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in Developing Countries

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INTRODUCTION

During the past decade there has been growing concern with poverty in the rural areas of developing countries. In most third world countries the predictions of growth economics have failed to materialize. Modern, urban-based industry has not grown at a sufficient rate to draw "surplus" labor from the rapidly expanding populations of rural areas to more productive occupations which, in turn, would facilitate the modernization of agriculture. Instead populations and labor force in most rural areas have been increasing in absolute numbers even though cities have been growing at a very rapid rate, fed by rural migrants. Per capita urban incomes remain far above the rural average, but the cities are saturated with persons attempting to extract precarious livelihoods from marginal, low-productivity, often part-time occupations in the so-called "informal sector." It is clear that for many decades in the future, rural occupations must continue to provide

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This project was undertaken, under a grant (Project #931-17-998-001-73) from the Rural Development Office of the U.S. Agency for International Development, within the framework of the Rural Development Committee of the Cornell University Center for International Studies. The country profiles and regional summary for Latin America were written by Cheryl Lassen. Country profiles for Africa were prepared by Laura McPherson and Jill Crystal; the regional summary for Africa was written by Norman Uphoff. The regional summary and country profiles for Asia were prepared by Shubh Kumar with the collaboration of David Rosenberg on the regional summary, Indonesia and the Philippines. John Roberts provided research assistance on the Indonesia profile. The conceptual design and the continuing analysis and critique of data and propositions included in this report reflect the collaborative efforts over many months of a working party composed of the author and those whose names are mentioned above.

livelihoods for rural populations, increasing at the rate of twenty-five percent every decade in many cases on a land base that can no longer be expanded except at very high cost and with diminishing returns.

There is mounting evidence, some of it impressionistic but much of it based on empirical surveys and village studies, that the majority of people in rural areas have not benefitted from the impressive macroeconomic growth chalked up by many third world countries during the past twenty-five years and that opportunities, real incomes and quality of life for large numbers, including majorities in many countries, have actually declined and deteriorated. The numbers involved are in the hundreds of millions, their deprivation is expressed in absolute and chronic shortages of the most basic needs for security and subsistence, and trends and prospects in many areas continue to be negative.* It is increasing recognition of these unfavorable trends and of the magnitudes of human suffering involved that have prompted the recent widespread interest in rural poverty.

If this concern is to be translated into action, however, the problems it seeks to address must be diagnosed correctly. Analysis must be sensitive--and this is a theme and a caution

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*The World Bank estimates that approximately half the rural population of developing countries, more than 650 million people, suffer from "absolute" poverty. The number is expected to increase to 1.1 billion by the year 2000. IBRD Basic Needs Paper #1, Global Estimates for Meeting Basic Needs: Background Paper prepared by Shahid Javed Burki, et al., August 10, 1977.

we shall continue to emphasize in this report--to the great variety of ecological, social, and institutional conditions among and within rural societies in developing countries. Globalistic generalizations and sweeping prescriptions simply cannot do justice to this variety and complexity. Prior to any interventions by governments and international agencies, careful diagnoses of concrete situations are essential. This diversity, however, does not mean that every situation is unique. There are general types or patterns of rural conditions which can be identified and, more importantly, trends that are international in origin and scope and which affect rural areas of most developing countries with predictable consequences. So while we are sensitive to local, regional and national differences, we are persuaded that general methodologies and concepts are available for analyzing rural poverty and for evaluating and predicting the outcomes of policies intended to redress it.

Social Structural Analysis

Most of the published efforts to understand and explain rural poverty rely on analyses of real income and income distribution. The advantage of this economists' tool is that it provides a rough but common and universal measure of incidence and levels of poverty. Its limitation is its abstract quality and its pronouncedly non-institutional bias. Rural areas are not composed of undifferentiated individuals and households who happen to earn and spend incomes at differential

rates, but of persons involved in networks of occupational differentiation, exchange, solidarity, conflict and power. The statuses and opportunities of individuals and households depend in large measure on their positions in these complex networks and especially on the productive assets or resources they command. While education, family backgrounds and political connections are of some importance, the most significant asset is ownership and control of land.* Land ownership conveys both local status and economic opportunity. It can be converted into political power; political power, which is another source of domination, is frequently translated into the ownership and control of land. While these relationships are not deterministic, the differential ownership and control of scarce productive resources--land and for pastoral societies animals--predict more about patterns of dominance and subordination and the opportunities and material welfare that can be achieved in rural areas than any other factor. Most of the life chances of individuals depend on the asset position of the families into which they are born. These can be modified by technological

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*As central governments "penetrate" rural areas and distribute some benefits to rural people, the local political boss who controls and brokers access to these scarce benefits (e.g., jobs on road gangs, subsidized fertilizer, hospital admissions) becomes a local power figure. Often he is a major landowner or soon becomes one; if not he usually establishes compatible working relations with local landed interests. In highly commercialized agriculture, firms which control credit, modern inputs, or processing and marketing facilities may assume a dominant position even in the absence of land ownership.

change, educational facilities, migration opportunities, and entrepreneurial drive, but the critical factor that explains these networks of relationships is access to productive resources, especially to land.

For analytical purposes, rural societies thus tend to be characterized by stratification in which income, status and power are determined by ownership and access to productive assets and are manifested in occupational distribution. Within these strata are informal solidarity structures, usually based on kinship or neighborhood relationships which provide mutual assistance, sharing, and protection and thus help to maintain life at least at the subsistence level. Cross-cutting these horizontal class strata are varieties of vertical solidarity networks based on kinship, caste, ethnicity, tribe, and patron-client relationships. These vertical networks are often focused on access to land and employment and usually embody tradition social structures. They incorporate mutual obligations, assurances of protection, services, and assistance which help to insure the minimum basic needs of participants, even though relationships within these structures may be highly unequal. Though such structures continue to function, there is evidence that, under pressures of population growth, commercialization of agriculture, and the penetration of urban values into rural areas, traditional social structures are increasingly less able to perform solidarity functions, particularly to enforce a sharing ethic on behalf of the rapidly growing army of landless and near-landless families.

As established structures no longer provide protection or subsistence to the rural poor, the latter must look for new patrons such as labor contractors or local political bosses. The erosion of traditional vertical solidarity networks is an accelerating trend which is likely to exacerbate the poverty of the landless and near-landless and leave them without effective protective structures unless they are able to forge links with new patrons or to form new organizations based primarily on common economic and class interest.

We therefore believe it is essential to analyze rural areas not simply in terms of incomes and income distribution, but primarily in terms of the social structures in which individuals live and work. The important consideration is the differentiation of individuals and especially of households by asset position and by occupation. These are the relationships that are salient to earning livelihoods and to getting along in rural society. These are the realities that must be diagnosed and taken into account in any public policy or program interventions which purport to reduce poverty, improve living conditions or open new opportunities for the poor in rural areas. Focusing on the landless and near-landless and on finer breakdowns among these categories can assist in identifying numbers and proportions of the rural poor within the constraining networks of power in which they function. It can indicate the circumstances of those who must be reached and benefited by public policy measures, and provide a framework for evaluating the political feasibility of such activities.

Alternative Strategies

Much of the concern with rural poverty and much of the writing and public rhetoric on this subject concentrate on three themes, which may overlook important realities and suggest remedies that could leave the great majority of the rural poor no better off than they are at present. The first of these themes emphasizes growing more food as the major priority for world and national agricultural policy, the premise being that hunger and malnutrition for all can be overcome if only more food is available to feed the needy. Implementing this perspective usually involves the search for "progressive" farmers (farmers who already produce surpluses for marketing) and providing them with information, production inputs on favorable terms, and incentives to increase their output so that more food will be available. The emphasis is on improved technologies, infrastructure and production incentives. Through diffusion processes and demonstration effects, it is expected that improved and more profitable practices will be gradually adopted by smaller farmers.

It is, of course, necessary to grow more food to feed growing populations and to reduce dependency on food imports. Growing more food, however, will not necessarily help the landless and near-landless; indeed if the emphasis is on working through "progressive" farmers it may actually hurt them. The new practices are often slow in trickling down to marginal or subsistence farmers because they can seldom afford the risks of innovation and the costly inputs. And even when

it is available on the market, many of the rural landless and near-landless (as well as many of the urban poor) will not have access to more food because they do not have the money to buy it. They do not earn sufficient incomes to feed their families. In some countries, including many in Africa, the absence of an adequate agricultural infrastructure prevents the production of sufficient food to meet domestic demand. But in many countries, except for failures of rainfall and other natural disasters, the main reasons for undernourishment and the main inhibition to increased food production and consumption are not inability to grow sufficient food, but inappropriate uses of land resources and especially limitations of effective demand due to poverty and low incomes.

The second of these unpromising strategies is the attack on rural poverty oriented primarily to improving the productivity and thus the welfare of the small farmer. The rural poor are regarded as an undifferentiated mass of owner-cultivators with small but potentially viable holdings. This is an appealing concept because there are well-tested practices and packages of inputs (research-extension-credit-seeds-fertilizer-irrigation-price supports-marketing assistance) for helping the small-scale yoeman farmer. But who are the rural poor? Usually they are conceived as the Latin American, Asian or African version of the European or North American owner-cultivator, with smaller holdings, no doubt, but holdings that nevertheless are sufficient, if scientifically cultivated, to provide a decent family livelihood-subsistence plus a marketable surplus. There are many small owner-cultivators with potentially

viable holdings and many of them are quite poor and inefficient producers who need and could benefit from improved public services and other assistance. But in most developing countries they are not the majority of the rural poor and they are certainly not the poorest. Often they are a relatively small minority and are relatively secure. Landless workers, tenants, and constrained small holders (those whose holdings are too small given their resource position and available technologies to produce a subsistence livelihood for their families) tend to be the majority in most countries. They must survive by selling all or part of their labor and the labor of their wives and children at very low rates of return. They are much poorer than small owner-cultivators, and their absolute numbers and proportions of the rural labor force are increasing very rapidly. Unfortunately, measures designed to assist the "small farmer" will at best neglect those in the lower and poorer strata, and may even disadvantage them further. A serious attack on lower-end rural poverty must focus explicitly on the much more difficult problem of designing and implementing measures that will help the landless and near-landless. Any strategy which looks upon these groups as a residual whose needs will be taken care of by rapid economic growth after the progressive farmers and the small owner-cultivators have increased their efficiency as the result of public investments and services oriented to their needs will result in increasing poverty both in absolute and relative terms.

The basic needs approach was originally sponsored by the International Labor Organization but has attracted sympathetic attention from many international organizations concerned with development assistance as well as among many analysts and practitioners. In our opinion, basic needs strategies are not likely to make much headway analytically or in practice unless they deal specifically with social structural relationships. The main problem is not simply how to find sufficient resources or how to develop sufficient administrative capacity to put a floor under the basic needs of undifferentiated low income people in rural areas, but more importantly how to overcome existing institutional obstacles in the present distribution of power, resources, and opportunities to the provision of decent income earning opportunities and public services. The basic needs approach, as we analyze it in Chapter V, becomes a matter of how to reach the landless and near-landless, without resorting to major structural reforms, under conditions of limited goods and severe competition for public services.

Organization of This Report

This paper, then, concentrates on the landless and the near-landless as groups which must be reached and benefitted by any development strategies that seriously claim to reduce or alleviate rural poverty in the third world. This is the first attempt at a systematic and general survey and analysis

of the incidence and dimensions of rural poverty conceived in social structural terms and focused specifically on the lowest strata of the rural labor force, the landless and near-landless. It encountered all the problems that might have been anticipated in the initial exploration of a neglected subject. These include data shortages because, with few exceptions, information has not been collected, analyzed or published according to these categories. One reason for the dearth of data is the political sensitivity of the subject. It involves not only welfare considerations, but above all, questions of power which many governments would rather leave alone. Only recently have some international organizations begun to focus on rural poverty in these terms. We must therefore emphasize that this is an exploratory, and by no means a definitive exercise, with many empirical and conceptual gaps. We nevertheless expect that it will contribute to more informed, thorough, and detailed analyses of the current situation, stimulate more relevant and comprehensive data gathering and analysis by governments, international agencies, and private scholars, and facilitate initiation of policies and programs designed to bring tangible benefits to the rural poor.

In this study we shall (1) propose a precise <u>analytical classification</u> of the popular concepts of landless and near-landless; (2) present what the best available statistical

and monographic data indicate about the incidence and dimensions of these categories by country and region; (3) propose a rough typology of situations to facilitate concrete analysis and program intervention; (4) outline the dynamics of these phenomena, their causes and effects on the lives of the rural poor, and current trends; (5) explore the coping mechanisms or strategies improvised by the landless and near-landless to insure family survival under harsh conditions; (6) survey the consequences, intended and unintended, of various governmental policy and program measures directed at helping the landless and near-landless; and (7) indicate the state of available data and suggest needs and priorities for further research. Thus we hope to provide a more realistic perspective and an analytical and conceptual set of guidelines for dealing with this large and complex set of problems which can later be further developed.

In order to begin to cope with the scale and complexity of this problem, we employed the following methodology: the main unit of analysis is countries (states), since these represent the political structures which regulate and serve rural activities and orient what data are available. Using available published data only--there were no resources for original research--country profiles were drawn up following the common conceptual outline presented in the next chapter. The data for the country profiles were aggregated into regional surveys for South and Southeast Asia, Africa and Latin America. The regional surveys report the major empirical findings and

attempt to capture the main similarities and differences of circumstances within each major region. This summary report attempts, in turn, to make what general statements are warranted by the country and regional data. Because of the diversity and complexity of conditions within and among the many areas of the world which we surveyed, there is hardly a single general statement that can be made without specific qualifications, conditions, and exceptions. We were impressed, however, by the great many similarities of conditions and trends that prevail over very wide areas.

This ambitious effort has been inhibited by the shortage and poor quality of available data on this subject--a problem we shall go into at greater length--and by the limited research resources available to us for this exploratory survey. We did not have sufficient resources, for example, to survey any of the countries in the Middle East except Egypt which is included with the survey on Africa. Many countries are not specifically covered by profiles, either because data were not a available to us or because of our small research budget. With few exceptions, however, we have covered most of the larger countries where landlessness and near-landlessness are major expressions of rural poverty. We were sensitive throughout to the great complexity and numerous variations both among and within countries. Nevertheless, the twenty cases reported and analyzed in this survey are broadly representative, though not in a strictly scientific sense, of rural poverty in the developing countries of contemporary Asia, Africa and Latin America.

Our interest in the landless and near-landless has a large humanitarian component and concern for justice, consistent with the Congressional mandate which requires that U.S. foreign aid concentrate on the poor majority, especially the rural poor. This is not the whole story, however. The unemployment and underemployment, the virtual redundancy of so much of their labor power caused by malfunctioning social organization represent appalling social waste; if more productively employed, the tens of millions of landless and near-landless men and women could be both producers and consumers of the product of expanding agricultural and industrial structures. For their current situation of extreme poverty and neglect, societies are already paying high social and financial costs in uncontrolled population increase, communicable diseases, overcrowded cities, legal and illegal international migration, crime and delinquency, and social unrest which has already broken out in violence in many areas.

CHAPTER I

Classification of the Landless and Near-Landless: the Diversity of Circumstances

In this study, we are concerned with the rural poor who fall below the economic position of the "small farmer" to whom much of the concern with rural poverty is currently addressed. The small farmer or owner-cultivator, though relatively poor, controls sufficient land and is sufficiently secure in his ownership that, with efficient cultivation, he can earn at least a subsistence livelihood for his family; with improved technologies, public services and cultivation practices he can look forward to earning a surplus. The landless and near-landless control insufficient land or other assets to provide for their families except by selling their labor. In most rural areas, status, power and wealth derive primarily from land ownership or access to land. Those without land are deprived and impoverished on all three dimensions.

"Landless and near-landless" is a broad, inclusive term for the rural poor, for those who must sell their labor on onerous terms and live near or below the margin of absolute poverty. It is a descriptive rather than an analytical category, thus necessarily imprecise. For more discerning analysis we have broken down the concept into a number of categories. These categories are based primarily on

occupational status, on how people earn their livelihoods, combined with the relative security of their income earning opportunities and their socio-economic status resulting from access to or control of productive assets. Before presenting and elaborating on this analytical classification, a few comments are in order.

While these classes are analytically distinct, they cannot be fully descriptive of concrete situations which offer more shadings and greater variety than can be incorporated into any analytical scheme. There is a great empirical diversity in landholding patterns, occupational distributions, and social statuses in the rural areas of developing countries. These are the outcomes of distinctive historical experiences, variations in ecological conditions, and different institutional structures. Combinations of specific historical, ecological and institutional factors result in concrete differences in social relations and occupational structures. Moreover, these conditions are not static; they are continuously changing under the impact of technological innovations, demographic changes and the commercialization of rural life. For these reasons, not all the concrete manifestations of landlessness and near-landlessness in any particular area may fit exactly into these general categories. We are confident, however, that they are useful as categorical guides to the identification and analysis of the roles, relationships and statuses of the rural poor and to intertemporal and interregional comparisons.

Individuals in rural areas may not belong exclusively to a single occupational category, but may divide their economic efforts among more than one. This applies with certainty to households which are the main sharing and support units in rural areas. The rural poor evolve complex survival strategies. Contrary to the vulgar stereotype which defines them as passive, indolent, and fatalistic, their decisions and behavior tend by necessity to be resourceful. They cannot rely on social security from governments or handouts from patrons; for the most part they must assure their survival by their own enterprise and effort. If for example, the male head of a household is a "constrained cultivator" whose holding is too small to support his family, he may work for part of the year as a laborer on a plantation, public works project, or another farm. His wife, in addition to raising children, preparing and cooking meals, making and washing clothes, and maintaining the home, may market vegetables or poultry. Grandmother helps to care for the children and shares the household chores; she may also work at handicrafts in order to supplement the family income. An adolescent son may tend livestock for a nearby farmer, while an adolescent daughter may become a domestic servant--both perhaps earning only their meals and a very small cash payment. An older son may have migrated to the city and found a job; he remits income to the household and looks for jobs for his younger brother and sister. Some of the effort of the family may be

spent in vultivating relationships with more powerful and wealthier people, to whom they may be linked in vertical solidarity networks by real or fictive kinship or clientage and to whom they can turn for help when jobs, loans, and other services are required. By aggregating and sharing income opportunities and returns from the labor of all the members of the household the subsistence needs of all may be secured; with luck there may even be a margin above the bare necessities of survival.

A classification system of the kind we have devised does not attempt to distinguish all the overlapping of categories and all the complexity of household survival strategies. It is necessarily static, reflecting distributions at some point in time. Nevertheless, it does provide a rather detailed and, we believe, a reasonably comprehensive set of categories by which members of the rural poor can be classified according to the main occupation of the household head. It provides a basis for developing analytical profiles of the rural poor in any area, for following trends over periods of time, and for cross-national comparative analysis.

The country profiles which are the building blocks of this report have followed this classification scheme as far as data permit, in their efforts to determine the location and the incidence of the landless and near-landless and the concrete forms in which they are manifested. The regional summaries follow this classification scheme, so far as data permit, and we

shall utilize it in the next chapter as we attempt some global estimates of the incidence of landlessness and near-landlessness. Few of the country profiles were able, with the data available, to arrive at figures much more detailed than the major headings in the scheme that follows. The more detailed outline was nevertheless useful in analyzing some sets of data, in estimating the incidence, and in understanding the critical elements that determine low-end rural poverty.

The Classification Scheme

We first present our set of categories so that the reader may have a view of the total scheme.*

I. LABORERS AND WORKERS
- A. Agricultural Workers
  - 1. Permanent agricultural laborers
    - a. Employed (or attached) laborers
    - b. Indebted (or bonded) laborers
  - 2. Casual agricultural laborers
    - a. Local laborers
    - b. Migrant laborers
      - i. Seasonal migrant laborers
      - ii. Permanent migrant laborers
      - iii. Intermittent migrant laborers
- B. Non-agricultural workers
  - 1. Laborers (generic category, excluding agricultural laborers)
    - a. Permanent laborers
    - b. Casual laborers
  - 2. Self-employed workers
    - a. Workers with labor only
    - b. Workers with come capital
- C. Rural-urban workers

---

*The first draft of this analytical scheme was prepared by Norman Uphoff.

II. CULTIVATORS
- A. Tenants and sharecroppers
  - 1. Secure tenants/sharecroppers
  - 2. Insecure tenants/sharecroppers
- B. Marginal farmers (not qualifying as "small farmers")
  - 1. Constrained cultivators
  - 2. Vulnerable small farmers
  - 3. Squatters
- C. Shifting cultivators
  - 1. Slash-and-burn cultivators
  - 2. Long-fallow cultivators
- D. Tenant-farmers

III. A. Pastoralists
- 1. Settled pastoralists
- 2. Transhumant pastoralists
- 3. Nomadic pastoralists

B. Hunters and gatherers

C. Scavengers

We then elaborate each of the categories with a brief description in outline form.

I. <u>LABORERS AND WORKERS</u>: Persons who are without land and who have few other assets. They have no access to and no rights to land except as laborers. They make their living almost entirely from proceeds of their own labor.

A. <u>Agricultural Workers</u>

1. <u>Permanent Agricultural Laborers</u>: Persons who have steady year-round employment working in agriculture for a single employer who owns land, capital, livestock or other assets. He may provide them with a house and a small garden plot. This is often a large category and can be subdivided in terms of:

a. Employed or attached laborers: "Free" laborers, able to accept or reject terms of employment, though they may be very much in need of work.

b. Indebted or bonded laborers: "Debt peons," unable to choose terms of employment, but have stable access to land and livelihood, however meager.

2. Casual Agricultural Laborers: Persons who have no stable employment.

a. Local laborers: Persons seeking odd-jobs, unable to count on year-round, income-earning opportunities.

b. Migrant laborers: Persons who because of insufficient local opportunities are forced to seek work outside their "home" community for all or much of the year. May be further subdivided into:

i. Seasonal migrant laborers, are away for some part of the year, but follow a predictable cyclical pattern of movements between their home area and sources of seasonal employment year after year.

ii. Permanent migrant laborers, have no permanent residence or place of employment and are continually moving in search of employment.

iii. Intermittent migrant laborers, under some circumstances migrate within the rural sector or to urban areas for employment when income from work on their own land or others' land is insufficient to support them and their families, for example, because of fluctuations in weather. Such migrant laborers are neither "seasonal" nor "permanent."

B. Non-Agricultural Workers: Rural residents who make their living from work in non-agricultural activities, e g., crafts, services, manufacturing, or public works. Such persons may even own a little land, but it is not a significant source of income and is insufficient to keep them from working primarily in non-agricultural activities.

1. Laborers: Persons in private or government employment who make a living from their physical labor. This is treated as a generic category, from which "Agricultural Laborers" (I-A) have been separated out for purposes of analysis. They can be subdivided into:

a. Permanent laborers: Persons with reasonably stable employment;

b. Casual laborers: Persons with relatively unstable, intermittent work opportunities.

2. Self-employed Workers: Persons in the private sector who make a living by their own entrepreneurial initiative rather than by working for someone else. These members of the rural poor can be subdivided into:

   a. Workers with labor only, whose enterprise is based only on their own effort, such as charcoal makers, wood gatherers, etc.

   b. Workers with some capital or skills, whose enterprise is augmented by some equipment or facilities, such as rickshaw pullers, tailors, etc., who are nevertheless very poor; if their income is large enough they would not be included in this framework.

   c. Rural urban workers: Persons who have left the rural sector to find employment in urban areas but who maintain their familial and community ties to the rural sector. In the event they are unable to find work, they return; if successful, they remit income to the rural sector. If they earn incomes equivalent to "small farmers" in the rural sector, or if they become permanent urban residents, they are not included in this scheme.

II. CULTIVATORS: Persons who own or have access to land but whose income from land is so little or so insecure that they must be included among the rural poor. They should not be regarded as "small farmers," because their holdings are insufficient to provide a subsistence family income and policies and institutions designed for small farmers will not be adequate to meet this poorer group's needs.

A. Tenants and Sharecroppers: Persons not owning land (or owning only a tiny amount, perhaps a house or small garden) who must therefore give up a substantial part of their produce to the persons owning the land they cultivate. No rigorous distinction need be made between the numerous concrete forms of tenancy and sharecropping because their situations are quite similar. Generally speaking, tenants pay some fixed sum (in labor, cash or in kind) for the use of land, while sharecroppers pay landowners a proportion of their produce.

1. Secure tenants/sharecroppers: Some tenants/sharecroppers have enough security of access to land that they can maintain use of it with some degree of confidence even though a considerable share of their output must be paid as rent. Tenants in this category usually have some responsibility for farm management decisions. Security can come from legal guarantee, as promised in tenancy reform legislation or from precedents or understandings

with landowners that are informally enforceable.

2. Insecure tenants/sharecroppers: Many tenants/ sharecroppers are in such a tenuous situation that they cannot be sure of maintaining their access to land. They are tenants-at-will because there are no legal protections, because population pressure on the land is such that tenants have no bargaining power, or because inadequately enforced tenancy reform legislation designed to give security encourages landowners to evict tenants periodically so that they cannot establish claims to secure tenancy. Under such conditions, tenants may be only slightly better off than laborers and their status may shift between the tenant and landless categories.

B. Marginal Farmers: Within this category are persons who own some land, but it is not large enough or secure enough or of sufficient quality to assure a subsistence income for their families. They therefore usually have to devote some portion of their labor and the labor of family members to work on others' holdings or in non-farming occupations. Even if income is at present marginally adequate, they cannot for various reasons, assure the maintenance of this income in the future.

1. Constrained Cultivators: For reasons such as those discussed below, these persons do not have access to enough land to operate as "small farmers." Thus they are unlikely to benefit significantly from policies and services aimed at helping the small farmer. Reasons for such marginal status include combinations of the following:
   a. Population density, as in Java and Bangladesh.
   b. Unfavorable ecological conditions, as in the hill areas of Nepal or Ethiopia outside the central plateau.
   c. Institutional constraints, in particular land tenure arrangements such as the hacienda and corporate farming systems in Latin America.
   d. Social discrimination, as with harijans or tribals in India.
2. Vulnerable Small Farmers: Persons with access to land a bit above those in the previous category but whose holdings are insecure for such reasons as those indicated below. For the present they may not need special attention (apart from measures to assist them as "small farmers") but as their numbers grow, they and their children may be reduced to the status of tenants or laborers. Two principle reasons for their vulnerability are:

a. Population growth, such that subdivision of holdings in the next 10-15 years will reduce large numbers of them to the "Insecure Cultivators" (II-B-1) category or into various Laborer and Worker categories (I-A and I-B).

b. Indebtedness, which through foreclosure, could deprive them of their landholdings.

3. Squatters: Persons occupying and cultivating land to which they do not have legally recognized titles and are thus vulnerable to eviction without warning.

C. Shifting Cultivators: Persons whose pattern of agriculture is not settled or who are dependent on large holdings and long fallow periods to maintain a subsistence income.

1. Slash-and-burn Cultivators: Persons who have some undefined access to land based usually on a communal pattern of landownership and who move their homes and operations as the fertility of given cultivated areas is exhausted, allowing them to lie fallow for some period of time. Incomes are usually very low and given any encroachment by more settled or commercialized agriculture, they are vulnerable to great privation.

2. Long-fallow Cultivators: Persons who have a more stable pattern of agriculture depending on access

to very large amounts of land. Long fallow periods are necessary to revive fertility that is quickly exhausted. Access to land is usually based on a communal tenure system. If population is not growing this can be a productive system of agriculture, but as population pressures increase and fallow periods are accordingly shortened, productivity and income declines

D. Tenant-Farmers: Persons who have very small holdings and rent in some land on a tenancy or sharecropping basis. In some situations they may not be distinguishable from Tenants and Sharecroppers (II-A) and Insecure Farmers (II-B), but they could be an important hybrid category in some circumstances. (If the holdings rented in are substantial enough, such cultivators should be regarded as "small farmers" or even "middle farmers," and would not be included among the rural poor.

III. PASTORALISTS AND NOMADS: Pastoralists and nomads are a difficult category to deal with analytically, in part because so little is known about them, their access to land, their incomes, their levels of living, their social structures. Within a study of "landless and near-landless" which seeks to comprehend the problems of the rural poor, some attention should be paid to those who are mostly dependent upon livestock production. Access to land is

important for their livelihood, though they need not own it so long as they can use it for grazing.

A. Pastoralists: Persons who earn a living by raising cattle, camels, horses, sheep, goats, or similar livestock, selling them or products such as milk and wool. They generally need access to large areas of land, which may nominally be communally owned, to provide forage throughout the various seasons. They also need access to water. The main assets are their livestock. There can be the equivalent of sharecropping, when the livestock owner lets them out to a pastoralist to tend, giving him a share of the produce (such as milk or some of the offspring) or of the value of the livestock when sold. There may be supplementary income from the processing of animal products such as rugs or hides. Three general categories can be identified:

1. Settled Pastoralists live and raise livestock within a relatively fixed area, usually of large size. There will be some movement of livestock within the area, but they have a sedentary base of residence and sometimes grow supplementary crops.
2. Transhumant Pastoralists move their livestock between grazing and base areas on a regular seasonal basis. These groups are likely to be hard to reach with government programs and services intended to assist the rural poor.

3. Nomadic Pastoralists move with their livestock over a shifting range, though movement may indeed be within vaguely defined territorial boundaries. This group is particularly hard to reach with government programs and services intended to assist the rural poor.

B. Hunters and Gatherers: Persons who depend for their livelihood on game and various edible things (berries, nuts, herbs, etc.). They usually have some base of residence but may be quite mobile in the pursuit of food. They are among the most "marginal" of the rural poor, but as long as their environment is not depleted they can maintain a stable way of life.

C. Scavengers: Persons have been forced, out of desperation, to give up a stable existence, however poor, and roam about, grabbing things to support themselves, often resorting to theft. They may engage in "Casual Labor" (I-A-2-b) but are even more on the fringes of society.

Utilities and Limitations of This Scheme

References to the rural poor usually oversimplify their circumstances. Many writers and policymakers treat them as an undifferentiated category often under the misleading catch-all of "small farmer." Some accounts of rural areas continue to imply the discredited romantic notion of an underlying harmony and idyllic solidarity among all rural people. Though

not, perhaps, as complex as urban society, rural life in most areas is characterized by very considerable occupational differentiation combined with differences in wealth, income, status and power. Even among the landless and near-landless who are by definition at the low end of the status-wealth-income-power hierarchies, there are significant differences along these dimensions. Thus anyone who owns land or cattle, meager though their assets may be, is likely to enjoy greater security and higher status than his landless neighbor. The "attached" laborer with a permanent job is likely to have a more secure income, however low, than the casual laborer employed by the day or the season. The tailor who owns his capital (a sewing machine) is likely to be better off than the blacksmith's helper who has only his labor to sell.

Most of the relatively few efforts to deal analytically with rural poverty collect and organize data by such demographic variables as sex and age or by such economic variables as size of holding or income and income distribution. Those studies have contributed to an understanding of the structure of rural poverty but they are incomplete and suffer from grave limitations. Efforts to stratify by size of holding usually leave out holdings below a specified minimum as well as tenants, agricultural workers and non-agricultural laborers--precisely the groups in which we are most interested--or consign them to a non-differentiated residual category. Income distribution studies not only have difficulty imputing income in kind, but

they frequently omit sources of income beyond the earnings of household heads. Unless meticulously collected, these data disregard the earnings of women and children and even the secondary earnings of household heads. A number of income and income distribution studies, e.g., the Philippine family income and expenditure survey of 1971, reports that many poor rural families, year after year, spend more money than they earn. Though some of these cumulative deficits may be financed by increasing debt, it is more likely that these families are realizing income that is unreported in these surveys, including remittances from family members in cities and abroad, earnings of women and children, or income from theft, scavenging, or outcast occupations. Low as they are, real family incomes must be higher than those reported in many income-consumption surveys. Otherwise, among the large numbers reported as living below objective levels of absolute poverty, death rates would surely be much higher.

The classification scheme that we have fashioned attempts to reflect the diversity and complexity of rural society and economy among the very poor. This classification combines three factors: occupation of the household head, terms of access to productive resources, and security of income earning opportunities. It takes landless laborers, tenants, non-agricultural workers, and migrants specifically into account. For mere enumeration it does oversimplify, since it classifies

household heads primarily by their main occupation and income source, omitting secondary employment and the occupations of women and children. When used for analytical purposes, however, these categories can be combined to account for multiple occupations and for income earned by the household head and other family members. The scheme also reflects the dynamics of survival among the rural poor, including the pervasive phenomenon of migration and such trends as fragmentation of holdings and increasing indebtedness. No classification system can reflect all the relevant dimensions of rural poverty; this one does not explicitly account for such phenomena as female-headed households and ethnic or racial discrimination. We believe, however, that if systematically employed, this set of categories enables analysts and policymakers to obtain a fuller understanding of the structures and dimensions of rural poverty than has been available from previous examinations of this problem.

Chapter II - Incidence of Landless and Near-Landlessness

In this exploratory survey of the published literature, detailed data and estimates appear in the various country profiles, for in these profiles the numbers are directly related to specific historical, economic and institutional contexts. The country profiles reveal in every case the published sources of the data.

Efforts to aggregate country quantitative data for comparative purposes even within the same region encounter difficulties because of variation in the availability and reliability of information and because of the unstandardized categories by which data are classified and reported. In many cases data to fit our categories had to be inferred, imputed or estimated from information that was collected and reported according to categories differently defined. In some countries, for example, women are not included as members of the labor force even though many engage in off-farm labor activities; in some cases children are not counted even though they begin to work at ages six to eight. It was necessary for us to attempt to account for and to correct such deficiencies in the data. The result inevitably is for less precision than would be desirable.

Asia and Latin America

These caveats notwithstanding, we are confident that our comparative tables on Asia and Latin America reflect with

reasonable accuracy the phenomena of landlessness and near-landlessness in the rural areas of the countries reported. The main utility of these data, of course, is not in specific figures, but in the orders of magnitude that they suggest. What we attempted in these regional tables was first to estimate the rural labor force in each of the countries which we examined and then to indicate the proportion of the labor force that falls into the categories of landlessness and near-landlessness.* We then summarize these figures by absolute numbers and by percentages of the rural labor force.

This form of aggregation facilitates rough comparisons, but inevitably simplifies reality by compressing variations into a limited number of standardized categories. Most of the available data, for example, indicate the main occupation (or tenure status) of the household head, but many household heads must earn income from several sources (e.g., a very small landowner may have to seek employment off his farm in order to use his available labor time and to earn needed income, while his wife and children may also be engaged in several kinds of off-farm employment). While real wages and real incomes of landless laborers are likely to be low in absolute terms, they are certain to vary according to local real wage rates and the number of days of labor available.

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*To remind the reader, the landless are members of the rural labor force who own no land and must sell their labor in order to earn income; the near-landlessness are those whose access to land or whose holdings are insufficient to provide a family livelihood and who must, therefore, spend a substantial proportion of their labor time working for others.

For the more concrete meaning of these data, it is thus necessary to refer to the individual country profiles and the regional summaries--and in some cases to the original sources that they cite.

Assigning tenants among the landless and near-landless categories produced a problem. While tenants in most of Latin America have some responsibility for farm management - because so many landlords are absentees - most tenants in Asia work under close supervision and differ from attached laborers only in that they work for a share of the crop or for a fixed rental rather than for wages. Recognizing this difference we included Asian tenants under "landless" but assigned Latin American tenants to the category of "near-landless." This is consistent with the sub-classes of tenants under our analytical framework in Chapter I in which "secure tenants" (II A 1) are likely to have some role in farm management, while "insecure tenants" (II A 2) are close to the status of laborers. In the real world landlessness and near-landlessness stand for a set of continua in terms of status, security and income rather than discrete categories. In this first exploration of the subject we were unable to aggregate data - even when we were able to estimate them for individual countries - by the precise analytical categories in Chapter I. While the aggregation that was possible according to the broader and more descriptive categories of landlessness and near-landlessness inevitably conceals differences, it does indicate general orders of magnitude for major categories of the rural

Table 1

Demographic Data for Selected Asian Countries

Country	Population (year) (millions)	Annual Rate of population Increase (%)	Rural Population as a percent of Total Population
Bangladesh	75 (1973)	3.5	91
India	548 (1971)	2.3	80
Indonesia (Java only)	86 (1973)	2.2	82
Malaysia	12 (1975)	3.5	71
Pakistan	65 (1972)	3.5	73
Philippines	39 (1972)	3.0	68
Sri Lanka	12.5(1970)	2.1	84
Thailand	36 (1970)	2.5	86

Table 2

Landless and Near-Landlessness in Selected Asian Countries

Country	Rural Labor Force as a % of Total Labor Force	Rural Labor Force (000's)	Landless as a Percent of Rural Labor Force	Near-Landless as a Percent of Rural Labor Force	Landless & Near-Landless as a Percent of Rural Labor Force	Landless & Near-Landlessness (000's)
Bangladesh	85	24,288	28	61	89	21,434
India	83	150,000	32	47	79	118,215
Indonesia (Java only)	63	21,000	60	29	89	18,500
Malaysia	68	2,232	12	39	51	1,123
Pakistan	58	10,950	43	45	88	9,630
Philippines	69	9,240	55	26	81	7,450
Sri Lanka	80	3,440	54	19	73	2,505
Thailand	78	12,700	10	40	50	6,372

Table 3. Demographic Statistics for Latin America

Country	Population (000 000)	Rate of Pop Increase 1970--1975	Rural Pop as % of Total Pop
Argentina	25.4	1.3	33
Bolivia	4.5	2.5	77
Brazil	105.7	2.8	61
Colombia	25.9	3.2	57
Ecuador	7.1	3.2	69
Mexico	60.3	3.2	60
Peru	15.9	2.9	66
Costa Rica	2.0	2.8	68
El Salvador	4.1	3.1	82
Guatemala	5.3	2.9	82
Dominican Rep.	4.3	3.3	60
Jamaica	2.0	1.9	62

Population figures are for 1975 with the exception of Bolivia, which reflects the 1977 census.

Table 4. Landlessness in the Latin American Region

Country	Rural Labor Force: As % of Total Labor Force	Rural Labor Force: (000)s of Workers	Landless as % of Rural Labor Force	Near-Landless as % of Rural Labor Force	Landless + Near-Landless as % of Rural Labor Force	Numbers of Landless + Near-Landless (000)s
Argentina	15	2,184	24	46	70	1,529
Bolivia	63	1,733	38	45	80-85	1,431
Brazil	44	19,000	40	19	59	11,247
Colombia	44	4,551	20	46	66	3,005
Ecuador	53	1,548	28	45	73	1,129
Mexico	45	15,200	30	20	50	7,600
Peru	43	3,850	23	37	60	2,316
Costa Rica	46	720	35	15	50	363
El Salvador	63	1,094	38	52	90	997
Guatemala	64	1,890	29	59	88	1,663
Dominican Republic	51	816	35	52	87	716
Jamaica	40	405	24	56	80	324

poor. To build a more reliable statistical base country by country and according to more specific and standardized categories will be a major research enterprise over an extended period of time.

(For sources of the data reported in Tables 1 through 4 please refer to the regional summaries in Appendices A and B respectively.)

These tables indicate that on both continents rural households below the "small farmer" category--below that group whose landholdings are sufficient with the technologies and resources likely to be available to them to earn subsistence for their families without resorting to off-farm employment--represent a substantial majority of the rural labor force. As a percentage of the rural labor force in Asia, landlessness ranges from 10 percent in Thailand to as high as 60 percent in Java; near landless from 18 percent in Sri Lanka to 60 percent in Bangladesh. Combined landlessness and near-landlessness ranges from 50 percent in Malaysia and Thailand to 79 percent in India and more than 80 percent in Bangladesh, Java, Pakistan and the Philippines. In Latin America, with a smaller proportion of the population in rural areas, the proportions of landlessness and near-landlessness in the rural labor force are similar, ranging from 90 and 88 percent in El Salvador and Guatemala to 50 percent in Costa Rica, the larger countries falling within the 50-70 percent range.

Even in some countries which have experienced buoyant economic growth in recent years, the numbers of the landless

and near-landless in the rural labor force are very high, e.g., 59 percent in Brazil and 47 percent in Malaysia. Even in these high growth economies the rural labor force is increasing in absolute numbers and so are the incidence of landlessness and near-landlessness. Even in countries which have experienced radical and highly publicized land reforms and from which many rural families originally gained substantial benefits, after the lapse of one or two decades the old inequities and insecurities begin to reappear on a very large scale, e.g. Mexico, Bolivia. The reasons for this trend are analyzed in subsequent chapters. While our tables do not present trends, the column indicating the rate of population increase suggests an ominous prospect. At population growth rates of about 3 percent per annum, assuming that 1/3 of the increments to the rural labor force migrate to already crowded urban areas, the rural labor force will grow in absolute terms by 2 percent a year, and thus will increase by more than 50 percent by the end of the century. The IBRD thus estimates that those suffering from absolute poverty in non-communist developing countries will increase from 650 million or about one half the rural total in 1975 to 1.1 billion in the year 2000.* There is no reasonable expectation under present policy and institutional arrangements in most of the Asian and Latin America countries covered in this summery that sufficient

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*IBRD Basic Need Paper #1, Global Estimates for Meeting Basic Needs: Background Paper, prepared by Shahid Javed Burki et al, August 10, 1977.

employment or income can be generated to absorb this rapidly growing labor force. Short of far-reaching policy changes, the future will bring further sharing of poverty, exacerbated by increasing concentration of land ownership and mechanization--processes which bear especially heavily on the employment opportunities and wage rates of landless workers and constrained cultivators. As serious as is the present situation, future prospects are even more grim. These data should demonstrate that national policies and international assistance oriented to the "small farmer" will simply not respond to the needs of the rural majority of landless and near-landless families in most of the developing countries of Asia and Latin America.

Africa

We did not have sufficient resources in this project to attempt a survey of the Middle-east countries where data in any case are meager. We did originally wish to cover much of Africa and we invested substantial research time in exploring data for the forty-five states of Africa. We produced country profiles for Egypt, Kenya, and Upper Volta, and collected considerable data short of detailed profiles for many other countries. We found the data for Egypt--which has one of the most acute problems of landlessness and near-landlessness in the world--to be quite good, while information on Nigeria, with the largest population in Africa, was meager. The task of locating, analyzing and presenting quantitative data on the landless and near-landless

in Africa, given the absence, unreliability, and scattered location of data proved to be beyond the resources available to us (e.g. several countries including Ethiopia have never held a census; many do not report the non-monetized sector in occupational or income surveys). Nevertheless, the quantitative and descriptive information were sufficient to enable us to produce a regional narrative on landlessness and near-landlessness in Africa, supplemented by the aforementioned country profiles. We believe that this regional summary reflects in general terms the present circumstances in Africa, though it is not fortified by as much quantitative information as would be desirable.

While we hesitate to cite even a ball-park estimate for Africa, our survey was sufficient to dispel the popular myth that Africa has no land problem.* In many countries cultivated land area per capita has been declining and less food per capita is grown than a decade ago. While production seems to be limited in some areas by seasonal labor shortages there is considerable landlessness in other areas of Africa. The poor quality of much of the land, exacerbated by poor infrastructure such as roads, water supply and public services, very limited access to modern technological inputs, few alternative employment opportunities,

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*Our judgmental estimate allowing for very considerable inter-country variation, is that 8-10 percent of the rural labor force in Africa is now landless, at least another 30-40 percent is near-landless, and these numbers and proportions are growing rapidly. Among pastoralists who comprise about 5 percent of the rural labor force a growing proportion appear to be animal-less--the pastoral equivalent to landless.

and combined with very rapid population increase have already created serious problems of near-landless in many areas. These conditions of acute poverty are reflected in very low per capita incomes and in large migratory movements, some seasonal, some semi-permanent, to sources of wage employment. Increasing privatization of communal lands, growing concentration of land ownership, and fragmentation of holdings are further aggrevating rural poverty. Most African governments do not have the capacity to provide the public services that would facilitate intensification and higher yields.

A Typology

Our research, limited to non-socialist systems, has produced four general types of social-structural situations in rural areas, depending on two critical variables, density of population (the man-land ratio) and land tenure arrangements. There is, of course, considerable variation of detail within each of these four general types.

Type A combines heavy population pressure on arable land with privately owned and operated holdings of moderate size, seldom exceeding ten hectares of irrigated and twenty-five of unirrigated land. Average holdings, of course, are much smaller. The majority of households are headed by landless workers, tenants, or constrained cultivators whose small, and often scattered holdings cannot provide subsistence for their families. Above the group of small farmers who are able to provide for their

families from their small holdings are a substantial minority of "middle farmers." The middle farmers cultivate their holdings intensively and efficiently, usually with the help of tenants or hired laborers, and produce surpluses for marketing. By investing their surpluses, they gradually expand the scale of their operations, dominate the rural areas economically and, in league with urban elites, politically. Because of scarcity, land values are high; because of heavy population pressure and the absence of alternative employment opportunities, wages are very low and terms of tenancy severe. The majority of the landless are chronically in debt. There is no remaining agricultural frontier. Lack of opportunity in rural areas pushes many of the youth to the cities, yet the rural labor force continues to increase. With increasing commercialization of production, traditional solidarity structures have eroded, stripping the poor of many traditional sources of social support. There are no effective organizations to articulate the interests or to bargain on behalf of the landless. Public services seldom are available to the lower strata of the rural poor. This pattern prevails in most of South and Southeast Asia, and in Egypt.

Type B is characterized by very large holdings on the more fertile lands operated by landlord families or commercial firms which dominate the rural areas economically and politically. These lands tend to be exploited extensively, often in livestock or export crops. Outside the large estates, usually on inferior and marginal lands, are the majority of rural families, unable

to provide subsistence on their tiny holdings. Members of these families must therefore find off-farm employment or accept tenancies on the estates, which, because of extensive cultivation practices and considerable mechanization, demand far less labor than could profitably be absorbed if the lands were to be devoted to more intensive agriculture. Although there is no technical land constraint, the majority of rural families subsist as tenants or constrained cultivators. In some of these countries there is still a land frontier, but it is usually unavailable to the landless because of the high costs of opening the land and the tendency of governments to convey newly opened lands in large blocks to commercial corporations which produce export crops. As in Type A, chronic debt peonage further demoralizes, increases the dependency and reduces the bargaining power and living standards of the rural poor. Lack of opportunity drives many of the youth to cities and even to foreign countries. Type B prevails in much of Latin America and parts of the Philippines.

Type C is characterized by a gross sufficiency of land to meet present demands, but with very low productivity per acre or per unit of labor because of weak soils, inadequate technologies, poor infrastructure, low rainfall, and insufficient production inputs. Land is often owned communally and allocated to families on a life-time usufruct basis, but privatization is spreading rapidly, often without legal sanction. Poverty is primarily a function of poor land quality and elementary cultivation practices rather than absolute population density or

institutional inequities. Labor shortages at peak seasons limit the amount of land that can be cultivated by a family with existing technologies, but there is nevertheless a significant drift of young workers to urban areas, because returns to labor in rural areas are very low. Rapid population increase and privatization of land holdings in large units are beginning to reduce the land available to newly formed families, shortening fallow periods, opening marginal lands and impairing the limited fertility of the soils. At current rates of population increase in rural areas, there will be serious land shortages, fragmentation of holdings, and increasing landlessness in many of these countries before the end of the century, unless improved infrastructures, new technologies, and better public services can be introduced that permit more intensive exploitation of the land. Type C prevails in much of tropical Africa.

Type D are pastoral societies usually organized on a tribal or extended lineage or kinship basis. Pastoralists tend to be nomadic, moving in seasonal or multiyear cycles according to the availability of range land to feed their cattle and other animals. Between pastoral peoples and most governments, dominated as they are by urban dwellers and settled agriculturalists, there is usually tension as the expanding communities of settled agriculturalists encroach on the reserve pasture lands of the nomads. Governments have difficulty reaching or providing public services to nomadic pastoralists. As their human populations increase faster than they can safely allow their herds

to increase on fixed or diminishing rangelands, there are growing pressures on the living standards of the pastoralists. As living standards begin to approach subsistence, the response is usually the migration of youth to urban areas. Pastoral societies appear in significant numbers mostly in savannah areas of Africa, in the mountains of Afganistan, Iran and Pakistan, and in Mongolia. There is a serious dearth of information in the literature on the coping behavior of nomadic pastoral peoples. Their circumstances therefore, are not treated in detail in this report.

Who Are The Poor Majority?

Our estimates of the incidence of landlessness and near-landlessness - after full allowance for large margins of error in the data - point to an unavoidable conclusion: in most developing countries the landless and near-landless represent a substantial and growing majority of the rural labor force. Governments and development assistance agencies concerned with orienting their resources and their programs to assisting the "poor majority" in rural areas must recognize who constitute that poor majority. The poor majority in rural areas are not yoeman farmers with secure holdings sufficient, when cultivated efficiently, to support their families. They are a heterogeneous group of agricultural and non agricultural laborers, insecure tenants, sharecroppers, squatters and constricted cultivators with holdings too small to provide a subsistence

livelihood for their families. They and usually their wives and children must therefore sell their labor when they can find employment under conditions that yield very low returns for arduous effort. While there are considerable differences in their statuses, circumstances, or incomes, in general they are condemned to chronic poverty, insecurity and powerlessness, unable at times to earn basic necessities. As our summary tables in Asia and Latin America indicate, the landless and near-landless are the rural majority.

The underlying causes, the detailed conditions surrounding their lives, and efforts by governments to alleviate these conditions will be treated in the next three chapters.

CHAPTER III

Sources and Trends

In this chapter we shall identify the major causes of the increasing trends toward landlessness and near-landlessness in the rural areas of developing countries. The four main causes that we have identified are rapid population growth, the commercialization of agriculture, institutional rigidities, and macro-economic policies that penalize the rural poor. These factors are present in nearly all the countries examined in this report but they interact to form different combinations depending on historical circumstances, resource endowments, institutional developments and patterns of public policy. By examining these causal factors, it is possible not only to explain the conditions which will be analyzed in the next chapter, but also to venture projections about future trends.

Population Growth

The first factor is rapid population growth, increasing at rates of from two to as high as 3.5 percent compounded in most developing countries. This results from improved public health practices which reduce mortality and increase life expectancy, unmatched by reduced fertility or by effective birth control practices. While the much awaited demographic transition seems to be underway in a few countries such as

Sri Lanka and Costa Rica, in most of the rural areas reported in this study it has not occurred. There are conflicting explanations to this phenomenon. Many continue to argue that the rural poor, by and large, are fatalistic and resistant to change on a matter that is so deeply implicated in religious and cultural norms. Others believe that many peasants would be interested in limiting their family size but are uninformed of safe practices and have not been afforded access to effective and inexpensive methods. An increasing number of observers, however, hold that the rural poor are unmotivated to reduce family size on strictly rational grounds--that more hands are likely to be able to produce more income for the family and greater security in old age. Thus their family interest is better served by large numbers of children, whatever the effect may be on their society as a whole or on future generations. The result is that despite large-scale migration to cities, the rural labor force is increasing in absolute numbers by as much as two percent compounded annually. Birth control and family planning programs have not made much progress in rural areas.

The rural population increase is exacerbated by three factors: (1) Exhaustion of available land resources in many areas of the world, especially in South and Southeast Asia (Type A situation) and the low quality of much of the land that remains to be exploited, particularly in sub-Saharan Africa (Type C situation). These circumstances limit the

possibility of spontaneous movement to frontier areas or of settlement schemes to expand the land frontier--many of which would, in any case, require very large capital investments. Much of the growing rural labor force--those who do not migrate to the cities--must therefore be absorbed on existing lands, whose carrying capacity may already have passed the optimum with available resources and technologies, or find employment in non-farming occupations. (2) The failure of industrial growth to proceed at a sufficient pace to produce enough jobs that could draw "surplus" rural labor into manufacturing employment. Relatively low rates of capital formation in industry plus the relative capital intensity of much of the manufacturing in urban areas have produced industrial structures in most developing countries which can accommodate only a small portion of the increments to the national labor force. The cities are saturated with underemployed labor in the so-called "informal sector" because of the absence of higher productivity jobs in the cities or in the rural areas from which most of them have recently migrated. As a result, the rural labor force continues to grow in absolute numbers on a finite stock of land with limited carrying capacity. (3) Institutional rigidities, which we shall analyze later in this chapter. In many areas, particularly in Type B situations in Latin America, many members of the rural labor force are denied access to arable land because of inequitable ownership patterns. Owners of very large estates and

commercial firms keep some of their lands idle--holding them in some cases for speculation--or to cultivate them extensively under mechanized, labor-saving and labor-displacing arrangements, to the very great detriment of underemployed and impoverished rural people.

Commercialization of Agriculture

An important and long-term trend is the commercialization of agricultural production. This is not a new phenomenon, but is accelerating in importance as mechanized technologies, urban based communications systems, the market economy, urban values and life styles continue to penetrate rural areas. The emphasis is often on export crops, first fostered by colonial regimes and now encouraged by their successor governments because they produce both tax revenues and urgently needed foreign exchange. Commercialized agriculture stresses profitability of the farm as a business enterprise, rather than employment or even output and tends to use capital intensive methods of production whenever possible. In some cases, more traditional export crops which were relatively labor intensive (e.g., coffee in Brazil, rubber in Malaysia) are being replaced by other export crops (soy beans and oil palm respectively) which are far less labor using per unit of land or value of product. The result is less demand for the services of the increasing numbers of agricultural workers and tenants.

In many parts of Latin America large commercial firms have assumed a dominant position in agricultural production. These agro-business enterprises, some locally owned, some

foreign owned and integrated into urban and international networks of finance, processing and marketing operate extensively and with the most modern available technologies. Because of their control of capital, processing and marketing, they are usually able to acquire, either by sale or rental, the lands they require for their operations. Often they rent land from very small holders who are thus reduced to the status of laborers. Because of their integrated procurement and marketing methods, they displace numerous petty suppliers and traders. These modern estates usually benefit from government support in the form of favorable tax arrangements, tariff-free imports of mechanized equipment and credit on concessional terms. While as in the Ivory Coast these large estates create jobs when they take over previously unused land--though their mechanized processes require relatively few jobs per unit of land or of capital--frequently they displace local smallholders and laborers in very large numbers. One authority estimates that tractors have displaced the equivalent of 2.5 million laborers in Latin America during the past two decades. Depending on the crop, they may require seasonal labor, sometimes in large numbers, often recruited from migrants through exploitative labor contractors.

A number of technical and economic factors have combined to worsen the conditions of the rural poor. Among them are technologies that reduce production costs to the landlord or firm, but have the effect of displacing labor. The profitability of mechanized technologies to the landowner may be considerably enhanced by the subsidies to capital that are so

widespread in developing countries. Their propensity to use mechanical equipment may be exacerbated by well-meaning measures like minimum wages or social security provisions which, if enforced, increase the cost of labor. Substitution of capital equipment for labor occurs not only on large estates and commercial farms, but also on the relatively moderate sized holdings of middle farmers in Type A countries of South and Southeast Asia. They invest their savings and profits in hand tillers and similar small scale cultivating, harvesting, and processing equipment which saves them considerable labor. They may contract out their plowing to tractor owners. Greater reliance on mechanical equipment may not always be an exercise in pure economic rationality on the part of the landowner. He may prefer to pay some immediate economic price in order to avoid difficult relations in the future with tenants and laborers, including problems of supervision, wage disputes especially during planting and harvesting time, importuning pressures for handouts and favors, the time and strain required to mediate disputes and the effort involved in evading tenant security and minimum wage laws. By mechanizing both cultivation and processing operations, by adopting more efficient tools and processing equipment, the number of full-time tenants and workers can be substantially reduced. In some Type A countries, such as Java, where the holdings of many owner-cultivators are small and are likely to be further fragmented by inheritance, small farmers must adopt whatever technical improvements they can in order to reduce their need for hired labor. They may

be motivated more by their own survival needs than by avarice. Traditional obligations to clients cannot survive this kind of brutal pressure. What happens to the displaced workers and their families becomes the responsibility of an impersonal and often remote presence called government.

Many landowners in Type A and B countries for generations accepted their responsibility as patrons to take care of client families who were linked to them by kinship or other forms of obligation in vertical solidarity networks. Though terms of tenure or labor service were often severe, the landowner-patron did provide for the basic subsistence needs of his clients in good years and bad, exchanging security and protection for deference and service. To fulfill these obligations was more important to the patron than to maximize short-term financial returns on his land or capital. Recently however, these traditional "feudal" bonds have begun to weaken. The number of client families has increased beyond the number of retainers for whose welfare patrons feel they can reasonably accept responsibility. Moreover, urban and material values increase their appetites for cash income. The tendency is to slough off traditional responsibilities in favor of more rational uses of resources with the objective of profit maximization. Evidences of this trend crop up in all areas of the world. In some parts of Africa, for example, tribal lands traditionally available to all tribal members on a usufruct basis are being appropriated by government officials or foreign firms usually with the acquiescence of

chiefs, effectively privatizing and alienating these lands from tribal subsistence uses. Land available to support growing tribal populations is therefore declining.

Thus traditional social structures which fostered a sharing ethic in rural areas are beginning to erode and to leave tenants and laborers without effective relationships on which they can depend to meet their basic need for livelihood or to care for them in times of trouble. Laborers must look for new patrons to supplement the support they receive from kinsfold who may be unable to offer much help. In some areas labor contractors serve this purpose, providing credit and employment, though on very harsh terms. The tendency on the part of former patrons and of their former clients is to look to governments to meet these responsibilities, but governments usually lack the means and often the interest to provide anything but palliatives, e.g., work relief in times of drought.

The land reforms which have been instituted in many countries have further undermined patron-client relationships. In many Type A countries, the traditional patron has been replaced by "middle farmers," farm operators who constitute the new ruling group in rural areas (Pakistan, Egypt). They share little sense of the traditional responsibility of their former landlords to their clients and are concerned primarily with efficient farming and the maximization of returns on their land and capital. To the extent that they adopt multiple cropping, high yielding varieties, and other measures of intensification in order to

increase returns on their land, they may increase their labor requirements and thus provide more employment opportunities through direct hire or tenure relationships than did their predecessor landlords. They are inclined, however, to mechanize where possible, to convert earnings from agricultural surpluses and from their credit operations to labor displacing capital equipment and to acquiring additional land. Whatever they do, however, they tend to deal with tenants and laborers on strictly commercial terms, rather than the feudalistic patron-client basis that previously provided some security for the rural poor. If it serves their purpose to contract out harvesting to commercial firms (e.g., the "tabesan" contracting practice which now prevails over 60 percent of the agricultural area of Java and has resulted in massive reductions in labor use) rather than to follow traditional practices of using local family labor, they do not hesitate to do so.

In some Type B countries, including Bolivia and Mexico, the elimination by land reform of traditional latefundia landlords has resulted in the substitution of government as the de facto patron. Government has penetrated rural areas with credit agencies, peasant syndicates and similar organizations which have government-provided benefits to distribute. Criteria for the distribution of benefits may include political loyalty. The gatekeeper to benefits is a local boss (cacique) who represents the national regime in the local area. In the tradition of machine politics, he awards jobs on the roads,

seeds-credit-fertilizer, access to clinics and hospitals, and other benefits available from government to those who reciprocate with services and loyalty. He takes a substantial slice of local revenues and requires special payment for government services and resources that pass through his hands. He may also maintain a strong-arm squad as a persuader. He is the new-style patron--the big man who can take care of little people when they are in trouble and need help. His strength comes not from the ownership of land, but from his position in the political system. In some cases he "represents" the peasant organization which may have begun as an instrument of a participative peasantry, but has been effectively co-opted and incorporated into the structures of the regime and now serves primarily as a conduit of government largesse and an instrument of control. The Latin American cacique system and its role as patron and exploiter of the rural poor has functional equivalents in all areas of the world and requires more specific study.

At a time when many rural areas are surfeited with underemployed labor that has few alternative employment opportunities, the commercialization of agricultural production, with its emphasis on the profitability of the firm or farm, is likely to result in less net employment and less sharing of employment and output than was the case under more traditional arrangements. The victims, of course, are the landless and tenants who must compete for limited employment opportunities; their intense

competition for access to land and employment keeps real wages low even in relatively prosperous rural areas. In this movement from status to contract they have lost some of the sources of security that were available to previous generations.

Institutional Rigidities and Inequities

Land tenure arrangements are the principle cause of inequities in most rural areas. In many areas of Latin America large tracts of fertile land are owned by absentee landlords and are inefficiently exploited, providing relatively little employment usually on harsh tenancy terms or at very low wages. Much of the land is unused, or used for grazing. When converted to modern commercial agriculture, as in northern Mexico and many areas of Brazil, such holdings may be highly mechanized, creating a few good jobs, but displacing large numbers of former tenants and laborers. In this environment access to land is denied to those who need it and could use it efficiently; the majority of peasants are confined to small holdings (minifundia) often scattered parcels of marginal land which are insufficient to provide for family subsistence. They are thus available as a dependable source of cheap, often seasonal labor on plantations for operations that cannot be profitably mechanized.

In other areas of the world where land is cultivated intensively (e.g., South Asia, the Nile Valley) and where landholdings are relatively small, farmers who produce marketable

surpluses and require labor outside the family provide tenancies and employ laborers on harsh terms, because the acute competition for access to land and employment drives down the price of labor. The poverty of these laborers and tenants is aggravated, in many cases, by indebtedness which makes them almost totally dependent on the landowner-creditor. Ironically, bonded labor and debt peonage, despite the exploitative quality of these relationships, often provide some guarantee of employment and subsistence which may be unavailable to the "free" laborer or tenant.

Oppressive conditions may be reinforced by institutionalized patterns of racial and ethnic discrimination. Land ownership may be denied to pariah groups or they may be inhibited, as in the case of the harijans in India, from aspiring to upward mobility and are thus compelled by custom to work on menial occupations at low rates of compensation. Because of ethnic discrimination, the Tamil laborers on rubber and tea estates in Sri Lanka have become the lowest wage group in that country, reversing the usual situation where full-time estate laborers are relatively well off. Organization and advocacy by such groups is prevented by force or the threat of force and efforts to do so are likely to be repressed. Indeed, weakness or absence of organization is a characteristic of the landless and near-landless nearly everywhere. Because of their weak and dependent condition and their inexperience with formal organizations, it is hard to form and maintain

organization among them. They tend to rely on kinship, or what remains of traditional vertical networks, or on particularistic arrangements with patrons or local influentials to protect their interests on an individual or family basis. Feelings of class solidarity among them are slow to develop and hard to embody in organizations.

Where organization appears likely to succeed, it usually evokes hostility among landowners and merchants, fearing that it will increase the cost of labor, and more seriously, threaten property rights or challenge their control of rural areas. Efforts to organize the landless and near-landless frequently provoke reprisals by landowners or armed bands financed by them. Their tactics include assassinations, burnings of homes, large-scale evictions and other acts of terror. Because of their political influence, landowners are often able to convince governments and law enforcement agencies that organizations of the landless have a subversive purpose, as evidenced by their radical rhetoric, work stoppages or land invasions, and that they must be suppressed. Only when they are supported by sympathetic governments as in Kerala or by influential bodies such as the Catholic Church in some Latin American countries have local organizations of the landless been able to survive and function for extended periods, to pressure governments for the adoption and enforcement of such measures as tenant security and minimum wage legislation, to engage in forms of collective

bargaining with landowners, and otherwise to promote the interests of their members. The absence or weakness of such organizations in rural areas, combined with the erosion of traditional protective social structures, leave the rural poor as individuals and households exposed increasingly to the rigors of a market economy under highly unfavorable labor surplus conditions.

Macroeconomic and Macrosocial Policies

Recent writers have emphasized the pronounced and consistent urban bias in public investments, incentives for private investment, and government expenditures for public services. Social and physical infrastructure tend to be concentrated in the cities, especially the larger cities, along with factories, military installations, financial institutions, and government offices. These urban structures in the "modern" and organized sector provide steady and reasonably paid employment. Being visible and articulate, those employed in such organizations are able to make effective claims for additional investments and public services. In the interest of survival, governments tend to be sensitive to the demands of these urban constituencies. It is no accident that mean per capita real incomes in urban areas tend to be more than double those in rural areas and that rural areas are starved for public investment and for public services.

Private investment also benefits from the infrastructure of transport, electricity, and similar facilities that are concentrated in urban areas, from concessional interest rates on capital, and preferential access to foreign exchange. Modern enterprises tend to locate in rural areas primarily for investment in export, foreign exchange earning crops--plantation enclaves encouraged often by interest and tax subsidies and the remission of import levies on capital equipment. Even when they are located in rural areas, "modern" agricultural enterprises, often foreign owned, produce goods on the best available land for export and employ relatively little labor in their operations. Little of the foreign exchange they earn is spent on items that reach the rural areas or that benefit the rural poor. Governments often permit and even facilitate sales promotion in rural areas of machinery and processing equipment--often imported tariff free--which has the effect of displacing rural labor. Adding insult to injury, government investment in agricultural research and in agricultural extension tend to be concentrated on export crops rather than on subsistence crops grown by marginal farmers.

It is often argued that the most reliable expressions of government policy are its patterns of public expenditure. Whether measured by doctors and health facilities per capita, all weather roads, potable water supply, or electricity connections, rural areas tend to be underfinanced and underserved. Economic policies which subsidize and otherwise favor private

investment in capital intensive industries tend to reinforce this urban bias. Rural areas are neglected. Within rural areas, the weaker strata of society are penalized both by the discriminatory provision of public services like agricultural research and health facilities, and by failure to foster patterns of development which emphasize employment. Even though investments in peasant agriculture tend to be more efficient than in modern industry or plantation agriculture--to yield both greater output and more employment per unit of capital--most governments nevertheless continue to favor urban industrial investment and to regard urban as modern and rural as backward.

While this may appear to be a cruel observation, the logic (though not necessarily the intention) of the macroeconomic and macrosocial policies of nearly all developing countries surveyed in this project--modified at times by populist rhetoric, by token programs serving the rural poor and by relatively small expenditures for public services in rural areas--is that the rural poor should be allowed to shift for themselves and somehow survive until they can be absorbed sometime in the future into the growing modern sector of the economy. While high rates of expansion in manufacturing industry have produced this favorable development in a few instances (Korea), this pattern seems unlikely to occur in most third world countries.

Another development that has penalized the landless and near-landless is the chronic inflation which has afflicted

most developing countries. Under conditions of inflationary expectations, land ownership is a sound and secure investment. This encourages urbanites, including businessmen, military officers and senior civil servants to put their savings in land. Their willingness to buy at high prices encourages local money lenders to foreclose and indebted small holders to sell out. The result is greater concentration of land ownership, less efficient use of scarce land resources, and the conversion of small holders to tenancy and landlessness. Unorganized wage laborers, especially in rural areas, are seldom able to adjust their wage rates to keep pace with rising prices for the items they purchase, including often the food they help to grow. The effect is the steady erosion of their already low real incomes. To the extent that inflation is a function of international price movements, there is little that governments can do to protect domestic living standards. But to the extent that domestic inflation is a function of over-committed public budgets for expenditures that benefit primarily urban populations, the price is paid by the poor, especially the unorganized poor most of whom live in rural areas.

In most developing countries, there are political and patronage links between the urban political elites and their economic allies who control the institutions of government at the center and the landowners and merchants who dominate economic life in rural areas. Where traditional social

organizations remain effective, their leaders can be expected to promote and protect the interests of constituents as well as their own family interests in dealings with government. Rural elites may bargain for higher prices for their products and lower prices for their inputs; they may work for public investments--roads, irrigation--that will benefit them. As local influentials, they may also bargain for schools, health centers and similar public goods that will help their communities and their neighbors. They thereby strengthen their influence and respect without impairing their own economic and social interests. As patrons, they may share some of their prosperity with poor relatives or with tenants and laborers. They may be able to do personal favors for their clients by intervening with higher level politicians and civil servants. They may in exchange deliver votes and other forms of support to urban elites when this is required.

In return, however, they expect that government will support them promptly and decisively against any local threats to their economic and political position from discontented tenants and landless workers. Usually the dependency of the poor for access to land, employment and credit, their recognition of the high costs of protest, appreciation for occasional acts of charity and assistance from landlords and merchants, plus sentiments of solidarity and social discipline are sufficient to maintain order in the countryside. Where

necessary, the police and other law enforcement authorities are available, supplemented if need be, by informal armed bands organized by landowners. In the event of crisis, however, local elites expect that help will be available from government at the center and that expectation is usually fulfilled, since the latter fear that disorder in rural areas may spread to the cities. Reformist governments in the hands of urban intellectuals, technocrats, businessmen and populist politicians may disappoint these expectations, however, and both foster and support demands originating among laborers, tenants, and marginal farmers. However, unless land tenure arrangements are radically reformed or the rural poor are effectively organized to advocate and bargain for their interests, such reform measures tend to be short-lived because they do not affect the underlying distribution of economic and political power in rural areas.

CHAPTER IV

Economic, Social and Political Conditions Associated With Landlessness and Near-Landlessness

Rural areas in most developing countries must provide livelihoods for a rapidly increasing labor force. The rural labor force in most countries, even after accounting for permanent migration to cities, will probably increase by 50 percent before the end of the century. In the absence of far-reaching institutional changes, very few landless families can expect any access to additional land, either because all available land is now in use (Type A), or because of restrictive land tenure arrangements (Type B); in Type C countries, much of the remaining unused land is of very poor quality. Land ownership is becoming increasingly concentrated under the impact of commercialization, agrobusiness enterprises expanding their operations in Type B countries, "middle farmers" acquiring additional lands in Type A countries. Meanwhile small holders lose their land or suffer the effects of fragmentation of holdings due to inheritance and foreclosure of debt; every year more of them drop into the tenant and landless categories. Earning a livelihood becomes an increasingly arduous enterprise as real wage rates decline because of intense competition for employment and access to land.

Except in a few areas, new job opportunities are not being created at a sufficient rate to provide employment for the increasing labor force and incomes needed to provide minimum necessities for large families. Some of this pressure is relieved by permanent migration to cities; migration to other rural areas in search of work becomes a way of life for large numbers of landless and near-landless families. Because of their urgent need for incomes, whole families, including women and children from the age of seven or eight must work whenever and wherever casual work can be found, even for the most meager remuneration and often under degrading conditions. Families thus develop "coping mechanisms," deploying all their available labor power wherever they can pick up work. The consequence of female labor is often the neglect of children; of child labor, inability to attend school, which helps to explain why the total number of illiterates in developing countries continues to increase. Illiteracy, in turn, is one of the factors that accounts for the weakness of self-help and advocacy organization among the rural poor and leaves them vulnerable to exploitation by employers, money lenders, merchants, labor contractors, and public officials.

This chapter will further detail the grim syndrome of poverty, insecurity, powerlessness, and social demoralization that governs the lives of the growing numbers of landless and near-landless families in nearly all Third World countries.

The environmental consequences of this poverty will be discussed in the final section of this chapter.

A. Impoverishment and Insecurity

The condition experienced by the landless and near-landless in developing countries is, with few exceptions, chronic poverty in the absolute sense, combined with insecurity.

Undernourishment

While data on incomes and real wages are limited and of questionable validity, the overall picture that they yield is of real household incomes barely sufficient for family survival in the most basic biological sense. World Bank estimates state that almost half the people in rural areas suffer from "absolute" poverty, the main indicator of which is insufficient diet and that 932 million have per capita calorie deficits in excess of 250 calories per day.* The FAO estimates of persons in developing countries with insufficient protein/energy supply was 434 million as of 1970, three-fourths of them in Asia. This is about half the World Bank figure, indicating how widely these estimates can vary. The few nutritional surveys which discriminate among income groups in rural areas indicate bare caloric sufficiency for those in the lower deciles, combined with protein and vitamin deficiencies even during seasons of abundant

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*Schlomo Reutlinger and Marcelo Selosky, Malnutrition and Poverty, Magnitude and Policy Options, World Bank Staff Occasional Paper #23, Baltimore, Johns Hopkins University Press, 1976, p. 23.

crops. In bad crop years and during some seasons of the year there are deficiencies even in caloric intake; yields decline for marginal cultivators and share tenants, jobs are unavailable for the landless and the price of food escalates because of shortages. Meats and meat products are a rare dietary item, except among pastoral peoples. In large areas of India, surveys indicate that as much as 80 percent of incremental rural income is normally spent on food items, including 60 percent for grains.

Thomas and his associates report that "in Indonesia between 1960-67 average per capita calorie consumption per day dropped from 1946 calories (already 200 below the United Nations minimum) to 1730. Furthermore, while the recommended minimum daily protein intake is 55 grams in Indonesia the average had fallen from 38.2 to 33.4. A similar situation prevails in Bangladesh where it is estimated that the poorest one-third of the population consumes less than 1600 calories a day."*

According to a recent AID source, in the Philippines "an estimated 500,000 pre school children and infants are suffering from third degree malnutrition (body weight less than 60% of Filipino standard). An additional 2.3 million children and infants are moderately affected (their weight being 60-75% of standard). Less than a third of the nine million pre schoolers attain full growth and development . . . Over a third of the nine million elementary school children are mal nourished . . . The Philippine government recommends 2000 calories per person per day

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*John Thomas et al., Employment and Development: A Comparative Analysis of the Role of Public Works Programs, HIID, April 1975, pp. 38-39.

but actual consumption averages only 1700.

The most impoverished households, those in which malnutrition in children is most severe, are those headed by women who are simply unable both to care for children and to earn income. Such women are often outcasts in their own communities. Among landless families where the women must work, the literature indicates high incidence of infant and child neglect, often leading to mortality or to physical and mental impairment, as infants and children are left in the care of young siblings or the elderly who neither feed nor care for them adequately.

Combined with the scarcity of health services available to the poor in rural areas, the absence of clean potable water supply and of adequate waste disposal facilities and practices, dietary deficiencies contribute to the high rates of child mortality, physical and in some cases mental impairment, relatively low life expectancies and poor health conditions. Housing conditions are uniformly shabby, primitive and unsanitary among the rural poor; families are crowded into small quarters which deny them any privacy and contribute further to ill health.

It is extremely risky to generalize about nutritional deficiencies among the landless and near-landless. Standards for measuring "adequate" diet must vary with occupation, age, and climate, there is no agreement among nutritionists on what constitutes adequate diet, and survey methods are far from reliable. Though the weight of informed judgement among nutritionists and representatives of most international agencies supports the

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*AID, War on Hunger, Special Issue on the Philippines, December 1977, pp. 11-12.

proposition that very large numbers of people in developing countries are insufficiently nourished, this is not a unanimous opinion. Poleman who is a careful and experienced student of food economics is skeptical of these estimates and believes they may be highly exaggerated. He rejects as a myth the view that large numbers of people are threatened with starvation. The existing data base, he believes, is too unreliable to permit generalizations; "the survey data from which inferences about the effects income has on eating habits simply do not exist for most areas."*

Declining Real Wages and Incomes

There is wide-spread evidence in Type A and B countries that real wages have been declining in recent years primarily because the supply of labor is growing more rapidly than the demand. An additional factor is price inflation, reducing the real value of nominal wages which tend to remain stagnant or to increase at a slower rate than prices. In the majority of countries which have not experienced the "green revolution," there has been inexorable downward pressure on real wage rates; whole families are mustered into the labor force and range over wide areas for even temporary employment at very low wages in order to maintain household income at or slightly above the subsistence level. Even in areas in which high-yielding varieties have been adopted and total employment has increased, real wage rates have seldom risen because the increased demand for labor has attracted large numbers of migrants. Aggregate employment and income may increase, even in the face of mechanization, but they must be shared among a much larger labor force; consequently real wage reate

*Thomas Poleman, "World Food: Myth and Reality," World Development, 5/5-7, May-June 1977, pp. 383-394.

and family incomes remain stagnant or even decline. Much of the benefit of the additional employment redounds to migrants who pour in from other areas rather than to local laborers. Evidence in our country profiles from areas as divergent as Colombia, Guatemala, Brazil, Java, Bangladesh, the Philippines, and Egypt indicate that real wages and rural household incomes during the past fifteen years have fallen, in some cases precipitously, by as much as fifty percent.

Many families appear to be spending more than they are earning. Apparently they finance their deficits by further borrowing, servicing interest payments by labor, illegal activities, remittances from family members working in urban areas, or sources of income that escape the surveys. Prospects for the next two decades are grim. Before the end of the century, the rural labor force in these countries will have increased by fifty percent, even assuming that a third of the additional workers migrate to urban areas. There is no evidence that rural employment opportunities in these countries will increase at anything approaching that rate. This signals continuing downward pressures on real wages and real family incomes and increasingly severe terms of tenancy and wage employment. The increasing commercialization of social relationships in rural areas will further aggravate these trends, with the erosion of traditional sharing, patronage, and solidarity networks and practices. A larger

percentage of the rural poor will be landless and near-landless, living on the margins of absolute poverty.

Underemployment

Except during peak agricultural seasons of planting and harvesting, when labor is in great demand and all family members including children work to earn as much income as possible, the lives of landless workers are beset with periods of underemployment and of work at very low levels of productivity and remuneration. In many labor surplus rural areas (Types A and B) underemployment is estimated at as much as fifty percent of available adult labor time. A recent survey in El Salvador indicates that rural underemployment averages about forty-seven percent of the available labor time of adult males.* Unemployment is especially evident during the agricultural slack seasons or periods of bad weather which make outdoor work very difficult. Under these circumstances, many adult males are unable to pick up casual work even if they are willing to migrate. They spend part of their incomes on alcohol, gambling, and similar activities, often depriving their women and children of bare necessities.

The fundamental problem is that there are not enough job opportunities to absorb the available labor supply. Under prevailing institutional and technological arrangements, much of the available human labor is redundant during much of the year. Because of desperate need for income, the

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*AID Mission to El Salvador, Agricultural Sector Assessment, August 1977, p. 13.

labor supply is expanded by women (in countries where women are permitted to work outside the family circle), and by children as soon as they are physically able to work. Many small holders--the constrained cultivators in our classification--must also seek wage employment during part of the year and so must the women and children in their households in order to supplement the incomes that can be derived from their mini holdings. Everyone works to maintain the family in such activities as drawing and carrying water, often for very long distances, scavenging for firewood and other sources of fuel and wild food, preparing meals under primitive conditions, caring for children and domestic animals, making and marketing handicrafts, or seeking casual work outside the family at very low wages whenever it is available. Child labor is the norm among landless families since all hands must make some contribution to family subsistence. This helps to account for the low levels of school attendance and the absolute increase in illiteracy in the rural areas of most third world countries. Some marginal farmers leave their farms to the care of women and children while they migrate in search of jobs that yield cash income; in the process the yields on their own small holdings may suffer.

The circumstances facing young males among landless and near-landless families pose another set of problems. Many have developed expectations through some exposure to education,

to the mass media, or to reports of peers who have been to urban areas that far exceed what their immediate situation and rural futures seem to offer. Not only have they difficulty finding any work at all during some periods of the year, but the work they find is often crude and degrading in their own eyes, pays very little, and their earnings usually must be surrendered to their families. They are deprived of the sense of independence that young males so often crave. If a father owns some land, he is not yet prepared, because of continuing family obligations, to turn it over to his young sons. In any case, the family holding may be barely sufficient for only one sibling. Their immediate and long-term prospects are dismal so long as they remain in the countryside. Many of them migrate to the cities or join the army if they are lucky. It is from the ranks of idealistic and discontented young males that violent protests including land invasions and other forms of civil disobedience often originate. Efforts to organize the rural poor for self help and for protest often begin among better educated but embittered rural youth. The Naxalite movement in India and the outbreaks in Sri Lanka in 1973 seem to have been led by relatively well-educated but frustrated and underemployed young rural males.

Indebtedness

Because of the low productivity of much of the work that is available and their inability to earn sufficient

income to meet consumption needs, plus family emergencies and social obligations which inevitably arise, landless, tenant, and constrained cultivator families invariably come upon periods when they need more cash than they are able to earn or save. Many rural families chronically spend more than they earn. Since they have no access to institutional credit, they must turn to local landowners, merchants or labor contractors who provide credit, but at usurious rates of interest. Because their normal earnings seldom yield a surplus, it is virtually impossible for the landless ever to liquidate their debts. Indebtedness further weakens their power to bargain with employers over wage rates or with landowners over conditions of tenancy and often compels them to provide unpaid labor in order to compensate for their inability to service debts and to insure access to additional credit in case of urgent need.

Smallholders become, in effect, sharecroppers on their own land, paying over a substantial part of their produce to service their debt; often this is a prelude to foreclosure and to the final loss of their land. The landless and near-landless frequently become, in effect, serfs or bonded laborers, held on the land by debt and fearful of leaving because this would jeopardize their access to credit. Ironically, despite the harsh and exploitative terms, bonded tenants, laborers, or peons may be more certain of employment and of the subsistence that it secures than free laborers.

Indebtedness provides a kind of patronage. The creditor, to protect his "investment" must provide some work--though on onerous and often degrading terms--to his debtor. One factor which accounts for the difficulties often faced in organizing the rural poor is the fear that, in reprisal, landowners and merchants will cut off the sources of credit on which they depend for survival.

Insecurity

The lives of the rural poor are beset with insecurity. Because of intense competition for access to land and to job opportunities, wages are depressed and terms of tenancy are severe. Tenant security laws and laws regulating shares of rental payments are seldom enforced and only with difficulty. When they are likely to be enforced, landowners may evict tenants and convert the status of former tenants to laborers; where minimum wages are enforced, wage labor can be converted to casual or seasonal tenancies-at-will. Such measures designed to protect the poor sometimes have the perverse effect of encouraging mechanization. Because their economic bargaining power is so weak and they have little in the way of organizational or political resources, the landless and near-landless literally live from season to season. Illness or disability of the household head can be catastrophic. They are the first victims of droughts or other natural disasters which simultaneously reduce the demand for labor and raise the price of food.

Their security comes from the claims they can make on kinsmen to aid them and share their subsistence in times of trouble. This may be supplemented by what survives of traditional social structures, including patron-client links, relations with creditors, and in some countries, their success in cultivating local political bosses who may have government handouts to dispense. Luck in finding employment in the slack seasons or remittances from family members who have migrated to the cities may also help. Upward mobility is extremely problematic for all but a fortunate or specially enterprising few of the landless and near-landless, because they have little effective access to education and because the price of an acre of land usually exceeds manyfold the annual cash income of a poor rural family.

B. Migration

The past two decades have witnessed unprecedented migration from impoverished rural to growing urban areas. Typical are these data from the Philippines. The poorest three regions of the Philippines (The Visayas, Bicol, and Ilocos) experienced, during the decade of 1960-70, a net outmigration of 1.5 million, or 35 percent of the overall population growth. Nevertheless, these areas gained about two and one half million in population during that period due to high birth rates.

Those who participate in these migrations are not always the poorest. Usually they are young and male. Among them

are rural youths who have achieved literacy and some skills but see little prospect for their use in the countryside, are attracted by opportunities in the cities, and are encouraged by their families to seek their fortunes where their skills can be put to better use. This group of rural-urban migrants usually comes from families who are relatively well-off or are specially ambitious for their children. The majority of migrants, however, are "pushed" from rural areas to the cities by poverty and lack of opportunity. If they are relatively successful, they may invite other members of the family including women, to join them. They may remit some of their earnings to their families which provide the latter with vital supplements to their earned incomes. These remittances become an essential factor in the maintenance and security of rural low-income families. Unsuccessful migrants to the cities usually return to the countryside.

Another pattern of migration is from one rural area to another. In some cases, the pattern is seasonal; migrants, often from distant areas and even from foreign countries, appear when the local labor market demands hands for planting or harvesting. The numbers involved are often very large. In Guatemala, it is estimated that 25 percent of the rural labor force is involved in annual seasonal migrations. Whole families migrant to participate in the seasonal opportunities for employment. The migrants pick up needed incomes, landowners are guaranteed a reliable supply of cheap labor, and

consumers benefit from relatively inexpensive crops. In many cases these migrations are spontaneous and follow an established annual cycle. In other cases, they are organized by labor contractors with whom the migrants must share their meager wages. When families migrate, the effects on the health and educational opportunities of children are highly detrimental and the strain on women is very great, for the conditions of housing and amenities in migrant camps are often deplorable. Migrant families hope to save enough from their earnings to meet a portion of their cash requirements for the balance of the year; in some instances, however, they incur unexpected expenditures during the migration period, or they are swindled by unscrupulous employers, merchants, or labor contractors, leaving them with little surplus beyond their subsistence during the migration period. Where men migrate alone, there is less family disruption, unless the migrant male fails to return to his family, but the additional burdens of cultivation and family maintenance are absorbed by children, older persons, and especially the women who remain behind.

Any center of growth, urban or rural, becomes a magnet for the surplus labor of the rural poor--South Africa for the countries of Southern Africa; Singapore for Malaysia; the Indian Punjab for Bihar and Rajasthan; Sao Paulo for Northeast Brazil; Saudia Arabia and Kuwait for Egypt, Jordan and even Pakistan; the Ivory Coast for Upper Volta; Argentina

for Bolivia; and the U.S. for Mexico and the Caribbean countries. The five to eight million illegal Mexican workers now in the United States may be averting social catastrophe in many rural areas of Mexico. Any opportunities for remunerative employment are met almost immediately with a response from impoverished rural areas, so efficient are the information flows. Wage rates and living and working conditions may be quite unappealing by urban standards, for the massive influx of migrants tends to keep wages low even during periods of peak demand. Nevertheless, rural poverty is so intense and remunerative employment so limited that seasonal influxes of rural labor even from great distances can be assured, whenever employment opportunities exist. Where HYVs have produced a permanent demand for additional labor, migrants by the thousands come to settle permanently.

C. Powerlessness and Social Demoralization

Because of their poverty and dependency, the landless and near-landless are ill-equipped to make demands in their own interest. There are few formal organizations in rural areas that bring together the landless or tenants to advocate or bargain for economic benefits. Unions and peasant leagues which manage to emerge have a poor record of survival. They are vulnerable to internal factionalism, inexperience in running formal organizations, and the hostility of landlords and merchants on whom the rural poor depend for employment, access to land, and credit. Cooperatives and farmers

associations provide useful services to owner-cultivators and can become effective spokesmen on their behalf; with rare exceptions such as the rickshaw cooperative in Comilla, cooperatives have been of little use to landless workers or tenants.* Informal small groups commonly help the rural poor to share out their poverty, but the literature is silent on their effectiveness in advocacy or bargaining. Since traditional organizations in rural areas so often are dominated by rural elites, they can seldom be converted into instruments that articulate the economic interests of the landless and near-landless.

In countries that permit the operation of political parties in rural areas and where political candidates must compete for votes, there are some opportunities for the rural poor to exchange their votes for at least the promise of specific benefits. These benefits usually take the form of public goods--health clinics, schools, potable water--and of public works projects which provide employment and supplementary incomes to the landless, especially prior to elections. The Panchayat system in India has provided opportunities for some lower caste groups to join electoral coalitions and extract benefits in exchange for votes. These benefits, however, seldom touch such fundamental issues

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*For a recent discussion of the Comilla Experiment and its aftermath, see Wahidul Haque et al., "Toward a Theory of Rural Development," Development Dialogue, 1977: 2, pp. 89-103.

of interest to the landless and near-landless as minimum wages, tenant security, increased employment opportunities and land reform. Where vertical patron-client linkages or similar traditional networks survive, clients often vote as their patrons ask; these votes may be purchased at a low price. Temporary jobs and other forms of patronage financed by government may be distributed by local political bosses or local influentials with good ties to government to "deserving" members of the local poor. The poor thus find it more effective and less risky to rely on individual and kinship links and on conjoling higher status people for particularistic benefits than on the more dangerous efforts at group or class organization. Only when governments positively support advocacy organization among the rural poor as in the case of Kerala or when influential organizations like the Catholic Church in some Latin American countries sponsor them, are they likely to survive and be effective.

Because of their political and economic weakness, the landless tend to be politically invisible, making few claims and enjoying little access to public services. Agricultural public services--extension, institutional credit, electricity, irrigation--are available almost exclusively to farm owners, and usually to the larger owners. Because they are scarce and valuable, they tend to be rationed to those in a stronger position to claim them. Some "progressive" landowners may "retail" services and facilities to their tenants in order

to insure higher yields which will mutually benefit both them and the tenants, though landowners who supply inputs usually demand a higher share of the output or higher cash rentals. Access to important non-agricultural services--schools, health clinics, family planning and public potable water supply--may be available to all rural people, but usually after the more powerful and influential have first been accommodated. Frequently, however, the landless cannot take advantage of schools because they cannot afford fees or proper clothing for their children or because they need the labor of their children of both sexes after the age of eight or ten. If they must migrate, they may not be eligible for school enrollment. Illiteracy, in turn, condemns the next generation of the landless to poverty and powerlessness. While the situation varies greatly from country to country, rural areas are sparsely provided with public services oriented to education, health and welfare. Where caste relationships continue to prevail, large groups of the rural poor may be excluded from public services or granted access to them on discriminatory terms.

In all societies where extreme deprivation and hopelessness are common, there are behavioral evidences of social pathologies. Such conditions create breakdowns of social discipline, reflected in criminality, family abandonment, drunkedness, prostitution, and abuse of women and children by men who are no longer able to fulfill their expected roles

as providers for their families. Such frustrations from time to time break forth in acts of random violence, often triggered by callous or abusive behavior by government officials, landowners, or merchants during periods of economic strain in the countryside. Civil disobedience may be expressed in attacks on property, including seizure of food stores or land invasions, or in physical attacks on persons, including assassinations of unpopular local officials or landowners. Attempts at land invasions and land seizure have been reported from nearly all Latin American countries. In Java contract labor teams have been attacked by local laborers whom the former had displaced from their jobs. Also in Java the visit of the Japanese Prime Minister in January 1974 touched off violent demonstrations in rural areas for no apparent reason directly connected with his visit.

Though statistics are seldom available on this subject, such acts of violence are known to occur frequently in rural areas reflecting the strains, frustrations and despair of extreme poverty. Though authorities frequently allege outside subversive influences, most such outbreaks are local and random, show little evidence of prior organization or of links beyond the local community, and are easily dealt with by law enforcement authorities. They are therefore not revolutionary in character. There have been instances, however, including the Naxalite rebellion in India in the

early 1970's and the recent violence in Colombia, which indicate clandestine organization and revolutionary intent. These can be expected to increase as poverty becomes more desperate unless governments are successful in improving the conditions and the prospects of the rural poor.

D. Environmental Degradation

The struggle for survival among the landless and near-landless has begun to impair the biological and physical environment on which they and their children must depend for their livelihoods. Forests are being rapidly denuded in many countries to provide firewood for fuel at a faster rate than they can be replenished, thus establishing conditions for flooding and soil erosion. The ravishing of forests in Nepal is exacerbating flooding and silting in distant Bangladesh. In many areas of tropical Africa, soils which are basically weak and require long fallow periods are being used more frequently and intensively, depleting their fertility. Lands once used only for grazing and unsuitable for intensive cultivation are being occupied and tilled by settled farmers.

The major cause of these environmental depredations is increasing pressure of populations on the available land base. In the absence of alternative employment opportunities in non-farm occupations resulting from capital intensive patterns of economic and industrial growth or from land tenure arrangements which prevent the efficient exploitation

of fertile lands, and because of cultivation, water use, and livestock management practices that degrade land resources, good land is overutilized, marginal lands are brought under cultivation, and forests are plundered to meet immediate consumption requirements. The consequence is likely to be an inferior resource base in many areas to support a growing rural population. Halting and reversing this destructive trend will require recognition by governments of the importance of this problem, the establishment of counter-measures as a high priority for public policy, major organizational efforts among the rural poor, and large investments over many years which are beyond the present capacities of many governments.

CHAPTER V

Government Policy Measures and Impacts

In Chapter IV we pointed out some of the methods by which the landless and near-landless have attempted to adapt to, cope with, and defend themselves from deteriorating economic conditions. Rural poverty has become so pervasive and intense in most third world countries that governments have been obliged to adopt some policies and programs to alleviate its effects and control its causes. Most of these activities, however, have reflected insufficient knowledge, capacity, or commitment on the part of governments and international agencies. The cumulative results have had only minor impacts on the incidence and intensity of the poverty, insecurity, and powerlessness that afflict the expanding numbers of landless and near-landless. Governments have generally under-invested in efforts to deal with lower-end rural poverty; they have been especially wary of recognizing and acting on the structural elements of rural poverty, since this would inevitably affect power relationships. They have preferred measures that might help the poor, without requiring significant redistribution of incomes, productive assets, or power. To simplify the presentation of this complex subject--for many kinds of programs have been

attempted--we shall classify them into five categories: (1) reducing population growth, (2) increasing employment opportunities, (3) reforming institutions, (4) meeting basic needs, and (5) orienting investments and public expenditures to rural areas.

A. Reducing Population Growth

The efforts and the performance of governments in this long range approach to limiting the growth of the rural labor force have been uneven and in most cases only marginally successful. This was not a major focus of this research project, but the data indicate, (1) that most governments have not seriously attempted to penetrate rural areas with family planning programs; (2) those that manage to reach rural areas have difficulty involving the lower social and economic strata; and (3) while their emphasis on maternal and child care may have resulted in healthier babies and marginally reduced infant mortality and morbidity, they have not significantly affected fertility rates, especially among the very poor. Populations continue to increase at annual rates of from 2 to 3.5 percent per year. The populations of overcrowded Egypt, Bangladesh, Philippines, Java, Mexico, and El Salvador, to mention only a few countries where the number and conditions of the landless are especially severe, are expected to double by the end of this century. Despite internal and international migration, the rural labor force in these countries is likely to continue to increase during

this period at an annual average rate of two percent, totaling more than 50 percent by the end of the century.

The preference of poor rural couples for large families has not been seriously modified for what many observers consider to be entirely rational calculation from the point of view of the parents, however disastrous this may be for their society and for the very progeny they are producing. (The tragedy of the commons). There are evidences from such countries as Taiwan, Korea, Sri Lanka, and Costa Rica that the eagerly awaited "demographic transition" occurs when high literacy rates, more equitable distribution of land and the benefits of basic public services have been achieved in rural areas, combined with economic prospects that assure parents a subsistence livelihood and some security in their old age. There is also some evidence that as prospects to earn even minimal livelihoods become desperate and opportunities for urban migration seem unrewarding, as in Java, some landless parents attempt to limit the size of their families by resorting even to infanticide because they see no way of feeding additional children. The latter phenomenon, observed in some village studies, has not yet been reflected in overall population growth rates. Tragically, even chronic malnutrition does not seem to affect the capacity and the propensity of the landless to reproduce at rapid rates.

While knowledge of how to motivate parents among the rural poor to limit the number of their children is uncertain

and the ability of many governments to reach rural areas with appropriate services is limited, the problem is complicated by the half-hearted efforts of governments to deal with this problem and to invest in it seriously. Some governments remain unconcerned and even pro-natalist in their orientation to this subject; they are advised by some of their intellectuals that "development" will take care of this problem or that the rural poor can be accommodated by settling unoccupied lands. Meanwhile the population explosion continued unabated in most rural areas, exacerbating the pressure of population on scarce arable land resources and on employment opportunities, guaranteeing a grim lot for future generations of the landless.

B. Increasing Employment Opportunities

Income earning opportunities for the landless and near-landless depend either on access to productive assets--capital, livestock, and usually land--or to jobs. In this section we shall deal with efforts by governments to provide additional employment for the rural poor. Most of the efforts by governments to deal with rural poverty to date are included under this heading.

Rural Works Programs

Many governments, often with assistance from international development agencies through food donations, have instituted rural works programs. Though their primary purpose is to provide work relief, through primitive capital accumulation

they also build and improve the rural infrastructure, creating, repairing, and maintaining facilities that may improve the productivity of agriculture and increase the supply of permanent jobs. John Thomas and his associates have identified fourteen countries which have attempted labor-intensive rural works programs in recent years on a substantial scale nationally or in particular regions.* The largest have been in South and Southeast Asia. There have been two significant cases in North Africa, a few in Latin America and the Caribbean, only one in tropical Africa. While rural works programs are often initiated in response to economic crises or natural disasters, once initiated, they tend to become permanent, though at reduced levels of activity. These programs have seldom absorbed more than ten percent of estimated rural unemployment. Even when aided by foreign food shipments, they tend to require substantial budget outlays in the face of competition from groups which may be in a stronger position to claim resources than unemployed laborers in rural areas. Budgetary pressures, combined with fear of inflation if these programs become large, plus strains on administrative resources tend to limit the scale of rural works programs.

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*John Thomas, Shahid Javed Burki, David S. Davies, and Richard M. Hook, Employment and Development: A Comparative Analysis of the Role of Public Works Programs, HIID-IBRD, 1976. Programs examined included Afghanistan, Bangladesh, Brazil-North East, Colombia, Ethiopia, India, Indonesia, Jamaica, Mauritius, Morocco, Pakistan, South Korea, Trinidad-Tobago, and Tunisia.

If they are to serve their purpose, Thomas and associates estimate that a minimum of 60 percent of expenditures should be used directly for wages. The poor benefit not only by employment and income, but also by permanent jobs that may be created by the construction and repair of physical facilities. Though this factor has often been ignored in the planning of rural works, it should be possible to create one man year of permanent employment for each six man years of labor employed on these projects. The longer term beneficiaries, however, tend to be landowners whose properties are made more productive by irrigation and drainage facilities, feeder roads, flood control, and other improvements built under these programs. Governments seldom attempt to recover these unearned benefits from the landowners.

A rural works program which is likely to leave new assets behind requires competent management which is a strain on the capacity of many third world countries even when budgetary means are available. Decentralizing decisions to local authorities has been found to be cost-effective where local action capabilities are available or participatory institutions can be fostered. Some governments attempt to man rural works programs through "voluntary" and uncompensated contributions of labor, the modern version of the traditional corvée. Though such projects are supposed to improve community facilities for the benefit of all and to embody desirable "self-help," they are deeply resented by rural

laborers, as with the African farmers who "planted" trees in a self-help reforestation program upside down. Successful rural works programs must pay laborers some version of the going wage and preferably in cash. Where they have been attempted, labor intensive rural works programs are no "solution" to rural poverty but they have made a significant difference to large numbers of very poor people. If effectively managed and supplemented by international assistance, they can be useful in alleviating rural poverty, especially in Type A and B situations.

Intensifying Agriculture

Perhaps the most promising and effective measures to increase long-term rural employment opportunities are through intensifying agricultural production. Increasing the intensity of land use requires more production inputs and results in larger outputs per unit of land. While the consequences of intensification are not predictable except by careful analyses of all the factors involved in particular circumstances, experience in Asia indicates that additional labor is usually required for more intensive cultivation and for processing the additional product. The incremental income, in turn serves as a multiplier, stimulating demand for local services and for products made by local handicrafts and small workshops. Intensification, by increasing the demand for labor, may provide upward pressure on wage rates, as labor becomes relatively scarce especially at peak seasons. Neutralizing this beneficial trend, however, is the tendency for increasing

job opportunities in most rural areas very quickly to attract migrant labor which depresses wage scales. Increased incomes may encourage landowners to invest their surpluses in cultivation and processing machinery which usually displaces tenants and reduces overall employment. Under these circumstances "middle" farmers may also attempt to expand their holdings by purchasing land or foreclosing debts on nearby marginal cultivators, thus reducing them to the status of tenants or laborers.

Intensification can be promoted by government policy. The most obvious and effective measure is to finance the construction or rehabilitation of irrigation facilities, thus creating opportunities for multiple or year-round cropping. Irrigation, along with fertilizer applications, pesticides, and more frequent weeding are required for many of the high yielding varieties (HYVs) of the major food crops. Though the subject is still controversial and depends on many location-specific factors, the weight of evidence indicates that HYVs usually require net increases in labor use both on and off the farm; this demand can be substantially reduced, as we have already noted, when farmers resort to mechanization of cultivating, harvesting and processing operations. A third set of practices that may increase intensity are interplanting, increased livestock and poultry raising, and on-farm fish production--all of which require some promotion by government through extension information and improved credit availability.

While intensification usually benefits farm owners and operators more than tenants and laborers and tends to skew rural income distribution in favor of the owners of assets, it usually creates additional jobs. As farm operators become more prosperous they rely less on family labor. Children attend school and women avoid more onerous field work; thus more tenants and hired laborers are required. On the other hand, as farming becomes more profitable, owners may become more active as cultivators; as a result, some tenants may lose their traditional rights and be reduced to the status of laborers.

Intensification is seldom a spontaneous set of activities. Irrigation and transportation require public investments, adoption of HYVs depends on the availability of credit, fertilizer, processing facilities, and often price incentives. Progressive or middle farmers usually desire mechanized equipment at low prices for which foreign exchange must be allocated, tariffs kept low, and credit provided on concessional terms. Poultry, livestock, interplanting, and rotational practices usually require the support of an extension network that can at least reach the more prosperous, surplus producing farmers. For governments which are uninterested in structural and institutional reforms, intensification is the most promising route for increasing labor utilization and providing job opportunities and additional income in rural areas. If irrigation facilities and HYVs are to provide

additional employment over extended periods of time, however, governments must see to it, through tariff, tax, and credit policies that farmers cannot gain ready access at concessional rates to labor displacing mechanical equipment. Few governments have shown any sustained interest in this approach.

Most experience with intensification has occurred in Asia, in Type A countries. In other areas, especially Latin America, large land owners and operators are seldom interested in intensification, but find that mechanization plus extensive cultivation, especially of export crops, is the pattern that maximizes their returns on land and capital. The use of labor in this pattern of production and the net output of the land is much less than would be possible if the lands were to be exploited in smaller units and directed more to crops used for domestic food consumption than for export. Latin American governments have taken few measures to help small holders intensify their operations.

Settlement Projects

The classical method of dealing with over-crowding on the land is to extend the land frontier and bring uncultivated lands into production. This process is still occurring in many areas of tropical Africa and is happening spontaneously without promotion or interference by government. Because of rapid population growth, however, the available land is gradually being exhausted. Lands of low quality are coming under the plow, settled agriculturalists are encroaching

on lands which traditionally have been reserve areas for pastoralists (which they use when their regular grazing lands prove insufficient), and low-quality lands are being permitted to lie fallow for shorter periods than in the past.

In other countries where most of the good quality land has been taken over for agriculture some lands still remain to be converted to cultivation. Filling up empty spaces with settlers, providing opportunities for the rural poor to open up frontier lands is regarded by most Latin American governments as an alternative or substitute for land reform. Such expensive prerequisites as the construction of access roads, clearing the land of timber and heavy jungle growth, providing water supply, eliminating such diseases as malaria and tsetse fly require substantial investments by governments before settlers can move in. When landless families occupy these lands they have no assurance of eventually receiving titles; their insecurity often contributes to land use practices that plunder the soils and degrade the environment. Frequently these newly opened lands end up in the hands of large corporations so that the rural poor who happen to migrate to those areas find employment as laborers, rather than settlers. Because of the high costs of these projects and their need for foreign exchange, governments often encourage the production of export crops in order to help recover their investments. Little of the benefit thus accrues to the rural poor.

In some cases, such as Indonesia, governments must arrange for and finance the transportation of settlers and their families over long distances, especially from Java to Sumatra and Sulawesi. The "transmigration" programs in Indonesia during the past 30 years have had a negligible effect on rural poverty in Java. Land settlement projects which require governments to open up areas remote from existing population areas, construct infrastructure and finance the movement and installation of settlers may cost more in funds per job created than would investments in manufacturing. Under these conditions, spontaneous settlement is not likely; it is too arduous, risky and costly for poor families, especially if they must move great distances. Organized projects like the Federal Land Development schemes in Malaysia have relocated relatively small numbers of landless families at very high unit costs. Thus, while they do create additional employment, land development schemes seldom provide sufficient livelihoods to make an important or long-term dent in rural underemployment. They seldom benefit more than a tiny proportion of the annual increment to the rural labor force. One conspicuous exception seems to be Sri Lanka where nearly 500,000 rural families have been resettled in recent years on land rehabilitation schemes at relatively short distances from their original residences. Though unit costs have been high, a significant proportion of the rural poor have benefited.

In many areas where density is very high, as in most of South Asia, Java, and Egypt, the arable land frontier has been entirely used up. Expansion of the land base would require very heavy investments, e.g., irrigating desert areas in Egypt, or moving to lands which are now incapable of supporting agriculture or even pasturage under known technologies. Much marginal land which has recently been brought under cultivation would be abandoned if employment alternatives were available in industry, of if, as in much of Latin America, the fertile lands now devoted to extensive cultivation under present land tenure arrangements were to be distributed more equitably to constrained cultivators, tenants, and the landless.

Industry and Other Forms of Off-Farm Employment

Our data indicate that in most countries, 20-50 percent of the time of the rural labor force is spent in off-farm employment. (One careful estimate for the Philippines places the figure at 45 percent). For the rural poor this includes full-time and part-time work in traditional crafts--blacksmiths, carpenters, tailors, barbers, mat weavers, furniture makers; in transportation, buying and selling, and similar service occupations; in processing crops and livestock commodities for marketing and in servicing farm equipment; and in public works--irrigation and road construction and maintenance. (This excludes government officials, teachers, merchants and moneylenders whose income levels and status place them outside

the category of the rural poor). Where additional employment opportunities on the land seem constrained, non-farm employment especially in processing agricultural commodities, in crafts and in small industries appears to offer opportunities for economic expansion and for initiatives by government to stimulate and support rural manufacturing enterprises. Our survey of the literature reveals that while some small manufacturing and handicrafts exist in the rural areas of most developing countries, they owe little to the initiative or support of governments. Governments tend to refer frequently to the advantages of expanding rural industry, but in very general terms. With few exceptions, they have done little to implement this policy, in part because they are not certain how to proceed and are skeptical of the prospects of success. The subject has not been carefully studied nor have prospects or methods for promoting rural based industry been thoroughly assessed. We consider this subject a prime target for further research.

Hogg's data from India and Liedholm and Chuta's work in Sierra Leone indicate that just as agricultural labor is underemployed, there is very considerable over-capacity among local craftsmen, a situation that probably prevails generally in the third world.* Rural incomes are too limited

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*Information from Martin Hogg's as yet unpublished ODI study was obtained by interview. See also Carl Leidholm and Enyinna Chuta, The Economics of Rural and Urban Small Scale Industries in Sierra Leone, African Rural Economy Paper No. 14, Michigan State University, Department of Agricultural Economics, 1976.

to absorb the output of village craftsmen and the cheap mass-products of urban industry increasingly find their way into village markets. This brings into question Mellor's argument that a large proportion of the incremental incomes resulting from the expansion of HYVs would be spent on wage goods produced under relatively labor intensive conditions in rural areas. Given the ability of urban industry to penetrate rural markets and the distribution of income in rural areas, much of which would be spent on higher quality urban produced goods, it is uncertain whether expanded agricultural production would result in greatly increased manufacturing and handicrafts employment in rural areas. This excludes, of course, direct agricultural employment and the processing and servicing of the additional agricultural output.

Industrial entrepreneurs find it more convenient to locate in urban areas where electricity, transport, and a full-time labor force are available. Indeed, the larger the city, the more attractive it appears to be for manufacturing operations. Governments have given rhetorical support to the notion of fostering small-scale manufacturing in rural areas, but have provided few positive incentives sufficient to create a significant or dynamic rural manufacturing base. There are several examples of successful efforts to support handicrafts--often conducted as part-time household activities--by offering technical, financial and marketing assistance sometimes through government-supported

cooperatives. These usually operate on a small scale and cater frequently to tourists and overseas luxury markets. Their employment and income effects are usually small, though they do help particular local areas.

The most successful effort to industrialize rural areas has been in the Peoples Republic of China.* In mainland China more than fifty percent of cement, fifty percent of nitrogenous fertilizers and a large proportion of consumer goods are manufactured in plants operated by communes and local government units. Communes--like Israeli's kibbutzim which also have moved into industry--are sufficient in scale to mobilize capital, labor, and management skills, and to assume the risks of substantial industrial investments which can be located to meet the employment needs of their members. They also depend on government measures which have provided electricity and improved transportation and communications in rural areas and linked them effectively to urban centers. Even in China, however, it does not appear that rural industry has succeeded in absorbing more than ten to fifteen percent

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*Jon Sigurdson, "Rural Industry and the Internal Transfer of Technology," Stuart Schram, Editor, Authority, Participation and Cultural Change in China, Cambridge University Press, 1973.

Jon Sigurdson, "Rural Industry - A Traveler's View," China Quarterly No. 50, (April-June 1972), pp. 315-337.

Jon Sigurdson, "Rural Industrialization in China: approaches and results," World Development, Vol. III, 1975, pp. 527-538.

Jon Sigurdson, "Rural Industrialization in China - A Reassessment of the Economy," Washington, D.C., for the Congressional Joint Economic Committee, 1975.

of the available time of the rural labor force. Where entrepreneurial decisions determine the location of manufacturing plants, any significant location in rural areas would require a combination of electricity, good road, and probably tax concessions to induce owners to locate in rural areas where they could take advantage of the lower wage and perhaps more docile labor than would be available in cities.

The Mexican government, with substantial assistance from international lending agencies, has recently initiated the PIDER program, which is intended to promote rural employment through improvement of the agricultural and industrial infrastructure and by facilitating the installation and development of small industry in rural areas. Twenty percent of the rural labor force in Mexico is expected eventually to benefit from this program. There are no data yet available on the success of this new, ambitious program oriented to expanding rural industrial employment and incidentally stemming the tide of migration to the U.S.

As a method of large scale employment creation, governments have made little effort to foster and support the expansion of handicrafts or the establishment of manufacturing in rural areas. It is not clear how potentially productive this approach can be and the limited literature on the subject offers little guidance. It is, in our opinion, a high priority topic for further research.

C. Reforming Institutions

Some measures which wuld improve the conditions of the landless and near-landless involve institutional reforms, many of which would alter power relationships in rural areas. They are considered deeply threatening, thus are likely to be resisted by rural landowners and merchants as well as by their urban allies. On the other hand, many observers of rural poverty believe that institutional reforms are essential and even prerequisite to the alleviation of rural poverty. Some measures are far more radical than others in their effects on property rights and on relative power in rural areas. In this section we shall begin with those which are relatively moderate and progress to those that are more far-reaching in their implications.

Minimum Wages and Tenant Security

These are companion measures which attempt to place a floor on wages that can be paid to rural workers or to regulate conditions of tenancy by limiting the right of owners to evict tenants--thus providing greater security--and by specifying maximum cash rentals or shares of output that owners can demand of tenants. Many countries have enacted laws of this sort, but few governments have demonstrated the will or the capacity to enforce them, except sporadically. Where they would improve returns to workers and tenants beyond the prevailing market situation, landlords seek and usually find ways to evade them. Workers

are so dependent for jobs and for access to land that they are often compelled to accept terms which violate the law. Where some enforcement can be expected, landowners often convert tenancies to wage employment or wage employment to tenancies-at-will, limited only by their need for reliable and experienced tenants and workers. Under patron-client relationships, often reinforced by indebtedness, workers and tenants may value the security of an established relationship which guarantees subsistence far more than the risks of asserting their legal claims.

Except in the relatively few reported cases where workers or tenants are organized into unions or associations which can press their claims collectively or when they enjoy the active support of government, minimum wage and tenant protection laws tend to be ineffective. By raising labor costs they may have the perverse effect of encouraging labor displacing mechanical equipment. While they may be enforced for brief periods, changes in government or the weakening of organizations usually provide opportunities for landowners, given their dominant economic and political position in rural areas, to evade and disregard the laws and to regulate terms of employment and tenancy according to pure market conditions.

While rural workers are usually exempted from labor codes, some Latin American governments have attempted to extend the protection of those portions of the codes that regulate the behavior of labor contractors, pursuant to ILO

sponsored labor conventions. The purpose of such legislation is to protect rural workers from the exactions of contractors and to make the latter responsible for seeing that workers whom they recruit benefit from minimum working and housing standards. Frequently the contractor is also the patron and the creditor. Thus their dependency on the contractor limits the ability of workers to protect their interests, regardless of the law. We found no literature describing or analyzing the enforcement by governments of labor codes designed to protect rural workers.

Organization

A more radical measure, one that few governments have been willing to support, is the organization of the landless for advocacy, self-help and collective bargaining purposes. While the organization of owner-cultivators into cooperatives, farmers associations and similar bodies is quite common and helps to enhance their capacity to interact with the administration and service providing agencies of the state and to influence public policy on their behalf, this is seldom the case with the landless. Some very small farmers and tenants have benefited from cooperatives, usually government supported, which provide them with production inputs and processing and marketing assistance on favorable terms. Informal kinship or neighborhood groups based on mutual trust, which facilitate sharing and self help, may, however, be an underutilized resource for helping the landless and tenants.

As we have previously indicated, efforts to organize the landless and tenants for bargaining and advocacy purposes usually founder due to inexperience with formal organizations, lack of trust and solidarity among the rural poor, and intransigent, often violent opposition of landlords. Governments hesitate to sponsor or even to tolerate mass organizations among the landless because of the influence of the rural elites or their fear that such organization will either make unacceptable demands or fall under the influence of opposition or even subversive political forces. Organizations of the rural poor which show some promise of success, e.g., the Federation of Free Farmers in the Philippines and the Peasant Leagues in Northeast Brazil tend to run afoul of governments. Under one pretext or another, they are disbanded and proscribed. Others, like those in Mexico, are incorporated into the government apparatus and cease to be effective advocates of their members' interests. One exception is found among the plantation workers whose unions have managed to survive in a few areas including Malaysia and the Caribbean Islands formerly under British control. These unions continue to promote the interests of their members through collective bargaining mostly with large foreign-owned firms. Only a tiny proportion of the landless and near-landless have unions or similar organizations to advocate and protect their interests.

In the absence of the countervailing power of organization among the rural poor, minimum wage and tenant security

laws can seldom be enforced and the landless have no collective means of protecting themselves under labor surplus conditions from the inexorable operation of supply and demand. Laborers and tenants continue to rely on traditional social structures or patron-client links for particularistic protection and benefits. Only reformist governments which are prepared to risk the hostility of landowners and merchants seem willing actively to foster and support organization which can increase the bargaining power and the political influence of the landless. Rural elites understandably look upon the organization of labor as the first step toward what they most fear, land reform.

Land Reform

Land reform is the most radical of institutional reforms because it redistributes the main asset, land, on which power, status, and income depend in rural areas. There are two main types of land reform:

(a) The parcelization of land, including sometimes the consolidation of holdings, into properties which are then owned and managed by individual households, (or in some cases managed as cooperative enterprises). Individual land ownership is what most peasants seem to prefer, because of the status, security, and sense of independence that land ownership confers in most societies.

(b) The alternative pattern is collectivization through state farms or communes, the pattern preferred by most Marxist regimes and by technocrats who believe, mistakenly, that small scale agriculture cannot be efficient. Any pattern of land reform is likely to be deeply threatening to landowners and their allies. Thus they

use their considerable influence to prevent its enactment or to sabotage its enforcement politically, judically and through organized violence.

There has been very considerable experience with land reform on all continents since World War II and a large literature exists on the subject, too extensive and complex to be reviewed in this paper.* Many "land reform" laws are mainly cosmetic; no one expects that they will make much difference. Often large modern commercial holdings are specifically excluded, as in the recent Philippine legislation; or the amount of land subject to distribution may be miniscule in relation to the need, as in Colombia, where only public lands have been made available; or appropriations for land reform purposes may be trivial, as in El Salvador.

Moreover, even when it is enacted and implemented, land reform does not necessarily improve the lot of the landless, unless this is one of its explicit purposes. The initial targets of most land reform programs are the very large holdings. Such lands are expropriated, often with some compensation to landowners, leaving them, however, with generous ceilings, usually of the most fertile lands, which they can continue to own and cultivate. In some cases, several family members are permitted to retain substantial holdings. The remaining land is distributed usually to former tenants in units that permit the production of surpluses. Often there is not

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*For a recent review, see Progress in Land Reform, Sixth Report, prepared jointly by the UN, FAO and ILO, New York, United Nations, 1976.

enough land left for the landless or even for all the tenants working the lands included in the original holdings. Outsiders can almost never be accommodated, however small their holdings or great their need. The result may be the creation, or the reinforcement of a class of yoeman owner-cultivators, the so-called "middle farmers," hard-working, dynamic and efficient farm operators, who engage tenants and hire laborers and soon become the new elite in rural areas. This has been the experience in many land reform countries, including Pakistan, Egypt, Sri Lanka, India and Mexico. Though they are not large landowners in an absolute sense, the middle farmers are able to produce surpluses the proceeds of which they use to acquire land from marginal producers, to mechanize their operations and to profit through money lending or commercial activities. Since they are relatively numerous, in contrast to the former very large landowners, they are not a vulnerable political target. They are a formidable political force, quite competent at resisting demands by tenants and laborers. They tend to recognize few of the traditional obligations of patrons to clients. In country after country efforts to achieve second stage land reform, that is, to break up the holdings of the middle farmers for distribution in family size parcels to tenants and landless workers becomes an extraordinarily difficult political challenge. Land to the tillers, except as a slogan, has been successful usually as the result of revolution (Bolivia), or of military defeat

(Taiwan, Korea). Where governments do not permit the great majority of rural families to become owner-operators or allow substantial differences in land ownership to persist, there soon emerges this class of middle farmers who gain ascendency in rural areas and recreate the former inequitable and exploitative relationships.

The reorganization of agriculture into collectives does not necessarily eliminate landlessness either, unless the government requires that all rural families be included in the collective organizations with the right to employment and to participate in the distribution of the output. In mainland China, this practice has been enforced. In Peru, however, the expropriation and conversion of the coastal haciendas into collectives included as beneficiaries and participants only former tenants and laborers on these extensively cultivated plantations. Others have been excluded regardless of their need, even though substantial areas of these former haciendas remain uncultivated. It is estimated that the land reforms in Peru during the past decade have benefited one-third of the rural poor, those who were originally relatively better off; the other two-thirds have been excluded. Collectivization which does not make room for all rural laborers and tenants creates, in effect, a labor aristocracy, while the majority remain impoverished and insecure constrained farmers, tenants, or landless laborers.

Though quality of land, availability of water and modern inputs, and the employment of efficient technologies are

important variables, there is increasing evidence that very small holdings, intensively cultivated, supported by effective and reliable public services and by farmer organizations, can yield family incomes well above subsistence (e.g., Taiwan, where average holdings are about one acre, Korea in a much colder climate where the average is one hectare. In Korea per capita farm income now equals per capita income in urban areas, in contrast to most developing countries where they are usually less than half the urban mean). The ability to achieve high productivity on very small holdings contradicts the conventional argument that large holdings are necessarily more efficient. Unless land reform redistributes land in family units sufficient to accommodate the great majority of tillers, there will remain a substantial group of landless laborers. As their numbers increase with population and labor force growth and unless many of them can be absorbed into an expanding industrial structure, exploitative practices will persist in rural areas.

Where land reform cannot provide minimal family size holdings for the great majority of the rural labor force, the advantages of collectivization become apparent. Even though production incentives to the household may be less than under family farming, collectives can guarantee employment and some degree of security to all and the right to share in the collective product. Since collectives may be more effective in promoting rural industrial enterprises,

they may be useful in expanding rural employment opportunities. In overcrowded rural areas such as Java, Bangladesh and Egypt, where the rural labor force is likely to double by the turn of the century, there may be no feasible alternative to the collectivization of agriculture.

D. Meeting "Basic Needs"

During the past few years, the concept of "basic needs" has begun to replace macroeconomic growth as the key target of development policy. This concept is being promoted by many of the international development assistance agencies, including the International Labor Organization, the World Bank and the OECD. Though agreed criteria and indicators have not yet evolved, it is clear that "basic needs" is a version of the welfare state that would provide a floor under the living standards of all. Thus progress toward development would be evaluated less by overall rates of growth than by the distribution of benefits, specifically the satisfaction of certain essential human needs. Any basic needs program that would rely primarily on market mechanisms necessarily implies redistribution of productive assets or at least of income, unless rates of growth and employment can be accelerated far above the figure that seems likely for most developing countries even under optimistic assumptions. Otherwise it is difficult to see how sufficient income could be generated to enable the rural poor to meet the basic subsistence requirements of their families for nutrition, clothing and shelter.

Except for socialist countries, no governments of developing countries have yet committed themselves to basic needs goals and few would be able to move toward it without foreign assistance, combined with far-reaching changes in priorities and perhaps in institutions.

Most basic needs proponents lean toward the redistribution of income, hoping to avoid the deep conflicts that inevitably accompany efforts to redistribute land or other assets. This places heavy stress on the redistributive role of government, primarily through taxation and public expenditures. Some basic needs are amenable to satisfaction through public services. These include formal education at all levels, health care, family planning services, the provision of sanitary potable water, and basic food rations, especially cereals sufficient to provide minimum caloric requirements. Some governments have moved significantly toward the provision of some of these basic needs through public administration, for example, the rice ration in Sri Lanka, health services in Costa Rica, and education in Malaysia. Though these services are a major charge on public budgets and are not specifically targeted to the landless and near-landless nor exclusively to rural areas, their impact greatly improves the welfare and the opportunities of the rural poor, including the poorest among them.

There is considerable dispute however, about the long-term effects of relatively costly public expenditures oriented

to meeting basic needs. Could the expenditures required to raise current consumption above the subsistence level be better spent on investments that would have a long-term beneficial effect on employment or incomes? Do welfare state expenditures satisfy current needs at the expense of the future? Has Sri Lanka for example, with its rice ration which has clearly raised standards of health and well-being and perhaps contributed to a falling birthrate, deprived the country of some of the resources required for job-creating investments? At what point should expenditures for current basic needs yield to expenditures for future growth, for jobs for the next generation of an increasing landless population. A basic needs strategy must come to terms with this type of choice.

Many developing countries, especially the poorest among them, lack the means and often the administrative capacity to finance and deliver these services on a universal scale especially in remote rural areas. Preliminary estimates by the World Bank indicate that very large capital expenditures will be required by any serious global campaign to provide such basic needs as education, health services, sanitary water supply and shelter. These costs exceed the capacities of most developing countries and would therefore require substantial increases in foreign assistance. The annual operating costs of maintaining the public services which deliver basic

needs would be even larger.* As a practical matter, therefore, governments, supplemented by foreign assistance, would have to move incrementally toward the provision of these non-marketed services. A few governments have begun to explore ways to reduce the costs and increase the coverage of these services through improved technologies like radio and television or through paraprofessional staffs combined with self-help measures which, in turn, would require effective local organizations.

While the satisfaction of basic needs by improved and expanded public services would not directly threaten the prevailing distribution of assets or power, neither statesmen nor analysts can afford to overlook its political implications. If taken seriously, a basic needs strategy would involve at a minimum the redistribution of a very large proportion of incremental public revenues. Urban groups which have only recently been incorporated into the "modern" sector with high expectations include civil servants, military personnel, and the white collar and blue collar employees of

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*Burki and his associates estimate that the investment costs for a basic needs program in food, water and sewage, housing, health, and education for all LDCs between 1980 and 2000, at 1975 prices, would total about $380 billion or $19 billion a year. Recurrent annual costs would range between $565 billion and $789 billion, or a yearly average of from $28 to $40 billion. Combined annual investment and recurrent costs would average from $47 to $58 billion. S. J. Burki, et al., Global Estimates for Meeting Basic Needs, Background Paper, IBRD: Basic Needs Paper #1, August 10, 1977, mimeo.

commercial, financial and industrial organizations. They are unlikely to countenance the large-scale redistribution of public expenditures to rural areas at their apparent expense, without vigorous representations. The prospect of a freeze in their wages or in the scope of public services or social security measures from which they benefit would be distasteful to such urban groups who are both visible and articulate and on whom governments depend for support. Thus the politics of redistribution on behalf of a basic needs strategy would have to take account of the relative power of the urban middle and working classes and of the rural poor in the inevitable struggle over shares of scarce fiscal resources available for welfare and human services. Most governments have not demonstrated that their priorities reside among the rural poor.

Given the prevailing distribution of power in rural areas and the differential access to services which this implies, the first beneficiaries of additional public services will probably be landowners, local officials, and others who command influence. Facilities will be located, as has been the experience in most of the countries surveyed in this research, primarily to suit their conveniences or preferences. Local bosses will distribute additional services to pay political debts or to create obligations. The last to enjoy these services will be ordinary landless and near-landless families. Unless services are available

in sufficient quantity to cover all those eligible or unless countervailing power, like effective local organization, is created by the intervention of governments as in Sri Lanka, Kerala, and Korea, new services which reach rural areas will go primarily to the more influential. Thus basic needs-oriented public services will improve the welfare and opportunities of the rural poor only (1) if they are available in sufficient quantity; (2) if administrative delivery systems can be modified and made more effective in reaching the rural poor; and (3) if political obstacles to the large-scale redistribution of fiscal resources from urban to rural claimants can be overcome. On an optimistic note: because of strong international pressures, more governments can be expected to experiment with basic needs approaches over the next several years.

E. Orienting Investments and Public Services to Rural Areas

There is increasing evidence as we have previously indicated, that public and private investments and public expenditures are strongly biased to urban areas, thus contributing to the large disparities in mean per capita income between residents of cities and the countryside.* Examples are the notorious maldistribution of doctors, schools, and health facilities. Much of this bias is the result of government policy and can be altered by public decisions.

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*For a detailed exposition of this theme, see Michael Lipton, Why Poor People Stay Poor: Urban Bias in World Development, Harvard University Press, 1977.

Investment in rural areas from all sources seldom reaches twenty percent of total investment, a fraction of those who work in rural areas or of the national product originating there. There are those who argue that despite the political risks, public investments and expenditures and incentives for private investment can and should be shifted toward rural areas. Some governments, including Tanzania and Malawi have been orienting substantial shares of investment and expenditures to rural purposes and others are spending marginally more than in the past for agriculture and rural services, but they remain a minority. Rural areas are systematically discriminated against. Many governments still prefer cheap food for the cities to incentive prices for farmers and the redistribution this would represent in favor of their rural constituents. It will take dramatic changes in public policy to shift this distribution of resources. Though political leaders are increasingly asserting rural development priorities, there is little evidence to date that major shifts in priorities are in progress.

But even if this shift in expenditures, investments and incentives were to materialize, the critical question would remain: who in rural areas would benefit from this reversal in priorities? As some believe that rural areas are made up of homogeneous populations of owner-cultivators, so they believe that any additional expenditures in rural areas will necessarily spread benefits broadly and equitably, or that some of the benefits will at least trickle down to the

landless. This question requires much more precise and sophisticated analysis.

Improved agricultural research, irrigation facilities, credit, and price supports may permit the intensification of agriculture and thus increase the demand for labor, but this would not be the only consequence. While some additional income would accrue to tenants and laborers and there would be a secondary demand for local services and products, the prime beneficiaries would certainly be the landowners. They might use their increased earnings to buy up the lands of marginal cultivators or to mechanize their production, thereby eventually reducing the demand for labor and inflicting even greater hardship on tenants and landless laborers. For those who are assessing the impacts of public policies on the rural poor, it is not sufficient to look at the aggregate distribution of public expenditures or price policies in relation to urban and rural populations. Each program must be evaluated in terms of its specific impact on the landless and near-landless. Health clinics, for example, may be entirely beneficial as would incentives for labor intensive industrial development in rural areas. On the other hand, expenditures and policies which stimulate agricultural production but do not inhibit mechanization may be positively detrimental. More research and extension for export crops grown by large commercial estates could hurt the rural poor. If price supports raise the cost of subsistence

food stuffs, without providing equivalent increases in rural wages or employment opportunities or subsidized rations, the real incomes of the landless and their access to the food they help to grow would be adversely affected.

The skewing of investments and expenditures toward urban areas is an expression of the relative distribution of power and influence in most developing countries and of ideologies which regard urban as "modern" and rural as "backward." Countries that have successfully reduced rural poverty have invested heavily in the agricultural sector; thus a shift in priorities seems to be a necessary, but not sufficient condition for alleviating rural poverty. But public policies which lead to more investment and expenditures in rural areas do not, ipso facto, benefit the rural poor. There is no theoretical basis or empirical evidence to support this hypothesis. All depends on tracing the impacts, both immediate and long-term, of specific programs and policies. There is little evidence in the literature of such evaluations either prior to or after the initiation of such programs.

CHAPTER VI

Research Needs

This report is a survey and critique of available published information on the landless and near-landless. To summarize briefly: the current information base is sparse in coverage, uneven in quality, and quite variable from country to country and subject to subject. The fundamental problems are that (1) governments and international agencies have underinvested in the collection, analysis and publication of information related to the rural poor; some countries do not even publish census data and when they do the information is so undifferentiated that it is difficult to arrive at more than educated guesses about the numbers and circumstances of the rural poor; (2) conditions of rural poverty are seldom conceived in the social structural terms that would require careful identification, enumeration, and analysis of data by socio-economic and occupational groups.

Statistical Information

Even studies which achieve some differentiation tend to overlook the landless and the constrained cultivators and treat them as an invisible or residual category. This is true of some large scale surveys which attempt to break down the rural universe by land tenure status. Holdings below a

certain minimum (e.g., .1 hectare in Java) are not even defined as farms, thus omitting a large number of cultivators and of intensively cultivated mini-holdings. In some rural employment surveys, no distinctions are made between different classes of tenants, or between tenants and agricultural workers, or between the latter and those employed outside agriculture. Income and income distribution surveys, few as they are, often fail to include income earned by family members except for the head of the household and these suffer from the difficulty of correctly identifying, imputing, and evaluating income in kind and income from non-conventional sources, including even remittances from family members in urban areas. Household income and consumption among the rural poor are often underestimated; were this not the case many more of them would actually be destitute and starving. Studies of health, nutrition, and housing seldom discriminate directly among occupational or status groups and often do not differentiate among ecological or economic regions within the same country. This is largely a matter of underinvestment in information, though no doubt some governments are not interested in encouraging analysis along these lines or publishing information about their rural poor. There has not been much pressure from international sources on governments to orient their statistical efforts in this direction. In its work on nutritional conditions, for instance, the FAO has not, to date, attempted to discriminate among rural socio-economic groups.

Therefore the quantitative literature which must rely primarily on government censuses and surveys is weak on the numbers and proportions of the rural labor force that fit into socio-economic or occupational categories similar to those we have proposed in Chapter I. There are some exceptions of course. India, for example, has been collecting census data by district for nearly a century on land tenure and occupational categories, but even for India which is well-equipped with survey organizations, estimates of poverty and deprivation vary even within the same region. Estimates of nutritional deficiency range widely, according to the methodology and criteria employed.

In some countries the number, frequency and accuracy of agricultural and agro-economic censuses and household expenditure surveys have begun to improve. They contain useful quantitative data which, with the help of interpolation and inference, provide information by income, size of holding, or occupation that give some idea of the dimensions and composition of rural poverty. There is a growing body of quantitative information resulting from detailed studies of villages or other poverty groups (e.g., Gillian Hart's as yet unpublished study of household labor allocation in a Javanese village and Lester Schmid's analysis of the conditions of a set of migrant labor households in Guatemala). These provide carefully collected and evaluated quantitative information on socio-economic structures and behavior among

the poor in specific rural areas and, through extrapolation, permit better informed estimates of social and economic conditions over wider areas. Excellent data-based country studies have begun to appear including Radwan's ILO monograph on rural Egypt, and the Bangladesh studies recently prepared by Januzzi. It was from combinations of such scattered statistical evidence that Baraclough and his associates at the CIDA in Mexico City were able to construct detailed tables which stratified the rural populations in most Latin American countries by land tenure categories.

Based on information emerging from such diverse sources, we are witnessing the emergence of comparative studies which rely on quantitative data. These include the volume on Hired Labor in Rural Areas edited by S. Hirashima, the two studies by John Thomas and his associates on rural works projects, Michael Lipton's book on urban bias, the recent studies published by the Institute for Development Studies at Sussex on the utilization of rural labor, Hogg's forthcoming ODI study on rural industry in India, the ILO sponsored, five country study by Van Ginneken on Rural Urban Inequalities, and the work by Eicher and his associates on rural employment and labor markets in Africa.* Because of the growing interest

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*Examples of recently issued comparative studies relating to landlessness and near-landlessness include: S. Hirashima (ed.) Hired Labor in Rural Asia, Tokyo, Institute of Developing Economies, 1977; Charles Elliott, Patterns of Poverty in the Third World, New York, Praeger Publications, 1975; Michael Lipton, Why Poor People Stay Poor, Urban Bias in World Development, Cambridge, Harvard University Press, 1977; United Nations, Progress in Land Reform, Sixth Report, New York, 1976; John

in rural poverty and social-structural analysis of poverty, and despite the sluggishness and the hesitation of many governments in orienting their census taking and data collection and analysis to these categories, it is reasonable to expect a gradual increase in reliable quantitative information on the social-structural and occupational dimensions of rural poverty, combined with better estimates of real income and employment according to these categories.

Qualitative and Descriptive Information

The more qualitative and descriptive literature at present leaves much to be desired. Little has been published about the

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Thomas, Shahid Javed Burki, Davis G. Davies and Richard M. Moor, Employment and Development: A Comparative Analysis of the Role of Public Works Programs, Cambridge, Mass., Harvard Institute for International Development, April 1975; Solon Baraclough, Agrarian Structures in Latin America, Lexington, Mass., D. C. Heath, 1974; Andrew Pearse, The Latin American Peasant, London, Frank Cass, 1975; Hollis Chenery, et al., Redistribution and Growth, Oxford University Press, 1974; Wonter Van Ginneken, Rural and Urban Income Inequalities in Indonesia, Mexico, Pakistan, Tanzania, and Tunisia, Geneva, ILO, 1977; Keith Griffin, Land Concentration and Rural Poverty, New York, Holmes and Meier, 1976; Claire M. Lambert (ed.), Village Studies, Sussex, Institute of Development Studies, 1976; Biplab Dasgupta et al., Village Society and Labor Use, Delhi, Oxford University Press, 1977; John Connell, et al., Migration from Rural Areas: The Evidence from Village Studies, New Delhi, Oxford University Press, 1976; John Connell and Michael Lipton, Assessing Village Labor Situations in Developing Countries, New Delhi, Oxford University Press, 1977; Derek Byerlee, Carl R. Eicher, Carl Leidholm and Dunsten S. C. Spencer, Rural Employment in Tropical Africa: Summary of Findings, Department of Agricultural Economics, Michigan State University, Working Paper #20, February 1977; George Rosen, Peasant Society in a Changing Economy, Comparative Development in Southeast Asia and India, Urbana, University of Illinois Press, 1975.

operation of local labor markets, migration patterns, the many varieties and conditions of tenancy arrangements, and the impacts of population change and the commercialization of agriculture on the security and income earning opportunities of the rural poor.

There is little definite information about the survival strategies of the landless, their sources of income, the allocation of family labor, processes of sharing among kinfolk, conditions and consequences of migration, and the operation of patron-client networks under changing conditions. Much of what is published on these subjects originates in the judgments of informed (and sometimes not too well informed) observers, plus a few good case studies from which patterns of behavior in similar situations can be inferred. Such inferences from which so much of our knowledge of the dynamics of rural poverty now depend are much in need of confirmation or modification from concrete, data-based research and analysis. This situation is gradually improving, however, with the appearance of more field studies focused on the rural poor by private scholars, many of them anthropologists. Moreover, several of the international organizations have begun to sponsor and in some cases to produce in-house single country and comparative studies bearing on the conditions of the landless. One example is the ILO financed village studies series produced by scholars associated with the Institute of Development Studies at Sussex. Another is the OECD Development Center's as yet uncomplete analysis of <u>Minimum Needs in Different Environmental Frameworks</u>.

There is a dearth of information on local organization, formal and especially informal, among the rural poor. This includes horizontal kinship networks and class-based organizations for mutual assistance and group struggle as well as vertical patron-client links, all of which provide support and assistance to the poor in their daily struggle for survival and in times of trouble. Organization is a dynamic factor in rural areas; as some structures decline in utility, others are likely to emerge so that individuals and families will not be totally exposed and atomized in dealing with a harsh environment. Though considerable literature has emerged in recent years on land reform, there is virtually none on local organizations, especially among landless workers, tenants, and constrained farmers. There is also a very limited literature on non-farm employment in rural areas, including handicrafts and small manufacturing, as well as the rural equivalent of the "informal sector" which we suspect may be even a larger user of labor time and producer of income than our present limited information would suggest.

Despite speculation and some data-based estimates of the net employment and income effects of the high yielding varieties and some recent analyses of rural works programs, there is very limited literature on the employment and income effects and the relative cost effectiveness of measures undertaken by governments to increase rural employment. It is generally suspected that the landless and near-landless in

virtually every country enjoy very limited and even discriminatory access to public services, but this subject has not been systematically or rigorously investigated. With increasing interest in "basic needs," it is likely that more research will be devoted to this subject.

While it is technically possible to collect accurate data on most of the factors associated with rural poverty, there will be continuing difficulty in determining the meaning of some of these data. There are two reasons for this: (1) Varieties of agro-climatic circumstances between and within countries. Thus a tenant on one hectare of good irrigated soil, even after delivering half his crop to a landlord, may be able to provide a subsistence livelihood for his family while an owner-cultivator on five hectares of poor, unirrigated mountain soils may be condemned to the status of a constrained peasant forced to migrate for part of the year in search of employment. The meaning of size of holdings and even conditions of tenancy depends on local ecological and often institutional factors; (2) Minimum standards. An adequate caloric and protein diet for a semi-retired grandmother will be much less than that needed for an adult male performing heavy agricultural labor; his requirements will be greater than those of a tailor or clerk. To be useful, data collection must discriminate among relevant categories. To complicate matters further, there seems to be no agreement among nutritionists about what constitutes

an "adequate" diet below which people can be said to be undernourished and thus to fall into the category of absolute poverty. While it is sad that in a world where it is possible to provide an adequate diet for everyone, it should be necessary to draw fine lines between various degrees of undernourishment, such information is needed to indicate areas and even specific families requiring work-relief, food subsidies or other forms of public intervention to alleviate extreme poverty among the landless and near-landless.

General Categories of Required Information

The information base on the landless and near-landless varies greatly from country to country. Thus it is hard to generalize on requirements and priorities. Specific priorities for additional data and analysis must differ considerably from country to country and region to region, and for each a separate strategy of data collection and analysis is needed. Research needs and priorities for individual countries are dealt with in our country profiles and no effort will be made to report or aggregate them here. There are, however, four general categories of information for which research, analysis, and data gathering priorities seem to apply across the board:

1. Basic data collection--Demographic and agro-economic censuses, household budget and other sample surveys should enumerate and publish data by land tenure, income and

especially by occupational and socio-economic categories similar to those outlined in Chapter II of this report. The cross-checking of data using these three approaches to rural socio-economic phenomena would permit governments more accurately to identify the location geographically and the incidence of various statuses and conditions of landlessness and near-landlessness. Trends could be forecast, policy and program measures could be designed and targeted to specific groups, and their effectiveness could be evaluated by their impacts on the employment, real incomes and nutritional and living conditions of these target groups. Sample surveys of employment, income, nutritional status, and housing conditions should also gather and report information according to the same tenure and occupational categories, adding depth to the more general data collected by census methods, so that interventions may be guided by more accurate information. International organizations that prescribe and provide technical assistance for census and other survey procedures should incorporate such social structural categories into their standardized guidelines and their technical assistance for censuses and social surveys. Cross-national comparisons are very difficult at present because even where relevant data are collected and published, the categories and definitions have not been standardized. The availability of more standardized data on a cross-national basis would permit governments and researchers to compare and evaluate

impacts of alternative policy measures on the conditions of the rural poor.

2. <u>In-depth studies of the coping behavior of the landless and near-landless</u>. In reviewing the existing literature on rural poverty, one is struck by the resourcefulness of the landless in adapting to very severe privation. Despite the legendary fatalism of the peasantry and of the rural poor, it is astonishing how much energy they expend and adaptability they demonstrate in coping with extremely harsh conditions. Through migration, through sharing within kinship and other solidarity groups, through unrecorded employment and income earning opportunities, the landless find ways to survive that are not apparent in the available statistical data or even the observations of officials or scholars. The landless and near-landless seldom write about themselves or publish their family budgets, nor would it be in their interest to disclose some of the secrets of their capacity to survive. Some detailed anthropological and economic village surveys have indicated that despite absolute poverty, they find unexpected ways to extract income and services, though often through very great exertion and under humiliating conditions, that keep them and their families alive.

Research on the coping or survival strategies of landless and near-landless families should concentrate on (a) the processes by which they allocate their household labor supply in order to balance considerations of security and maximum return; (b) the diverse sources of income which poor rural

families put together in order to meet their subsistence needs and the criteria they use for apportioning income among competing needs and among the various seasons of the year; (c) the role of formal and informal organizations in providing services and support to poor rural families, including sharing mechanisms and links with patrons, employers, labor contractors, and political bosses which facilitate their access to jobs and other basic needs, but often on arbitrary and disadvantageous terms; (d) their access to and use of various public services, especially those related to "basic needs."

Greater knowledge of the details of coping behavior can be achieved primarily by careful firsthand observation using participant observer methods. Governments and developmentally oriented academic institutions and foundations should encourage additional research of this kind to complement the more quantitative and statistical surveys mentioned in the previous section. The latter cover many more cases, but tend to be comparatively superficial and limited by standardized assumptions that may not be valid for specific populations. In-depth studies provide greater behavioral depth, though over a necessarily small sample. Together they can furnish governments and international agencies with a far more accurate cross-section of the reality on the ground than is available in most areas today or than either method of research could separately provide.

(3) <u>Analyses, indepth, of socio-economic circumstances associated with rural poverty and of trends in these conditions</u>

where possible by land tenure and occupational categories. Though some data are now available from some areas, the existing gaps are very great and much of what is available is of uncertain reliability. Since conditions change, research on these subjects must be followed up periodically in order to identify changes and establish trends. This kind of data gathering is similar to that in section two above in that it must be research-intensive and thus relatively expensive, since it requires careful sampling and very great patience in acquiring and verifying information and in ascertaining that the information sought and acquired is relevant in explaining the phenomena under investigation. Accurate information is required, usually by district or area on such questions as: (a) nutritional, health and housing status; (b) terms and conditions of tenancy and access to land; (c) employment opportunities, real wages and real household incomes; (d) processes of indebtedness and the consequences of debt relations; (e) migration behavior, its economic effects and its social consequences; (f) effects of mechanization and other technological innovations on family employment and income; and (g) impacts of population increase in rural areas on employment, real wages, and marginal land holdings. Since many of these phenomena are interactive, data that relate to one subject of inquiry are likely to be relevant to others.

4. Evaluations of the impacts on specific groups of the landless and near-landless of programs intended to alleviate the conditions of the rural poor. As international agencies and governments turn their attention to the rural poor and begin to focus on occupational and social-structure groups as defined in this report, it will be increasingly important to evaluate the consequences of government-sponsored policy and program measures, including their cost effectiveness. Many of the program interventions already attempted, some of which have been described and summarized in this report, and others that are likely to follow begin as action hypotheses. At the present state of knowledge, it cannot be certain to what degree their intended purposes will be achieved, what unanticipated problems they will face, or even how they will be received by their intended beneficiaries as well as by those who may feel threatened by these activities. The work of Thomas and his associates on rural works programs is an example of the kind of comparative, evaluative research that is required. It is necessary to build a reliable body of comparative knowledge, based on evaluative research on the impact of every form of intervention that governments are likely to attempt, including all those discussed in Chapter V of this report.

These would include (a) minimum wage and tenant security measures; (b) food subsidies, including especially the recent experiences in Sri Lanka; (c) assistance to rural based

handicrafts and manufacturing; (d) land colonization and settlement schemes; and (e) land reform measures. It would be useful to have studies of the distribution of benefits among socio-economic and occupational groups of government investments, expenditures, and policies affecting rural areas, including price supports, agricultural research, subsidized credit, provision of land to agro-business firms on subsidized terms, as well as such welfare measures as potable water supply, health clinics, vocational education, and similar services oriented to the satisfaction of basic needs. The effects of the presence or absence of participatory organizations among the rural poor on the availability and the distribution of such public services would be a useful contribution to public policy.

Such evaluative studies should include the distribution of benefits and costs among occupational and status groups. Wherever possible, evaluation processes should be built into project and program designs and published and disseminated widely. They can provide raw material for better designed future policy, help reduce margins of error, and, we suspect, correct optimistic illusions that now confound many well-intentioned programs oriented to the rural poor.

IN CONCLUSION

This first effort at the systematic exploration of landlessness and near-landlessness in the rural areas of developing countries has disclosed great diversity in specific circumstances between and within countries. For purposes of analysis we have attempted to disaggregate these descriptive terms into categories based on occupation, access to productive resources and security of income earning opportunities. We have also classified countries or rural areas into major types according to population density and land tenure relationships. These classifications have helped us to rder this large and heterogeneous universe into analytical categories which will be useful for future data gathering, research, and the design and evaluation of public policy. We have attempted to identify and assess available published data, incomplete as much of it is in coverage and uneven and superficial in quality, and to report it as objectively as we could with the research resources we had available. We have tried to avoid either underestimating and understating the dimensions and consequences of rural poverty or, what was perhaps more difficult, exaggerating its incidence and social costs. The overall picture that emerges for most of the countries we surveyed provides little ground for optimism.

The numbers of landless and near-landless are very great. In most of the countries for which we compiled profiles they comprise a substantial majority of the rural labor force and their ranks will continue to grow by more than fifty percent before the end of the century. Though concrete conditions differ within this large and heterogeneous group, and some are clearly better off than others, poverty is their common condition and it is serious by virtually every reasonable criterion of access to or enjoyment of adequate nutrition, health, housing, employment or security. Their insecurity, indebtedness and powerlessness seem to be worsening in all but a few countries. The world is faced with the grim reality of millions of men, heads of households who have only their labor to sell, but whose labor and earning power are unneeded or redundant during long periods of the year. They and their wives and children expend extraordinary efforts to earn incomes, but their remuneration from work when they find it is barely adequate to provide subsistence and leaves them frequently without enough to eat. Many of the solidarity structures which previously provided them with protection and subsistence have eroded. In large measure they are the invisible and inaudible victims of official neglect. Many public policy measures that affect rural areas have been detrimental to the landless and near-landless; even those specifically designed to alleviate their poverty have often proved to be of only marginal help.

It was not the purpose of this research exploration to prescribe for the problems of the landless. And clearly no simple or short term formulas or "solutions" are available. Some observers and scholars predict further immiseration of

the rural poor leading to Malthusian disasters in some areas of the world. Others foresee and advocate revolutionary transformations which will radically redistribute economic assets and political power, but they differ on appropriate or effective means to achieve this transformation. Others believe that varieties of incremental measures similar to those described in Chapter V can, if greater investments of resources and political will can be generated, begin to reverse recent trends, gradually alleviate present conditions, and improve the future prospects of the landless. Any such strategies must, of course, take into account the structures of social and economic power that now govern the distribution of assets, income, job opportunities, and public services, highly institutionalized structures that provide some degrees of freedom for enlightened policy, but cannot readily be set aside.

The authors of this report share a deep concern for the plight of the rural poor and the conviction that their poverty need not be irremediable. We are aware, however, that the impact of this study on some readers may be highly pessimistic and may leave them with the impression that the dimensions of poverty, insecurity, and powerlessness which it reports are so vast and intractible as to be beyond the reach of interventions that could be attempted or managed by most existing regimes, even when encouraged and supported by foreign assistance. Therefore, if this premise should hold,

governments and aid agencies should continue to work on more modest and manageable problems and to support programs--like helping small farmers or growing more food--that are both useful and feasible within present constraints of knowledge, resources, and the distribution of power.* Since political and economic resources seem insufficient for the magnitude of the task required to assist the landless on a scale that would make a difference, attention and energies would be better invested in more modest programs where positive results can be expected. Though we recognize the possibility of this reaction, we earnestly hope that this will not be the outcome.

One purpose of this research enterprise was consciousness-raising, in the hope that the assembling, ordering, and presentation of existing data might call attention to the large and growing numbers of the landless and near-landless whose poverty and insecurity are increasing. We hoped that this report might contribute

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* In this final footnote we must reiterate a point that we made in the Introduction and which recurs throughout this report: the current enthusiasm in the ranks of development assistance agencies for growing more food, though necessary for feeding increasing populations and overcoming infrastructural bottlenecks in some countries, will not necessarily help the landless and near-landless. Their main problem is that there are not enough jobs to employ them and that they cannot earn enough income to purchase the food they need. Working through "progressive" farmers to grow more food will probably result in greater concentrations of land ownership and mechanization and thus the net displacement of tenants and laborers who have no alternative sources of livelihood. Growing more food, as the main solution to the problems of rural poverty outlined in this report is a copout.

to the shift in priorities among scholars, government officials, and foreign assistance agencies, of which there are now encouraging signs, including the Congressional Mandate in the U.S., the increasing focus on "basic needs" in many international organizations, and statements of policy by leaders of several developing countries. To neglect the plight of the rural landless, once its scope and intensity have been documented and publicized, and to abandon them to their fate because the effort seems futile would be unworthy of men of good will and of sound political judgment. The invisible of the Third World are becoming more visible even in the United States as they illegally breech our borders by the hundreds of thousands in search of work. If their numbers continue to increase and their conditions continue to deteriorate, how long can it be before they pass over the threshholds that separate acquiescence from protest and protest from social revolution?

REGIONAL SUMMARY ON LANDLESSNESS IN SOUTH AND SOUTHEAST ASIA*

1. Introduction. Asia has two-thirds of the third world's population and two-thirds of the third world's poor. It also includes countries that have improved conditions for the vast majority of their populations, by a variety of strategies. These are China (both mainland and Taiwan), Japan, Singapore, and South Korea. In most other parts, there is a large and growing proportion of the population that is living below poverty levels. As Robert McNamara put it recently,

> "We are talking about hundreds of millions of people. They are what I have termed the absolute poor: those trapped in conditions so limited by illiteracy, malnutrition, disease, high infant mortality, and low life expectancy as to be denied the very potential of the genes with which they were born. Their basic human needs are simply not met."[1]

The effort in this research project has been (1) to distinguish among and between the disparate groups that together comprise the poor; (2) to estimate the incidence of landlessness and near-landlessness among these groups; (3) to indicate the causes of landlessness; (4) to describe the socio-economic characteristics of the affected groups; and (5) to indicate the implications of different policies that have been implemented to remedy the problems of landlessness. Undertaking this task requires an integration of an enormous amount of information on the incidence of poverty, the relationship between poverty and various types of ecological and economic conditions, the sociology and anthropology of cultivation patterns in different rural societies, the influence

*The regional summary and country profiles for Asia were prepared by Shubh Kumar with David Rosenberg (for the Regional Summary, Indonesia, and the Philippines), and with the research assistance of John Roberts (for Indonesia).

of historical experiences and the impact of recent changes in social relations and structure, and much more. This task required many choices and compromises to be made. One of these was to limit the scope of the research to countries where (a) the problem is known to exist and increasing in significance, and (b) where at least some recent data were available. The degree to which different countries were covered was also uneven and dictated largely by availability of information.

Landlessness has been used at the focal point in this study of rural poverty because land is the principle means of production and subsistence in most rural areas. Even though its significance may have declined with the diversification of the rural economies, it is still the one factor which is most closely associated with income distribution in rural areas. Furthermore, because of its singular importance in earlier times, differential access to agricultural land crystalized into class and caste groupings--such as the former 'untouchables' of India--which tended to limit choices for many subsequent generations. For those families without access to land to provide a subsistence of food and income, the best alternative is usually to sell their labor to raise the income for their basic needs. Achieving subsistence needs under these conditions, requires a pattern of labor allocation of men, women and children that traps these families further in the vicious cycle of poverty.

The countries that have surmounted the problem of rural inequities and poverty have certain features in common that

are different from the countries examined in this report. These are structural change in the distribution of rural wealth combined with a genuine support of agricultural terms of trade and a high priority for agriculture in the budget. These changes are also often accompanied by the sustained growth of off-farm employment through industrialization, a process which gradually draws more and more people from the agricultural sector without massive inflows of displaced rural workers. It is this essential combination of structural change with state intervention to maintain and increase agricultural productivity that is most conspicuous at a macro policy level. Structural change by itself can achieve little for either productivity or equity (except in the short run). Investment in agriculture without structural change leads to increasing inequalities and reinforces the political and economic dominance of those few farmers who can adopt practices that nullify the employment-generation potential of agricultural growth.

Broadly speaking, the factors that have accentuated the problem of rural poverty in Asia have been related primarily to the rate of growth in the economy relative to the increase in the labor force. Even where an increase in overall employment has not been rapid enough to absorb increments in the labor force, there have been some cases where public services and other forms of income subsidies have mitigated rural poverty (for example, Sri Lanka). A stagnant economy, especially the agricultural economy, in conjunction with either wide resource

disparities or heavy population densities, have produced the most rapid decline in the conditions for the landless. The exact nature of the situation, however, depends on policy measures taken by the government and the composition of the labor force. Government policies that affect factor shares in the economy and capital-labor ratios, the terms of trade in agriculture and commodity pricing, the degree and nature of investment in the agricultural sector--all these effect the dimensions and structure of the problem. These policies together with others that deliver direct subsidies and services determine the overall effect on conditions of different groups. This summary will highlight available information on the conditions of the rural landless and near-landless, and the effects of government policies on the landless and near-landless in the region.

2. The Incidence of Landlessness and Near-Landlessness. The table in the Appendix gives estimates of landlessness and near-landlessness according to the categories designed for this study. These figures are subject to several qualifications and cross-country comparisons must be made with caution. The paucity of primary data constituted the biggest constraint. Secondary sources were widely used, but these data had to be adapted to fit the analytical categories of the landless and near-landless as used in this study. In many countries, e.g., Sri Lanka, Nepal and Malaysia, it was not possible to differentiate between

those with absolutely no land and those with garden plots. In other countries. e.g., Pakistan and Thailand, the proportion of landless was derived from estimates of the wage-earning labor force, and these could also overlap with small-holders. In the case of India, recent census estimates on laborers and cultivators were used together with earlier, more detailed, breakdowns of land-holding status among rural cultivators and workers. In estimating the numbers of constrained and vulnerable cultivators, cut-off points in size of land-holdings were established according to well-informed, though still arbitrary, procedures. These conceptual and methodological issues are discussed in each country profile. However, several general observations for the region can be made.

As might be expected there is tremendous variation in the nature of landlessness within Asia. There is ample evidence of a dynamic interaction between the ecology and carrying capacity of the land on one hand, and government policies and institutional frameworks on the other. The effect of past policies and historical factors is also important in determining the pattern of settlement and land use.

It is useful to differentiate between the structural classification of landlessness and the levels of living and welfare especially in a cross-national context. In this study, it has been found that a constrained farmer or insecure small tenant in one area may be worse off in terms of disposable income or welfare than a landless worker in a more prosperous area. As off-farm employment grows, landlessness, per se, becomes a less

meaningful predictor of levels of living. This applies especially to Malaysia.

For those who are dependent on wages for a part or whole of their income, a wide range of arrangements for renumeration exist, ranging from day to day arrangements, short-term or seasonal contracts, to year round or permanent employment, and debt or rent service arrangements. Extremely little is known about the types and frequency of these different arrangements, but it appears that in labor surplus regions, even though casual day labor may have a higher wage rate on an hourly basis, longer term contracts with lower wage rates often result in higher annual net income flows, and because of their security are often preferred. They are particularly preferred by constrained farmers and tenant farmers who need wage employment to supplement farm incomes, but do not have the flexibility of landless workers. This creates a reciprocity of interest between labor-deficit and labor-surplus farms, leading to increases in a kind of "devalued sharecropping." There is evidence of this in West Bengal, Andhra Pradesh, and Madras in India; in Bangladesh; and in analogous patterns of labor exchange between farmers in Indonesia. This phenomenon of devalued sharecropping can create labor surpluses even during the peak harvesting periods. This results in widespread labor migrations which has been documented in practically every wet rice growing area examined in this study. However, there is extremely little documentation on the causes and effects of these migrations. The subject is a complex one and would require a thorough investigation, including both an area survey

of labor supply and demand and a micro-level analysis of migrant labor households.

In this study, the commercialization of agriculture has been consistently associated with an increase in landlessness. Commercialization of agriculture also reduces incentives for the expansion of cultivation into marginal lands by increasing both the costs and risks of doing so for the constrained farmers who are the most likely to be motivated to expand. The effects of commercialization will be discussed in more detail below, but it should be mentioned that it also creates a new class of cultivator--the mortgagee small landowner--who in effect becomes a sharecropper or share-laborer on his own land. While technically remaining an owner-cultivator with redeemable rights, he is simply servicing his debt with a portion of his crop. According to this study, this form of rural indebtedness is widespread. Unfortunately, government census data and agricultural survey data seldom identify the mortagee small landowner. This study's typology would place him as an insecure cultivator, but in terms of level of living, he would be substantially worse off than the cultivator who is insecure simply because of a small sized holding. If explicitly identifiable, this category can be expected to be extremely high in countries such as Bangladesh. It should be explicitly identifiable to understand the incidence and trends of landlessness more adequately.

Trends

In general, the rate of increase in the number of landless workers is not higher than the rate of increase in the aggregate

labor force throughout the countries surveyed. However, virtually all increments in the labor force can be considered among the near-landless. Under these widespread circumstances, the potential for increasing income inequalities is enormous. It holds major implications for employment generation, both in the agricultural and non-agricultural sectors, without which a larger and larger segment of the population would face declining real incomes.

At the national level, there was limited data available even for establishing the incidence of various types of landlessness in a single time frame. Trends are difficult to determine, and have frequently been based on extrapolations from the findings of micro-level village studies. The diversity of local situations and the complexity of factors has been indicated by the I.D.S. (Sussex) Village Studies Programme.[2] Even with such an immense study, extrapolations at the national level are difficult to make.

One of the factors which has the greatest impact on trends in landlessness is the nation's capacity to absorb additional labor into productive employment. We have found a very definite association between the average incomes and the aggregate frequency of the landless population. For example, when the value of the marginal product of the existing labor input declines, then employment and incomes of the poor fall. The relative increase in the number of landless persons occurs by a gradual decline in the status of constrained cultivator into the ranks

of the landless. The absolute increase in the number of landless persons is due to procreation, because, under these conditions, the value of additional children far outweighs their cost. The need for, and the possibility of, migration to improve levels of living also provides an impetus for larger families. In a recent study on 3,200 women in rural India, it was found that a greater access to urban employment was related to significantly higher fertility rates among landless households.[3] From the point of view of the landless, population control would amount to nothing less than genocide, as was dramatically shown by the popular verdict on Mrs. Indira Gandhi's population control policies in India. Consequently, even in countries which have a vigorous population policy, unless rapid employment growth occurs and a sustained improvement in living conditions is attained, a trend towards increasing proportions of landlessness can be expected. An associated trend in wet-rice producing areas is increasing proportions of landless tenants--which has been evident in Bangladesh, the Sri Lankan wet zone and densely populated areas of Malaysia.

3. Causes of Landlessness and Near-Landlessness. The major factor associated with landlessness and near-landlessness is the rate of absorption of increments in the labor supply into productive employment. The presence of large structural inequalities in the agricultural sector tends to restrain the amount of labor absorption with given levels of capital inputs.[4] In addition, factor price distortions that underprice capital inputs

by macro-level government policies also influence the degree of labor absorption. The case of Malaysia provides an example where increases in employment have reportedly kept pace with increases in the labor force. This occurred mainly in the non-agricultural sector but was complemented by large investments in irrigation and settlement schemes for the landless and near-landless. Together, these policies appear to have neutralized some of the labor-displacing effects of growth in a hierarchical agricultural structure. In Sri Lanka, there was a similar emphasis until the late 1960's on expanding cultivated acreage, mainly through settlement schemes for the landless and near-landless. However, because of the large expenditure on welfare programs involving both consumer and producer subsidies for agricultural products, capital for growth of the non-farm sector has been scarce. Non-farm employment has therefore stagnated and has not helped to absorb increments in the labor force. In all the other countries, employment growth has remained substantially below the rate of 2.0 percent to 3.2 percent per annum, which is the range of labor force increase for the region. After 1970 in Bangladesh, the rate of labor absorption in both agricultural and industrial production declined. The magnitude of labor surplus created by these conditions and the annual labor force increase of up to 3.2 percent is reflected in extreme impoverishment in the country, with sharply declining wages and rising unemployment.

In the rural economy, where agriculture provides the bulk of the employment opportunities, increasing the carrying capacity

of land can provide an important means of both income and food. However, there are limits--physical, ecological, and institutional--to agricultural intensification as a possible remedy for landlessness. This region of the world has the highest ratio of population to local land area, most of which is already under cultivation. Malaysia, with the lowest man/land ratio in the region, is the only nation which still has a substantial capacity to extend the area under cultivation. There is, however, considerable scope in most other parts of the region for increasing the carrying capacity of land through intensification of cultivation. In most parts of South and Southeast Asia, provision of irrigation can achieve up to three annual harvests.

Both extension and intensification of agriculture have high capital requirements. In Malaysia and Sri Lanka, the only countries which have had a significant commitment to expand acreage under cultivation, up to half the national budgets for agriculture have been devoted to such programs. To a large extent, revenues from the export crop sector in these two countries have made these heavy investments possible. In the other countries, if the agricultural sector is supported at all, it is invariably with the objective of getting maximum growth in agricultural output, with the minimum capital investment. Such a strategy inevitably favors secure medium- or large-holding farmers.

Commercialization in agriculture requires and also creates a surplus labor force in rural areas, contributing both directly

and indirectly to the growth and impoverishment of the landless and near-landless groups. Once land becomes a marketable commodity, extension of cultivated land becomes possible for capital surplus families only, not for labor-surplus families. Similarly, intensification of cultivation needs scarce inputs, which, in a market economy, go to the highest bidder. These processes help to create and perpetuate structural inequalities which tend to work towards limiting labor inputs. Contrary to the assumption that land reforms would diminish demand for wage labor and hence reduce wage rates, a recent report on the association of rural wage rates and inequalities in land holdings in India suggests that higher inequalities in land holdings are associated with lower wage rates.[5]

That commercialization of land in agriculture helps to create structural inequalities has a historically documented basis, and there is evidence to suggest that process is still continuing. Mortgage of land for collateral on consumption loans at exorbitant interest rates is continuing to reduce large numbers of constrained farmers into landless workers each year. In rural Thailand, for instance, Khai Fak or the mortgage of land as security is typical in a loan transaction. Interest rates of up to 60 percent on consumption loans are commonly found, with about 10 percent of cultivators unable to redeem their debts even after harvesting their crops. In one such village, within a four year period, the percent of families with farming as an occupation declined by eight percent.[6] Similar observations have been made more recently in Bangladesh.

In case studies conducted between August, 1974, and September, 1975, in villages of Comilla District, almost 20 percent of households were landless and an additional 40 percent had some land mortgaged out.[7] The studies find that "the cumulative impact of these mortgage transactions function to increase and stabilize the gap between the richer and poorer peasants."[8] Thus, some of the forces that create landlessness are also enlarging existing structural inequalities.

Another effect of commercialization on the landless is the change in modes of wage payment and, in particular, the increase of monetary rather than share payments. This change speeds the breakdown of traditional village social and economic relationships which usually entailed a higher degree of mutual obligation. New forms of serfdom have, however, emerged based on debt labor or share-cropping at a fraction of the traditional shares. Often these arrangements reflect the effect of a surplus labor force pushing down returns to labor. This may occur in spite of militant agricultural labor organization, as in the Thanjavur district of Tamil Nadu. The increasing use of labor contractors to supply laborers for agricultural operations, particularly harvesting, has been noted in Indonesia, Malaysia, and Bangladesh. This practice alters existing patterns of labor utilization, and, as in the case of tebasan harvesting in Indonesia, can produce dramatic shifts in employment practices. There are likely to be differential effects of these changes on landless and near-landless workers which need to be examined in greater detail. While their overall effects appear to reduce

proportional returns to labor and to maintain or improve wages for a section of the workers with employment, it also increases the pool of unemployed labor. The landless may be more likely to be performing the contract labor, while those who are being displaced may be the near-landless tenants and constrained farmers. However, more careful investigation is needed of these issues arising from the changes in labor utilization patterns.

Institutions that limit access to resources and its output are closely associated with the occurrence and conditions of the landless. Tenant cultivation of land is one such institution, and its provisions in traditional societies are often viewed as barriers for the improvement in the lives of these tenant cultivators. Tenancy regulations themselves are often the result of existing inequities in resource distribution. To understand the sources of these inequities requires a broad historical perspective of political and economic changes and their influence on social relationships and institutions such as tenancy and share-cropping.

In the areas of paddy cultivation, where share-cropping and tenancy are most prevalent, such as Bangladesh, Thailand, Indonesia and Malaysia, it is clear that those with land tend to have a preference in obtaining land under tenancy. In Sri Lanka, mortgaged land is usually cultivated by the original owner under share-cropping. In general, the contribution of inputs in the production process determines the share of the crop claimed by the owner and tenant cultivator. In several Indian paddy producing areas, such as in West Bengal, Andhra

Pradesh and Tamil Nadu, organized agricultural labor movements have prompted a type of share-cropping in which a laboring household receives about one-fourth of the crop, or even less, for providing labor for all the cultivating operations. This process effectively limits the demand for agricultural labor. Under these conditions, demands for minimum wage legislation by labor unions simply result in increasing unemployment for them.

Since there is a strong traditional basis to support tenure patterns that exist in different parts of the region, attempts to regulate and enforce tenancy through legislation have failed almost everywhere they have been attempted. Furthermore, any attempts at enforcement of the legislation have usually resulted in tenant eviction, shorter leases, and, in general, worsening conditions for tenant farmers.

A second set of institutions are based on socio-political systems that determine the access of individuals to productive assets such as land. These systems can be modern or traditional. Examples of modern political systems that limit access to some of its workers to land and/or services are those based on race in Malaysia, and on citizenship of former indentured laborers in Sri Lanka. Among the traditional systems are those of (a) tribal lands, which exist in parts of Nepal, India, Thailand and Malaysia and (b) expansion of settled agriculture and entrenchment of caste hierarchies in most South Asian countries. Historically, and even today, tribal culture and that of settled agriculture have been in conflict. This is frequently due to

the continual encroachment on tribal lands by the settlers who also formed the feudal states in the region. While hierarchies do exist among tribal groups they operate within the context of communally owned lands (as opposed to communally cultivated land) on which all those with lineage links can claim a share of land. Within the caste hierarchies of feudal states based on settled agriculture in India, those who remained on the fringes were often of tribal origin. Some became absorbed within the system while others continued to perform the most menial and unwanted work of the village societies. They became what are known variously as the Untouchables, Harijan and Scheduled Castes. In the traditional system, they are denied individual upward mobility and have little hope of improving living standards. The discrimination exercised by the traditional system tends to weaken with commercialization, as do patron-client relationships and other social structures. However, reports from India also point out that the economic hardships and realities remain, and can only be redressed by a massive and prolonged affirmative action by governments.

Macro-political commitments and policies within countires largely determine whether any benefits of the development process will accrue to the poor. Political representation for the landless workers has been absent except in some cases such as in Kerala State of India and in Sri Lanka where leftist ideologies prevailed in the popular vote. In the case of Malaysia, the near-landless constrained cultivators were largely beneficiaries of settlement schemes as a part of the government's commitment to the Malay peasant sector.

In most developing countries, macro-economic positions are typically seen as being designed by an urban elite for the urban elite. However, one major exception to this is the macro-economic goal of achieving self-sufficiency in food. In the early 1950's, all the countries formerly under colonial rule, except Burma and Thailand, were net importers of foodgrains. Given the capital limitations and need for a balanced growth in the industrial sector, support for the agricultural sector has tended to follow the "progressive farmer" strategy. Those countries in the region with large export crop sectors such as Sri Lanka and Malaysia, have provided generous producer subsidies in an attempt to stimulate production. They have also expanded cultivated acreage, both extensive and intensive, with heavy investments in irrigation works, land settlement and provision of subsidized inputs, such as fertilizers, improved seeds, and pesticides. The two countries also provide an interesting contrast in strategy. Malaysia has simultaneously supported an industrial and agricultural development strategy, while Sri Lanka has devoted its resources for agricultural development and massive consumer subsidies (especially the expansion of public services, such as health and education). The effects of these alternative strategies on long-term changes in the welfare of the population, particularly for those with low-income levels, need to be examined carefully.

4. Conditions of Landlessness and Near-Landlessness. Studies on the incidence of poverty among different types of workers conducted in Indonesia, Malaysia, and Sri Lanka indicate

that the landless workers and constrained cultivators have the highest proportion of extremely poor people. To determine the frequency of extreme poverty, the most common practice is to measure household expenditures along a scale of expenditures necessary to meet "minimum requirements." Usually the "minimum requirements" are considered as the expenditures necessary to provide an adequate food intake. A series of studies conducted in India, notably those of P. Bardhan, illustrate the problems of interpreting these expenditure data without access to actual consumption patterns, price differences for different commodity and income groups for different regions, and their trends over time.[9] Using a uniform cut-off point for all sectors of a nation's economy would tend to over-estimate the incidence of poverty for some groups and under-estimate it for others.

Estimates on the incidence of poverty based on income or expenditure data suggests that from 50 to 90 percent of the population in different countries of the region would fall below poverty levels. Countries at the lower end are Malaysia and Sri Lanka with about 50 percent of the rural population below poverty levels. India, Pakistan and Philippines fall in the middle with estimates indicating up to two-thirds of the rural population below the poverty level. Bangladesh and Indonesia have the highest incidence of poverty with some estimates suggesting that 90 percent of the rural population may have insufficient incomes to purchase an adequate diet.

Trend data on poverty levels are not very reliable. Studies which take account of changes in commodity prices indicate that the proportion of the population below the poverty level is increasing, as in the case of India in the late 1960's. In Sri Lanka, on the other hand, income data corrected for consumer subsidies suggest that proportion of people below the "minimum level" may not have increased and that income inequalities were also decreasing. While this may have been the case for the country as a whole, it is clear that the conditions of workers in the estate sector have been steadily deteriorating. Lee estimated that the average earnings per day of male workers on tea plantations in 1973 were 6.5 percent lower than in 1963 even without discounting the effect of inflation.[10] Since most of the Tamil estate labor do not have Sri Lankan citizenship, they are not eligible for the government's welfare programs. According to Fernando, "Even today (based on the 1969-70 socio-economic survey), about 40 percent of the estate population is illiterate, whereas the corresponding rate for the whole island is about 20 percent."[11] With the break-up of estates under current land reform legislation and their opening up to the surplus labor force from the surrounding Sinhalese peasant sector, the unemployment problem for Tamil laborers is likely to increase.

Since the landless and near-landless workers depend on wages for all or part of their incomes, trends in real wage rates provide another indication of changes in their conditions. The evidence suggests that real wages have been declining in almost

all rural areas. In some areas, effective wage bargaining by organized agricultural labor unions, and changes in patterns of labor use, such as the tebasan system in Indonesia or contract labor in Malaysia, may operate to insulate wages and sometimes employment of some workers from the general declining trend. Instances of agricultural labor organizations that succeed in increasing real wages for workers are documented in several parts of India, for example, in Kerala State, and in some selected districts in Tamil Nadu, Andhra Pradesh and West Bengal. In each of these cases, however, either cultivators have (1) reduced the use of wage labor by performing more tasks themselves, or by employing more permanent laborers, thereby circumventing a dependence on casual labor and their demands, or (2) increasingly sought to obtain share-cropping laborers who often accept meager returns to their labor for the security of such arrangements. It is likely that labor organizations may be more effective in maintaining returns to labor if they have some guarantee of subsistence levels. However, it is also necessary to evaluate the inflationary effects and the longer run employment effects of shifts in capital/labor ratios or investment patterns. The long run effects of labor organizations that may be beneficial for the poor would be broader distribution of public welfare budgets resulting from their effective political representation, such as those achieved in Sri Lanka and to a lesser extent in Kerala State, India.

Because of economic and institutional constraints, the poor usually have the lowest levels of health and nutrition.

Rural areas, where most of the poor live, generally have lower standards in public health facilities. Part of the problem lies in the provision of public health services in the more remote rural areas. Even in China, in 1975, after more than a decade of emphasis on rural health, the crude death rate in rural areas was about 15 per 1000, more than twice the urban rate of 6 per 1000.[12] The same difference was also present in China's rural and urban infant mortality rates (both of which, however, are exceptionally low by Asian standards, indicating the success of their general health strategy). In India, which has a health strategy very different from China's, similar rural-urban differences in mortality statistics are present, suggesting that it may be more appropriate to emphasize the shortcomings of the strategy or overall commitment to public health.

Within rural areas, the landless have relatively poorer levels of health and nutrition. In India, a longitudinal study in Khanna district of Punjab during the 1960's indicated that women from landless labor households lose about twice as many children during their lifetimes as do women from landowning classes.[13] Results of a national survey conducted in India by the National Council of Applied Economic Research in 1971, also indicates that by the age of 45-49 years of age, women from landless households lose 50 percent more children than women from landed households.[14] For those children who survive, the problem of malnutrition is also relatively greater among the

landless.[15] Levinson found the incidence of both severe and moderate malnutrition to be about twice as high among the landless Ramdasias compared to the landowning Jat caste households. Similar differences in health status are likely to exist in the other countries as well, with the landless having not only the poorest health and sanitary conditions, but also housing, education, and access to public services.

Obtaining a livelihood for minimum subsistence is the predominant concern for most people living in developing countries. For the landless, for whom returns to labor are the primary, and often only, means of subsistence, generally every member of the household capable of working is contributing towards the household's livelihood. Migrations occur not only as an attempt to avoid prolonged unemployment, but also as an attempt to gain access to diverse sectors of the economy. Patterns of seasonal migration, whether from high-density areas, such as the Sri Lankan wet zone and Chao Phraya delta area of Thailand, or from sparsely inhabited areas, such as Rajasthan in India or the Thai north-west, indicate acute economic distress due to unemployment in the place of origin. With declining wages and greater competition for existing employment, more constrained farmers from Bangladesh and Central Thailand give precedence to migrant wage labor, often leading to suboptimal yields on their own lands. Apart from the effect on production, there are other negative effects of these migrations on the participation rates of women and children, and on family disruptions and desertions.

Migrant rural workers tend to provide a cheaper, more willing and steady source of employment than local, casual laborers, with the unfortunate consequence of an increase in unemployment for local workers. Some militant agricultural labor unions, as in Kerala State, India, actively prevent the movement of migrant workers into their areas in an attempt to maintain their own wages and employment. The effect of migrant workers is to dampen the demand for higher wages during agricultural intensification, as was observed in Punjab. However, much more research needs to be done specifically on the effects of rural migration patterns on the incomes of local and migrant workers, and their consequences in shaping patterns of labor use in the production processes.

5. Government Policy Measures. Because the landless and near-landless comprise such large sections of the population and work force in the region, there is probably no government policy or measure that does not affect the group in one way or another. Macro-economic growth strategies, foreign trade and investment policies, and public sector investments in consumer services and welfare all have an impact on levels of living for the landless and near-landless. Probably the single most important factor that determines the economic status of the poor is the capacity of the economy to absorb the labor force into productive employment. As was seen in Part III, the macro-economic growth strategy, the unequal structure of productive asset ownership and the forces of commercialization have worked

inexorably, in most of the countries surveyed, to create a huge, visibly impoverished, and underemployed labor force.

Given these conditions, high rates of population growth serve to aggravate the problem. However, it is also becoming apparent that though a national population policy is important, it is not likely to be very effective under the present conditions of impoverishment and economic insecurity for such large numbers of the population. As a solution to the problems of landless and near-landless workers, it can divert attention away from basic ills of economic and social structures. Population pressure is not necessarily associated with poverty. In the Republic of Korea, for example, population per cultivated square kilometer is about five times that in India and 20 percent greater than in Bangladesh.[16] These figures are from 1973 data; by then, the proportion of the population employed in agriculture had substantially declined, due--in large part--to a successful labor-intensive strategy of industrialization. But the agriculture-industry ratio had been similar to the other countries a scant 10 years earlier.

Population pressure is thus very visible, particularly when people are unemployed. While the population explosion can even be seen as the cause of problems for the poor, the real problem is the increasing proportion of people living in abject poverty. In India, the landless tend to have lower fertility rates than landowning groups and substantially smaller completed family sizes, because of the combined effects of female work roles, its

interaction on biological capacity, and higher child mortality rates.[17] However, since their dependence on their own labor power is so complete, improving conditions could mean an initial upward swing in fertility rates. In the short-run, at least, this implies even dimmer prospects for implementing a population control policy.

Much of the problems for the poor stems from the unequal distribution of productive assets. Even though the "trickle down" theories of economic growth are being laid to rest, inequalities have still been increasing.[18] After the initial displacement of a few, large landowners in the post-colonial period (for example, Zamindars in India and foreign estate owners in Sri Lanka and Malaysia), subsequent structural reforms have been extremely limited. Even countries with a long-stated commitment to land reforms, such as India, have had virtually no redistribution and successive legislation reducing land ceilings have contained numerous loopholes and virtually non-existent administrative procedures for implementation. Similarly, intentions expressed by national leadership in Pakistan, Thailand, and Philippines to redress the serious inequalities in land ownership are likely to be quite ineffectual.

While radical land reforms can be justified on economic grounds, they require political forces to carry them out. These forces are conspicuously absent at present, except possibly in Sri Lanka where a substantial momentum had been built up until the recent change in government. Contributing

to the political apathy for genuine reforms are the absence of grassroots organizations of landless and near-landless workers. Divergent class interests within their ranks dissipate their political power. Caste serves to further their divisive tendencies. In Kerala, according to Oommen, "because of the elaborate division of labour linked to castes and the attendant status identities, it is extremely difficult to unite all of them [agricultural laborers] under the fold of one organization, even when they share common ideological and political loyalties."[19] This situation is reflected in the formation of multiple unions, and is contrary to the overall interests of the laborers. In other countries such as Indonesia where existence of such organizations are opposed by the military dictatorship, or discouraged, as in the Philippines, the poor are left with no recourse to redress their grievances.

Reforms that stop short of redistribution, such as tenancy reforms and minimum wage legislation, have generally been more readily subscribed to. Tenancy reform laws that provide for protection against eviction and for rent reductions have been enacted time and again in Bangladesh, India, Pakistan, Nepal, Sri Lanka, Thailand and the Philippines. In none of these countries is there any evidence that these laws have in any way improved conditions for tenants. To the contrary, there is some evidence that tenancy reforms have worsened conditions, especially for small tenants. In the Philippines, for example, as a result of President Marcos' 1972 decree on the "Emancipation

of the Tenants," about one million were expected to benefit by (1) changing their contractual arrangement from share-cropping to leasehold farming, and (2) paying rents reduced from an average of 50 percent of the crop to no more than 25 percent. By mid-1975, when about 20 percent of the tenants had been issued tenancy certificates, the pace of the reform slowed down. Apparently, larger farms were handled first under the program; complications increased as they moved to the smaller sized farms. It was at this that the problem of tenant harassment and illegal evictions began to surface.[20]

Discussed above are those government policy areas which have not received sufficient public policy support, and which, for one reason or another, have been difficult to implement. This is in contrast with the prominent place that has been given to increasing agricultural productivity, in general, and food-grain self-sufficiency, in particular. Public policy on these issues emphasizes providing irrigation for multiple cropping and facilitating adoption of new high-yielding varieties. Similarly, the increased use of fertilizers, pesticides and machinery have been prompted largely by the introduction of the new seeds, irrigation and multiple cropping, since yields are maximized with the combined package of inputs. This is, of course, not always the case. Irrigation with some increase in fertilizers and pesticides, can also improve yields with multiple cropping of traditional varieties. The extent of mechanization may also vary considerably with the level of input use.

Strategies to increase agricultural productivity through new technologies were initially hailed by economists as providing many of the solutions for rural poverty and underemployment. It is now clear, however, that the employment impact on laborers, tenants and small farmers was not foreseen at the time the seed-fertilizer technologies were introduced in South and Southeast Asia. In an evaluation of agricultural practices on labor absorption in India, Mehra concluded that:

> "The potential of irrigation in extending the productive use of labour on farms is large. Seed-fertilizer technology too increases labour use but since its spread has accompanied mechanization, the substitution of capital for labour has led to a reduction rather than an increase in labour input per hectare on individual crops. But via an increase in cropping intensity, and even more importantly, by inducing shifts in the cropping pattern from less labour intensive to more labour intensive crops, it has extended labor use."[21]

One reason why the new technology, per se, has had a small impact on employment generation is its association with mechanization on large farms, which have a lower labor input per acre to begin with. Mehra also notes that "there is need for keeping the farm size relatively small in order to exploit more fully the employment potential of the seed-fertilizer technology."[22] However, the major objectives of increasing agricultural productivity and achieving food self-sufficiency have been neared in almost all the countries that invested resources in their agricultural sectors.

As early as 1969, some of the unexpected and unfortunate side effects of the "progressive farmer" strategies and the

intensive agricultural development strategies were being noticed. Tradition-bound peasants apparently turned overnight into profit-maximizers competing for scarce resources and government subsidies. Many of these changes have now been documented.[23] Many of the social and economic implications of the new technologies for the constrained farmers, tenants and laborers are similar to those of commercialization in agriculture. With surplus producers much more willing and able to take risks, they are better able to multiply profits. Inequalities tend to increase as the smaller producers are squeezed out. The demand for land increases, pushing up its commercial value. Small landowners with no means of obtaining working capital may continue traditional cultures, or they may sell their land at the improved price.[24]

Changes in landlord and tenant relations have also taken place. In cases where legislation to secure tenant rights has been passed, proprietors have often responded by replacing customary share-tenancies by seasonal "share-cropping" arrangements in which the ex-tenant is reduced to the status of a laborer receiving share-wages. The particular changes that occur depend on the current price of labor, the existing demand for tenancies, the legislation in force affecting tenant rights, and landlord facilities for supervising the harvest and taking away his share.

Another aspect of commercialization which was accelerated with the profitability of the new technology was the breakdown in traditional labor arrangements. A United Nations study finds

that, "In general, the entrepreneurial farmer wants reliable labour at the cheapest possible price, and increasingly this meant bringing in labourers from neighbouring or even distant villages where the supply/demand situation has kept down wages."[25] The rapid growth of the unattached labor force was spurred by the termination of tenancies, the marginalization of small proprietors, and the loss of means of livelihood for some artisan groups and the rapid rate of population growth.

In general, studies that have examined the distribution of benefits from agricultural intensification in Asia have not given sufficient consideration to its impact on landless and near-landless workers. At best, these studies have dealt with relative or absolute returns to laborers and to aggregate changes in wages and employment. They have fallen short of differentiating or distinguishing what benefits accrued, if any, within this extremely heterogenous group of workers who offer their labor in production or processing of crops, and in other rural secondary or tertiary sector activities closely linked with agricultural economies. Aggregate estimates of labor use are of limited usefulness if they do not identify the categories of workers they refer to. For instance, in the shift in harvest labor-use patterns from a share-crop to contract labor, it would be useful to know whether constrained farmers, migrant workers, or local landless workers were being hired as contract labor for the harvest and post-harvest tasks. Such information would be very useful in identifying those displaced and hence the distributive impact of

different patterns of agricultural intensification. It is possible with such analysis to extend support for those likely to suffer most. In Punjab, for instance, surveys tend to indicate that constrained farmers may have benefited least with the Green Revolution, while agricultural laborers had a much more rapid increase in their incomes, given the conditions of labor supply in that region.[26] In areas of Indonesia, Malaysia and Thailand, where contract labor use is on the increase especially during harvest time, there is a great deal of concern for the large numbers of share-laborers that have been displaced. But more specific information is needed on these changes in the composition of the labor force. For example, if the displaced harvestors were predominantly small or constrained farmers, and the contract laborers were predominantly landless workers, much more precise and useful conclusion can be drawn, both on (1) the distributive impact of the observed changes, and (2) the policy needs indicated. From what is known about the marginality of constrained farmers, a decrease in their wage incomes would tend to make their landholding status precarious. Thus, to prevent large increases in the landless labor force, alternative measures to maintain real incomes would need to be considered. One alternative would be providing consumer subsidies for foodgrains, as in the case of Sri Lanka. Such a strategy could help relieve the income constraint for essentials and prevent constrained farmers being forced into high-interest consumption loans and the mortgaging of their few assets, especially land.

Therefore, careful research on the impact of agricultural intensification on the landless and near-landless is necessary. Such research must first identify the different categories of this heterogenous group and then trace the effects of the different strategies on each category in order to draw policy implications.

Public works programs are also aimed at those with low incomes. Generally the specific problem they are designed to address is massive unemployment, but they may also directly contribute to enhanced productivity. In some cases, the initial beneficiaries of public works projects are also the recipients of the long-term returns on the increased productivity, for instance, on settlement programs in Sri Lanka and the earlier Malaysian FLDA schemes. However, the opportunities for projects which bring new land into use are limited in most of the countries with severe rural unemployment problems, such as Bangladesh, Philippines and India. Furthermore, the capital costs are very high.

Public works programs are often instituted in times of acute distress in rural areas due to droughts (e.g., in India and Afghanistan) or for income relief in areas of chronic unemployment (e.g., in Bangladesh, Indonesia, India and Pakistan). They may also be part of longer term low cost infrastructure development programs (present in most countries) or of long term employment and settlement projects (Sri Lanka and Malaysia). In the last case, the proportion of national resources committed to such programs is usually larger than in the other types of programs--

which are seldom more than 0.5 percent of the GDP annually. Bangladesh probably had the highest national budgetary allocations, with almost 0.6 percent of the GDP being spent on the public works program during the 1960's.[27]

The benefits of such programs for the poor are difficult to evaluate. In terms of economic return to those employed, the value of additional employment may be quite significant, even though the number of people involved is limited.[28] In many cases the wage rates paid to workers on these projects are set below the prevailing agricultural wages in an attempt to distribute the available funds broadly. The World Bank evaluation concluded that market or incentive rates were preferable and they also resulted in greater labor productivity.[29]

Programs to absorb labor in areas other than infrastructure and agriculture have been limited. Under the present policies, there is a tendency for employment in agriculture to diminish, given the predominantly laissez-faire character of the increasingly commercialized agricultural sectors. Unless radical redistribution of land occurs to increase the labor intensity of agriculture, more and more workers will seek off-farm employment each year. If these opportunities are not available in the rural sector, they will either migrate to urban areas or continue in the rural sector at lower and lower levels of productivity. Development of rural and small scale industries that either supplement or absorb existing indigenous village industries is necessary to prevent displacement of workers in traditional

crafts and to increase overall employment. In some places, this process has occurred spontaneously with local capital, for instance, in Punjab. It is important to study the processes whereby rural manufacturing and processing industries can be promoted. One reason for their lack of success so far may be that they may be in conflict with the interests of larger landowners, who may see these industries as capable of reducing their supply of cheap agricultural labor, possibly leading to labor unions, and in general undermining their authority in local affairs.

Public policy measures designed to directly improve human welfare by providing health and education facilities have been present in various degrees in all countries. Much improvement has been made at the aggregate levels but problems of distribution remain between urban and rural areas and within rural areas. Levels of health tend to be lower in rural areas, almost universally. Some of the difference is accounted for by lower investment on a per capita basis in rural areas. It is also likely that a large part of the difference is due to problems of access to services in rural areas compounded with the dispersed settlement pattern, the acceptance of western models of medical practice, and the complex etiology of rural health problems.

Consumer subsidies provide a direct income transfer and have benefited the poor relatively more so than public services, especially when staple foods are involved. Consumer food grain subsidies benefit urban consumers more than rural consumers since

distributional channels for rural areas are weak. In some food importing regions, for example, Kerala State and Sri Lanka, much wider networks have been provided to distribute heavily subsidized basic foodgrain staples. Provision of these food supplies has helped not only to improve the subsistence levels for the poor but has also acted as a buffer against a deterioration in their condition. In Sri Lanka, for instance, the dependence on consumption loans has diminished dramatically over the past two decades. There remains a major need for the evaluation of the role of these consumer subsidies on consumption levels, indebtedness, and security for livelihood.

6. Research Needs. Any study of levels of living is incomplete unless it incorporates information on three areas: asset distribution, occupational distribution and income distribution. Any one by itself serves only as a partial description and is not conducive to highlighting the underlying factors associated with levels of living. Most present methods of data collection and reporting, especially those dealing with asset and occupational distribution, either represent the landless as a residual, often not even included, or are quite useless in documenting the variety of employment and occupational arrangements that exist. Censuses need to extend their role as record-keepers of holdings and salary earners to the relationship of these measures with the functional unit of households. Sample surveys can provide more recognition to the diversity of sectors within which a

single wage earner may be employed, especially in low income households. Aggregate estimates of labor force participation rates are virtually meaningless for landless, near-landless households--since most members, men, women, and children, contribute to the provision of subsistence needs. A study of labor allocation patterns at the household-level would provide better insight into questions of labor supply, economic conditions and the coping behavior of the groups involved.

Basic data collection on the distribution of land should explicitly recognize landholdings that are mortgaged in lieu of loans. Functionally, such owners may be no more than sharecroppers or even have lost rights to cultivate the land, without any legal transfer of ownership. Technically, they are owners and not sharecroppers, and often recorded as such. In reality, they may be on the way to being landless, and the manner of reporting is not only misleading but also masks the process of structural changes taking place.

In countries where labor force participation in agriculture is low or decreasing, as in Sri Lanka and Malaysia, landlessness is not as strong a determinant of levels of living. In these cases, the manner of reporting the non-agricultural occupation becomes very important. For these groups, information on the level of assets, both physical (capital, savings) and human (skills, training), is necessary to document the factors associated with levels of living.

The second major area of interest in future research should be to study individually the different processes that may have led to increasing impoverishment and landlessness, in particular, indebtedness and unequal access to resources and inputs for agricultural intensification. Attention needs to be focused on analyzing the relative increase in labor supply occuring through displacement and population growth, and on the effects on the patterns of labor allocation and use. Second generation problems to be studied also include migration patterns, both rural-rural migration and the more frequently mentioned ruran-urban migration. It would also be useful to study the social, economic and political organization that exist among and for the landless in an attempt to isolate those which, if strengthened, provide them with greater access to benefits of development programs.

Finally, much more and careful analysis is required in evaluating the effects of specific public policy measures on different landless and near-landless groups. Probably the most important and complex issue is that of technological change in agriculture under various structural, institutional and ecological conditions. To date, much of the documentation on this question has originated in India, and there is little by way of comparative analysis. Furthermore, the emphasis is clearly on distribution among different sizes of landholdings, with labor treated as a homogeneous entity. The cost of labor is frequently seen only in terms of units used in production.

This is often a very limited view of the employment potential realized in agricultural intensification. Labor is not a homogeneous entity; at different stages of the production process, various categories of landless and near-landless may participate and, hence, benefit in various degrees. Even within the limited scope of labor in the crop production process, at least four types of workers are usually involved: migrant workers, local, casual workers, attached workers from landless labor households, and wage workers from constrained cultivator households. Shifts in the patterns of labor use would influence the distribution of benefits among the different types of workers. If there are changes in the employment of women, then those households with higher dependence on women's participation in the labor force (mainly the landless households) will be most affected. Changes in kinds and amount of off-farm employment associated with technological change in agriculture are also likely to have a differential impact among the landless and near-landless. Ideally, evaluation of the policy measures should include a study of changes in (a) economic conditions for the different categories of landless and near-landless, and (b) its implications for the patterns of land ownership and income distribution. Finally, comparative studies on these aspects would be useful to show the underlying factors that determine what changes will occur.

Table 1

Demographic Data for Selected Asian Countries

Country	Population (year) (millions)	Annual Rate of population Increase (%)	Rural Population as a percent of Total Population
Bangladesh	75 (1973)	3.5	91
India	548 (1971)	2.3	80
Indonesia (Java only)	86 (1973)	2.2	82
Malaysia	12 (1975)	3.5	71
Pakistan	65 (1972)	3.5	73
Philippines	39 (1972)	3.0	68
Sri Lanka	12.5(1970)	2.1	84
Thailand	36 (1970)	2.5	86

Source: See notes for Table 2.

Table 2[a]

Landless and Near-Landlessness in Selected Asian Countries

Country	Rural Labor Force as a % of Total Labor Force	Rural Labor Force (000's)	Landless as a Percent of Rural Labor Force[b]	Near-Landless[c] as a Percent of Rural Labor Force	Landless & Near-Landless as a Percent of Rural Labor Force	Landless & Near-Landlessness (000's)
Bangladesh[d]	85	24,288	28	61	89	21,434
India[e]	83	150,000	32	47	79	118,215
Indonesia[f] (Java only)	63	21,000	60	29	89	18,500
Malaysia[g]	68	2,232	12	39	51	1,123
Pakistan[h]	58	10,950	43	45	88	9,630
Philippines	69	9,240	55	26	81	7,450
Sri Lanka[i]	80	3,440	54	19	73	2,505
Thailand[j]	78	12,700	10	40	50	6,372

See attached notes a through j.

Notes for Table 2

a. In general, the data reported here are taken from the country profiles, for the year indicated. While most data were originally available in terms of household units, they have been converted here to labor force units to provide a greater degree of comparability. This procedure, however, tends to even out significant regional, temporal, and sectoral variations in participation rates. The conversion procedures and major qualifications are noted below. Unless otherwise noted, all labor force data include unpaid family farm labor. However roughly estimated, these figures do provide useful parameters on the incidence of landlessness and near-landlessness in Asia.

b. The landless are comprised of the study categories of I.A. Agricultural Workers, I.B. Non-Agricultural Workers, and II.A. Tenants and Sharecroppers, according to the following criteria: 1. The landless have extremely little or no ownership of farming land and 2. they have access to insufficient land for cultivation (whether as secure or insecure tenants, sharecroppers, or other forms of hired labor), or they have incomes or expenditures below existing poverty levels.

c. The near-landless are comprised of the study categories II.B. Marginal Farmers, II.C. Shifting Cultivators, and III. Pastoralists and Nomads. The near-landless do have some ownership (or traditional claim) of land, but their landholdings are not large enough or secure enough to assure a subsistence income, either at present or in the near future. The operational definitions for these categories are indicated in each country profile. The estimates for Pakistan and Thailand are noted below.

d. Labor force data were derived on the basis of the 1977 Bangladesh Land Occupancy Survey estimate of 2.05 workers per rural household.

e. Labor force data were derived from the 1970-71 Census estimate of 1.74 workers per rural household. However, unpaid family workers were excluded from the enumeration.

f. The data are based on the 1970 agricultural labor force only, which had an average of 2.2 workers per rural household in Java. However, labor force estimates vary widely. For a recent attempt to resolve this variation, see H. R. Redmana et al, Labor Force and Labor Utilization in Selected Areas of Java, National Institute of Economic and Social Research (Jakarta), August, 1977.

g. The estate sector is included in the totals for the rural sector and rural labor force. Labor force data are based on the 1970 Census and the Third Malaysian Plan which estimate an average of 1.86 workers per rural household.

h. The data are based on an estimate of the 1972 agricultural labor force and its occupational and land tenure status characteristics derived from the following sources: Pakistan Statistical Division, Pakistan Statistical Yearbook for 1975; Government of Pakistan, Census of Agriculture, 1960; G. C. Hufbaur, "Occupational Trends and Social Mobility in the Punjab," Pakistan Economic and Social Review, Vol. XI, No. 1 (Spring, 1973); and Government of Pakistan, Report on the Quarterly Survey of Current Economic Conditions, 1966-67. The landless consist of the estimated 40% of all farmers who had some degree of tenancy in 1960, extrapolated to 1972. The near-landless consist of the estimated 45% of all cultivators with holdings between 0.1 and 5.0 hectares in 1960, extrapolated to 1972.

i. The data are for the agricultural labor force only.

j. The landless consist of a. agricultural workers, who comprise 3.2% of the rural labor force, and b. non-agricultural workers who comprise 6.8% of the rural labor force. The near-landless consist of those cultivators with less than 20 rai, who comprised 40.2% of the rural labor force. The data sources did not permit the identification of the number of cultivators who were tenants or sharecroppers. There is also a very large number of squatters in rural Thailand -- perhaps as many as a million households -- but very little is known about their labor or land-holding status; they have also been excluded from the analysis. These estimates are based on the following sources: Fuhs, F. W. and J. Vingerhoets, Rural Manpower, Rural Institutions and Rural Employment in Thailand. Government of Thailand, Manpower Planning Division of the National Economic Development Board, Bangkok, 1972; International Labour Office, "Report to the Government of Thailand on Internal Migration." Mimeo, ILO, Geneva, 1965; Kirananda, T., "Selected Economic Characteristics of Agricultural Population in Rural Thailand." Paper No. 11, Institute of Population Studies, Chulalongkorn University, Thailand, 1972, (This study does not include the southern provinces.); Kitahara, A., "The Forms of Rural Labor and Their Role in the Rural Economy in Thailand." in Hired Labor in Rural Asia, editor S. Hirashima, Institute of Developing Economies, Tokyo, 1977; Smith, H. E., C. Dhamanutra, C. Bavichitra, and P. D. Richardson. "Thai Rural Families: A Sociologic and Economic Survey." Mimeo., Department of Sociology and Anthropology, Northern Illinois University, DeKalb, Illinois 60115, 1971.

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Bangladesh: Country Profile

1. Introduction. Bangaldesh in 1973 had an estimated population of 75 million, and a population density of 1365 persons per square mile with 1080 persons per cultivated km. Different estimates of its population growth vary from 2.9 percent to 3.5 percent per annum. Of its estimated labor force of 26.3 million in 1973, 85 percent were employed in agriculture for a major part of their time.

2. Incidence of Landlessness

Laborers and Workers

According to the Land Occupancy Survey (LOS) of 1977, conducted in Bangaldesh, 32 percent of the estimated 11,848,000 households residing in rural areas were landless, i.e., they did not own any land under cultivation. About 11 percent did not own even homestead land. This estimate includes landless tenants who reportedly comprise about 5 percent of all rural households. Correcting for this category of landlessness, an estimate of 27 percent of all rural households were dependent only on wage labor for their entire income. 1./ In a report on the LOS, Jannuzi and Peach suggest that the incidence of absolute landlessness may have been underestimated because there was an unwillingness among respondents to be classified as landless. 2./

Occupational distributions for the landless were reported by Abdullah et al 3./ and by the Integrated Rural Development Program (IRDP) survey of 1973-74 in 12 districts. 4./ According to them, only 16 percent of the landless had agricultural labor as a primary source of employment, while 36 percent had non-

agricultural labor as the main occupation. However, about half of the non-agricultural laborers also have agricultural work, presumably during peak agricultural employment periods. Similarly, practically all the agricultural laborers have non-agricultural employment as a subsidiary occupation, presumably during slack agricultural periods. The following table gives some idea of the diversity of employment sources for the landless.

Table 1
Main and Subsidiary Occupations of the Landless

Occupation	Main	Subsidiary
	(% of households)	
Agricultural labor	16.1	37.2
Non-agricultural labor	36.2	48.5
Business	12.4	5.6
Fishing	12.1	0.8
Service	7.7	-
Weaving	3.4	-
Other	11.8	8.0

Source: Abdullah, A., M. Hassain, and R. Nation. "Agrarian Structure and the IRDP-Preliminary Considerations," The Bangladesh Development Studies, Volume IV (2), April 1976.

Cultivators

a) Tenants and Sharecroppers According to the Land Occupancy Survey, 559,500 households were landless tenants, or roughly 5 percent of all rural households. On the average, each of these households cultivated about 1 1/2 acres -- Somewhat more than owner-cultivators, but less than the other types of cultivators identified in the LOS, i.e., owner-managers, and

owner-cum-tenants. In their report on this survey, Jannuzi and Peach (1977) suggest that the degree of tenancy was underreported. This bias occurred for different reasons in reporting by both landowners and tenants. A high (unreported) incidence of "subletting" is also indicated by these authors. 5./ This practice in effect is likely to sharply reduce the share of output for the actual tenant-cultivators.

Cultivation rights for most tenants and sharecroppers are insecure; and a rapid turnover usually occurs on the land tilled by these people. The LOS found that slightly more than 70 percent of all tenant households had cultivated their rented lands for a period of three years or less. 6./ A similar observation was made by Zaman, on data from the late 1960's, who attributed it to the 1950 Tenancy Act, according to which tenants can claim de jure rights to land they have tilled for more than three years. 7./

b) Constrained Farmers According to the LOS figures, about 30 percent of rural households in Bangladesh own cultivable land that was less than one acre, and an additional 15 percent own between one and two acres. Depending on ecological factors and cropping patterns, between one to two acres is likely to provide subsistence incomes for an average Bengali household. Of those households cultivating less than two acres, the majority are expected to have members in the wage-earning labor force in addition to being cultivators. Most of the households under the LOS category of owner-cultivators are likely to be within this size holding. Table 2 shows the frequency distribution of cultivator households from the LOS report.

Table 2

Number and Area of Rural Cultivator/Owner Households

	Households		Area Owned		Area Rented In	
	# (000)	%	# (000)	%	# (000)	%
Owner-Cultivator	1,923.8	24	1,973	10	-	-
Owner-Manager	3,002.0	37	8,192	44	-	-
Owner-cum-tenant	2,618.3	32	4,366	23	3,481	19
Tenant	559.5	7	-	-	828	4
Total	8,103.6	100%	18,841	77%	4,309	23%

c) Marginal Farmers About 16 percent of rural households in 1977 owned between 2 and 5 acres of cultivable land. Even though these households reached into the top tenth decile on the scale of land distribution, and more than 3/4 of the population was worse off than they, in absolute terms they would still be considered marginal farmers. Land subdivision or a drop in farm prices could at any time put them in the "constrained" category. Many of these cultivators are also likely to be in the owner-cum-tenant category.

Table 3 summarizes this information on the incidence of landless and near-landlessness among rural households in Bangladesh.

3. Trends

A recent report by Jannuzi and Peach based on experience with the LOS gives their impressions of the changes taking place in the agrarian structure of Bangladesh. They describe these changes as leading to:

> "a) the further concentration of land in the hands of a few landholders;
> b) the weakening of the sharecropping institution (with sharecroppers being progressively lowered); and
> c) the rapid growth in the number of landless and near-landless peasants." 8./

Table 3
Incidence of Landlessness and Near-landLessness in Bangladesh (1977)

	Households* # (000)	%
I. Laborers and Workers	2,726	23.0
A. Agricultural Workers	532	4.5
1. Attached agricultural laborers[1]	260	2.2
2. Casual agricultural laborers	272	2.3
B. Non-Agricultural Workers	2,194	18.5
1. Laborers	1,197	10.1
2. Self-Employed Workers	994	8.4
II. Cultivators	7,730	65.2
A. Tenants and Sharecroppers	560	4.7
1. Secure	168	1.4
2. Insecure[2]	392	3.3
B. Marginal Farmers	7,170	60.5
1. Constrained[3]	5,317	45
2. Vulnerable Small Farmers[4]	1,853	16.5
C. Owner-cum-Tenant Farmers	--	--
Total Landless and Nearlandless	10,456	88.2 %
Total Rural Households	11,848	100 %

Sources: (1) Land Occupancy Survey of Rural Bangladesh, 1977, Summary Report, Bangladesh Bureau of Statistics, Dacca, 1977. (2) Abdullah, A. et al. "Agrarian Structure and the IRDP-Preliminary Considerations," The Bangladesh Development Studies Volume IV (2), April 1976.

Footnotes:

1. According to Abdullah et al. (1974), roughly one half of the agricultural laborers could have been attached for part of the year to a single employer.
2. Conservatively estimated at 70% of all tenants. The LOS estimates about 70% of tenants have tilled their lands for less than 3 years. These cultivators would not have any security of tenure even if the Land Tenancy Act of 1950 were to be enforced.
3. All those owning cultivable land less than two acres.
4. All those owning cultivable land between two and five acres.

*Labor force data has been converted at the rate of 1.71 workers per household.

The exact dimension of these changes is difficult to determine because of problems of enumerating tenancy. landlessness and landholding sizes. These problems are discussed in the report mentioned above, and are also likely to have existed, though in different degrees, in the earlier survey and census material.

Existing data suggest that landlessness roughly doubled between 1961 and the mid-1970's, from 17.2 percent to 33-37 percent. The component of landless tenants, even as reported, has been increased from less than 3 percent of households in 1961 to about 5 percent in 1977. 9./

4. Causes of Landlessness

The high degree of economic stagnation, if not outright disruption, that has been existing in Bangladesh since 1971 is the primary cause of the structural changes taking place. Declining employment and wages depress levels of living for those heavily dependent on them, namely the landless and constrained cultivators. For the latter, this often means loss of land through indebtedness or outright sales of land. The concentration in land-ownership that occurs under these circumstances has probably bestowed economic power far out of proportion of the landed elite. High rates of population growth, given the unequal nature of asset distribution, increase the size of the landless and near-landless both in absolute and in proportional terms. This further deteriorates their collective position and bids down their wages and their returns from sharecropping through elaborate subletting procedures. Fragmentation of land through inheritance makes holdings increasingly inadequate each year and further contributes to the increasing inequality of land ownership.

Even in pre-liberation Bangladesh, there was little evidence for an increase in aggregate demand for agricultural labor. At the same time, the industrial labor absorption was only about

2.5 percent annually. Thus, in the 1960's, the aggregate demand for labor had not increased by more than 20 percent over the decade. At the same time, the labor force increase was almost 3.3 percent annually. 10./ Mellor estimated that to absorb all the increments to the labor force annually, and 0.6 million additional jobs in agriculture and public works have to be created (equivalent to roughly 2.5 percent of the agricultural labor force in the late 1960's). 11./ The rapid economic growth necessary to achieve this employment was far from realized.

In the post-liberation period, there was not only economic stagnation but an outright decline in productive capacity. By the mid-1970's, output had barely caught up, in both the industrial and agricultural sectors, with the levels of 1969-70. All this is likely to have had a tremendous impact on employment and income levels of the people of Bangaldesh.

An increasing inequality in land ownership is indicated by the 1977 Land Occupancy Survey. Figures from the survey reveal that 36 percent of the cultivated land was owned by about 5.0 percent of rural households. According to the 1960 Census of Agriculture, the same proportion of land was owned by about 9 percent of rural households. During periods of acute economic distress, such as the famine of 1973-74, there is a sharp increase in distress sales of land, and this accentuates the process by which inequalities have been increasing. In addition to those who sold off their lands, a large number of cultivators take loans using their land as collateral. A

village study conducted in late 1974 found that 44 percent of "paeriboers" (households) owning land had some of their land mortgaged out. About half of such households belonged to the 1-2.5 acre category of constrained cultivators. 12./

Macro-economic policies have contributed to the present situation. In the agricultural sector, there has been no effective strategy to transform traditional agrarian structure. The present situation, according to Jannuzi and Peach, is "also one in which unplanned, unregulated, and potentially destabilizing changes are taking place in the countryside." 13./

The industrial sector development has been surprisingly capital intensive in Bangladesh. In a comparison of capital intensity of different industries, A. R. Khan found that in all cases except in basic metals production, Bangladesh had 2 to 5 times greater capital-labor ratios than Japan. 14./ In the case of paper products, the capital intensity in Bangaldesh was found even higher than the U.S.A. A series of government policies were largely responsible for this phenomenon. 15./ These policies included an overvalued exchange rate, an artificially low interest rate structure, tax benefits and depreciation allowances for capital costs, and the practice of providing licenses sanctions for importing capital goods at low prices.

5. Conditions

In 1963-64, a household income and expenditure survey was conducted by the Central Statistical Office of the Pakistan Government. Using the available information on expenditure elasticties of foods, and 1963-64 prices, it was estimated that

an income of Taka 32.75 per capita per month would be required to meet dietary intake levels of 2150 calories daily per person. According to levels of reported incomes, 85 percent of the households and 76 percent of the population of Bangladesh could not afford a diet with "adequate" calories in 1963-64, as indicated in Table 4 below.

Table 4
Populations Below Estimated Poverty Levels: 1963-64

	Taka/Capita month	% households below this level	% persons below this level
Income for "adequate" daily per capita caloric intake (2150 calories)	32.75	85	76
Absolute Poverty Level	23.60	52	40
Extreme Poverty Level	17.00	10	5

Source: Pakistan Central Statistical Office. Household Income and Expenditure Survey.

Between the mid-1960's and the mid-1970's, inflation had quadrupled the amount required to purchase the "adequate" diet. Incomes, on the other hand, had not increased, and this was particularly so for wage laborers. The net effect is that the number of people below the "extreme" poverty level has multiplied severalfold. A survey of eight villages conducted during the famine period of 1973-74 by the Bangladesh Institute of Development Studies revealed almost 80 percent of villagers reported incomes below the "extreme" poverty level. 16./

Those likely to be worst affected by inflation are those who depend on wages for their livelihood -- and these are the landless and near-landless. Since 1971, real wages (nominal wages corrected for inflation) for rural labor have been steadily declining to levels unprecedented since the wage record began to be published in 1949. 17./

The patterns of labor-use in agriculture are also transition. There has been a gradual change from the traditional modes of share-payment at harvest, to the use of fixed-wage contract labor. This practice eliminates much of the potential for increased labor input with agricultural intensification. There is reason to believe that this trend in hired labor is on the increase. Furthermore, the use of contract labor or day labor on a cash basis has been shown to be more common when hired labor is from outside the village. 18./ Thus, "There is a new source of labour, migrant labour, bidding down wage rates. Many farmers are quite willing to accept this advantageous situation without regard to the problems of labour supply in the future or their relationships with local labourers." 19./

6. Public Policy Measures

a) Rural Cooperatives The formation of these units is the principal objective of the IRDP or Integrated Rural Development Program, which is based on the Comilla model. The program has been used to channel a significant portion of credit and other inputs for rural development. However both membership in the cooperatives and access to inputs is determined by level of asset (primarily land) ownership. Thus members of landless

households are rarely members of cooperatives. The near-landless have received minimal assistance from the program. A study in Comilla Kotwali Thana revealed that among members on the cooperatives, farmers who owned less than one acre of land received loans amounting to only 6 percent of loans to farmers with 1-3 acres, and only 2.7 percent of loans to farmers with more than 3 acres. 20./

b) Agricultural Intensification A series of programs and organizations have been involved with the objective of intensifying Bangladesh agriculture through the provision of credit, irrigation, and other inputs. During the 1960's, agricultural production increased by about 2.5 percent annually, mainly due to expansion of irrigation for the production of the dry season "boro" rice crop. However, only a limited amount of additional employment was generated in agriculture even during the 1960's.

c) Public Works The Rural Works Programme is probably the only public policy measure designed to directly benefit the landless and near-landless. Funding has been provided primarily by the PL 480, both directly in food-for-work projects, and indirectly from the sale of PL 480 commodities. Between 1962 and 1967, takas 710 million were allocated for different construction works and about 75 percent of the total allocation was for road construction and maintenance. It is estimated that the rural works program provided, on an average, about 170,000 man-years of employment annually during 1962-67. 21./

7. Research Needs

Over the past 10 to 15 years there has been a rapid increase in the proportion of absolutely landless rural households. It is

important for research to focus on the factors by which this has been occurring to pinpoint the possible remedial measures. What are the factors that make cultivation difficult for a constrained cultivator? Is land lost through outright sales due to acute economic distress? What is the role of land mortgages on effective vs. reported or legitimate rights of farmers? The question of how these mortgaged lands should be recorded in basic data collection is important considering the magnitude of their occurance, and their possible relevance in illustrating the structural changes that are taking place.

A second area where research is needed is in recording the trend in sharecropping arrangements in terms of frequency, conditions of their arrangements, and their effects on labor utilization. This is particularly relevant from the policy standpoint, since legislation or any other corrective measures will not be effective unless the interests of all the concerned parties in these arrangements are known. An increase in the practice of "subletting" has been reported, and seems extremely plausible given the scarcity of productive employment and declining real wages. This practice is likely to result in a pronounced vertical stratification and a cross-class interest in maintaining the "subletting" arrangements. If such practices are the result of existing inequalities, a fundamental redistribution may be a necessary precursor to a real growth strategy.

It would also be useful to analyze the effect of declining real incomes on participation rates, household labor allocations, and choices in meeting subsistence needs. A better documentation of "coping" behavior in difficult socio-economic and ecological conditions would also improve studies on levels of living.

Footnotes

1. LOS, 1977
2. Jannuzi and Peach, 1977
3. Abdullah, et. al., 1976
4. Abdullah, et. al., 1974
5. Jannuzi and Peach, 1977, p. 29
6. Ibid., p. 43
7. Zaman, 1973
8. Jannuzi and Peach, 1977, p. 72
9. The earlier figure is derived from the 1961 Census and the later range from the IRDP (1973-74) and LOS (1977) Studies
10. Ahmed, in Robinson and Griffin, 1974
11. Mellor, 1971
12. Huq, 1976, p. 138
13. Jannuzi and Peach, p. 72
14. Khan, 1976
15. Ahmed, 1974
16. There are several methodological problems in deriving diet-based poverty levels. The implication of such low incomes (reported) on dietary intakes, and physiological capacities is unknown. It is accepted that "adequate" dietary levels are set fairly arbitrarily, given the limited agreement on actual human requirements, especially under conditions of prolonged consumption of "sub-optimal" diets and possible physiological adaptation. Thus while there is likelihood that dietary measurements are over-estimated, incomes may be often underestimated, and could lead to exaggerated estimates of people with "suboptimal" diets. However, unless much more is known about both human nutrition and its relation to levels of living, these problems will remain.
17. Clay, 1976
18. Ibid.
19. Ibid.
20. Malek, 1976

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INDIA: Country Profile

I. Introduction

According to the 1971 Census, India had an estimated population of 548 million with an annual growth rate of 2.24 percent. Eighty percent of the population lived in rural areas, and 72% of its workforce of 180 million were employed in agriculture. Children below 15 years made up 5% of the country's working population, not including unpaid family workers.

II. Incidence of Landlessness and Near-Landlessness

A. All-India Estimates

Estimates for the incidence of different types of landless and near-landless groups for India have been derived from three kinds of data available for the country. These are i) decennial censuses, ii) National Sample Surveys on rural landholdings and characteristics of rural labor households, and iii) Agricultural Census data. This last source of aggregate data was the least useful, since the unit of "holdings" included was quite irrelevant in identifying asset ownership of either households, individuals, or members of the labor force. For our purpose, neither one is complete by itself, for each provides a different degree of disaggregation of sections of the population. In using these sources together, however, the problem of comparability between populations identified in different reports is quite large, in addition to the inherent difficulties in interpreting any one of them.

Landless Laborers and Workers - National Sample Survey data on landholdings has the advantage over Agricultural Census data in that a) it tabulates landholding status by households rather than the ambiguous "holder" used in censuses, and b) it does not exclude landless households. Unfortunately, only the 1960-61 National Sample Survey data was available, even though a more recent survey has been conducted. According to the 1960-61 Survey, 19 million rural households with 102.6 million persons had absolutely no access to cultivable land. They amounted to 26.3% of all rural households.

The 1970-71 Agricultural Census provides an indirect and rough estimate of the incidence of landlessness. Assuming that the 70.5 million reported agricultural holdings, is roughly equivalent to the number of cultivating rural households, about 20% of rural households would be landless. Since there is no real evidence to suggest that the proportion of landlessness has been declining, the discrepancy is attributed to the problem of interpreting "holdings" reported in the Agricultural Census.

In 1971 there were about 45 million agricultural laborers in rural India. These agricultural laborers made up 30% of the rural labor force (in the 1971 census, unpaid family workers were excluded from the work force). Many of these laborers are drawn from the marginal cultivator categories. Surveys have shown that up to 40% of those households that derive the major part of their incomes from agricultural labor may also be cultivators.[1]

The occupational composition of landless households can also be derived from National Sample Surveys. A Survey conducted in 1963-64 indicates that about 13% of rural households were landless agricultural labor households, and another 2.5% were landless non-agricultural labor households.[2] Assuming that the overall proportion of landless households in 1963-64 was the same as in 1960-61 (i.e., 26%), 10.5% of households were landless self-employed or skilled workers. These breakdowns were extrapolated from the 1971-72 rural population estimates. It is assumed that each of the categories has increased in the same proportion as the overall increase in landlessness.

Agricultural workers either as a proportion of total workers in the state or of rural workers is highest in the Southern states of Andhra Pradesh, Tamil Nadu, with states of the Eastern Zone and Western Zone next. Characteristically, the Northern zone states of Punjab and Rajasthan plus Assam have a small proportion of agricultural laborers. Thus of all the landless agricultural laborers in India, Andhra and Tamil Nadu have about 28%, Bihar and West Bengal have another 22%, Maharashtra and Mysore have 17%, Uttar Pradesh and Madhya Pradesh together have 15%, and Rajasthan and Punjab have only about 5%.[3] Of these agricultural laborers, about 14 million were casual agricultural laborers and the remaining 3.4 million were some kind of permanent agricultural laborers. Two observations on permanent agricultural laborers should be noted: i) their number fluctuated widely between seasons with the largest number around the time of the rabi harvest in winter,

and almost insignificant during summer; ii) it appears that for the majority in this group, the service conditions are very much conducive to a debt-relationship with the employer. It is not clear from most data sources what proportion of the non-casual laborers are seasonally attached to their employers and how many are permanent employees. Such a distinction would be useful to make since within this group are found members in at least three different situations. Traditionally they were present within and around tribal pockets or in small numbers as permanent farm servants on large farms. More recently two other groups have been added to this category and will be discussed in more depth in the next section. The first of these groups originated in areas of HYV adoption where there was sharply increasing demand for labor vis-a-vis supply, e.g., Punjab. The other group results from land reform legislation from reducing the number of tenants and share-croppers in areas of Eastern India or from HYV introduction in Tamil Nadu rice production. The result was a kind of "devalued" sharecropping arrangement, in which former tenants or attached labor cultivate the land on a shared-crop basis but receive a much smaller portion of the output.

Cultivators - Since settled cultivation is the predominant characteristic of Indian agriculture, the framework of all censuses and surveys is heavily oriented to measuring such a system. This leads to the under-reporting, if not complete omission, of the existing class of shifting cultivators. In 1960-61, out of

about 72.5 million rural households, 2.2% were reported to be tenants or sharecroppers, another 33.2% were "constrained" farmers of average holdings of less than 2.5 acres in India. They suffer both land and ecological constraints. Furthermore, very few of them are expected to benefit from technological improvements so far.

According to the 1971 Census of Agriculture, 35.7 million holdings out of a total of 70.5 million holdings were 2.5 acres or less. An additional 13.4 million holdings were between 2.5 and 5 acres. However, because of problems of interpretation of the Census data, breakdowns available for households from earlier National Sample Surveys has been used. Table 1 gives the percentage distribution of households in 1960-61 by size of agricultural holdings. Table 2 provides current estimates on the landless and near-landless groups as extrapolated from the 1971-72 population. (Both tables are located at the end of this country profile.)

An indirect estimate of shifting cultivation can be made from the size distribution of tribal lands. The process of assimilation of India's tribal population into the expanding sphere of settled agriculture has been gradual. Historically, their traditional means of subsistence had been hunting and gathering or shifting cultivation. Now, the expansion of settled agriculture into former tribal lands has them more and more dependent on the villages' farming economies. Originally regarded as outcasts, they have gradually become a part of village life.

Since they have few skills, they are disadvantaged, and generally have to accept the worst menial work. Their use as bonded labor has been mentioned in practically all states that have tribal populations. A majority of them, however, have remained with their traditional occupations. Tribal households are reported as cultivating farms that are, on the average, larger than the all-India levels: 20.5% had land over 10 acres compared to 18% for India as a whole.[4] Little is known about their relative agricultural productivity. The largest pockets of these groups is in Madhya Pradesh, Maharashtra and Mysore, with the heaviest concentrations in Andaman and Nicobar Islands, Assam, and Manipur.

B. Evidence of Trends

Agricultural Laborers - According to Census data, the number of agricultural laborers (this includes both landless and those cultivating some land) has increased from 27.5 million in 1951 to 47.5 million in 1971. At about a 4% per annum growth rate, they increased from 12% of workers in the country in 1951 to 26% of the workers in 1971. While there has been a proportional increase of agricultural laborers without land among all agricultural laborers, there is also evidence for a higher proportion of contract or attached agricultural labor in recent years.[5] Studies from different states seem to indicate that most of these increases have come from the ranks of unprotected sharecroppers and have taken place in the Eastern and Southern states, while the situation in the Western and Northern states has not deteriorated as much. There has been an increase in permanent agricultural

laborers in Punjab and parts of Haryana and Western U.P., mainly with the introduction of HYV's and increasing demand for labor, but here also there are increases in agricultural labor by tenant evictions.

Even though the increase of permanent labor in Punjab is associated with a higher living standard for the workers, (contracts for over a year are rare, but a system of cash advances ensures repeated contracts), the net result here is the same as that associated with the pauperization of the share-cropper in West Bengal, namely, the consolidation of control by the large land owners. In Punjab, it helps to forestall casual labor, peak-season wage hikes. In West Bengal and Bihar, it helps to maintain the semi-feudal structure by perpetuating the indebtedness of small cultivators and share-croppers while a few large landowners continue to siphon a major share of production and also maintain political control.[6]

Reduction in the degree of share-cropping has been occurring for the past two decades in West Bengal, Bihar, Uttar Pradesh and Orissa. This appears to have resulted from a combination of factors, particularly land reform legislation and the increasing profitability of cultivation. Both these factors have led to the owners assuming greater control in the production process, and in the process, reducing former share-croppers to attached laborers.

In the Southern zone states, especially in rice-producing areas, there appears to have been an increase in tenancy. This has been attributed to the high concentration of the landless

and agricultural labor population in the same regions. The increase in tenancy here is a result of the effort of those landless who have saved some resources in the form of implements, etc. to ensure their livelihood through tenancy contracts.[8] There is similar evidence from Orissa and Andhra Pradesh. Conditions of these tenants however appears to be deteriorating with the increase in their numbers, in many cases the lease being tied with free labor on the landowner's farm.[9]

The situation of agricultural laborers and tenants appears to be much more stable in the Western zone states of Maharashtra, Rajasthan and Gujarat. Numbers of agricultural laborers do not appear to have increased in Maharashtra and Rajasthan because of absorption into the industrial sector of Bombay or migration to the areas of Punjab, Haryana and Western U.P. where increase in labor demand is taking place.

III. Causes of Landlessness

A. Demographic-Environmental Factors

The pattern of population distribution in India varies with the carrying capacity of the land. Population densities are the highest in the fertile river valleys and in irrigated areas. Further, rice-producing areas have the highest densities and the smallest average size of landholding. In general, this does not necessarily indicate that this would by itself result in greater pauperization in rice areas since irrigated rice producing lands have a much higher carrying capacity of land than any other

cereal crop.[10] Population densities are consequently highest in the southern states. Thanjavur district of Tamil Nadu has a population density of 900 persons per square mile, while Kerala state has an overall density of 525 persons per square mile. Variations in the carrying capacity of land also range from about one acre of irrigated land in Kerala to more than seven acres of unirrigated land in Maharashtra. In arid Rajasthan, the minimum required to support an average family of about five persons would be even larger.

Those lands which are not under cultivation are extremely poor in quality and can be brought under production only with substantial investment of capital and labor which is outside the reach of the landless and small cultivators. For those lands under production, there is a high potential for higher intensity of cultivation with inputs such as irrigation, drainage, flood protection and fertilizer. Apart from the economic constraints for these improvements, there are serious institutional constraints as well.

B. Institutional Factors

A general observation made across regions in India is that land reform legislation has failed to fulfill the objectives of its formulation. In most areas it has actually been retrogressive for small tenants and sharecroppers. Neither the political authorities nor legal institutions such as the judiciary have paid much heed to the needs of small cultivators and landless

workers. Within this overall picture, there are important regional variations, primarily due to the differential impact of local labor organization and the impact of HYV's. These are discussed in Section IV.

C. Economic Factors

The limited access to credit facilities and markets in the wake of commercialization of land ownership has been the single most important factor in the impoverishment of such a large segment of India today. The loss of ownership rights pushed millions of people below subsistence. This large-scale loss of cultivator rights occurred in India under an administration that introduced high taxation of farm produce together with commercial transaction in land, without any input in credit or marketing. Railways were built simply to transport produce for export from the region of origin to ports. By 1947, most of the large landholders were also money lenders or tax collectors. However, in spite of this commercialization of production, a semi-feudal relationship continued to exist in many parts, and this is more pronounced even today in areas which are remote from urban centers. The resulting situation is a pronounced vertical stratification of rural society, one that is very conducive to the exploitation of the laboring class.

IV. Conditions

For India as a whole, there have been various estimates of people living below subsistence at different points in time.

According to one estimate, the percentage of rural people living below the minimum level of living (which incorporates minimum dietary criteria and differential price increase of food-grains) went up from 38% of the people in 1960-61 to 54% in 1968-69. In absolute numbers, this means a rise from about 135 million to about 230 million rural people in an eight year period.[11] It can be expected that this rural population roughly coincides with the agricultural laborer and "constrained" cultivator categories identified under our typology. Another overall observation has been that while the number of days employed appears to have remained stable or increased somewhat, the participation rate is declining, with a smaller proportion of women in the labor force.[12] Finally, from information on real wage-rates in IADP districts, it appears that they have declined across all districts, except in Palaghat in Kerala State. When comparing levels of living on a regional basis, only in Punjab has the real income level been rising significantly for agricultural laborers. In all other states (except perhaps part of U.P. and Orissa, according to Parthasarathy, including Kerala, real incomes of agricultural labor households have been declining at least until 1969. On the other hand, the "Additional Rural Income Survey" (ARIS), carried out by the National Council of Applied Economic Research and sponsored by USAID, has indicated that, between 1968-69 and 1970-71, there may have been a decline in poverty in rural India.

The report from ARIS suggests that the number of rural people living below the poverty level (taken as a constant per capita expenditure level of RS. 30 per month) declined from 267.3 million (64.8%) in 1968-69 to 253.4 million (60.1%) in 1969-70 and finally to 249.7 million (57.9%) in 1970-71. There is, however, no evidence for taking this to be a trend measure, and the use of a constant poverty line for the three-year period is misleading.

The impact of labor organization in agriculture on the conditions of the landless can be illustrated best by using four district cases: Ludhiana in Punjab, Thanjavur in Tamil Nadu, Palaghat and Allepey, both in Kerala. In the case of Ludhiana, there has been no labor organization historically. None has emerged even with the increasing demand due to many factors including the use of migratory labor and the increasing use of seasonally attached or permanent farm labor. However, agricultural intensification has progressed very rapidly and wages have been increasing rapidly.[13] Because of inflation with longer year round employment, the result has been an improvement in real incomes of agricultural laborers.[14] 2) In the case of Thanjavur, there has been political organization among agricultural laborers since 1939, at least. This organization resulted in fairly militant demands for wage increases in the 1960's when, as a result of being an IADP district, profitability of cultivation was increasing. Two characteristics of Thanjavur, however, have prevented any real improvement in conditions for the agricultural labor

force. Firstly, the high proportion of landlessness (almost 50%) led to undercutting the organized labor demands, by an increase in tenancy arrangements of a highly exploitative nature. Secondly, the limited political representation of organized labor at the regional level here has encouraged fierce retaliation by landowners against them. As a result even though real wage rates (even after controlling for inflation) for agricultural labor did increase during the 1960's the level of employment fell drastically, partially from the increased tenancy, thereby undercutting any increase in income levels. 3) In the case of the two districts from Kerala, Allepey and Palaghat, both were similar in that both had high degree of labor organization and had broader political legislative support as well. a) In Palaghat, where production was being rapidly intensified from the IADP participation, both the level of employment as well as real wages were rising. b) In Allepey, where no such intensification was occurring, real wage rates rose but farmers cut down on labor use and employment declined. Here they could not exploit the labor pool through exploitative tenancy as in Thanjavur since political support for land reform legislation was quite strong.[15]

In areas with good communications, access to public services is likely to be available to all irrespective of economic and caste differences. In the remote areas, however, instances of discrimination are more frequent. Thus in the village of Vaviamuvada in Gujarat State, far from rail or road transport connections, even in 1971-72, none of the laborers' children

were attending the primary school in the village while the farmers' children were.[16] The same author also documents the continuation of the "Hali" system of tied family labor in Gujarat where farmers provide subsistence and sometimes education for laborers and their children in return for total command of the labor supply of the laborer's family. In contrast, in Punjab, Harijans can now freely use all public services. Here "The Chamars (Harijans) are so sensitive to untouchability that by observing it a Jat (high caste) family runs the risk of antagonizing the laborers with fairly serious consequences."[17] In terms of other services that supply inputs such as credit, irrigation, fertilizers, etc., there remains serious inequalities. Even inputs of the Gandhian Sarvodaya movement which are meant exclusively for the landless and marginal or "constrained" farmers went mostly to rich farmers. It was found that in Bihar the majority of the benefit provided under the Sarvodaya movement from irrigation schemes and subsidized hand-pump distribution went to landlord and rich cultivator farms.[18] In the entire state of West Bengal, nationalized banks financed only 111 sharecroppers in 1971-72 out of an estimated 2.2 million sharecroppers in the state.[19] Based on the requirements for credit-worthiness in these banks, it can be expected that elsewhere in the country as well, this institution of credit has been unavailable to most landless laborers, tenants and share-croppers.

V. Public Policy Measures

The measures taken by the Indian Government to improve the living standards of landless laborers and "marginal" cultivators can be classified as follows: A. legislation; B. social welfare programs; C. rural public works; D. provision of credit and development of cooperatives and rural industries; E. land reclamation and resettlement; F. small farmer development programs; and G. rural industry.

A. Legislation: Both at the central and state levels laws have been made that were expected to cover tenancy reforms and security, fixation of rents, creating limits for land holding size and distribution of surplus created from large holdings to the landless, controlling lending rates for private moneylenders, and the establishment of minimum wages. There is no evidence from any part of the country (except Kerala) that these measures have been implemented to improve conditions for either laborers or tenants and share-croppers in any way. Even though the machinery for implementation has been conspicuously weak in almost all states where tenancy and share-cropping was prevalent such as in West Bengal, Bihar, Orissa, and Uttar Pradesh, passage of legislation for tenancy reforms appears to have spurred the eviction of these tenants from their lands by the owners. Often to eliminate share-croppers' claims for improved or more secure status, they were either threatened by eviction and made to stay on as crop-sharing permanent laborers, or rotated on different plots each year or two so that secure share-holding status could not be

claimed by them. In West Bengal a Planning Commission Task Force on Agrarian Relations (1973) found that only the rights of 0.8 million sharecroppers out of an estimated 2.2 million were legally recorded in the state. Even for those sharecroppers whose rights were recorded, they are still paying 50% of their crops to the landlord instead of the new provision in the legislation for only 25% of the crop.[20]

It appears that, in many areas, share-cropping simply went "underground." The majority of agreements were traditionally verbal and in the event of any litigation, it was the landlord's word against the small cultivator's (who was in any case very likely to be indebted to the landlord). Protection of sharecroppers' rights could hardly be expected under such conditions.

Legislation on minimum wages for agricultural laborers is even less meaningful for several reasons. First, it cannot be enforced. The National Commission on Labour in its review of the Minimum Wages Act as applied to agricultural labor concluded that the only purpose served by the Act was to "provide a basis for persons who are prepared to work in the interests of agricultural labour" and to help in evolving norms.[21] Secondly, it was not unusual for minimum wages and maximum wages to remain in force for several years at a time, even though the cost of living rose rapidly. Finally, even when they were revised upward, they often remained below the prevailing wage rates.[22]

B. Social Welfare Programs: These programs are intended to provide Scheduled Castes and Tribes funding for education

(scholarships), improved housing and water supply, and health. According to Labour Bureau estimates, during the first four five-year plans, a total of Rs. 3920 million ($490 million) was spent on welfare programs for Scheduled Castes, Tribes and other Backward Classes.[23]

C. Rural Public Works: These programs are usually seen as a short term solution of the rural unemployment problem, while improving rural infrastructure through schemes of irrigation, afforestation, soil conservation, drainage and land reclamation, and improving roads and communications. From 1965-66 to 1970-71, a sum of Rs. 902 million ($113 million) was estimated to have been spent, providing about 1.5 million persons an additional 100 days of employment each year.[24] In April 1971, the Crash Scheme for Rural Employment was launched on a pilot scale. According to one report, in the first five months of its operation, a sum of Rs. 31 million had been spent on the program and had led to employment generation of about 9 million man-days.[25] In the Western Godavari District of Andhra Pradesh alone, during the first year this program, about Rs. 1.7 million had been spent or Rs. 4.50 per agricultural laborer in the district where half the households are in this category.[26] During this period physical achievements included 10 minor irrigation works, 17 drainage and anti-water logging projects, and about 550 kilometers of road work.

D. Credit and Cooperatives: While there is frequent mention of the need for state governments to provide financial help to agricultural laborers for purchase of equipment and livestock,

it is expected that nationalized banks were the only means to extend this kind of credit in rural areas. The need for labor cooperatives especially for construction work has also been seen as by-passing exploitative arrangements with labor contractors, but there is not much by way of evaluation of such attempts.

E. Land Reclamation and Resettlement: Allotment of land to landless laborers is one of the major programs for improving the economic status of the Scheduled Caste and Tribes in the country. In all states, either by legislation or executive order, special preference is given to Scheduled Castes and Tribes in the distribution and allotment of surplus land.[27] During the first, second, and third five-year plans, a sum of about Rs. 190 million was allocated by central and state governments for the reclamation of land and resettlement by landless people. From the time of independence to 1971, about 1-1/2 million acres have been colonized for additional cultivation involving 800,000 people. Out of these, it has been estimated that 44% of colonists have been from Scheduled Castes, Tribes or other landless groups.[28] Some additional land has been distributed to the landless as a result of land ceilings imposition or the Bhoodan and Gramdan movements of Acharya Vinoba Bhave.

F. Small Farmer Development Programs: In general agricultural intensification has resulted in some increase in labor demand, though it may reduce the proportional share of labor in the benefits. Even though the net demand for labor has risen, in-migration into areas of increasing labor demand has tended to

depress real wages, except where a high degree of labor organization has prevented in-migration from occurring. Very little information is available on seasonal migration or longer term rural-rural migration. The role of intermediaries and labor contractors is also not known. The relative position of migrant labor, their effect on and relations with local labor has also gone unreported so far.

G. Rural Industry: Over the years, expenditures on rural or village industries has tended to be a small fraction of the rural development budget. During the first three five-year plans, about Rs. 202 million was spent or about 4% of the rural development budget for those plans.[29] The majority of this effort has been on manufacture of bricks and tiles, tanning of leather, and local spinning of cotton yarn. Unfortunately, the majority of traditional village handicrafts have not been protected, or received any support under these schemes and the potential for utilizing local skills and resources has not been realized.

VI. Research Needs

There are many general areas that need research, e.g., seasonal migration patterns, their causes and consequences, changes in arrangements along the scale from casual to seasonally attached and permanent (annual) employment. In addition there are a fairly large group of self-employed people in the agricultural sector about whom we know very little. In India, as in Sri Lanka, Bangladesh, and Pakistan, as the number of landless

workers has increased, more and more have not been able to find employment in agriculture and seek non-agricultural wages in the rural sector. The kinds of work, its productivity, the conditions of these workers needs to be explicitly addressed in future research. The major research need, however, is one of evaluation. It is possible to find programs of all descriptions that have been implemented in India. They range from legislation, technological change in existing agriculture, land distribution, land reclamation and settlement on both individual and mechanized state farms, public works and some village industries, cooperatives, provision for credit to small cultivators and landless for productive investment via Nationalized Banks. There is, however, little by way of systematic evaluation of these programs specifically in terms of the landless and near-landless.

Table 1

Area Operated Per Household and Person--Rural India: 1960-61

Size Class of Household Holdings	Estimated Households	Estimated Area Operated per Household	Estimated Area Operated per Person
Acres	Percent	Acres	Acres
0	26.26	-	-
up to - 0.49	9.69	0.13	0.049
0.50 - 0.99	6.01	0.63	0.14
1.00 - 2.49	15.63	1.45	0.30
2.50 - 4.99	16.17	3.10	0.59
5.00 - 7.49	9.02	5.23	0.89
7.50 - 9.99	4.81	7.39	1.21
10.00 -12.99	3.44	9.52	1.46
12.50 -14.99	1.98	11.84	1.77
15.00 -19.99	2.53	14.78	2.14
20.00 -24.99	1.50	19.03	2.57
25.00 -29.99	0.87	23.47	3.23
30.00 -49.99	1.44	32.25	4.11
50.00 and above	0.65	67.09	7.69

Source: National Sample Survey No. 176

Table 2

Incidence of Landlessness and Near-Landlessness in India, 1971-72[1]

	Rural Households	
	Number	Percent
I. Landless Laborers and Workers	22,360	26.0
A. Agricultural Workers	11,180	13.0
1. Attached agricultural laborers		
2. Casual agricultural laborers		
B. Non-Agricultural Workers	11,180	13.0
1. Laborers	2,150	2.5
2. Self-Employed workers	9,030	10.5
II. Cultivators		
A. Tenants and Sharecroppers	2,580	3
1. Secure	860	1
2. Insecure[2]	1,720	2
B. Marginal Farmers		
1. Constrained farmers[3]	26,660	31
2. Vulnerable small farmers[4]	13,760	16
C. Owner-cum-Tenant Farmer[5]	2,580	3
Total Landless and Near-Landless	67,940	79%
Total Rural Households	86,000	100%

Sources:

1. National Sample Surveys No. 176 and 134.
2. All-India Report on the 1970-71 Agricultural Census
3. Census of India, 1972. Economic Characteristics of the Population, Paper 3 of 1972.

Notes:

1. Breakdowns are available for the early 1960's and then are extrapolated for the 1971-72 population.
2. About 2/3 of tenants, those cultivating less than five acres, are assumed.
3. Constrained farmers, operating less than 2.5 acres.
4. Vulnerable small farmers, operating 2.5-5 acres.
5. Included in regional summary as near-landless.

Footnotes

1. National Sample Survey No. 134, 1963-64.

2. Ibid.

3. These estimates are based on their distribution in 1963-64 reported in NSS Report no. 134. Since then there may have been a change in this regional distribution pattern because of i) the differential growth in demand for labor and migrations, and ii) regional trends in the proletarization of tenants and small cultivators.

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18. Prasad, P.H.,"Agrarian Unrest and Economic Change in Rural Bihar," EPW.

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20. Ibid.

21. Parthasarathy, G. and G.D. Rama Rao, op. cit.

22. Ibid.

23. India, Labour Bureau, Agricultural Labour in India (1969) p. 197.

24. Ibid., p. 223

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Indonesia: Country Profile

1. Introduction. Due to problems of availability and comparability of data, this study will focus only on Java, where several micro-level studies and sample surveys can be used to supplement census data. Despite the paucity of reliable data, several studies in Java indicate that landlessness is a pervasive phenomenon. It is estimated that about 89.5 percent of Java's farming households do not own, or have access to, enough land to provide for their own subsistence. The system of agricultural involution or shared poverty which Clifford Geertz described in the early 1960's has broken down and is being replaced with a system of indentured labor. Through an employment survey in 1972 and an agro-economic survey in 1973, the government has become increasingly aware of the problems of the landless; however, no programs have significantly reversed the trend toward dispossession and impoverishment in rural Java.

2. Incidence of Landlessness. According to the 1971 population census, of Java's 62.3 million rural residents, 21 million were defined as economically active in agriculture. They were distributed as follows:

Table 1
Population Working in Agriculture, Rural Java, 1971

Occupational Status	Number (000's)	%
Total	21,000	100%
Employer	1,300	6
Own Account Worker	6,200	30
Unpaid Family Worker	7,800	37
Employee	5,700	27

SUMMARY DATA FOR JAVA

Total Population, 1973	86,000,000 (100%)
Population Growth Rate, per annum	2.2%
Rural Population	70,500,000 (82%)
Rural Density	1,200+ persons per sq. kilometer
Arable Land (45% of total), 1973	6,600,000 hectares
Rural Population Working in Agriculture, 1971 (As a Percent of Total Labor Force)	21,000,000 63.0%
Arable Land per Worker in Agriculture, 1971	.3 hectares
Farming Households, 1971	9,400,000
Average Farm Size per Farming Household (2.2 Workers per Household)	.7 hectares
Landless or Near-Landless Farming Households, 1971 (Due to Inadequate Land or Insecure Status)	8,830,000
Landless and Near-Landless as a Percent of All Farming Households	89.5%
Estimated Rural Unemployment, 1973 (about 1.5 million per year enter the labor force)	8,000,000
Percent of Rural Javanese earning less than $100 per year per capita, 1973	60.0%

The Landless

According to Table 1, the landless represent about 27 percent of the rural agricultural labor force. An immediate problem of interpreting these figures arises from the mixed job portfolio of those rural households which have inadequate land for self-sufficiency. Many people are unpaid family workers part of the time and paid laborers at other times.

Further data come directly from the number of landless households. Of the 9.4 million farm households in 1970, the bottom 20 percent of all farming households averaged less than 0.1 hectares.[1] Thus, in 1970 an estimated 1.9 million households (20 percent of 9.4 million) operated farms too small to be included in any census (which only considers farms larger than 0.1 hectares). These households can be regarded as virtually landless.

Unfortunately, the figure for the absolutely landless in 1970 is not available; but, according to the 1963 Agricultural Census, they amounted to 21 percent of all rural households. Thus, by projection, we can say that in 1970 <u>at least</u> 41 percent of rural households had no land or less than 0.1 hectares. The results of the 1973 Agricultural Census are not available, but in the absence of effective land reform and in view of the impact of population growth and rice intensification programs in recent years, we cannot be far wrong if we say that almost half of Java's rural

households are completely or virtually landless. In terms of the figure of 62.3 million rural residents in 1971, and assuming household size does not vary by state of access to land, then about 26 million people belong to virtually landless households in Java. This number does not include those (unknown) numbers of tenants and their families operating farms more than 0.1 hectares, but who have been reduced to de facto landless laborers through the mechanization of rice production.

The Near-Landless

The 1963 Agricultural Census revealed that 54 percent of households operating more than 0.1 hectares were within the "0.1 to 0.5" category. It is unlikely that this percentage has declined since then. If we were to extend the idea of an adequate farm size to 0.5 hectares of any land, not necessarily of sawah, we could conclude that something in the vicinity of 73 percent (41 percent "landless" plus 54 percent of the remaining "non-landless") of Java's rural households clearly do not have land enough to meet their basic needs. The true percentage might be much more. Again using the 1971 estimate of rural residents, at least 45.5 million rural Javanese are completely landless, virtually landless, or near-landless.

The 1963 Agricultural Census also indicates that 27 percent of households operating more than 0.1 hectares were within the "0.5 to 1.0 hectare" category. Although this may be an adequate farm size for family subsistence

these small farmers can be considered insecure because of their vulnerability to land division due to population pressure and to land alienation due to indebtedness. Approximately 16 percent of Java's rural households (27 percent of the remaining "non-landless") are vulnerable small farmers.

Based on these estimates, agricultural households in rural Java can be distributed as follows:

Table 2
Farm Size of Households
Working in Agriculture, Rural Java, 1971

Status	Farm Size (Hectares)	Number of Households (Millions)	Percent of Total
Completely Landless	0	1.97	21%
Virtually Landless	0 - .1	1.88	20%
Seriously Constrained	.1 - .5	3.01	32%
Vulnerable	.5 - 1.0	1.50	16%
Other Non-Landless	1.0+	1.03	11%
TOTAL		9.39	100%

Tenancy

Of the total number of operational farms (over .1 hectares) reported in the 1963 Agricultural Census, 59 percent operated only their own land, while 41 percent operated mostly non-owned land, through sharecropping, renting-in, and other arrangements. In renting arrangements, on more than 90 percent of total rented land, the rent was paid in money, before the use of the land for one or more seasons. In sharecropping arrangements, on 46 percent of total sharecropping land, payment was made in kind after

the harvest. In all cases, the landlord usually functions as a farm manager, specifying input requirements and assigning labor requirements at each phase of the farming cycle. The nominal tenants and sharecroppers thus usually function as farm laborers.

Due to population pressure, technological change, and inflation, all of these small tenants and sharecroppers (1.8 million households, or 41 percent of those with farm sizes from 0.1 to 1.0 hectares) can now be considered insecure. Additional evidence presented in Part II of this report indicates that about half of these insecure tenants and sharecroppers (.9 million households) have been displaced by technological changes and the intensification of agriculture since 1967. They now earn only below market wages as indebted laborers.

Occupational Status of the Landless in Agriculture

The system of indentured or contract labor for harvesting, known as tebasan, has now spread to an estimated 60 percent of all cultivated land in Java (about 4 million out of 6.6 million hectares). Using Sajogyo's estimate of 75 man/days per crop, and assuming that all tebasan land is doublecropped, this would provide 600 million workdays of labor for the landless, or a government minimum level of employment (100 days per year) for six million landless persons in the agricultural labor force. The remaining landless workers in the agricultural labor force may be regarded as casual agricultural laborers.

These estimates on the occupational distribution of landlessness in rural Java are summarized in Table 3.

Table 3
Landless and Near-Landless Households Working in Agriculture Rural Java, 1971

	Number of Households (Millions)		Percent of Total	
I. Laborers and Workers				
A. Agricultural Laborers		4.75		56.5%
1. Permanent Agricultural Laborers	3.63		43.2%	
a. Employed (or attached) Tebasan 2.73				
b. Indebted Laborers .9				
2. Casual Agricultural Laborers	1.12		13.3%	
B. Non-Agricultural Rural Workers	NA			
II. Cultivators				
A. Tenants and Sharecroppers		.9		10.7%
1. Secure Tenants and Sharecroppers	NA			
2. Insecure Tenants and Sharecroppers	.9		10.7%	
B. Marginal Farmers		2.76		32.8%
1. Seriously Constrained Cultivators	2.11		25.4%	
2. Vulnerable Small Farmers	.6		7.4%	
3. Squatters and Settlers	NA			
C. Shifting Cultivators		0		
III. Pastoralists and Nomads		0		
TOTAL		8.41		100%
Total Number of Households Working in Agriculture		9.4		
Landless and Near-Landless as a Percent of Total Households				89.5%

NA = Not Ascertainable

Trends

Both the 1961 and 1971 censuses suffered from age misstatements, under-reporting, differences in definitions and differences in time reference periods. Hence, labor force data cannot be compared to estimate trends. Going back further, however, a 1903 poverty survey described 45 percent of farms as having less than 0.5 hectares, whereas the 1963 Agricultural Census specified a slightly higher figure: 52 percent. Moreover, over the same period the proportion of farms greater than one hectare merely changed from 21 to 22 percent. Yet over that sixty-year period, Java's population rose from 29 to 66 million. There has been little migration to urban areas, except to Jakarta and Surabaya, and transmigration to the other islands has been insignificant. Some more land had been brought under cultivation and the decline of the sugar plantations also put more land under staple food crops. But the last significant extensions of cultivated land were made prior to 1920. On the evidence so far, then, between 1903 and 1961, something between 24 and 28 million rural residents (80 percent of a 30 to 35 million population increase) have been added to the category of landless households.

In the past ten years, the incidence of landlessness has been greatly affected by population pressures and technological changes in agriculture. These are analyzed in the following section.

3. Causes. The principal causes of landlessness and near-landlessness in rural Java are first, population pressures leading to the breakdown of traditional institutions of "shared poverty," and second, technological changes leading to the displacement of agricultural labor. The dynamics and interactions of these factors are analyzed below.

The traditional Javanese cultivation system (bawon) has been described as a process of "agricultural involution." For generations, and at least up until 1965-1967, the traditions of communal life in rural Java allowed the growing population to feed itself and find some means of employment for the entire labor force.[2]

On the average throughout Java, pre-harvest labor inputs to cultivation required 217 man/days of labor per hectare per rice crop. These inputs have been broken down as follows: slashing and cutting, 20 man/days; hoeing and plowing, 140 man/days; and weeding, 57 man/days (Hansen, 1973). Usually, 50 to 55 man/days of this labor was estimated to come from individual farm-family sources as unpaid labor, leaving at least 167 man/days of hired labor required per hectare.[3] The bawon harvest utilized the services of neighbors, friends, and villagers seeking employment to assist with the harvest. A hectare of rice (approximately 2.5 acres) would be harvested by up to 480 to 500 persons, each using the traditional hand-knife known as the ani-ani.[4] Tradition held that any larger implement for the harvest, e.g., the hand sickle, would offend and alienate the mythological Javanese goddess of rice, and hence,

prevent all future harvest from being successful. As the harvesting was being completed, the laborers would carry the harvested rice, still on short stalks, to the landowner's house for division and distribution.

Traditional division of the rice harvest allowed between 12 percent and 15 percent of the entire crop to be shared by the harvesters. This would serve as "wages" for the laborers. Generally, en route to the owner's house, the harvesters would pre-divide the best proportion (those stalks holding the most and heaviest rice pericles) for themselves--although careful not to pre-select any more than their allotment from the harvested stalks.[5] Obviously, the use of the ani-ani was relatively inefficient since harvesters had to search for rice pericles and then cut the stalks high. Often, up to 10 percent of the possible crop might be missed and left in the paddy. This would, in turn, allow harvest benefits to be shared by yet another group. The landless and unemployed rural Javanese would traditionally follow the harvest and glean the paddies for the remaining pericles.

After the harvest, threshing would be undertaken by village women using hand methods of labor. The short stalks of grain would be hit against the side of woven bamboo matting and the kernels collected in bamboo baskets. After drying, by hand spreading the grain over an expense of cleared ground, and winnowing, the rice would be hulled by pounding it in a mortar-and-pistle fashion. The total of labor inputs for post-harvest

activities for one crop from 1.0 hectares of land averaged about 210 man/days of labor. By subtracting the average 50 days of unpaid family labor, at least 160 man/days of hired or wage labor was required. The wages were usually paid in kind.[6]

By combining the pre-harvest figures of labor inputs (167 man/days of hired labor) and the post-harvest labor inputs (160 man/days), it may be determined that an average total of 327 to 330 man/days of hired labor were needed per crop per hectare. These labor inputs represent only the pre- and post-harvest requirements. The total does not include labor required for the actual harvest (480 to 500 persons), nor those benefiting from the gleaning which traditionally followed each harvest period.

Post 1965-1967: The Advent of High-Yielding Seed Varieties and Other Technological Changes (HYV+)

The introduction and spread of HYV+ across Java, as in most areas of Southeast Asia, was accompanied by a proportional increase in the man/days of labor required in pre-harvest activities. In comparison to traditional varieties, HYV+ cultivation required additional fertilizers, insecticides, pesticides, and more intensive irrigation. These increased the necessary labor inputs to a minimum of 250 man/days of labor per hectare per crop. By subtracting the standard 50 to 55 man/days of unpaid family labor, an average figure of roughly 200 man/days may be derived.[7] This increased labor input requirement is still applicable

today, even with some labor-saving technology which has evolved parallel to HYV+ cultivation. One example would be the weeding process. In traditional cultivation, rice seeds were usually scattered in the seed beds, and subsequent transplanting done ad hoc and irregularly. HYV+ technology, however, requires straight row planting to ensure the best yields. Hence, the small rotary hand-weeder has been adapted and evolved as more appropriate than weeding by hoe. (In effect, a trade-off occurs; the rotary weeder takes less time than hoe-weeding, but straight row planting is more time-consuming than irregular planting). Despite the general increase in labor inputs for the HYV+, increasing population pressures in rural Java caused intense competition for pre-harvest employment opportunities. By the early 1970's, competition had become so keen that in many rural areas contract groups of Javanese laborers (borongan) were contracting with landholders and tenant farmers for advance working relationships. Contracting on the part of the landholders then began to cause resentment by other traditional laborers in each community and intensified the alienation between the landholders and the rural majority, the landless.[8]

Changes in the actual harvest practices have even been more drastic. By 1970, population pressures and rural poverty in many areas had increased to such a degree that the number of laborers appearing to "assist" in any harvest rose from the standard 450 to 500 persons per hectare of crop to in excess of 1,000 to 1,200 per hectare (Hansen, 1973). The resulting

chaos caused great harvest losses due to trampling of paddies and lack of control over the large numbers of people. This situation, being generally unacceptable to overall production, has resulted in yet another institutional change and a general reduction in applications of the bawon system. The new system is known as Tebasan, or literally, the middleman system. Under this practice, a farmer will sell his entire rice crop to a middleman while the rice is still unripe and on the stalk in the paddy. This automatically avoids the problem of overcrowding during the harvest on the part of the farmer or landholder. The middlemen are often the local money lenders. As money lenders, they have already recruited small crews of landless laborers who agree to work for the middleman as a means of paying off previous loans. The work, of course, may be extracted from these laborers at below-market wages for their labor. This kind of labor is classified as Ijon-Kerja, literally, "indentured labor." The tebasan middleman, instead of following tradition and allowing the community's landless into the paddy to share in the harvest, will place these work gangs in the paddy when the crop is ready for harvest. A hectare can then be harvested with less than 25 to 30 workers, and may take as long as three to four days.[9] Since the middleman has only purchased the rights to the crop at hand, and has no rights to or commitment on future harvests, he has nothing to fear from breaking tradition in the face of the rice goddess. In order to obtain maximum efficiency, the tebasan middlemen have been replacing the traditional ani-ani with a minor

technological improvement, the hand sickle. This change is resulting in more efficient harvests. With the hand sickle, the rice stalks are cut low throughout the paddy, and no uncut or missed pericles remain. This practice, however, effectively eliminates the opportunity for gleaning.

Another recent innovation has been the introduction of rice scales in the rural areas. With this weighing device, the traditional division of rice stalks by laborers and harvesters has also been eliminated. By using less laborers per hectare of crop harvested, and by applying the ijon-kerja system of indentured laborers, the overall cost of each harvest has been decreasing. In-kind payments to those harvesting now amounts to between 6 and 8% of harvest values compared to 12 to 15 percent with the bawon harvest system.[10]

The government began to establish and direct village cooperative organizations in early 1967. These village units are known by the acronym of BUUD. For every 20,000 to 25,000 people in any rural area, a BUUD has been set up to assist farmers in such activities as providing agricultural credit, distributing fertilizer and insecticides, and assisting in the post-harvesting handling and marketing of the rice.[11] While under the nominal control of the government, decisions in local BUUDs are made at local levels through a council of village-elected commissioners who must be farm operators. This automatically excludes the majority of the rural population who are landless and under or unemployed laborers. In order to increase production, the BUUDs have recently experimented

with new post-harvest technologies. Mechanical threshers have been purchased by many BUUDs and are transported around a given area during the harvest periods. In these areas, mechanical threshers have displaced most hand threshing. Mechanical driers have also appeared. The biggest change, however, has evolved in the hulling and milling processes. Many BUUDs now operate their own mechanical hullers. There are also many privately-owned mechanical innovations which have become a major element in rural Java's agri-business. For the most part, these private mechanical huller entrepreneurs are local Chinese. Traditionally, the hand-hulling of rice by using the hand-pound method would provide a yield of 32 kilograms of husked rice per person per eight-hour day. Labor costs to a farmer/landholder for 100 kilograms, which employed three persons at a standard wage of Rupiah 200 ($.48) per day was roughly $1.45 for the 100 kilograms. With the mechanical hullers, the same 100 kilograms may be hulled in a total of two hours, and at a cost of approximately $.54.[12] The consequence of all these "appropriate" technologies applied to post-harvest rice production in Java has been a dramatic decrease in the number of man/days of labor required. A recent estimate indicates that an average of 105 man/days total labor input is now required for post-harvest activities by employing the technologies described above.[13] By subtracting the non-paid family labor, only 55 man/days of labor per hectare per crop are needed. This represents only one-half of the labor inputs utilized as recent as ten years ago.

The net results in terms of required hired labor for both the traditional and the post-1965-1967 systems on a per hectare per crop basis are shown below. All figures are for required hired labor; non-paid family labor has been factored out.

Table 4
Hired Labor Inputs
for Rice Production in Rural Java
(per hectare per crop)

	Traditional System "bawon"	Post 1965-1967 System, Using HYV and Other Technologies
Pre-Harvest	167 man/days	200 man/days
Harvest Period	+480 persons, plus gleaners	30 persons, no gleaners
Post-Harvest	160 man/days	55 man/days
TOTALS	327 man/days, plus 480 harvesters, plus gleaners	255 man/days, plus 30 harvesters, no gleaners

It is apparent that in the last ten years, rice-production practices in rural Java have seen a decline or net loss of 72 man/days of hired labor per hectare per crop (327-255 man/days). Additionally, benefits to 450 harvesters per hectare per crop and residual benefits to gleaners have been totally eliminated.

All of these technological and institutional changes have been occurring at a time when Java faces continuing pressures of population increase and high unemployment. The net loss of 72 man/days per hectare per crop of pre- and post-harvest labor on the 3.3 million hectares of

intensively-cultivated land on Java is staggering. This represents a loss of 237,600,000 man/days of labor per crop. If we estimate that one-half of this land is producing two crops annually, the 237.6 million man/days may be increased by another one-half to a total of 356,400,000 man/days of employment displaced. Assuming that full employment requires a minimum of 100 workdays per year, we can estimate that there are about 3.5 million workers who were displaced by the technological and institutional changes in pre-harvest and post-harvest production patterns in the past ten years.

The number of harvesting labor lost through the spread of ijon-kerja and tebasan appears to be much larger, although the population pressures leading to these institutional changes have been at work for a much longer period of time. Using Sajogyo's estimate of four million hectares under tebasan, we can estimate that the abandonment of traditional harvesting practices has led to the displacement of 17,000,000 farm workers over a period of two or three generations.

4. Conditions. In rural Java, the threshold of poverty can be interpreted as the minimum income necessary to purchase 240 kilograms of milled rice per person per year. However, even for farmers working on .5 hectare (well above the mean) and double-cropping, this poverty level cannot be reached without some off-farm sources of income. The burden (and the benefits) of the increased rice production for Java rests with the estimated 2.53 million farm households with over .5 hectares.

In the 1971 National Social-Economic Survey, sample results showed that even the richest and largest farms (those few which exceed 1.0 hectares) reported a single crop gross profit of approximately $159 per hectare. This was reduced to $112 for net profit. By double-cropping, the net profit may be assumed to reach $224. Farm laborers still employed by these farms earned an average of $3.60 per month. While all of these figures represent a net increase in incomes over the previous ten-year period, the number of Javanese in the landless and under/unemployed category continues to expand without additional land available for cultivation, and the real average incomes in rural Java have precipitously declined.[14]

The general economic situation for rural Java as an entity is equally bleak. Money lenders at local levels are now extracting an average of 20 percent in interest charges, even for the smallest loans of only one week. Literally millions of unemployed cannot even find work in the ijon-kerja (indentured labor) system. Farmers and landholders, in order to survive, are seeking desperately to reduce costs and maximize profits. The incentive is merely survival. To do so, the farmers and landholders must act at the expense of the landless and jobless. Between 1970 and 1975, local hire wages for those finding employment increased by 40 percent. However, during this same time period, inflation increased the cost of living and the rice index by 50 to 65 percent.[15] "Shared poverty" has become "every man for himself."

5. Public Policy Measures. In efforts to stimulate rural development, the government has recently undertaken several kinds of projects and activities which are labor-absorptive. Many local-level, labor-intensive public works schemes have been implemented, known as Padat Karya. Other types of labor-intensive projects have been conducted with central to local government subsidy grants known as INPRES, Presidential Instructions for Development. Together, however, these two types of projects have only been able to provide a maximum of 240,000 jobs annually in rural Java. This represents only a small fraction of the labor force displaced by the recent technology applications and institutional changes taking place in rural Java.

Another solution, begun as early as 1905 under Dutch colonial administrations, is entitled "Transmigration," and consists of moving the poorest families from rural Java to the less-dense, relatively undeveloped "outer islands." The Javanese transmigrants are provided transportation, stipends, land (usually 2.0 hectares) and moderate housing. However, problems have abounded. Most of the transmigrants are totally unprepared for the transition. The pioneer life is too radically different from communal and crowded Java. The soils are different, irrigation is unknown, and dryland farming techniques are difficult. Disease also takes its toll, as schistosomiasis and malaria are rampant in many locations off-Java. Since 1952, only 1.5 million Javanese

have been officially transmigrated. The National Five Year Development Plant targets have called for at least 50,000 families (250,000 persons) to be transmigrated from Java, but no more than 20,000 families have ever done so, even in the "best" years. Meanwhile, new births on Java exceed 1.8 million annually.[16]

There is an urgent need for labor-intensive, non-agricultural employment in rural Java. Currently, 70 percent of all Indonesian industry is located in major urban areas. In Java, only about 6% of the entire rural population is primarily engaged in any semblance of non-agricultural industrial endeavor. Aside from locally used handicrafts and local products, these are found in the first-order basic industries for cigarettes, soft drinks, and food processing. Direct and immediate attention must be provided by the government and local Javanese authorities for creating some means to expand the rural industrial base in order to absorb significant amounts of labor.[17] Transmigration will not effectively lessen the population pressures of Java. Labor-intensive public works projects are not capable of absorbing the excess unemployment to any full measure.

Without prompt policy determinations and revised strategies for labor mobilization in rural Java, the immediate and long-range future appears calamitous for the millions of landless under- and unemployed Javanese. Java's problem is not one of stagnation. Neither is it really one of finding a means to increase rice production. The review

of the situation demonstrates that the problem lies with labor displacements caused by the adaption of moderate, yet innovative, technological changes in the means of rice cultivation. The problem is further exacerbated by subsequent institutional changes in the pattern of producing rice, which have been caused both by the newly-applied technology and an increasing population rate. The solution must be found in additional technological applications to sectors other than rice.

6. Research Needs. Solutions of this magnitude require a data base far more extensive than currently exists. The serious gaps in our knowledge about labor force size and characteristics in Indonesia suggest the need for more carefully designed labor force surveys along the lines of the 1972 Urban Unemployment Survey. In rural areas particularly, new concepts and approaches may need to be devised to gain a meaningful picture. As well as macro-level surveys, intensive village surveys of labor utilization are also needed to provide insights into patterns of labor utilization and their links with farm size, productivity, income, family size, and migration patterns.

FOOTNOTES

1. Sajogyo, 1972
2. Geertz, 1963
3. Sajogyo, 1972
4. Penny and Singarimbun, 1973
5. *Ibid*.
6. *Ibid*.
7. *Ibid*.
8. Collier, 1976
9. *Ibid*.
10. *Ibid*.
11. Hansen, 1973
12. Arndt, 1974
13. Palmer, 1977
14. Collier, 1976
15. Grace, 1977
16. Penny and Singarimbun, 1973
17. Sajogyo, 1972

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Malaysia: Country Profile

1. Introduction. Malaysia had an estimated population of about 12 million in 1975, with an increase of 3.5 percent annually for the same year. Of its working population numbering almost four million, 49.3 percent were reported to be employed in agriculture.

Problems of rural poverty in Malaysia are determined largely by commercial factors, since subsistence peasant farming forms a relatively small section of the rural population. Among the smallholder category, especially rubber and oilpalm producers, fluctuations in prices of the commodity have largely determined the proportion under poverty levels. In the early sixties prices for rubber were buoyant and acreage expanded rapidly, but with the slump in prices in 1970-72, rubber smallholders have become the most numerous category in the poverty level.[1] The information available for the country almost exclusively relates to Western Malaysia where 85 percent of the people live. Extremely little is written on the agriculture and rural conditions in Sabah and Sarawak.[2]

The geographical distribution of the population of Malaysia in 1975 is shown in Table 1.

The population density in Sabah and Sarawak is much lower than that of Malaya and there are also marked differences in the sectoral distribution of the population.

Table 1
Geographical Distribution of Population in Malaysia, 1975

Peninsular Malaysia	10,385,000	(85%)
Sarawak	1,113,000	(9%)
Sabah	751,000	(6%)
TOTAL	12,249,000	(100%)

Source: Government of Malaysia, Third Malaysia Plan, 1975.

Table 2 shows the proportion of the labor force in agriculture for the regions in 1960. By 1975 in Malaya the agricultural labor force had declined to 46.2 percent of the total labor force. Comparable figures for the other two regions are not available, but the pace or development there does not suggest that there has been any appreciable decline from the 1960 levels. Most of the population in Sahab and Sarawak is engaged in the shifting cultivation of hill paddy, and has an extremely marginal level of subsistence.

Table 2
Agricultural Labor Force in Malaysia, 1960

Region	No. (000)	% of Total Labor Force
Malaya	1244.8	58.5
Sarawak	239.6	81.4
Sabah	142.1	80.5

Source: IBRD (1963).

Rubber occupies almost 60 percent of cultivated acreage of West Malaysia and contributes half of total foreign exchange earnings. This represents a highly commercialized sector of the Malaysian economy, even though half of the rubber acreage is under smallholder cultivation.[4] The rest of the rubber

acreage is within plantations, and represents a completely different set of problems for the workers, who are insulated within these plantations with no links in the surrounding countryside, since they are almost all former indentured laborers from India.

Paddy cultivation is relatively insignificant in terms of the proportion of land under its cultivation, and in 1972 comprised less than 15 percent of the cultivated acreage. It has however, received development assistance with the primary objective of increasing production to cut down rice imports in the country.[5] Most of the efforts have been to increase double cropping through major irrigation works. There is some evidence of increased mechanization with double cropping, especially during peak periods. However, no analysis has been made on the effects of this on small and marginal farmers, and on tenants and sharecroppers who are present in large numbers in the paddy sector.

2. Incidence of Landlessness and Near-Landlessness.

Landless Laborers and Workers

There has been no direct reporting in the nationwide surveys available on the landless in Malaysia. This fact together with the observation that there is extremely little reliance on hired labor in agriculture, results in the impression that landlessness in rural Malaysia is a limited phenomenon.

However, when data on ownership of assets, available from agricultural surveys, is analyzed, a fairly large degree of

landlessness becomes evident. For instance, the Census of Agriculture of 1960 estimated a total of about 450,000 farms in Malaya. If we assume that 10 percent of these farmers were operated jointly by more than one household, and that the number of farms increased by 10 percent between 1960 and 1970; then roughly half of the estimated 1,200,000 rural households in 1970 would be non-operators of agricultural land.

A World Bank study in 1970, which did not measure asset distribution but recorded occupation and income of rural households, found somewhat over 50 percent of households were farmers. Twelve percent of households were estate workers, three percent were fishermen and thirty percent were in the non-agricultural sector.[6] A significant fraction of workers in the non-agricultural sector can be expected to be self-employed petty businessmen. A somewhat curious fact worth noting at this point is that the incidence of poverty among the predominantly landless occupation was lower than among the cultivating group (Table 3).

Obviously those landless households who are well-off as a result of the expanding non-agricultural sector or increasing real wages in the estate sector need not be included in this study's category of landless. One alternative is to enumerate only those landless households that fall below the poverty levels, in the category of landlessness.

Table 3
Occupational Distribution of Rural Households in Malaya,* 1970

	Rural Households		Households Below Poverty	
	# (000)	%	# (000)	%
Non-Cultivators				
Fishermen	38	3	25	5
Estate Workers	148	12	30	6
Others (inc. rural industry, service and business)	365	30	83	16
subtotal	551	45	138	27
Cultivators				
Mixed Agriculture	130	11	102	19
Padi Cultivators	140	12	104	19
Rubber Smallholders	350	29	176	33
Coconut Smallholders	32	3	14	2
subtotal	652	55	396	73
TOTAL	1203	100	534	100

Source: "Problems of Rural Poverty in Malaysia," World Bank Commentary.

* The survey only covered this region.

Malaysia has a diversified rural economy, and the proportion of its workforce in agriculture has been declining steadily over the past two decades. More importantly, perhaps, since non-agricultural employment opportunities have been expanding, poverty and landlessness are not necessarily correlated. For this reason, only those non-cultivator households below poverty are included in our classification. On this basis, about 11.5 percent of rural households in Malaya are poor and landless.

If however, all the estate workers are included, then up to 21 percent of rural households would enter the classification. This process is so arbitrary as to be almost meaningless and makes for estimates that cannot be compared with other countries. The need for better documentation of asset level and security among non-cultivators is thus seen to be especially important for Malaysia. A larger section of the workforce is employed outside agriculture in Malaysia than in all other countries in this part of the world.

Cultivators

Tenants and Sharecroppers

An estimated 30 percent of farms in Malaya were tenant-cultivated. Paddy farms have the highest incidence of tenancy--an average of 60 percent at the time of the 1960 census of agriculture. A huge variety of tenancy arrangements, shares and rates are present in the rice producing areas.[7] Most tenants have little security of tenure. Arrangements are made orally for a single crop season or year. Mortgage and share-cropping arrangements are closely interconnected and determine the respective shares of parties involved.

Marginal Farmers

Constrained cultivators: About three acres of padi or other crops except rubber, are considered to be the minimum necessary to provide subsistence for an average Malaya household. The high frequency of share-cropping in general and on paddy farms in particular, would indicate that in using this

cut-off point we might be underestimating the proportion of constrained farmers somewhat. In 1960, about 50 percent of farms (non-rubber) were smaller than three acres. Extrapolating this to the number of cultivating households in 1970, about 150,000 households or 12.5 percent of all rural households, belonged to this category. However, from the IBRD estimate of poverty in these households--which is about 70 percent, it is possible to conclude that, between 1960 and 1970, the proportion of constrained cultivation in this sector has increased markedly. This category of cultivators is also likely to overlap with the bulk of landless tenants and sharecroppers. In the case of rubber, a minimum of five acres are necessary, considering the lower returns and declining trend in rubber prices. Forty-six percent of rubber farms in 1960 were below this level. In 1970, 50 percent of rubber small borders were below poverty levels, and can be assumed to be constrained rubber cultivators.

Vulnerable small farmers: In addition to the constrained cultivators who do not own or rent enough land to meet their subsistence requirements from cultivation, about 15-20 percent of households in both rubber, paddy and other small holder categories are expected to be vulnerable. For their vulnerable farmers, either subdivision or sale of some land could reduce them in the constrained category. On the other hand, it is also likely that it is these farmers who have some surplus that are able to see the necessity for and do diversify into

off-farm assets and skills. If it is these middle farmers who are leaving the agricultural sector, inequalities in land ownership can worsen very fast.

Owner-cum-tenants: According to the 1960 census of agriculture, owner-cum-tenants cultivated only about six percent of farms in the countries. Since most of these are expected to operate above average sized holdings, they are likely to be the least critical of all categories covered.

Shifting cultivators: Scarcely any work has been done on conditions of the indigenous populations of Sabah and Sarawak, even though 15 percent of the country's population resides there. As of the early 1960's, over 80 percent of the population in Sabah and Sarawak depended on agriculture for a livelihood. It is not known what proportion of these agriculturists rely on shifting cultivation. About two-thirds of the population in Sabah and one-half in Sarawak are tribal groups who traditionally live on the forested hills and practice slash-and-burn cultivation of crops, especially hill paddy. Even though most of these cultivators have marginal levels of living, reports from settlement schemes in these regions indicate that efforts to exploit them as labor on those projects have been largely unsuccessful. While they may migrate to the plains in search of seasonal employment, they return to these lands for the planting and harvesting of hill paddy.

Assuming that 60 percent of the population in Sabah's Sarawak depends on slash-and-burn cultivation, then almost

one-tenth of the country's population or 1.2 million would be covered in this category.

Regional Distribution

The regional distribution of these categories depends on the ecological and production characteristics of each state. Rice producing regions have the highest population densities, the highest proportion of tenancy,[8] the highest concentration of casual agricultural workers and the highest amount of in-migration from surrounding areas during periods of peak labor demand. Most of the impoverished fishing population is located on the east coast of Malaya and are subject to extreme seasonality of incomes which are at virtual standstill during the northeast monsoons. Along the western strip of Malaya are concentrated the rubber plantations, and rubber, coconut and oilpalm smallholders.

Within regions, larger kampongs have a higher proportion of landless and casual agricultural workers than do smaller kampongs.[9] Within the estates, areas that are converting from rubber to oilpalm have a greater degree of unemployment among estate workers due to a lower labor requirement for oilpalm cultivation.

Trends

There is no clearcut evidence on trends for different categories of landless or for the proportion of people below poverty levels. Data from Household Budget Surveys does however indicate that between 1957-58 and 1970, the real

incomes for the bottom 40 percent of the population has been declining. According to Lee, "...the average income of the bottom 40 percent of households fell significantly and...this was concentrated among rural households. The bottom 20 percent of rural households experienced a fall of over 40 percent in their average income while the next 20 percent of households experienced a fall of 16 percent. In contrast, the top 20 percent of rural households experienced a 21 percent increase in their mean incomes over the period." (Lee, p. 5).

3. Causes. There are very serious inequalities in the distribution of income and productive resources which have been increasing with the commercial penetration of food crop sectors in the last two decades. The magnitude of these inequalities have also contributed to the unequal access to development programs and further accentuated poverty. With the spread of irrigation and double cropping in paddy cultivation, there have been pressures to mechanize and increase economies of scale.[10] As a result, tenancy rates (costs) have risen astronomically, preventing small rice cultivators from increasing their returns from cultivation.[11] At the same time, there has been little evaluation of the degree to which small cultivators have had access to the improved seed, irrigation, and fertilizer package.[12] In the case of rubber smallholders, few of these with less than five acres have been able to replant with higher yielding clones, while yields from old trees are low and declining.[13]

Table 5
Size Distribution of Rice and Rubber Farms, 1960

Size Group (acres)	Wet Rice (percentage)	Rubber (percentage) of farms
Less than 1	9.9	1.9
1 - 1.99	23.2	7.9
2 - 2.99	21.3	14.1
3 - 3.99	14.3	12.2
4 - 4.99	9.7	10.3
5 - 9.99	18.6	30.0
10 - 39.9	3.0	19.6
More than 40	0	4.0

Source: Census of Agriculture, 1960. Report No. 3, table 34, Report No. 8, table 56.

Note: "Farms" refer to operating units and not to ownership units. The 1960 Census of Agriculture shows that 62 percent of paddy farms were under tenancy and another six percent were operated by owner-cum-tenants. The distribution of land ownership is thus more highly skewed than the distribution of farms. For instance, a survey of a major rice growing area, Krian, showed that nine of the largest landowners accounted for two-thirds of the total cultivated area while the largest two landowners owned half of the total area (see T. B. Wilson, "The Economics of Paddy Production in North Malaya," part I, p. 20). Tenancy is less widespread on rubber smallholdings where 80 percent of farms are owner-operated.

In spite of major national emphasis for improvement of incomes of the peasant sector, the macro-regional development approach of both the settlement schemes and major irrigation works has failed to address many of the structural imbalances within the rural economy, which help to perpetuate poverty. It also appears that those regions with the highest incidence of poverty have often had the least benefit from rural development schemes.

4. Conditions. The incidence of poverty among different occupational groups has been reported by IBRD and the Government of Malaysia. Their figures are similar, as can be seen by comparing the IBRD estimates presented in Table 3 and the Government of Malaysia estimates presented below in Table 6.

Table 6
Incidence of Poverty in Peninsular Malaysia

	Incidence Within Group (%)	No. of Households in Poverty (000)	% of Total Households in Poverty
Rural		684	86
Urban		108	14
Occupations in Agriculture (production, processing, incl. estates)		586	74
Rubber Smallholders	64.7	226	29
Agricultural labor	91.8	126.2	17
Paddy cultivators	88.1	123	16
Estate workers	40.1	60	7.6
Fishermen	73.2	28	3.5
Coconut smallholders	52.8	17	2.1
Oilpalm smlalholders	30.3	2	0.2

Source: Third Malaysia Plan, 1976-1980, Government of Malaysia. The statistics are derived from the 1970 Post-enumeration Survey of the 1970 Population Census.

As elsewhere, the conditions of poverty in Malaysia are seen "in deficiencies in absolute standards of living in terms of caloric intake and nutrition levels, clothing, sanitation, health, education and other socio-economic variables." (Third Malaysia Plan, p. 160). According to household budget surveys, households below the poverty level of M$25 per capita per month, or about M$150 per household, spend 70 percent of their income

on food alone.[14] Based on the Household Budget Survey of 1957-58, it is estimated that at per capita monthly income levels of M$33, level of caloric intake was about 2000 calories.[15] If, as the data indicate, real incomes of the poorest have been declining, levels of caloric intake in the 1970's may be even lower than in 1957-58.

This reduction in living conditions is partly because growth in employment in agriculture has failed to keep pace with increases in the labor force, producing the large population movements from rural to urban and other rural areas in search of employment.[16] Reduction in labor uses are occurring in both the estate and paddy producing sectors which produce dislocation and present adjustment problems, even though at the aggregate level, employment growth is reported by the government to be increasing as rapidly as the growth in the labor force. There is a fast-growing, capital-intensive manufacturing sector which, while contributing 18 percent of GDP in 1973, employed only 11 percent of the labor force.[17] At the same time the country's labor force grows at an annual rate of about 3.2 percent, one of the highest rates of growth in Third World countries.

There is little micro-level data on trends of wage rates and employment levels in the rural sector, but aggregate data suggests that in some sectors both levels of real wages and length of employment may be lower. The estate sector may be an exception with regard to real wages which were rising

steadily between 1957 and 1970. However, those who are unemployed in the estate sector (about one-fifth) experienced sharply falling incomes. In the remainder of the agricultural sector, where labor is unorganized, growth of contract labor would be undercutting the increasing share to labor with traditional arrangements that would otherwise result with double cropping, since a larger number of agricultural laborers, tenant and other poor farmers are competing against each other to obtain wage labor opportunities (Kenzo Horii, p. 205).

5. Policies Affecting the Landless. The overall strategy of the Government of Malaysia has been to try to solve the problem of poverty within its economic growth strategy. Both until 1970 and in the New Economic Policy enunciated in 1971, there is the conviction in the singular importance of economic growth for an egalitarian society. Huge public sector expenditures of up to $10 billion during the Second Malaysia Plan (1971-75) were incurred out of which nearly 2.5 billion came from foreign loans. As a result of its economic growth strategy, the rate of employment generation in Malaysia between 1970 and 1975 was 3.3 percent per annum,[18] and was accompanied by a four percent per annum increase in average real productivity per worker (Government of Malaysia, 1976).

In the food grain sector the emphasis is on the provision of irrigation to facilitate double cropping and the adoption

of inputs for greater crop yields. During the Second Malaysian Plan (SMP) irrigation facilities were extended to increase double cropping from 345,000 to 600,000 acres. The principle beneficiaries of this expansion were Kedah (MUDA scheme), Kelantan (Kembu project), and Trengganu. Reports of these programs provide no evaluation of the equity of distribution of these facilities among different size classes of landholdings.

Micro studies indicate that provision of these facilities may have: (1) increased rents beyond those established by the Control of Rent and Security of Tenure provision of the Padi Cultivators' Act of 1967; and (2) stepped up mechanization in paddy cultivation, thereby facilitating economies of scale with a large potential for tenant and small farmer displacement.

It is quite surprising that even with the evidence accumulating in other countries, there appears to be little concern or at least discussion, on the question of distributional equity of measures to increase double cropping and productivity at a regional level. It has been recognized that there are limitations to continued expansion of acreage on which to settle landless people. Yet the very measures that are being taken to increase productivity could lead to a second generation of problems which could increase landlessness and make the problems of poverty eradiction more intractable.

In the cash crop sector achieving increases in yields and increases in area cultivated have been the major objectives of policy measures adopted.

Rubber Replanting Program: In this program, a special effort to benefit the smaller growers has been made. Smallholders with five acres or less were qualified to receive high-yield variety replanting grants for their entire acreage, while those with over 15 acres benefit only to the extent of one-third their total holding. However, many of the smallest rubber growers who are largely dependent on income from rubber have been reluctant to forego even the modest income from old rubber trees[19] that is entailed in replanting. The FAO/IBRD report admits that even though the program has been in operation for several years, over one million acres still need replanting and "of this amount over half is apparently in plots of less than five acres." Other programs such as the RISKA Block-planting Schemes and Fringe Alienation schemes designed to increase incomes for rubber smallholders have not benefited the marginal holders.

Land Development and Settlement Schemes can be outlined as follows:

Sabah-22 projects comprising 70,000 acres primarily oil palm, also rubber, coconut and cocoa. By 1974, 2,300 families settled.
Sarawak-FELDA type of development: 36,500 acres up to 1974. Laborers recruited from Indonesia and settlers from the west coast of Malaya.
Malaya-FELDA schemes: 149 schemes covering 899,000 acres and settling 42,322 until the end of 1974.

Between 1956 and 1974 FELDA settled about 42,000 families.[20] During this period FELDA accounted for nearly 35 percent of the total public expenditures on agricultural development. In the revised allocation of expenditures for agricultural development

during the entire SMP, 50.1 percent of total outlays are expected to go for the development of new land as compared with only 18.3 percent for agricultural services, extension, replanting and crop diversification (this proportion increases to 32.5 percent if irrigation and drainage are included). (FAO/IBRD, p. 50).

The dent this program could make in the solution of poverty is miniscule. During the SMP alone increase in the agricultural labor force was about 121,000, and in 1970 about 530,000 to 680,000 rural households were in the poverty range (depending on whose estimates are used).

The advantages of the program were that it provided a major source of employment in the agricultural sector, especially after 1970. Yamamoto (1977) estimates that in 1975, FELDA contributed about 27 percent of new jobs created in the agricultural sector. Its beneficiaries were also selected from among the rural poor, and only persons with less than two acres were considered for settlement. The ethnic composition of settlers was also designed to favor Malays, who predominate in rural poor households. In Yamamoto's survey of seven FELDA schemes, the original occupation of 60 percent of settlers present in about the same proportion was paddy farmer, rubber smallholder, estate worker and agricultural laborer.

6. Research Needs. The available information helps to define the dimensions of the problem of poverty in fairly general terms. It does indicate that a very serious and growing problem exists and that future work must be directed

at a better definition of the different poverty groups in terms of their basic conditions. The conditions in Sabah and Sarawak are even less well known. Efforts must also be directed to gain a better understanding of the conditions of subsistence farmers engaged in the shifting cultivation of hill paddy, since they appear to have been excluded from any benefits in the development of their regions.

In addition to the need for a better regional balance on information in Malaysia, the rapid process of transition in Malaysia points out the significance of off-farm employment in categories in basic data collection. The proportion of cultivators in the rural population of Malaysia has been declining markedly over the past two decades. (This process itself has not been studied in sufficient detail), and in 1970 almost half the rural households in the Malaya peninsula were non-cultivators. To better reflect living conditions of this large and growing segment dependent on wages, their occupational classifications should combine their level of assets--both physical and human (skills, education).

Probably the most crucial research need is an evaluation of national policies in the rural sector on employment growth in different sectors, on the process of structural change given the already unequal resource distribution pattern present in the early 1960's and finally on their impact on living conditions for the low-income 50 percent of the population. Specifically, lacking in substantive evaluation are the (1) paddy sector[21]; (2) escate sector; and (3) rural industries.

A summary of the information on each category of landless and near-landless households in Malaysia is presented in Table 4.

Table 4
Incidence of Landlessness and Near-Landless in Rural Malaysia, 1970

	Number of Households (000)	% of Rural Households
I. Landless Laborers & Workers[A]	138	11.5
A. Agricultural Workers		
1. Permanent Agricultural Laborers[B]	30	2.5
2. Casual Agricultural Laborers	--	
B. Non-Agricultural Workers[C]	108	9
1. Laborers	90	8
2. Self-Employed Workers	18	1
II. Cultivators[D]	466	38.7
A. Tenants and Sharecroppers	(217)	-
1. Secure[E]	(70)	-
2. Insecure	(137)	-
B. Marginal Farmers	440	36.6
1. Constrained Farmers[F]	325	
2. Vulnerable Small Farmers	115	
C. Shifting Cultivation[G]	26	2.1
D. Owner-Cum-Tenants	(39)	-
Total Landless and Near-Landless	604	50.2
TOTAL Rural Households	1203	100%

Sources:
(1) FAO/IBRD "Problems of Rural Poverty in Malaysia," World Bank Commentary, mimeo, 1970.
(2) N. S. Choudhry, Socio-Economic Sample Survey of Households, Malaysia 1967-68, (Malaysia, Department of Statistics, 1970).
(3) Federation of Malaya, Census of Agriculture, 1960, Preliminary Report No. 3.
(4) IBRD, Report on the Economic Analysis of Malaysia, (1963)

Footnotes:

[A]For all the sub-categories under Landless Laborers and Workers, only the numbers reported to be living under poverty, as identified for 1970 in the joint FAO/IBRD commentary, are reported in this table.

Footnotes to Table 4 (continued):

[B]Almost exclusively estate laborers.

[C]The breakdown of non-agricultural worker households is derived from the 1967-68 Socio-economic Sample Survey of Households, which reports proportions for the country on a whole. These proportions are then applied to the number of rural non-agricultural worker households reported for 1970 in the FAO/IBRD Commentary.

[D]Proportions of households under these sub-categories are derived from 1960 Agricultural Census, and are extrapolated to the number of cultivators in 1970. Unfortunately, the census did not cross-tabulate tenure status (which indicates II.A. Tenants and Sharecroppers) with the size distribution of landholdings (which estimates II.B. Marginal Farmers). Hence, there is a significant overlap among categories II.A., II.B., and II.D. In the table total and in the percentage distribution, II.A. Tenants and Sharecroppers and II.D. Owner-cum-Tenants are included in the figures for II.B. Marginal Farmers.

[E]Estimated number of settlers on Federal Land Development Agency (FELDA or FLDA) schemes.

[F]Below three acres of non-rubber farms and below five acres of rubber farms (Census of Agriculture, 1960). Proportions in 1960 are extrapolated to 1970 cultivators.

[G]The estimated number of households supported by shifting cultivation.

FOOTNOTES

1. According to a World Bank study (Anand, S., The Size Distribution of Income in Malaysia, Development Research Center, World Bank, April 1974) quoted in "Problems of Rural Poverty in Malaysia," World Bank Commentary.

2. A major survey of Sabah and Sarawak were expected to be undertaken in late 1976 by the Government of Malaysia (Third Malaysia Plan, 1976).

3. Tribal groups comprised 50.3 percent of the population of Sarawak and 67.2 percent of the population of N. Borneo as of December, 1961 (IBRD, 1963).

4. Holdings of less than 100 acres are classified as small holdings. "In rubber planting, the official definition of a "smallholding" includes farms of up to 100 acres. In 1960, 25 percent of these holdings were larger than 10 acres, and many of these belonged to non-Malay absentee owners. Thus the non-estate rubber sector includes many medium-sized holdings which do not strictly belong to the peasant sector." (Lee, 1975).

5. By 1975, 87 percent of the requirements of rice were met by domestic production (Malaysia, Third Malaysia Plan, 1976). This was up from 54.1 in 1956-60. At the same time double cropping increased dramatically, from 5.5 percent of rice acreage in 1962-63 to 58.2 percent by 1973-74 (FAO/IBRD Cooperative Program Report).

6. Identified as 'mainly industry and service workers' in the World Bank report.

7. See Parkinson, B. K., "Economic Organization of Malay Rural Villages" thesis. University of London, 1965, for an excellent documentation of the various types of arrangements.

8. The 1960 census of agriculture shows that 62 percent of paddy farms were under tenancy. According to Parkinson (1965), in Province Wellesley, often up to 80 percent of paddy cultivators are tenants or sharecroppers. Among rubber smallholders, 80 percent of farms are owner-operated.

9. (Kenzo Horrii, 1977).

10. The number of paddy farmers declined from 398.3 thousand in 1957 to 300 thousand in 1970, at the same time that paddy acreage and area under double cropping was increasing. While some paddy farmers were selected under FELDA land settlement schemes, the implication of this trend is for an increase in the proportion of landless workers. (Yamamoto, 1977).

11. Yukon Huang, "The Economics of Paddy Production in Malaysia," (Ph.D. thesis) Princeton University, 1971, table 3a, p. 101, quoted by Lee (1976).

12. In MADA, a rapidly developing rice region, Afifuddin (1974) reported the impact of mechanization on the displacement of 21,000 landless tenant families imminent with the changes in tenancy conditions.

13. (FAO/IBRD Report)

14. Malaya, Household Budget Survey of the Federation of Malaya, 1957-58.

15. Assuming that rice supplied about 50 percent of the caloric intake, and a household size of 4.5 (average) for this income range.

16. Between 1957 and 1970 there was only a small increase in urbanization from 26.5 percent to 28.7 percent. The predominant pattern of migration was rural-rural migration, with 2.4 million people or 27.4 percent of the population moving either inter-state or intra-state during this period. It may be that urban areas are fairly saturated with rural migrants to be able to absorb many more. In Kuala Lumpur, for example, 25 percent of the population comprises squatters of rural origin. (Yamamoto, 1977).

17. V. Selvanatnam and B. W. Dissanayake, "Migration, Regional Development and Employment in Peninsular Malaysia--The Case of Negeri Sembilan Timur," IDS Discussion Paper, 1975.

18. However, contrary to the Government of Malaysia's estimates of a 1.6 percent annual increase in agricultural employment between 1970 and 1974, evidence from micro studies in paddy farming (U.N. Bhati, 1976) suggest that even with the successful introduction of HYV's there was no increment in employments, and there has been an aggregate decline in estate sector employment (Lee, 1976).

19. On these small holdings, the productivity of rubber trees is further reduced by the practice of share tapping--which may be as high as 40 percent. The sharetappers in such arrangements are naturally tempted to use tapping techniques which immediately produce large yields even though these are at the expense of the tree's productive life. (FAO/IBRD, p. 77).

20. This is the figure reported by the FAO/IBRD Mission. Yamamoto (1977), however, gives a figure of 70,000 settled between 1957 and 1970, and estimates that during this period FELDA was responsible for moving 372,588 persons directly or indirectly.

21. A study of the UNRISD project on "The Economic and Social Implication of the Large-Scale Introduction of High Yielding Varieties of Foodgrain" that was devoted to Malaysia was somewhat disappointing in that it virtually ignored the distributional and employment generation effects of the new technologies.

    Some of the data suggest that only those who had access to benefits of the irrigation schemes improved their levels of living and that the landless non-cultivators were more likely to be worse off. (U.N. Bhati, Some Social and Economic Aspects of the Introduction of New Variables of Paddy in Malaysia: A Village Case Study. UNRISD, Geneva, 1976).

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The Philippines: Country Profile

Introduction

Population: 39,040,439 (mid-1972 estimate)

Population Growth Rate: 3% (interpolated intercensual medium estimate)

Table 1

Philippine Labor Force, 1972

	Total Philippines		Rural Sector	
	Number (000's)	Percent of Total Labor Force	Number (000's)	Percent of Total Labor Force
In the Labor Force	13,417	100%	9,239	100%
Employed*	12,598	93.9	8,871	96.0
In Agriculture	6,794	50.6	6,476	70.1
Outside Agriculture	5,804	43.3	2,395	25.9
Totally Unemployed	819	6.1	369	4.0
Not in Labor Force**	13,572	----	8,888	----

Source: Bureau of Census and Statistics, Survey of Households (BCS/SH), August, 1972

*Employed includes both "fully and partially" employed. BCSSH reports that 15.1% of the total employed are working less than normal hours, are looking for additional work, or are temporarily not at work, and are therefore considered under-employed. Hence, the national unemployment rate (6.1%) plus the under-employment rate (15.1%)was 21.2%. It is estimated that the under-employment rate is higher in the rural sector than in the urban sector.

**Persons not in the labor force include an unknown number of disabled or retired persons students, housewives, and seasonal workers. In agricultural areas the latter two groups may also be considered as part of the labor force, and therefore, functionally, if not technically, under-employed or unemployed

Incidence of Landlessness and Near-Landlessness

Overview

There is widespread evidence to indicate that 1) the rural landless and near-landless constitute a significant proportion of "the poorest of the poor," 2) their numbers are increasing steadily as less and less land is available for more and more people, and 3) they have received disproportionately few benefits from economic growth. The overall dimensions of the problem of the rural poor have been identified in aggregate terms; however, little is known about the composition, labor skills, employment patterns, and social welfare of this group. As a result, few development programs have been designed specifically for the landless and near-landless.

Incidence of Rural Poverty

A poverty threshold of P4,000 (US $114) has been adopted by USAID/Philippines on the basis of studies prepared by the Development Academy of the Philippines and the Philippine Food and Nutrition Research Council on the minimum expenditure requirements necessary to provide adequate food clothing, and shelter for rural families.[1] According to this threshold criterion, the incidence of rural poverty can be summarized as follows:

Table 2

Rural Family Income and Expenditures, 1971

	Less than P4,000	P4,000 & Over	Total
Number of Families	3,576,000	858,000	4,434,000
Percent	80.7%	19.3%	100%
Average Family Income	P1.741	P7,305	P2,81S
Average Family Expenditure	2,764	6,436	3,474
Savings (Dissavings)	(1,023)	869	(656)
Average Rate of Saving (Dissaving)	(59%)	12%	(23%)

Source: Family Income and Expenditures Survey, 1971, Bureau of the Census and Statistics

On the average, rural families in the Philippines were spending more than they were earning. For the three and a half million families below the poverty threshold, the average rate of dissaving was 59%, indicating that 1) they have to incur substantial debts in order to subsist, or 2) they are under-subsisting; i.e., they are living substantially below the poverty threshold. For the purposes of this study, all of these families with incomes below the P4,000 poverty threshold can be considered landless or near-landless.

Occupational Distribution of the Rural Poor

The major means of livelihood of poor rural families comes from self-employment or wage-labor in agriculture, as the following data indicate:

Table 3
Distribution of Rural Families by
Major Source of Income, 1971

Source of Income	Less than P4,000	P4,000 & Over	Total
Wages and Salaries	29.1%	49.8%	33.1%
Agricultural	15.0%	10.1%	14.0%
Non-Agricultural	14.1	39.7	19.0
Entrepreneurial Activities	66.0%	43.8%	61.7%
Trading	4.0%	5.5%	4.3%
Manufacturing	2.7	2.4	2.7
Transport	1.2	1.9	1.3
Other Enterprises	0.5	0.5	0.5
Practice of Profession or Trade	0.2	1.0	.4
Farming (including livestock and poultry)	51.5	29.7	47.3
Fishing, Forestry, and Hunting	5.9	2.8	5.3
Other Sources (rents, pension, benefits, gifts, relief)	4.9%	6.4%	5.2%
	100.0%	100.0%	100.0%

Source: Family Income and Expenditure Survey, 1971

Tenure Status of Poor, Rural, Farm Families

In 1971, there were a total of 2.354,500 farming families in the Philippines. Of this total, 10.9% were considered living in the urban sector. Another 10.8% were considered living in the rural sector, but with family incomes above the poverty threshold of P4,000 or over. The remaining 78.3% represents 1,841,640 poor, rural, farming families. Their tenure status can be estimated as follows:

Table 4
Tenure Status of Poor, Rural, Farm Families

	Number of Families (000's)		Percent of Total	
Full owners	854.6		46.4%	
Part owners	268.6		14.6	
Tenants	681.7		37.0	
Cash		5.7		.3
Share of Produce		569.3		30.9
Fixed Amount of Produce		49.9		2.7
Rent Free		39.3		2.1
Other Forms of Tenancy		17.5		1.0
Other Forms of Tenure	36.7		2.0	
TOTAL: Poor, Rural, Farm Families	1,841.6		100.0%	

Source: Family Income and Expenditures Survey, 1971

Note: The table calculations assume that the number of farms is equal to the number of farm families. The subtotals for each category of tenure were estimated on the basis of the poverty threshold and the average size of landholdings.

Incidence of Landlessness and Near-Landlessness

The previous two tables can be re-calculated and combined into the study categories as follows:

Table 5

Incidence of Landlessness and Near-Landlessness Among Rural Families, 1971

(%)

I.	Laborers and Workers			37.7%
	A. Agricultural Laborers		15.0%	
	1. Permanent	---		
	2. Casual	---		
	B. Non-Agricultural Workers		22.7	
	1. Laborers	14.1		
	2. Self-employed	8.6		
II.	Cultivators			51.5
	A. Tenants & Sharecroppers		19.1	
	1. Secure	---		
	2. Insecure	---		
	B. Marginal Farmers		31.4	
	1. Insecure Cultivators	7.5		
	2. Vulnerable Small Farmers	23.9		
	3. Other	1.0		
III.	Pastoralists and Nomads			5.9
IV.	Other (rent, pension benefits, gifts, relief)			4.9
				100.0%

(N = 3,576,000 families)

Regional Distribution of Landlessness and Near-Landlessness

Considerable variation with respect to income levels, poverty, and landlessness exists among the different regions of the country.[2] In 1971, the median income in the City of Manila (the highest income region) with 1.4 million people was three times that of the two poorest regions: the Eastern Visayas (with 5.5 million people) and

the Cagayan Valley (with 1.5 million people). In Central Luzon, the second highest income region (with 5.3 million people), the median income was twice that of these two poor regions. In terms of total numbers of people, poverty is most serious in Southern Tagalog, Eastern Visayas, and Southwestern Mindanao. The highest proportions of low income families to the total number of families can be found, however, in the Ilocos, Cagayan Valley, Bicol and Eastern Visayas, which has 14 percent of the country's population but 21 percent of the "bottom 40 percent" of the nation. Almost 60 percent of the entire population in the Eastern Visayas is in the "bottom 40 percent"; in Cagayan Valley the percentage is 59; in Bicol, 51; and in Southern Tagalog, 32. Table 7 indicates this regional diversity.

Trend Data

Rural poverty has increased both in absolute and relative terms from 1961 to 1971:[3]

Table 6

Rural Family Income and Expenditure Balances, 1961, 1965, and 1971

	1961	1965	1971
Total Number of Rural Families (000)	2,921	3,606	4,434
Number of Families Below the Breakeven Point*	2,220	3,083	4,035
Percent Below the Breakeven Point	76%	85%	91%
Average Rate of Saving (Dissaving)	11%	22%	23%

*Breakeven Point = where income equals expenditure

Source: Journal of Philippine Statistics 1:2, NEDA Yearbook, 1974, A. R. Khan, 1976.

Causes of Landlessness and Near-Landlessness

There is little doubt that a substantial proportion of the rural households in the lowest income groups experienced a very significant decline in living standards during the last 15 to 20 years. Furthermore, the deterioration in the living standards of the rural poor accelerated in the early 1970's, a period of rapid inflation. There is also a growing consensus on the causes of this pauperization of rural households. The ILO country study on Sharing in Development suggests four, inter-related causes as follows:[4]

1. A marked acceleration of population growth.
2. An attempt to foster rapid growth of the relatively narrow, large-scale industrial sector.

This meant, on the one hand, that in spite of the relatively rich endowment in natural resources, population began to press increasingly against the land frontier by the end of the 1960's and, on the other hand, that the rural sector--with its two components of domestically-oriented food production and export-oriented cash crops--had to be relied upon to finance much of the rapid expansion of the industrial sector. These two trends led to the relative stagnation of the subsistence agriculture sector.

3. Despite rapid over-all growth of output of the rural sector, the benefits of growth were not widely distributed, and
4. The trends toward the concentration of ownership and commercialization in agriculture has continued throughout the post-war period and may have been accelerated by government policies.

The demand for labor within agriculture has lagged far behind output. This dramatic decline has been explained by a) direct

Table 7

Comparative Economic Characteristics of Agriculture by Region

Item	Low Income				Medium Income				High Income	
	Eastern Visayas	Ilocos	Cagayan Valley	Bicol	Northern And Eastern Mindanao	Southern Tagalog	Southern And Western Mindanao	Western Visayas	Central Luzon	Whole Country
Median annual income of farm households[1]	1,115	1,516	1,527	1,530	1,865	1,973	1,973	2,209	2,514	1,818
Density of population per sq. km.[2]	148	71	56	168	75	148	79	175	215	123
Ave. farm size (cultivated area) in hectares[3]	1.98	1.04	2.75	3.53	2.75	2.79	3.13	3.34	2.65	2.69
Percentage of cultivated area let to tenants[3,4,5]:										
All crops	32.4	47.1	43.0	42.3	27.4	53.9	20.0	39.0	73.4	38.9
Palay	54.1	53.2	48.2	62.1	34.1	69.6	26.4	57.5	74.7	55.8

Sources:

[1]Family income and expenditures survey, 1971, Bureau of the Census and Statistics. [2]Population census, 1970. [3]Bureau of Agricultural Economics. [4]Data from National Irrigation Administration. [5]1966-69 Preliminary data from a survey banks, Development Bank of the Philippines, Philippine National Bank.

government policies to encourage mechanization, and b) the desire of landlords to avoid increasingly unmanageable tenant relations. There have been few government efforts to prevent this deterioration of the status of the rural poor. Minimum wage legislation has had little impact in the rural sector. Land reform legislation is not intended to benefit the landless or the near-landless, who constitute the bottom quintile of the rural population. In fact, the near-landless--those with very small holdings or insecure tenant rights--have frequently found themselves evicted from their former occupations by wary landlords. The next step for the dispossessed is frequently to migrate to Metropolitan Manila or other regional cities, there to swell the number of unemployed and underemployed low- or unskilled persons living in squatter settlements in already overcrowded cities.

Those sectors in which landless workers predominate--fishing, sugar, coconut, bananas, and other plantation crops including rice plantations--have not as yet benefitted from any reform legislation.

To summarize, less and less land is available for more and more people. The commercialization of agriculture dispossesses them. Government policies have ignored, if not exacerbated, the plight of the landless and near-landless.

Conditions of the Landless and Near-Landless

Families with annual family incomes less than P4,000 ($617) are characterized by the following:[5]

Income insufficient to needs. Ninety two percent (92%) of these families have incomes which are insufficient to meet the costs of the minimum requirements of food, clothing, and shelter.

Large deficit spending. The best available data show these families have an average excess of spending over income equivalent to almost 60% of the average family income of P1,741 ($50/capita). This deficit may reflect among other things, an underestimation of incomes particularly in the rural areas resulting from a relatively low level of participation in the money economy (38% of reported income are non-cash) and the fact that heavy indebtedness among rural families is widespread. A study of this phenomenon needs to be undertaken.

An average family size of 5.4. Most of these families are relatively young; fifty percent of household heads are under 40 years of age.

Low educational attainment of household heads. The average number of years of schooling of household heads is 4. Seventeen percent of the household heads have no formal education at all. Only 6% have finished secondary schooling.

Family budgets with a disproportionate share accounted for by food expenditures. Food expenditures represent 63% of all expenditures. Additionally, 63% of total food spending is for cereals, cereal products, fish and other sea foods.

An agricultural base. The major source of income of 68 percent of poor families is agriculture. Fifty-one percent of them work as small-scale farmers. Fifteen percent are landless farm laborers deriving incomes in the form of agricultural wages and salaries while 2.1% have incomes mainly from the share of agricultural produce.

A variety of income source. The total income of poor families comes from a multiple of sources, primarily agriculture. Income from farming consists of 39% of total family income; from agricultural wages and salaries, 14% and from share of agricultural produce, 2.1%. About 45% of total family income is derived from non-agricultural sources.

Limited access to services and facilities. In general, only one out of every 15 rural households is being provided with electricity. Only 30% of the rural population are provided with water primarily through artesian wells and springs. Road systems are inadequate. For every 470 hectares of cultivated land, there is only one kilometer of feeder road.

As indicated above, the major source of income for the rural poor is small-scale agriculture. This is characterized by the following:

The major crops grown by the small-scale farmer are rice, coconut, and corn. In 1970, out of the 2,355,000 farms in the Philippines, 86% were rice, corn, and coconut farms.

Most farms are small and fragmented. The average sizes of rice, corn, and coconut farms in 1970 are 3.0, 2.5, and 4.4 hectares, respectively.

In 1972, one million farms planted to rice and corn were tenanted with an average farm size holding of 1.8 hectares.

In 1972, 44% of rice crop area was irrigated. Fifty-six (56%) percent of rice crop area was planted to high yielding varieties.

Fertilizer usage is minimal. Fertilizer use per hectare of 18 kg is about 6% and 9% of the levels used in Taiwan and South Korea, respectively.

While credit from institutional sources is used by an increasing number of farmers, many continue to borrow from landlords, middlemen and other non-institutional sources at high interest rates.

In 1971, the annual income of a typical farm unit was P1,783.

Public Policy Measures

"A new species in the labor force has emerged in the country which was not covered by any umbrella of law or government, that is, the landless rural worker. He is the man in limbo, administratively occupying a no man's land between the Department of Agrarian Reform and the Department of Labor. Yet he is rapidly outnumbering all the farmers of the area."[6]

Blas Ople
Secretary, Department of Labor
October, 1975

As Secretary Ople's statement suggests, government recognition of the problem of the landless and near-landless has been recent. The 1971 Family Income and Expenditures Survey and the ILO's 1974 study on Sharing in Development both led to increasing awareness of the dimensions of the problem. By October, 1975, Secretary Ople was able to announce the general objectives the government sought to achieve in order to provide economic opportunities for the landless rural poor.[7] The objectives he indicated were as follows:

1. Rural electrification for small-scale industries;
2. the reordering of credit priorities;
3. extension services of the Department of Industry to the small-scale entrepreneur;
4. labor-intensive techniques in public works;
5. eleven regional manpower training centers and technical institutes for jobless youth;
6. popular participation through rural workers' organizations and pre-cooperatives;
7. upgrading bureaucracies charged with rural development; and
8. political will for rural mobilization.

Discussion of these priorities was further stimulated by the ILO-sponsored meeting of experts on tenancy legislation in Asia, held in Manila in October, 1975. Obviously, a program as ambitious as this one would require a substantial data base, field research, and experimental or pilot project experience. Toward this end, in November of 1975, the Institute of Philippine Culture of Ateneo de Manila University, with the support of the ILO,

submitted a proposal to the Philippine Department of Labor for a "Project for the Improvement of the Conditions of Landless and Other Rural Workers in the Philippines." More information on the landless was also recommended by the ILO study team to the Philippines. Despite this recent attention, however, "there is too much self-righteous pronouncements and little by way of alternatives," according to one prominent Filipino social scientist, "At present rhetoric prevails and not much data."

Research Needs

The 1974 ILO study team identified several "specific problem areas" for research and analysis.[8] The most relevant to the purposes of this project are as follows:

Agriculture and the rural economy

The crucial importance of rural mobilisation to the course of Philippine development means that this area should receive top-priority attention in the whole statistical and research effort. The general insufficiency of comprehensive data and analysis makes it difficult to single out items for emphasis. Nevertheless, a few specific suggestions may be appropriate.

The lack of reliable information about patterns of labor use and working conditions in agriculture and the rural areas generally is a particularly acute deficiency. Little is known about the extent and the activities of landless labor and about the actual state of mechanisation in agriculture. In order to devise policies with respect to mechanisation it is necessary to know who

the users of machinery are, whether the labor most vulnerable to displacement is mainly family labor or hired labor, whether mechanisation is a function of farm size, how many families are likely to be displaced as a consequence, and so forth. Closely related to this point, a knowledge of the nature and extent of secondary activities in agriculture is crucial to an understanding of all the alternatives available to a typical farm family. Finally, more information on barrio and municipal tax systems and collection is required if plans for decentralisation and rural mobilisation are to be based on a realistic assessment of the initial conditions.

Research is also needed to know whether the land frontier has in fact been reached or whether some of the shortage of land is a consequence of private ownership patterns and holdings for speculative purposes. For this purpose, as well as others, it would be desirable to have information on agricultural operations on the basis of owned as well as operating units.

Last but not least, the dearth of knowledge concerning water management and community irrigation is of great concern. An active programme of studies on these subjects should be undertaken urgently so as to provide the basis for implementation of the crucial local participation and mini-infrastructure components of a rural mobilisation strategy.

Regional and provincial statistics

The most obvious and serious statistical need is for more data on a regional and provincial basis and also on the economic

relationships between these important parts of the national economy. This should include information on crop, trade, income and consumption patterns in the various islands, as well as on capital investment, housing infrastructure, and so forth. It is becoming increasingly obvious that the lack of attention to regional disparities now will rebound sooner or later; the first step to counter this danger must be to provide an improved statistical picture of the entire Philippine society on the regional as well as the national basis.

Distribution of income and wealth

Information on the distribution of income and wealth in the Philippines is either extremely weak or non-existent. Much work needs to be done to establish with greater reliability both the absolute and the relative economic positions of various groups in the economy. Better data on sources of income and the distribution of financial and real assets are particularly important in this connection.

Employment, wages and labor markets

This area is one in which the lack of data by regions, provinces and metropolitan areas is especially acute. Furthermore, there is virtually no reliable quantitative information on internal migration--inter-regional, rural-rural and rural-urban--despite evidence that such movements of population and workers are sizeable and of central importance to the future patterns of development. Moreover, all too little is known about the structure and operation of urban and rural labor markets and the patterns of

employment search, of seasonal variation in work opportunities, of combinations of agricultural and non-agricultural activities, of labor force entry and exit and of the supply of labor services by type of household.

There is a corresponding absence of data on the structure of wages and workers' incomes and on the processes of wage determination in various labor markets. Urgent attention needs to be given to developing more reliable and more extensive statistics on wages and workers' incomes, by sector and industry, by occupation and (perhaps most important) by labor market areas and geographical regions. Such information is required not only to maintain continuing appraisals of how workers are faring in the course of development, but also for the formulation of policies on investment patterns, location of industry, project evaluation, and so on.

Rural Industry

It is important to have better data, and certainly more analysis, on the issue of relative productivity, especially the productivity of capital, in different scales of industrial activity including non-agricultural rural production. There is very little published information on unorganised manufacturing, rural or urban, with respect to the nature of production activities, markets and input materials. Since this subsector accounts for 70 percent of total manufacturing employment, larger resources (either in the census or through sample surveys) should be devoted to collecting and analysing data in this area. If medium-

and small-scale industry are, in fact, to expand substantially, an industrial extension service, working perhaps through the National Manpower and Youth Council's centres must have the informational raw material for extension, including that at a very decentralised village level. Employment and other characteristics in the garment, shoe, electronics and furniture industries, at all scales, would be extremely important background material for devising specific policies.

Footnotes

1. Development Assistance Program for the Philippines, Volume I, USAID/Philippines, June, 1975.

2. See "The Regional Dimension of Agricultural Development," Sharing in Development, Geneva, ILO, 1974.

3. The calculations presented in Table 6 are based on data from the Bureau of Census and Statistics' Family Income and Expenditure Surveys of 1961, 1965, and 1970/71. The original data at current prices were deflated by a cost-of-living index for another study on the same topic by A.R. Khan, "Growth and Inequality in the Rural Philippines," Geneva, ILO, World Employment Programme Research Working Paper, April, 1976.

4. See Part I. "Background and Summary," Sharing in Development, op. cit.

5. See the USAID Report, op. cit., pp. 1-2.1 to 1-2.9 and IV-7.1 to IV-7.16.

6. In a news article, "The Poorest of the Poor," Times-Journal (Manila), October 3, 1975.

7. Ibid.

8. See the special paper on "Suggestions for Statistical Improvements and Future Research," in Sharing in Development, pp. 679-685.

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SRI LANKA: Country Profile

Introduction

In general, while we find groups of people who can be categorized within our classification, there is enough overlap that (a) their placement within the classification scheme presents some conceptual problems, and (b) the figures proposed must be accompanied by several methodological qualifications. It will be seen that a high proportion of "marginal farmers" who can be classified as "insecure" have as a major source of income, casual agricultural or non-agricultural labor, or will be self-employed, or in the dry zone areas, they will be slash-and-burn cultivators as well. Many groups cannot be easily classified, though it will be attempted for purposes of gaining an understanding of land statuses in Sri Lanka.

Data limitations are also quite severe. Initially, in 1952, the agricultural census seemed to view the estate sector as the one deserving the most attention. Studying peasant agriculture was almost an afterthought. The estate (plantation) sector in Sri Lanka figures very prominently in its agriculture, as the British colonial government attempted to restructure the Ceylonese economy in order to produce tea and rubber on large estates for export, even to the extent of importing Indian Tamil laborers in the 19th century to supplement labor requirements on the plantations. By drawing land and labor into export crop production,

this left the agricultural economy of Ceylon dependent on food imports. In the last 15-20 years, the successive governments have worked toward a goal of food self-sufficiency by increasing smallholder production and deemphasizing the plantations, but still this sector has been important for foreign exchange. It also contains a large share of the agricultural labor force and land area. Even though greater detail of the peasant sector is available in the 1962 and 1973 agricultural censuses, major definitional and measurement problems remain. For example, there does not appear to be any comparability between the numbers of "holdings" and "holders." In the 1962 census, there were about one-third more holdings as there were operators, and it is clear that these "holdings" were not parcels. To complicate matters further, the 1968-69 Socio-economic Survey of Sri Lanka shows roughly half the number of workers ("income receivers") in cultivation as there were operators in 1962.[1]

In this connection, it should be noted that the ILO classification of workers does not seem very useful, since it emphasizes operational tasks, such as "Workers in Agriculture," without differentiating them by means of production. This means that one cannot make important distinctions according to people's relation to land.

One further point should be suggested here which will come up again in our discussion. The structure of rural society in Sri Lanka is continually undergoing changes in landholding and production patterns. In the past ten years, although extensive

peasant colonization schemes were stopped because of unfavorable IBRD evaluations, other programs such as youth colonizations, cooperative farming, and the breakup of estates and their distribution among peasants, have continued. Any quantitative analysis must therefore be considered against the inherent limitations of the data base available and the continuing evolution of man-land relations.

Incidence of Landlessness and Near-Landlessness

According to the 1950 Economic Survey of Rural Ceylon, 29 percent of rural families were landless, i.e., did not own any land, and in the same year, the ratio of cultivators to agricultural laborers was almost 1 to 1. (This did not include the estate population, which was 12.8 percent of the country's population in 1946.) In 1969-70, there was another economic survey, the 1969-1970 Socio-Economic Survey of Sri Lanka, according to which the ratio of cultivators to agricultural laborers was about 3 to 1. This suggests that there had been a gradual decline in the proportion of agricultural laborers presumably as a result of colonization schemes. Between 1962 and 1973, there appears to have been an annual increase in operators (agricultural) of about 50,000. While the number of operators increased in this period by 39 percent, the area operated increased by only 24 percent, which resulted in a decline in acreage per operator of about one-quarter of an acre, or an 11 percent decline.[2] The regional distribution of these changes indicates that the highest

acreage increase (under peasant cultivation, i.e., with less than 50-acre holdings) occurred in Moneragala district with a 93 percent increase, followed by Puttalam district with a 46 percent increase. Both of these are dry zone districts and this trend was evident in most of the other dry zone districts as well, appearing to be the result of colonization schemes and extension of irrigation. In Jaffna, where acreage remained almost steady, there was a 26 percent increase in number of operators, indicating the effect of population increase in causing a fragmentation of holdings. During this decade, the size of landholding in this district declined by one-fourth, such that each operator now had half an acre less on the average than he did before. This occurred in a number of other districts. Two areas of the dry zone which were atypical are (1) the eastern district of Amparai, where there was a 67 percent increase in operators with only a 19 percent increase in cultivated acreage, and (2) the northwestern districts of Karunegala and Puttalam and to a lesser extent, Anuradhapura, with similar increases in both the number of operators and acreage.

Even in the densely populated, wet zone areas such as the districts of Colombo, Kandy Matale, Nuwara Eliya, and Ratnapura, there was an increase in acreage under smallholding operators between 25 and 35 percent for the period 1962 to 1973. This would appear to indicate that the breakup of large estates and their distribution to small operators may have begun by 1973 in these districts. This breakup does not appear to have occurred

in Kegalle; and in Kalutara, Galle, and Matara, there was about a 15 percent increase in acreage under small-holding cultivation.

For the country as a whole, assuming for the decade that there was between 20 and 25 percent increase in operators due to parcelization of family holdings, there was an increase of about 15 percent in the number of operators from previously non-operating members, apparently due to distribution of land to households not otherwise holding land. The proportion of rural households below a poverty line of 200 rupees, shown in Table 1, suggests that land redistribution measures have left nearly half of the rural population below this level, though because of data ambiguities, we cannot equate this condition with landlessness or near-landlessness as such. We do see in Table 2 the incidence of landlessness among rural households differentiated by districts. Since these figures exclude estate workers, we find that the proportions of households below the poverty line and those without land correspond rather closely.

There are certain inconsistencies and definitional problems in Sri Lankan data that preclude identifying either the occupational circumstances of the landless or the population supported by different size of agricultural holdings. It is a pity that while such detailed statistics on "holdings" have been obtained by the 1962 and 1973 Agricultural Censuses, there is no clear indication of what they mean and what the unit of measurement is. It is neither a parcel of land, nor an operator's holdings, nor a family's assets. In deriving estimates here, (1) the

TABLE 1

DISTRIBUTION OF BELOW POVERTY HOUSEHOLDS IN RURAL AND ESTATE SECTORS[a]

Monthly Household Income	Rural Sector Estimated Households	%	Estate Sector Estimated Households	%
Below Rs. 100	138,042	9.2	21,788	8.8
Rs. 100-149	263,101	17.5	66,305	26.8
Rs. 150-199	267,310	17.7	66,639	25.8
Total Below Rs. 200	668,453	44.4	154,732	61.4

Source: Ceylon, Department of Census and Statistics, Socio-economic Survey, 1969-70.

TABLE 2

REGIONAL DISTRIBUTION OF LANDLESS[a] HOUSEHOLDS IN THE RURAL SECTOR

Dry Zone States	%	Wet Zone States	%
Jaffna	42	Colombo	44
Mannar	45	Kalutara	30
Vavuniya	34	Kegalle	24
Puttalam	45	Kandy	27
Anuradhapura	30	Nuwara Eliya	42
Trincomalee	36	Badulla	12
Karunegala	22	Ratnapura	31
Matale	41	Matara	24
Polonnaruwa	63	Galle	28
Batticaloa, Amparai	15		
Monoregala, Hambantota	31		

Source: Ceylon, Department of Census and Statistics. Report on the Survey of Landlessness, Sessional Paper XIII, 1952.

[a]Relates to ownership of agricultural land. Does not include estate workers, who are concentrated in the wet zone states.

discrepancy between holders and holdings is ignored, and as much as possible, tables which break down data according to holders are used, and (2) it is assumed that "agricultural operators" are equivalent to "income receivers" on own or rented farms. This makes it possible to delineate those "agricultural operators" whose main occupation is not cultivation. Some of these will be among laborers and self-employed workers, and consequently, the two sections of Table 3 are not mutually exclusive; there is some overlap.

It is worth noting the differences in conditions to be found between the two climatic zones in Sri Lanka. According to a survey of villages in 1950,[3] the percent of landless families was as low as 12 percent in the dry zone mountainous areas of Badulla, Moneragala, and Amparai districts. It was much higher in costal areas and in the densely populated central districts of Nuwara Eliya and upper Kandy. For the country as a whole, 37.7 percent of the rural population was landless. This is exclusive of the landless workers on the estates. This figure included both landless workers and artisans and tenant cultivators, with both "ande" sharecropping and other lease arrangements in the latter category. Figures on the number of tenants are not strictly comparable between regions.

While "ande" tenancy was widespread in all parts of the country, both in the dry and wet zones, lease arrangements predominate among settlers on colonization schemes, even though the lease is in perpetuity. "Ande" tenants have only minimal security, with most contracts renewed every year,[4] and are in a worse position

Table 3
Estimates of Landlessness and Near-Landlessness in Rural Sri Lanka, 1971

	Rural Households			
	000's		%	
I. Laborers and Workers		654		45
A. Agricultural Workers		248		17
1. Permanent Agricultural[a] Workers	154		11	
2. Casual Agricultural Workers	94		6	
B. Non-Agricultural Workers		406		28
1. Laborers	156		11	
2. Self-employed Workers[b]	250		17	
II. Cultivators[c]		812		55
A. Tenants and Sharecroppers		412		28
1. Secure[d]	212		14	
2. Insecure	200		14	
B. Marginal Farmers		400		27
1. Constrained Farmers[e]	156		10	
2. Vulnerable Farmers[f]	244		17	
III. Pastoralists and Nomads		5		*
TOTAL		1471		100%

Source: Ceylon, Socio-economic Surveys, 1968-69 and 1969-70, Ceylon, Census of Agriculture, 1962 and 1973. For this table and the regional summary, conversions from household data to labor force data were made on the assumption of 2.6 income recipients per estate sector household and 1.6 income recipients per other rural household, as derived by the 1969-70 Socio-economic Survey.

a. - estate workers living below the poverty line
b. - self-employed workers living below the poverty line
c. - The data sources do not permit mutually exclusive categories. For example, one source on tenure status indicates that about 51% of all "agricultural income recipients" own no land except garden plots. These workers may be I.A. Agricultural Workers

or II.A. Tenants and Sharecroppers. For Category II.B. Marginal Farmers, the source on the size distribution of agricultural holdings does not clearly distinguish different tenure statuses. To resolve this problem of over-lapping categories, percentage estimates from secondary sources were applied. In this regard, the 1975 I.L.O., Silva, op. cit. was particularly useful. Caveat: the margin of error, overall, may be as much as 19% for these categories.

d. - lease tenants on settlement schemes.

e. - farm operators with plantation crop land of less than 5 acres or paddy or coconut land of less than 2-1/2 acres.

f. - farm operators with plantation crop land between 5 and 10 acres or paddy or coconut land between 2-1/2 and 5 acres.

* - less than 1%

than lease holders. Thus, while there is a higher proportion of tenants in Anuradhapura, Polonnaruwa, Trincomalee, Amparai, and Monaragala, these are also areas with high colonization rates, and hence they have a greater proportion of secure tenants. On the other hand, in Matale, Kandy, Nuwara Eliya, Ratanapura and Vavuniya, most of the tenancy is of the "ande" kind, and therefore extremely insecure.[5]

The nature of the agricultural economy in Sri Lanka and pattern of land distribution and use does not involve much use of hired labor in agriculture outside of the plantation sector. Thus, in 1970, only 0.7 percent of paddy operators were reported as employing hired labor.

It does not appear that the farmers who hire labor are ones with very large holdings (average about two acres). They are fairly evenly distributed around the country with some regional predominance in and around Colombo district and in Jaffna.

Trends

During the 1960's, the land in agricultural production was increasing by about one percent per annum. Over the decade, agricultural acreage increased by about 24 percent, while the number of operators rose by 39 percent. As a result, the proportion of cultivators with less than one acre increased from 35 percent in 1962 to 43 percent in 1973. During the same period, the proportion of area operated by owner-cultivators has also been increasing, due in part to the land redistribution but also indicating an apparent decline in "ande" tenancy. During the preceding decade, the proportion of tenants relative to owner-cultivators had been climbing. Since the demand for land was very high, the conditions of tenancy could also have been increasingly exploitative in this time.

Tenancy is found mainly on paddy lands. The Paddy Lands Act of 1953 provided legislation to grant tenants security of tenure for a five-year period, providing for maximum rental rates and registration of tenancy agreements. There was little provision for enforcement of the act, and reliance was mainly placed on the "'honesty' of tenants and landlords, on their good faith in dealing with one another."[6] This act was followed by the more far-reaching Paddy Lands Act No. 1 of 1958. This seems to have led to widespread evictions of tenants. Between 1958 and 1968, about 35,000 evictions were reported to the government and "the number would in fact have been larger than reported."[7] Furthermore, few tenants could have pressed landlords for strict adherence to the

act, because they were often dependent on the landlords for operating expenses, such as loans for fertilizers, operating capital such as draught animals, and for consumption loans. Landlords may have been more often than not also kinsmen, who could conceivably wield other controls. It was observed that, "far from resorting to the benefits of rent provisions, a large number of tenants were actually scared to get their names registered in the Paddy Lands Register for fear of reprisals by landlords . . ."[8] The greater proportion of land under owner-cultivation in 1970 could be due to non-reporting of "ande" tenancy arrangements and to the actual evictions of tenants.

Since 1950, the actual proportion of landlessness is likely to have remained about the same. This is partially due to the high propensity of small landholders to refrain from disposing of their land to work for wages, a trend which is quite small, though growing.[9] Complicated mortgage and "ande" arrangements were often worked out between small landowners and their debtors rather than have an outright loss of land.[10] Since there have been specific debt relief efforts which appear to have been successful, the capacity of the submarginal landholders to protect their assets would have increased. Also, the provision of free and subsidized food rations reduces food expenditures drastically, and provides a greater income subsidy to the paddy-deficit producer than to the self-sufficient producer--and probably reduces need for consumption loans. Thus, the ranks of the landless would not appear to have swelled while the number of marginal cultivators nevertheless increased.

Furthermore, until 1966, settlement programs were giving preference to landless in village expansion and colonization schemes. Between 1953 and 1966, about 42,000 allotments were made on the major colonization schemes, the majority of which would probably have gone to the landless.[11] In addition, village expansion schemes could have benefited another 350,000 allottees, most of whom were landless. If even one-fourth of these allotments were made to landless, then the proportion of these people in the population would have remained constant. If all these allotments were made to the landless (which is unlikely), and the number of these in the country was about 500,000 in the early 1950's, then by the mid-1960's, it would have grown to about 650,000 without any intervention. With the settlement program, this number would have been reduced to 250,000 families--a decline from about 35 percent of rural families to about 15 percent or less.

Re-emergence of "karu-ande," an exploitative kind of sharecropping in which the tenant supplies all the labor but obtains only 25 percent of the output, which is not covered by land reform and under which the tenant is virtually a hired laborer who can be evicted at will, has been noted.[12] The same author also notes the spread of tenancy in wet zone villages, where land holdings are more inequitably distributed. These indications suggest that the current situation could be deteriorating somewhat, or even considerably, but we have no systematic data available to assess this possible trend. What can be said is that a worsening trend in the 50's was turned around in the 60's, a rare occurrence among the developing countries included in this study.

II. Causes

In the wet zone of Sri Lanka, population density averages about 1,000 persons per square mile.[13] (This is more than three times the density in the dry zone.) The population pressure in wet zone villages is even greater than that implied by this figure, because half or more of wet zone villages is under plantation agriculture, where labor use and population density is lower than in the villages. This is reflected in (1) intense fragmentation of land holdings, (2) high tenancy rates, often exploitative, (3) a high proportion of workers who depend on wage labor, and (4) high rates of seasonal migration to dry zone agricultural regions. The frontiers for expansion were originally seen to be in the dry zone, but since the early 1970's, takeover of plantations over a 50-acre limit has been introduced, to be collectively operated by peasants selected from the surrounding wet zone villages. These programs are discussed below under IV. Public Policy Measures.

It may be pointed out here that there is an inherent difficulty in the movement of individual peasants from the wet to dry zone areas. Given the rainfall pattern and soil formations there, irrigation is generally provided through tank storage of water. This collective approach to irrigation is inherent in existing dry zone villages and is reinforced by a closed endogamous kinship pattern of each village with some surrounding villages. This is reflected in the practice of "rajakariya" or compulsory labor donation for tank repairs and maintenance, and in the practice of "bethma" in which shareholders in a field which is short of water may agree to cultivate only a proportion of that field and then share out the

proceeds among themselves.[14] Absence of this kind of cooperation, as in state-initiated colonies, has been one of the major problems impeding their progress, as heavy capital expenditures have been made in maintenance of irrigation facilities and poor management of production has prevailed. This has often been blamed on the selection process for the colonies which had stressed the landlessness of applicants and not expertise in management of cultivation.[15]

III. Consequences

It is not possible to infer from the pattern of landholding alone what the levels of living are among rural population and the differences in income distribution among them. We have seen that for the majority of landholders, cultivation is a secondary occupation, with several other sources of income often present. We can reasonably assume that when these occupations involve merely manual labor, the living conditions will be much poorer than when some capital--physical or as skills--can be used as well. According to aggregate income levels of the population from the Central Bank of Sri Lanka's Survey of Consumer Finances for 1963 and 1973, incomes for the poorest deciles was rising faster than in the richest decile. However, when the inflation rate is accounted for, real income levels of the lowest 20 percent of the population actually declined during the decade.[16] For all other income groups, the real income levels increased. For the estate laborers however, incomes, even without controlling for inflation, actually declined between 1963 and 1973. They were the poorest group in 1963 and had

an average income per income receiver of half that of the surrounding village workers.

Income data alone do not take into account the substantial income subsidy provided by free and subsidized distribution of food grains that has been undertaken by the government. Data from the Socio-economic Survey of Sri Lanka of 1969-70[17] indicate that even families from the lowest 20 percent in income levels (below Rs. 150 per month), while they did not spend a much larger percent of their income on food, had a caloric intake level of about 2000 per capita, compared with an all-island intake of 2264 calories per capita.[18]

Employment

The growth of population has resulted in the rapid growth of the labor force at an annual average rate of 2 percent from 1953 to 1971. As a result, the participation rate has decreased from 37 percent in 1953 to 35 percent in 1971. Silva notes that this is especially marked in rates of female labor force participation in the rural sector, as they declined from 20 percent in 1950 to 15 percent in 1969-70. In contrast, female participation rates in the estate sector appear to have climbed.

During the same period of 1953 to 1971, growth of employment has been about one percent per annum. Consequently, in 1971, the average number of dependents per employed worker was four. In agriculture, most of the increase in employment (which has been slightly smaller than overall growth of employment in the economy) has occurred in paddy cultivation which has expanded acreage rapidly

during this period. In the export sector, employment actually declined at about one percent per annum between 1953-1971.

IV. Policies Affecting the Landless

There have been four kinds of policies designed to improve conditions for the landless and small tenants in Sri Lanka since its independence. These will be discussed in order of decreasing effectiveness in achieving this objective. They are (1) direct food subsidies, (2) land development, public works and settlement of landless households, (3) intensification of agricultural production, an important component of which was provision of substantial fertilizer subsidies to progressive farmers, and (4) landholding and tenancy reforms.

The huge commitment in Sri Lanka in recent years to provide both consumer and producer price subsidies has its origin in the rationing system that was set up to protect consumers during World War II when rice imports from Burma were cut off. Since then the heavy dependence on rice imports to meet domestic needs coincided with the political need to ensure low consumer food prices and led to the continuation of the rice ration.[19] Simultaneously, especially since the high world rice prices of 1952, producer incentives through a guaranteed price and state procurement have been maintained. The tendency has been for the combined rice subsidy to increase over the years.[20] Thus, the dual objectives, that of providing consumer welfare and achieving self-sufficiency in rice, which the successive governments have attempted to achieve

through rice policy, explain this phenomenon. By 1974, the value of rice subsidy provided by the state was Rs. 776 million, up from Rs. 33.5 million in 1954-55 and Rs. 264 million in 1964-65.[21] Since 1966, a weekly ration of 2.2 lbs. per person has been provided free of charge, with up to an additional 2.2 lbs. available at a subsidized price, depending on the supply situation.

The significance of this subsidy for the poor has been that, despite a rapid increase in the cost of living and evidence of declining incomes for the poor farmers and laborers, differences in caloric intake of foods among income classes is very small. The 1969/70 Socio-Economic Survey of Ceylon found that even at the lowest household income levels of below Rs. 100, daily per capita caloric intake is 2000, while it is 2,640 for the highest income level of Rs. 1,000 and above.[22] It is possible that the heavy cost of welfare services in Sri Lanka may have precluded the capital investment needed for a sustained growth in employment and incomes of the people. It is also likely that the demographic transition taking place in the country may not have occurred without this sustained commitment to the welfare in terms of basic needs such as food, health, and education.

Colonization schemes which began in the 1930's but did not make significant headway till the early 1950's have been a major tool of agricultural development adopted by the state. In the field of domestic agriculture, the primary objective has been increased rice production which was expected to be achieved by opening up new land and providing necessary irrigation facilities and other

inputs such as improved seed and chemical fertilizers. This effort has resulted in opening up land at the rate of 9,000 to 10,000 acres per year. This area has been developed around sixteen major irrigation projects designed to exploit the considerable surface water resources of the dry zone.[23] Of the four major types of settlement schemes - colonization, land development ordinance allotments or village expansion schemes, middle class colonist farms, and youth settlement schemes - the first has provided the backbone of settlement efforts and has also been the only settlement scheme to address the needs of the landless directly. The two main qualifications for selection of settlers in colonization schemes have been (1) landlessness, and (2) physical fitness. By 1970, these projects had settled 612,000 colonists in 70 colonization schemes in the dry zone. In addition, they also attracted a large inflow of permanent and seasonal migrants who provided goods and services and labor supply for the settlement scheme economies. This adds up to about 100,000 squatters plus 30-40 thousand seasonal migrants engaged in harvesting, trading, etc.[24] The Mahaweli Development Project now underway is expected to provide irrigation for 900,000 acres, settle 235,000 farm families and provide employment on the project for 8,000 families in the surrounding villages.[25] Because of the regional development approach used in these schemes together with the incentives needed for the massive relocation of workers from the wet to dry zone, this has involved high capital expenditures which have characteristically been around 40 percent of the total investment in the agricultural sector.[26] However, since 1970, further

development of colonization schemes for settlement by landless has been curtailed because of criticisms of the projects in cost-benefit terms by an FAO/IBRD report.[27] These are indications that such activity is reviving presently.

Agricultural intensification programs have been primarily aimed at increasing rice production. Apart from the extension of irrigation via medium and large irrigation projects and the popularization of high yielding varieties, fertilizer subsidies to the extent of 50 percent have been provided since 1968. Both the fertilizer subsidies and the generous credit scheme for agriculture are significant items in the agricultural policy. Access to both these inputs depends on village level organization and control of local co-operative societies plus access to irrigation water which makes fertilizer application profitable. Since the supply of both these inputs is limited, together with the extension services available to the farmers, it can be concluded that the benefits of these policies for marginal farmers and tenants have been less than those for larger farmers. Landless workers benefit only to the extent that there are more employment opportunities for them. It must be noted that the use of agricultural labor in Sri Lanka is largely limited to the dry zone areas; it is only partly used in the wet zone, and virtually absent in the hilly areas except on estates. In most dry zone areas, however, there is usually a shortage of labor and the reverse is true for the wet zone. This affects the bargaining capacity and trends in real wages.

In the dry zone, there has been a trend towards rapid mechanization of cultivation and harvesting operations, with lower labor inputs per acre than in the wet zone. In a critical evaluation of the adverse socio-economic impact of tractorization, Jayaweera claimed that, "in the tractor owner, who is invariably an affluent farmer, the subsistence farmer has acquired a new oppressor, more intractable than the feudal land owner. A new feudalism of technology has grown up around the tractor owners. The Paddy Lands Act notwithstanding, smallholder subsistence farmers are slowly losing operational control of their paddy lots to the tractor owners."[28] On the balance, however, dry zone intensification has provided employment for several hundred thousand seasonal migrant workers from the wet zone annually.

Land reforms in Sri Lanka have, by most accounts, made some improvements in the conditions of landless by redistribution of some land.[29] However, for small cultivating tenants, land reforms appear to have an unequivocally detrimental effect. The Paddy Lands Act of 1958 sought to regulate rents paid by tenants to 1/4 of the produce (as against the traditional rate of 1/2 the produce) and ensure security of tenure in regard to paddy lands (as compared with the oral agreements of single-year leases traditionally prevalent in "ande" tenancy common in wet zone regions). This has resulted in sharecroppers registering as agricultural laborers under the act and is initiated by landlords who deny privileges entitled by the law. According to Wickramasekara, "It has also led to the emergence of more onerous forms of tenure such as 'karu-ande' which is a sharecropping arrangement whereby the tenant

supplies all the labor and the landlord all the inputs and the latter claims 75 percent of the harvest. Under this the tenant is virtually a hired labourer and he can be evicted at will."[30] The reasons why such situations arose were that the land reform was not accompanied by the necessary institutional measures to implement it, and it was naive in that it failed to take account of the strength of the interests to which it was opposed.[31]

V. Research Needs

Census and sample surveys need to be more sensitive to categories that reflect the control of, or access to, the factors of production, especially in the rural agricultural sector. Other factors that need to be studied are the patterns and magnitude of seasonal rural-rural migrations. These are a group of people who are often susceptible to exploitation by large contractors and farmers. Third, it would be useful to study the conditions under which co-operative and state farms, increasingly used to distribute the resources from institutional reforms, can operate productively. Fourth, in rural Sri Lanka, there is a large pool of landless skilled and semi-skilled artisans and workers not employed in the limited agricultural sector employment. It would appear that encouragement of rural industry that could draw on and improve these existing skills might be useful. Fifth, there needs to be more information on the effects of agricultural intensification policies in terms of access to employment, wages, tenure conditions, landholdings, access to subsidized inputs, and participation in village level co-operative societies.

Footnotes

1. This discrepancy is partly resolved since in 1962, about 30 percent of "operators" had a major part of their income from non-agricultural sources. The more recent data is from: Ceylon, Department of Census and Statistics, Socio-Economic Survey, 1968-69.

2. Ceylon, Department of Census and Statistics, Socio-Economic Survey, 1969-70.

3. Ceylon, Department of Census and Statistics, Report on the Survey of Landlessness, Sessional Paper XIII, 1952. Since landlessness was according to ownership and not operation of land, this included all tenants (pure) and landless workers in and out of agriculture. The same survey also reported 26.3 percent landlessness among "agricultural families" and 38.9 percent among "non-agricultural" families. However, the survey report does not indicate what the basis for this differentiation was.

4. E.R. Leach, in Pul Eliya: A Village in Ceylon, Cambridge, 1961, describes how "ande" tenants are commonly viewed as merely cultivating land for the owner on a temporary basis. In another kind of circumstance, an owner, if he has to mortgage his land for taking a loan, would then continue to cultivate his land on "ande." (Quite small consumption loans could result in this.) Most traditional arrangements of a contractual nature are paid in share of produce, including labor in agriculture that is not exchange. This is likely to have changed into greater acceptance of cash wages and lease arrangements, especially in newly settled areas, where kinship ties of the "purana" villages do not exist.

5. "Sri Lanka Country Study on Rural Employment Promotion," by A.T.M. Silva (mimeo, I.L.O., Geneva, December 1975) and "Tenancy in Ceylon's Paddy Lands: the 1958 Reform," by Nimal Sanderatne, South Asian Review, 5(2), Jan. 1972, pp. 117-136. Share tenancy is mainly confined to paddy lands, and consequently it is in those regions with higher proportions of irrigated lands and a high population density that its incidence is the highest. It is noted that the tenant's perception of his security is not necessarily parallel with performance, especially in the case with settlers on colonization projects.

6. Silva, "Rural Employment Promotion," p. 79.

7. Sanderatne, Nimal, "Tenancy in Ceylon's Paddy Lands," op. cit.

8. Silva, "Rural Employment Promotion," p. 81.

9. Wickramasekara, P., "Aspects of Hired Labour Situation in Rural Sri Lanka," in S. Hirashima, Hired Labour in Rural Asia, Tokyo, Institute of Developing Studies, 1977.

10. Leach, E.R., Pul Eliya, op. cit.

11. Amerasinghe, N., "An Overview of Settlement Schemes in Sri Lanka," Asian Survey, Vol. XVI, No. 7 (July, 1976), pp. 620-636.

12. This observation was made by P. Wickramasekara (1977) on the basis of the Sri Lankan Agrarian Research and Training Institute Studies, op. cit. p. 91.

13. Ceylon, Department of Census and Statistics Statistical Pocketbook of Ceylon, Colombo, 1971.

14. Leach, Pul Eliya, op. cit. p. 169.

15. M.U.A. Tennakoon, "A Note on Some Social and Economic Problems of Subsistence Farming in Rural Settlements of the Dry Zone of Ceylon" Staff Studies, Central Bank of Ceylon, Vol. 2, No. 1 (April, 1972), pp. 1-56. In the late 1960's, an FAO/IBRD Evaluation of the dry zone irrigation schemes resulted in a major shift in settlement policies of the country. See A.T.M. Silva, op. cit., for a review of the colonization and other settlement schemes.

16. Lee, E.L.H., "Rural Poverty in Sri Lanka," 1963-1973" Working Paper, Rural Employment Policy Research Programme, ILO, Geneva, 1976.

17. A survey of 9,694 households over one year beginning November, 1969.

18. "Preliminary Report on Socio-Economic Survey of Ceylon in 1969-70," Department of Census and Statistics, 1971.

19. The amount of the basic rice ration has for the most part been 4.4 lbs. weekly per person.

20. Edirisinghe, Neville and Thomas T. Poleman, "Implications of Government Intervention in the Rice Economy of Sri Lanka," Cornell International Agriculture Mimeograph No. 48, 1976.

21. Karunatilake, H.N.S., "The Impact of Welfare Services of Sri Lanka on the Economy," Staff Studies, Central Bank of Ceylon, Vol. 5, No. 1 (April, 1975).

22. Perera, L.N., et al., "The Effect of Income on Food Habits in Ceylon: The Findings of the Socio-Economic Survey of Ceylon 1969/70," Marga, Vol. 2(1), 1973.

23. De Silva, L., "A Critical Evaluation of Agricultural Policy, 1960-68," Staff Studies, Vol. 1(1), 1971.

24. Tennakoon, M.U.A., op cit. (1972). By 1953 alone, when the number of settlers was about 90,000, there were over 5,000 squatters, and "there were also several thousands of seasonally floating population engaged in harvesting, buying, selling, etc." p. 6. By 1966-67, the number of squatters in six dry zone districts alone was 85,000. Ibid., p. 9.

25. Silva, "Rural Employment Promotion," op. cit., p. 184.

26. De Silva, L., "Agricultural Policy 1960-68," op. cit., p. 96.

27. Report of the Irrigation Programme Review, FAO/IBRD Co-operative Programme, Ceylon Government Press, 1968.

28. Jayaweera, Neville, "Credit Support for HYV in Sri Lanka," Marga, Vol. 2(2), 1973, pp. 18-48.

29. By 1974, 375,000 acres (17) percent of total acreage cultivated under tea, rubber and paddy) had been vested with the Land Reform Commission. Of this, 215,000 acres had been alienated, with 60 percent of it distributed to state plantations and co-operatives. The remaining 90,000 acres were turned over to individual farmers on the basis of payments in installments. The alienated units were two acres for irrigated paddy land, and 1.5 to 2 acres for other crops. (E.L.H. Lee, 1976, op. cit.)

30. Wickramasekara, P., 1977, op. cit. Also see A.T.M. Silva, "Rural Employment Promotion," op. cit.

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A Report on Landlessness and Near-Landlessness in the Latin American Region*

This report discusses the magnitudes and types of rural poverty in Latin America, as well as thr trends, policies and conditions affecting the landless and near-landless. In general, Latin America is characterized by more land per person than in Asia, and by rapid population shifts, either among agricultural regions or towards cities. This does not mean that the lack of jobs or inability to earn an adequate income is not a problem in the Latin American countryside: more than two billion people--roughly 70% of all rural workers--are landless or nearly so. Because present rates of industrialization cannot provide enough employment to absorb this mass of rural unemployed, immediate attention has to be paid to conditions in the countryside which do not allow the poor rural majority to earn minimal incomes, so that those conditions can be improved.

The situation with the rural poor in Latin America is very serious, but it is <u>not</u> hopeless. We need to know more accurately what causes their inability to earn sufficient incomes; what employment options are available to them, and what the real costs associated with these options are; what policies have been directed to this group; and, what must be known to deal more effectively with this target group in the future.

The census data, surveys and reports upon which this regional summary is based are far from complete. Despite the gaps

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*This regional report and all of the country profiles for Latin America were prepared by Cheryl A. Lassen, a rural sociologist and member of the Rural Development Committee, Cornell University.

in available knowledge, this regional report and the eight case studies which illustrate it are a step forward in bettering our understanding of this target group.

Section I: The Dimensions of Landlessness and the Land Tenure Structure in Latin America

Three general tenure situations have been suggested as characterizing rural poverty in developing countries:

1. No current land constraint but concentration of land ownership.

2. No current land constraint or inequity but low productivity per man and per hectare.

3. Heavy population density, land scarcity, plus inequitable ownership and limited investment in rural areas.

In terms of the Latin American region, types one and three above are useful to begin to conceptualize income-earning constraints among the rural poor. But these types are still too gross and must be further differentiated to fit the variation particular to the region. A more area-specific typology of land tenure situations in Latin America might be:

1. <u>No land constraint but a highly skewed distribution of the means of agricultural production including</u>:

   A. A monopoly of landholding by a traditional latifundia estate. The traditional estate provides employment and limited access to land to the surrounding peasant population and serves as a social nucleus for the peasantry. Organization, economic activities, etc. revolve around the landgroup servicing this large estate.

   B. A landless or near-landless proletariat servicing plantations whose products are mainly for export. These plantations also command a monopoly of land, but differ from category A in that the amount of permanent labor they hire is low in comparison to the amount of seasonal labor they hire. The key for these commercial planta-

1. No land constraint but a highly skewed distribution of the means of agricultural production: (cont.-)

   B. (cont.-) tions is to have a large labor force which must seek seasonal employment in the plantation sector and which, when workers are no longer needed for harvesting commercial crops, can return to some subsistence plot. Strictly speaking, this large migratory labor force is not landless: it is nearly so, and the inability to earn a minimum income from a subsistence plot is what forces these workers to migrate.

   C. A situation in which the traditional landlord-patron has been replaced by a patron who controls capital and/or access to public goods and services. As Andrew Pearse notes, "The patron in land, eliminated by land reform gives way to the patron in capital or authority, and the dyadic relationship between this new patron and his peasant clients gathers up the cultural traits of the old relationship and becomes a basic principle of the new ordering of social relations." 1./*

2. Heavy population density, land scarcity, and a lack of public services and investment in the rural area.

At this point it would be nice to draw a map showing the areas which fall into the above categories. But such a map for the Latin American continent would have one large blank center composed of the Amazon selva and the Andean mountains without enough room to show the land tenure varieties which exist in the more densely populated areas nearer to the coast. To simply discuss the areas which fall into these categories, then, tenure patterns in the southern cone countries of Paraguay, Uruguay and Argentina resemble type A--the large, more traditional latifundio estates. Such estates are also found in central Chile, Ecuador, Nicaragua, the coastal departments of Colombia, and throughout Brazil with the exception of the Center-West, South-West region.

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* All footnotes are given as endnotes in this report.

Areas characterized by the plantation mode of production relations (type B) include the Santa Cruz (Eastern Lowlands) area of Bolivia; the Tucumán area of Argentina; the Zona de Mata in Northeast Brazil; the best agricultural lands of the Dominican Republic, Jamaica, and smaller Carribean islands; both the Atlantic and Pacific coastal areas of Central America, and the coastal areas of Colombia, Ecuador and Peru. A sub-variety of the plantation mode might be the highly commercialized farms of São Paulo and Paraná, Brazil, or in irrigated areas of Mexico. These latter operations are also highly dependent on a large supply of seasonal migrant labor.

Countries where the patron-in-land has been replaced by a new dominator of the peasantry, the political or economic middleman, include Venezuela, Bolivia and Mexico. This may also be what will emerge from the land reform process in Peru.

Finally, the "high density, land scarcity, lack of investment" situation is what characterizes the central plateau area of Mexico, the highland areas of Central America and the highlands of Colombia and Peru.

Although specific regions may be predominantly characterized by small holdings (minifundios) or large holdings (latifundios), the subsistence sector is always highly influenced by the large farm sector, even if the two are geographically distinct. If we equate land with power, it can be seen by Table 1. that power rests predominantly in the hands of large landowners in Latin America, and not in the hands of family farmers or minifundistas.

Table 1. The Structure of Landholding in Selected Latin American Countries

Country	Multi-Family Farm Units*		Family Farm Units*		Sub-Family Farm Units*	
	% Farms	% Area	% Farms	% Area	% Farms	% Area
Argentina	8	52	49	45	43	3
Brazil	39	93	39	6	22	1
Colombia	6	69	30	25	64	6
Ecuador	2	64	25	29	73	7
Mexico	52	C.	11	C.	37	C.
Paraguay B./	5	71	95	5	(included in family farm figures)	
Peru A./	1	82	6	5	93	13
Venezuela B./	2	79	30	18	68	3
Costa Rica	22	88	32	10	46	2
El Salvador	2	50	6	23	92	27
Guatemala	2	72	10	14	88	14
Honduras	5	60	26	28	69	12
Nicaragua	22	85	27	11	51	4
Dominican Republic	2	47	21	30	77	13
Jamaica	2	62	19	23	78	15

* Farm-size categories are adopted from a classification system used by the Comite Interamericano de Desarrollo Agricola (CIDA) in surveying land tenure structures throughout Latin America. A "sub-family" farm was defined as having insufficient land to satisfy minimum needs of a family or to allow the utilization of their work throughout the year. A "family farm" has enough land to support a family at a satisfactory standard of living in the locality through the work of family members using prevailing methods in the area. A multifamily farm has enough land to employ a number of workers outside the family.

Of course, for these statistics on the concentration of landholding to make sense one has to accompany them on the differing sizes of population, rural labor forces, and absolute numbers of landless and near-landless among Latin American countries.

Table 2. Demographic Statistics for Latin America

Country	Population (000 000)	Rate of Pop Increase 1970--1975	Rural Pop as % of Total Pop
Argentina	25.4	1.3	33
Bolivia	4.5	2.5	77
Brazil	105.7	2.8	61
Colombia	25.9	3.2	57
Ecuador	7.1	3.2	69
Mexico	60.3	3.2	60
Peru	15.9	2.9	66
Costa Rica	2.0	2.8	68
El Salvador	4.1	3.1	82
Guatemala	5.3	2.9	82
Dominican Rep.	4.3	3.3	60
Jamaica	2.0	1.9	62

Population figures are for 1975 with the exception of Bolivia, which reflects the 1977 census.

Notes to Table 1.

A. Peru is an agrarian reform country where reform units are operated in large cooperatives, hence the bulk of the land area held in "multifamily farms" is not owned by private land owners. In 1976, 43 percent of the cultivatable land in the country was included in the land reform sector.

B. The State is the largest landowner in Venezuela, possessing approximately 11 million hectares, or half the area of land held in multi-family estates. The State is also a large landowner in Paraguay, possessing approximately 25% of the cultivatable land area.

C. Mexico underwent a major land reform in the 1930s which contributed to the situation today whereby many families have land although they lack the capital, water and/or technology to earn an adequate income from it. As a result, the renting of land by ejidatarios (land reform beneficiaries) to large entrepreneurs is widespread, making statistics on landholding misleading.

Table 3. Landlessness in the Latin American Region

Country	Rural Labor Force@ As % of Total Labor Force	Rural Labor Force@ (000)s of Workers	Landless* as % of Rural Labor Force	Near-Landless* as % of Rural Labor Force	Landless + Near-Landless as % of Rural Labor Force	Numbers of Landless + Near-Landless
Argentina B./	15	2,184	24	46	70	1,529,080
Bolivia A./	63	1,733	38	45	80-85	1,431,000
Brazil A./	44	19,000	40	19	59	11,247,406
Colombia A./	44	4,551	20	46	66	3,005,530
Ecuador B./	53	1,548	28	45	73	1,129,821
Mexico A./	45	15,200	30	20	50	7,600,000
Peru A./	43	3,850	23	37	60	2,316,991
Costa Rica A./	46	720	35	15	50	363,630
El Salvador A./	63	1,094	38	52	90	997,360
Guatemala A./	64	1,890	29	59	88	1,663,200
Dominican Republic C./	51	816	35	52	87	716,000
Jamaica D./	40	405	24	56	80	324,000

@ Rural Labor Force statistics are based on population figures (1975) in Table 2.

* Cultivators, tenants, insecure land reform beneficiaries and other tenure statuses which give access to land for cultivation are classified as "Near-Landless." Estate workers, temporary agricultural laborers, and non-agricultural rural workers (artisans, etc.) are classified as "Landless."

What stands out from Table 3 is the number of countries where the percentage of near-landless is one and a half or two times as large as the percentage of landless. Only in Brazil, Mexico and Costa Rica does the opposite case occur. Can we infer from this that the situation is not so bad in the Latin American region because many of the rural poor do have some sort of access to the land? I would argue that we cannot. Access to land does not have quite the same meaning in Latin American countries as it does in many densely populated Asian countries. And the majority of poor farmers in Latin America have so little land, such insecure access to it, and/or such inferior agricultural institutions (marketing, credit, extension, etc.) to serve them, that their on-farm income and employment

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Notes to Table 3.

A. For a more detailed analysis of how estimates of landlessness and near-landlessness were prepared for these countries, see the individual country profiles. As a general rule, studies were consulted which surveyed land tenure statuses and/or the proportion of workers falling into various occupational acitivities. Latest figures on rural work forces were then divided by those proportions.

B. For Argentina and Ecuador, estimates of the Comite Interamericano de Desarrollc Agricola (CIDA) were thought to be validsince neither country has undergone a major change in the structure of landholding since these surveys were taken. See Tenencia de la tierra y desarrollo socio-economico en el sector agricola: Argentina and Tenencia de la tierra y desarrollo socio-economico en el sector agricola: Ecuador, Washington, Pan American Union, 1966.

C. Calculations for the Dominican Republic are based on an estimated labor force of 5.1 million for 1978, 51% of which are employed in rural areas. Of the rural labor force, government surveys indicate that 80+ percent of the rural economically active persons earn less than a basic minimum income of 60 pesos per month. (See: AID Statistical Data Book, Dominican Republic, Agency for International Development, Santo Domingo: June, 1977) Divisions of landless and near-landless were made according to the 1971 agricultural census.

D. Landless and near-landless divisions are based on the Jamaican agricultural census of 1968--1969. Data on population, workforce, etc. was obtained Area Handbook for Jamaica, Washington: American University, 1976.

is in many cases no greater than that of a landless worker. In preparing the material for this report, a search was made for studies that were able to say, based on empirical findings, that it made a significant difference in the quality of life of a Latin American peasant as to whether he was landless or nearly so, and that access to a very small amount of land was the factor that explained this difference. Of course, such research is not common. Nonetheless, no studies were found that could unequivocally show that the nearly-landless were better off than the landless.

What, then, do the percentages which fall into the gross categories of "landless" and "near-landless" suggest? It would be safe to infer from them that farmers--many of them part-time farmers who cannot earn a living from their parcel alone--make up a very important component of the workforce in this region.

If we break down the mass of rural poor using more precise occupational statuses, then we can begin to make inferences concerning the varying levels of poverty within this group. Among landless workers, a number of studies have shown that those who have only temporary forms of employment are worse off than those who have permanent jobs in agriculture. Among the cultivators, tenants, share-croppers, squatters, etc. are often worse off than those who own their own parcel. Using surveys of land tenure and/or occupational status, Table 4. is an attempt to differentiate the "landless/near-landless" group into more concrete categories.

Table 4. A Breakdown of Landlessness and Near-Landlessness by Occupational Status in Selected Latin American Countries

Country	Rural Labor Force		Differentiation of Landless/Near Landless by Tenure Status (Percentages)					
	% Landless, Near-Landless	Absolute Numbers	Permanent Workers	Temporary Workers	Cultivators	Tenants	Land Reform Benefeciaries	Artisan, Other
Argentina	70	1,529,080	21	20	30	28	-	2
Bolivia	80-85	1,431,000	12	24	54		-	10
Brazil	59	11,249,406	19	31	12	20	-	18
Colombia	66	3,005,530	13	13	54	16	-	4
Ecuador	73	1,129,821	15	17	40	22	-	6
Mexico	50	7,600,000	5	43	24	-	17	11
Peru	66	2,316,991	5	18	28	12	22	15
Costa Rica	42	363,630	10	44	16	-	-	30
El Salvador	90	672,140	16	20	17	37	-	10
Guatemala	88	1,663,200	10	23	57	10	-	-
Dominican Republic	87	716,000	15	20	30	25	5	10

What can be observed from Tables 1, 3, and 4 is the large diversity of land tenure structures and rural labor forces in the Latin American region. Colombia, Guatemala and Bolivia emerge as countries with many minifundio farmers. Mexico and Costa Rica have large percentages of non-permanent workers. Brazil and El Salvador also have the majority of the rural poor falling into "insecure" occupational types such as temporary workers, tenants, artisans, etc.

The information in Table 4 is useful only to a certain extent. It helps to be aware of when the rural workforce of a country features a large landless proletariat; a subsistence sector pulled toward temporary labor on the plantations; minifundistas increasingly oriented toward production for urban areas; or an important sector of constrained land reform beneficiaries. But the differentiation of the rural poor into fixed occupational categories is in part academic. What we know from numerous micro studies is that people with scarce resources are very limited risk takers. And so the rural poor do not simply have one occupation: they may depend on four, five, or even more types of activities to earn a living. The relevance of this for applied development situations is that peasants will reject policies designed to aid them in one income-earning activity if such programs interrupt other income-earning activities and pose too much risk of being unemployed. For now, the best thing that could be observed about the rural poor is that most of them have one or two primary occupations which alternate with one another during the various seasons of the year; however the employment generated from these primary oc-

cupations or (more likely) the remuneration is not enough to provide for the majority of them a minimally adequate standard of living.

SECTION II: SOURCES AND TRENDS OF LANDLESSNESS IN LATIN AMERICA

In terms of sources and trends of landlessness in the Latin American region, the number one cause of rural poverty has to do with institutional rigidities which preserve a maldistribution of productive resources rather than an absolute scarcity of resources per se. Even in countries such as Argentina or Uruguay where the amount of arable land per worker exceeds 10 hectares, more than 50 percent of the agricultural work force earns low and unstable incomes due to the skewed distribution of landholding which permits enormous extensions of land to be tied up inefficiently by large estates (called latifundios). The problems become more acute in densely populated Andean and Central American countries such as El Salvador where limited arable land coupled with population growth and lack of employment opportunities in modern urban sectors have brought the landless and near-landless into more frequent, jostling contact with the latifundio sector.

The institutional context has given large farmers agribusiness and/or foreign investors other advantages as well. For example, in Brazil, Guatemala and Bolivia one encounters such producers being granted or sold at nominal costs huge tracts of public lands in frontier agricultural regions. Ernest Feder reports that since 1964 foreign multinations have acquired from 32-35 million hectares of arable land in several different states in Brazil.[2./] Many governments in

the Latin American region feel they need to create "confidence" in these large agricultural producers by such means as tax exemptions, cheap credit, import permits and/or subsidized gas, oil and water. All of these public policies preserve and increase the inequities among tenure classes.

Another way in which institutional rigidities block the redistribution of resources to the rural poor is in the political checks placed on the organization of rural workers and the inadequate enforcement of national labor codes on large estates. In some cases such as Brazil, Chile and Guatemala political organizations among small holders, tenants and migrant laborers have been banned by the state. In other cases, right-wing vigilante groups such as the "Mano Blanco" in Guatemala assassinate peasant leadership. Some countries like Mexico, Venezuela and recently Peru are characterized by mass organizations of agrarian reform beneficiaries. However, these organizations are controlled by the state and seldom serve as vehicles to press economic demands of the rural lower classes against the interests of commercial farmers or urban consumers. The biggest problem in every Latin American country is that the bulk of the landless or near-landless have no organization and therefore possess no means of extracting higher wages, higher prices, or compliance with legal statutes concerning contracts, working conditions, living quarters, and the provision of medical or educational facilities.

By far the most important trend affecting the landless and near-landless in the Latin American region is the commercial transformation of latifundio estates and the accompanying breakdown of social relationships that had previously formed around them. Large traditional estates were an important source of employment and access to land; and commercial farms in fertile areas also employed sizable amounts of seasonal labor. In almost every country, however, trends show alarming displacement of labor due mainly to the commercialization of agriculture. For example, in southern Brazil government efforts to promote agricultural exports (soy beans, cattle, wheat) have led to the replacement of labor intensive crops such as coffee by labor extensive crops which are amenable to mechanization. In the states of São Paulo and Paraná the percentage of employed agricultural labor has not only declined relatively but also in absolute terms. It appears that an important "escape valve" which provided seasonal employment to peasants who migrated from the drier northern parts of the country has been significantly closed. Similarly, the expansion of the plantation sector and subsequent displacement of tenants, permanent and seasonal laborers by cattle raising has also been reported in several Central American countries.

Mechanization has also had a dramatic impact on the land tenure structure. The most mechanized rural sectors in the region are Argentina, Cuba, Chile, Colombia, Uruguay and Venezuela with one tractor for approximately 100-200 arable

hectares. The Latin American region as a whole is well ahead of other developing regions in terms of mechanization. The introduction of tractors has led to a drop in average labor requirements for the main crops equivalent in man-years per tractor to 4.1 in Chile, 5.7 in Colombia and 6.8 in Guatemala. K. C. Abercrombie estimates that the tractors currently in use in Latin American agriculture have displaced approximately 2.5 million jobs. He calls this a "highly conservative estimate."[3./]

In addition to export promotion and mechanization the penetration by large marketing concerns and foreign agri-businesses has displaced petty traders and further concentrated productive resources in the hands of large producers. Shepard Forman details the concentration of capital at the higher levels of marketing in Brazil, particularly in transportation and storage facilities. This has resulted in commercial elites searching to buy in bulk at the source of production, rationalizing practices which eliminate both the petty trader and the small producer.[4./] A similar process is observable in Mexico where U.S. multinationals have controlled significant portions of Mexican production not simply in traditional plantation crops, but in processed foods and in fresh and frozen fruits and vegetables consumed by the American market. In Mexico, control is not exercised by owning land directly, but rather by providing production credit and technological inputs, as well as owning the plants which receive and process the products. Feder notes that with this new form of penetration

which concentrates land by not buying crops from small producers, thereby forcing them to rent parcels to those who possess capital, water and technology, power is not based on a monopoly of landowning, but rather on a monopoly of capital.[5./] Because much of this is achieved through false front holding companies and surreptitious contracts, it is difficult for even the governments of developing countries to control, let alone labor unions or agrarian associations.[6./]

A third factor which worsens the conditions of the poor are national-level policies which favor urban consumers and depend on the surplus generated by agriculture to finance urban-industrial development. It is doubtful that this situation will change quickly. As can be seen by Table 4, most Latin American countries have a heavy dependency on agricultural exports to earn foreign exchange.

Of course, with such dependence on agricultural export earnings, especially when balance of payments problems are exacerbated by energy imports, governments are loathe to expropriate the unused holdings of the plantation sector or to comprehensively enforce labor codes, social security provisions, etc. Evidence from two countries where social security has incorporated rural workers (Costa Rica and Brazil) indicate that the labor factor was made more expensive precisely at the time that the capital factor was being cheapened relative to labor by subsidized credit, artificial exchange rates, etc. In both cases, a displacement of labor resulted.

Table 5. Economic Dependence on Agriculture in Latin America

	Ag Population As % of Total Population	Ag Exports As A % of Total Exports
Argentina	14	84
Barbados	22	61
Bolivia	57	9
Brazil	42	67
Colombia	42	81
Costa Rica	45	75
Cuba	32	--
Chile	25	3
Ecuador	53	89
El Salvador	56	64
Guatemala	59	60
Haiti	76	--
Honduras	69	79
Jamaica	25	--
Mexico	45	35
Nicaragua	54	75
Panama	42	64
Paraguay	52	67
Peru	44	18
Dominican Republic	59	84
Uruguay	16	--
Venezuela	20	1

Source: 7./

A fourth factor resulting in worsening socio-economic conditions among the landless and near-landless is natural population increase that cannot be absorbed in the modern economic sectors. In most Latin American countries the proportion of the work force that enjoys high productivity and relatively high incomes in these modern sectors is small. Only in Argentina, Chile, Uruguay and Venezuela does it reach 20 percent of the economically active population; in Mexico it is 15 percent; in Brazil, Colombia and Peru it is 10 percent; and in the remaining countries it is still lower. Faced with this condition, one alternative means of survival has been the creation of a new traditional sector--traditional in terms of

income and productivity--called the informal urban sector. In Asunción, Paraguay this sector provides 57 percent of all employment; in Santo Domingo, Dominican Republic, 50 percent. The Government of Mexico found that the "under-employment rate" (i.e., under the statutory minimum) exceeded 35 percent in Mexico City, a metropolitan area with more than 12 million people.[8./] This informal urban sector has probably been the most important escape valve in absorbing excess population that could not find adequate income and employment in the rural sector. The question is, how much longer can the informal urban sector continue to absorb the rural exodus? In Table 5 we see some indication of how this sector has expanded in various Latin American countries over the past 20 years.

Another response to the inability of the modern sectors to absorb population growth has been the subdividing of subsistence holdings and the proliferation of minifundio. In Brazil, for example, according to the 1960 census figures, 1.5 million holdings (45 percent of the total) had 10 hectares or less of land. In 1970 this same type of holding numbered 2.5 million (50 percent of the total). A similar process occurred in Mexico, where the 1970 Ejido Census recorded 22,281 ejidos and agrarian communities---- 10 percent more than 1960. The number of ejido plots regarded as individual farm units increased from 1.5 million in 1960 to 1.8 million in 1970, an increase of 23.4 percent. Similar phenomena can be observed in the highland regions of Andean countries such as Ecuador, Colombia, Peru and Bolivia.[9./]

Table 6. Percentage of Population Living in Towns In Selected Latin American Countries

Country	1950	1960	1970
Argentina	65.5	73.6	78.9
Bolivia	25.8	29.9	35.5
Brazil	30.8	40.2	47.6
Chile	55.8	63.8	70.4
Colombia	35.0	47.0	57.7
Costa Rica	29.1	31.2	33.6
Dominican Republic	21.5	28.8	36.9
Ecuador	27.3	36.1	45.7
El Salvador	27.6	31.4	37.9
Guatemala	24.1	27.3	30.8
Haiti	10.1	12.4	17.3
Honduras	17.4	20.8	27.7
Mexico	46.1	54.0	62.3
Nicaragua	28.1	33.8	40.0
Panama	35.4	42.4	50.2
Paraguay	28.0	29.9	36.0
Peru	31.2	38.7	49.2
Uruguay	67.5	74.9	79.9
Venezuela	48.7	62.9	71.9

Source: 10./

Another important escape valve for population excesses in Latin America has been uncontrolled spontaneous colonization of frontier agricultural areas. Responses of this nature have occurred in Argentina, Bolivia, Brazil, Colombia, Costa Rica, the Dominican Republic, Guatemala, Paraguay and Peru. The difficulty with this type of colonization is that it tends to

be destructive to virgin lands. Squatters with insecure tenure have no incentive to develop farms. Primitive farming methods squander soils and destroy woodlands, causing problems with erosion that will be difficult and costly to repair. Although certain countries (e.g., El Salvador) face a situation where there are no more frontier areas, throughout most of Latin America this escape valve still exists. Even where access to these frontier areas is limited, transnational migration has relieved some pressures stemming from lack of rural employment opportunities such as the migration flows from Bolivia to Argentina, Haiti to the Dominican Republic, and El Salvador to Guatemala.

SECTION III--PATTERNS OF EMPLOYMENT; WORKING AND LIVING CONDITIONS; AND ACCESS TO PUBLIC GOODS AMONG THE RURAL POOR IN LATIN AMERICA

In Section II we examined several of the macro trends which are affecting rural poverty for the worse in Latin America; here we look at the conditions produced by those trends. Because a mind is numbed by figures that spiral into the millions, no attempt is made to estimate aggregate statistics on the amount of unemployment, malnutrition, etc. Rather, the approach here is to present examples from specific micro situations in hopes that they will increase our qualitative understanding of important problems and conditions faced by the landless and near-landless.

Andrew Pearse noted that the number of cultivators who may be described as small in the sense that they own or have access to sufficient land to maintain a family livelihood may be stable or declining, but there is a larger and increasing number of cultivators who can only be described as "marginal" since they have access to "sub-livelihood" lands only and must compliment their own production from other income such as the sale of labor to other local farmers; seasonal migration; petty commerce; artisan production, etc. The most serious problem facing Latin American agriculture today is the inability of these marginal families to earn enough even to subsist. It is not just small numbers of people who fall into this precarious category. Indeed, in many countries 50 to 70 percent of the economically active persons in agriculture are landless or near-landless.

This mass of people is marginal in both an economic and a social sense. Economically, they lack employment which will pay them for the value of their labor. Socially, the kinship and clientalistic relationships which used to provide assistance to them has disintegrated, especially as they are forced beyond their traditional village environment in search of seasonal employment or permanent wage labor as landless agricultural workers.

In terms of income earning and standard of living differences among the rural poor, hired workers as a group tend to be worse off than producers on minifundios, although there are different terms of employment for landless laborers. Some

farm workers are allotted small plots of land for growing subsistence crops, while others are hired only for wages. Feder notes that available evidence tends to support the view that pure wage workers, whose numbers are steadily growing throughout Latin America, are the worst off because of the greater insecurity of employment and the lack of a supply of homegrown food.[11./] It is often the need to buy food and the lack of savings with which to do so which forces these marginally employed people into a vicious circle of debt.

A good illustration of several of the themes we have been discussing--"sublivelihood" access to land; need to find several types of employment; low pay; insecurity of employment; and debt--is Lester Schmid's survey of 120 seasonal migrant laborers in Guatemala. Schmid found that the average net income earned by these peasants from working plots that averaged one hectare in size was $73 per year. At the same time, the average family expenses for the year were $151, the majority of which (91 percent) was spent on food and clothing essentials. Thus these minifundio farmers <u>had</u> to migrate; and they earned an average of $101 for 103 days work. But according to the migrants own estimations, they were only able to take 18 percent of their net earnings on the plantations back to their home community. Forty-five percent of the earnings was consumed by expenditures for food, medicine and transportation while migrating. It is significant, however, that even if every cent not needed for

essentials on the plantations was brought back, that would still not be enough to make up the deficit between what these migrants spent on their home communities and what they earned on their farms. Consequently these marginal Guatemalan peasants are in a constant cycle of debt, which is the usual way they are recruited for work on the plantations because the money lender in their home communities is the labor contractor who recruits them and takes part of their wages earned on the plantations.[12./]

If the male migrants in Schmid's survey fared badly in terms of low pay, poor living conditions and sicknesses contracted while working on the plantations, the female and child laborers fared worse. Most labor contracts were only with the head of the family or with the head and the oldest sons. Only on a few government plantations were women and children as young as 10 years of age given separate contracts entitling them to food rations and payment of transportation. In the Schmid survey, 120 male migrants brought 112 women and children to work with them. This does not seem to be a high ratio of males to females and children. But on some plantations, for example, the rice, maize and coffee plantations in Costa Rica, the bulk of the seasonal and casual workers taken on are women. This is a characteristic that distinguishes Latin America (and Africa) from the major plantation areas in Asia. In Latin America employment on plantations for women is almost always on a purely casual basis; whereas Asian plantations have large resident populations--both males and females--who are provided with work the entire year round.[13./]

In its survey of plantation wages, the ILO did find the practice of paying men higher basic rates of pay than women and juveniles. For example in Colombia, the basic wage for permanent adult male workers in 1969 was 32 pesos, for women workers 19 pesos, and for juvenile workers 15 pesos per day. For temporary workers--mostly women and children--the rates were 31 percent lower than that.[14./] Lester Schmid found that workers on the Guatemalan plantations were generally paid by the piece--thus eliminating age and sex differentials in wages.

Schmid also found in his survey that plantations frequently cheated workers in determining their wages. Boxes into which workers dumped their picked coffee--that by law were supposed to hold 100 pounds--held 122, 135 and even 150 pounds. This cheating, plus the costs to a worker for food, medicine and transportation, plus the fact that workers were only given contracts for one month's duration and could be dismissed anytime after that, serve to illustrate the low-paid, insecure types of employment which landless or near-landless families have to depend on to earn a living. Generally they are not without work to do, they are just without adequate payment for it.

If we stress the employment conditions of migrant workers it is because most observers are not aware of how many Latin American peasants are forced to earn part of their living from this kind of employment. In Guatemala 300,000 minifundio farmers seasonally migrate to work on the plantations every

year--about half of the minifundio sector. Proportions are similar in the plantation economies of Central America. As much as 30 percent of the economically active persons in agriculture in the Andean countries migrate. Feder calls migration the "forced geographic mobility of the peasantry." To him it is not evidence of a dynamic peasantry attempting to improve its economic and social status; rather it is an outward sign of a deep-seated malaise in rural Latin America.[15./] In addition to the seasonal migration which is typical in Central America, in countries such as Brazil, there are a large number of 'professional migrants' who simply move from place to place with their belongings packed in a bundle on their back. Or there are those permanent migrants who simply chose to divorce themselves from populated areas and head out into the wilderness. Census figures show that about 2.5 million chose to do this between 1950 and 1970 in Brazil.[16./]

Governments publish social indicators such as literacy rates, hospital beds per thousands of inhabitants, etc. But I believe that to distinguish how well or poorly off these landless or near-landless peasants are in their employment situation one has to look at their degree of marginalization and judge how isolated they are from relationships (among kin or with patrons) which could aid them during critical periods. To present two illustrative examples, Johnson discusses the case of a fazenda in Ceará which was sold by a more traditional

landowner to a more profit-oriented landowner, and what effect this change of patron had on the share-croppers working the estate. The sharecroppers were distressed when they could no longer pick fruit from the estate's orchards; when the new owner would not arrange for them to obtain medical care in the state capital, or when the new owner no longer bought green crops in bulk. But only one vertical relationship had changed for these peasants; they still maintained old vertical arrangements with the farm administrator and with local merchants and landlords who gave them credit and other sources of employment. Also unchanged were the horizontal kinship relationships among the estate workers and the conditions under which they had access to land.[17./]

In contrast to the above where the biggest change seemed to be one of style, is the situation of landless wage laborers in highly commercial farm districts in Northwestern Mexico. Notwithstanding the fact that they work in an area where the biological, chemical and mechanical technologies associated with the green revolution have been used for 30 years--and perhaps because of it--these wage workers are excellent examples of the social marginalization discussed previously. Their condition as landless wage workers cuts them off from almost all ascriptive/kinship relations either among themselves or with wealthier elements. Cynthia Hewitt de Alcántara describes their living conditions:

"Once the cotton harvest in Sonora is over, migrant laborers go on to another cotton growing area further north or east, or return to their homes in the south. But the permanent rural proletariat of the Yaqui Valley and the Hermosillo Coast settles down to wait out a grim and jobless winter...The utter disorganization of most rural settlements in the Yaqui Valley seems to isolate the proletariat within them to an extent unthinkable in more closely knit communities in traditional farming areas. Not only do the former have no material resources on which to draw during periods of worst unemployment; but they also have precious little social support.

Housed in reed or cardboard huts built on small pieces of land ceded to them by ejidatarios or private farmers who ask a certain number of free days of labor in return, the landless laborers can be evicted at any time. Their diet of beans, tortillas, chile and coffee during the good times is maintained through indebtedness to local storekeepers who charge interest even when that should not be necessary. The institution of paying landless laborers in script is widespread throughout the commercial farming areas of Sonora; and storekeepers discount as much as 50% the value of the script in return for accepting IOUs. In bad times, families of ordinary hired hands survive on anything they manage to catch on the seashore and what can be raised on centimeters of houseplot land. Their children are as weak and undernourished as any to be found in the remotest subsistence regions of central Mexico, except in the limited number of communities where they are fortunate enough to be able to participate in a school breakfast program."

18./

The living conditions outlined above suggest criteria for evaluating in an applied situation who are the worst off and/or poorest of the poor. Access to a homegrown food supply is critical. Security of employment and real wage rates are equally important. Working in an area where one has built up patron-client or kinship relations is also a major determinant of well-being, even though such a factor can never be expressed in quantitative

terms. Having a labor organization and/or making seasonal migrations within a group of mutually supportive kin may lessen the harshness of completely completely commercialized relationships. To these may be added a fifth criteria: maintaining the family (xtended or nuclear) as the social unit so that females or children whose wages rates are almost always markedly lower do not become the sole supporters of themselves. The absence of one or several of these conditions are what create and widen differences in the standard of living among the rural poor.

A last aspect of rural poverty that is important to deal with is the organizational weakness of the landless and near landless and their inability to gain access to public goods and services, particularly in areas where traditional tenure structures have been abolished. Often the traditional landlord patron is replaced with a new middle class patron who has access to capital, connections with government bureaucracies, or both. Pearse calls an individual who accumulates personal power far beyond the normative blueprints of the organization he represents a cacique. He claims caciquismo typically occurs where organizations proposing to working according to rational rules are introduced, but where conditions for their proper performance do not exist.[19./] Sylvia Gomez-Tagle gives an excellent illustration of this with the experience of land reform beneficiaries in Mexico. She investigated the functioning of ejido credit societies in the Laguna area of commercial agriculture. When land reform occurred there it was difficult to establish a good relationship between ejidatarios hitherto isolated, still illiterate, and accustomed to clientelism, and the Ejido Bank with its intricate, standardized requirements. Failing to

find a sufficiently experienced representative among themselves, the ejidatarios appointed a smart town worker who helped organize the ejido as representative of their credit society. The new representative became a typical raqueteer-cacique, basing his control on a supporting group to whom he distributed largesse and free drinks on occasion, and crediting them with work they had not done. Apart from inflated, uncontrolled credits, the cacique misappropriated funds to establish his own private store. The illegal selling of "moonlight cotton" to private buyers instead of to the Ejido Bank also frequently occurred. What developed was a covert agreement between venal bank officials and caciques "representing" the ejidatarios to exploit the relationship between the two institutions to their own personal benefit.[20./]

What Gomez-Tagle reported from Mexico also seems to have occurred on a large scale among peasant syndicates in Bolivia. Some of the ways in which syndicate leaders have taken advantage of their authority to emerge as new local strongmen include the pillage of estate property and livestock; the pocketing of municipal dues; the charging of fees in connection with land transfers; benefits from lands worked collectively by union members; renting out of common pasture lands; use of union transportation for the commercialization of private products, and even the manufacture and sale of cocaine.[21./]

Although reports of cacique abuses are frequently associated with countries that have undergone land reform (Mexico, Bolivia, Venezuela), it can occur in any situation

where authority and public goods are being channeled into any local situation. Also, a cacique need not be only a political middleman who dominates local peasants and "represents" them to complex bureaucracies: he can be--and frequently is--an economic middleman as well. Haney relates an interesting example of economic caciquismo from an area of minifundio holdings producing fresh fruits and vegetables for urban consumption in Colombia. There local merchants and professionals had taken advantage of a public good (extension service) and combined it with their ability to command capital and lend credit in order to control the majority of small producers (85 percent of the 203 families Haney interviewed) and thus be able to buy their crops at 50 to 100 percent below the real market value of the products.[22./]

The importance of caciquismo--both political and economic middlemen--is that even when the traditional landlord is removed, this new form of domination replaces him and has the same effect of blocking any real distribution of income, status or political power to the peasantry. The important thing to remember is that a cacique, where he is a syndicate leader in Bolivia, an ejido representative in Mexico, a labor contractor in Guatemala or a buyer in Colombia, often gets his power from access to public goods or some delegation of public authority. He functions because of a lack of peasant participation and an inaccountability to his constituency. Designing programs to remove the old landlord and improve access to land will ultimately fail if they do not have provisions for controlling this new type of caciquismo.

SECTION IV: GOVERNMENT POLICIES TOWARDS THE LANDLESS AND NEAR-LANDLESS

With the exception of Cuba, no government has dedicated itself in a direct way to achieving massive rural transformation and the provision of employment, health and education services and adequate housing to the majority of rural people. If public policy has made an impact on the landless and near-landless, in most Latin American countries it has done so negatively with policies favoring commercial farmers as well as "public safety" programs to repress the peasantry. Public investment programs and food prices have favored urban interests; and in some countries such as Peru where bonds from estates expropriated by the agrarian reform can only be invested in urban industrial development, an open process of decapitalizing agriculture seems to be taking place.[23./] However, it would be wrong to give the impression that nothing is being done to help the landless and near-landless. As Solon Baraclough points out, political forces in Latin America no longer have the option between reform and no reform. Rather, serious policy debates are between proponents of indirect reforms which try to resolve social conflict without altering the present rural power structure and direct reforms which aim to make massive changes in the rural power structure in order to redistribute rights to land and redesign institutions in favor of the peasantry.[24./] Excepting Cuba and possibly Peru, public policies in regard to the landless are indirect and incrementalist.

Policies to Increase Employment

A. Intensification of agriculture. Improved genetic technology has not been introduced on a widespread scale throughout Latin America. The only significant case where an attempt was made to diffuse hybrid maize to minifundio cultivators was the Plan Puebla in Mexico (CIMMYT) which linked the adoption of high-yielding varieties with credit to purchase fertilizer. In an area with over 500,000 cultivators, half of whom have two hectares or less, only one sixth of the minifundistas took advantage of the Puebla program and another sixth adopted some of the practices. The reasons why the other two-thirds of the minifundio population did not adopt the HYV after six years of advertisements, demonstration plots, films, etc. are several; but the principle one seems to be that the Puebla project hooked credit, fertilizer and improved practices together in such a way that it made participation difficult for part-time farmers who possessed little land and thus had to seek off-farm employment. The recommended practices were not designed for the minifundista who could invest only 60 to 75 days tending his plot.

B. Rural Works Programs. Here also Latin American governments have not sponsored public works programs in any extensive way. A few exceptions to this are Brazil where SUDENE operates famine relief programs in the Northeast in times of drought; the "Pick and Shovel Program"--a labor-intensive road building project in Colombia; and the Ministry of Health in Mexico which sponsors public works to dig wells

and extend drainage facilities in rural areas. Not one of these projects are as nearly as large as Asian public works programs in terms of scope.[25./]

C. Settlement and Colonization. A number of countries (Brazil, Costa Rica, Guatemala, Panama, Paraguay, Peru, Venezuela) are striving to channel migration towards new areas and to open frontier lands for cultivation. Because conservative political forces are loathe to sponsor direct land reforms, opening up the frontier has great appeal to them as a solution for landlessness. Unfortunately these frontier agricultural projects are not conceived primarily in terms of resettling the landless. The thrust of government policy in Brazil, Bolivia and Guatemala, for example, has been to mobilize private funds to open up new lands for corporate plantation agriculture. This policy has the effect of recreating the same agrarian structure in virgin land areas as characterizes the more traditional agricultural regions.

One difficulty that plagues colonization projects is the high cost per settlement family. For example, Nelson discusses a directed colonization project in La Chontalpa, Mexico that spent $1,070 per hectare of land cleared and $18,950 per family settled. The total number of beneficiaries on this project were 4,800 families, only 1,600 more than had lived in the region before the project began.[26./]

One country which seems to have enjoyed some success in settlement and colonization is Paraguay. From 1956-1968, 30,000 plots of land suitable for colonization were assigned

to families in the Eje Norte and Also Parana regions. Colonization was semi-directed with the government providing some roads and several rural industries such as a saw mill and a sugar mill. Settlement success was due to the presence of some infrastructure and the availability of valuable natural resources from which settlement families could readily earn a living.[27./]

D. Rural Industry. Only one country in Latin America-- Mexico-- seems to have an active policy at present for creating industries in rural areas. Among other things these include food processing plants, small mines, clothing factories, resin industries, brick factories and tourist resorts. The industries are formed in conjunction with ejidos and their products, especially processed foods, are often sold by the state marketing agency CONASUPO in its 5,000 retail outlets throughout the country. This program only began in 1973 and unfortunately not enough is known about how many industries have actually been created, how many new jobs have resulted, and what economic successes or difficulties the new industries have had.

The rural industries program in Mexico is part of a larger national program of integrated rural development in Mexico (PIDER) which puts primary emphasis on creating productive employment in rural areas. Funds are being matched by the Mexican government and the World Bank. The latter institution also gave a large soft loan ($66 million) to Colombia recently for similar integrated rural development projects.

"Basic Needs" Policies

Lacking economic resources to increase employment in the countryside and political resources to change the tenure structure, many governments have adopted policies geared toward meeting basic needs. This is characteristic of Costa Rican, Guatemalan and Bolivian public policies. These governments do not have comprehensive targets they are striving to fulfill in terms of meeting the educational, health care, nutrition, etc. needs of a certain proportion of the rural population within an explicit period of time. Rather, following a basic needs strategy seems to consist of investing in social infrastructure in the absence of other types of policies.

Institutional Reforms

Because Latin American countries do not suffer from an absolute lack of land, but rather from a maldistribution of it, all serious debate concerning rural sector policy generally revolves around institutional reforms. Countries that have not been able to sponsor direct land reforms have generally tried more indirect approaches such as land taxes or the enforcement of tenancy laws, labor codes, social security legislation or laws for contracting migrant laborers. Enforcing labor codes is difficult, however, because of the weakness of many of the legal provisions as well as the lack of enforcement services and the low educational standards of the workers in question.

Sometimes the mere passage of such kinds of legislation has negative consequences. The effect of tenancy laws in Colombia, Argentina and Peru was to cause the eviction of thousands of small tenants. The cost of social security benefits was cited by large farmers in Costa Rica as a reason for replacing labor. In Brazil the attempts to form rural unions and peasant leagues to force large landowners to respect the rights of renters and resident workers has led to serious conflict.

CIDA (Inter American Committee on Agricultural Development) concluded that the way in which tenancy laws have occasionally been made to work is through collective bargaining--i.e., through the efforts of workers federations and smallholders cooperatives. These unions were able to attract public attention and even bring court action against landowners who violated regulations. This is the motivation behind the attempts to form cooperatives and small farmer organizations in several of the Central American states today (Panama, Costa Rica, El Salvador, Guatemala and Honduras).

In terms of direct, massive tenure reform the most serious questions to be resolved are: what lands should be subject to reform? What compensation should be given to previous owners? Who should be the direct beneficiaries of the reform with what priorities? What tenure system should replace the old one? What complimentary investments are necessary to solve social and production problems, and how should they be

financed and administered? Most of the direct attempts at land reform have floundered attempting to resolve those questions.[28./]

For example, the Mexican land reform succeeded in distributing half the cultivatable land in the country to reform beneficiaries in the 1930's. But the collective units were allowed to fragment into individual parcels; and today the bulk of ejidatarios are, functionally speaking, minifundistas or renters of land to larger farmers. From 1940-1970 the land reform process in Mexico suffered from a lack of productive investment in the ejido sector and a lack of agrarian and agricultural reforms which would have converted ejidatarios into secure, productive small farmers.

In general terms the experience of Bolivia is similar to Mexico's. In 1952 thousands of peasant groups took over the estates they worked on and ejected the landlord. So land reform occurred as a result of social revolution. The estates were divided up and it was not uncommon for peasants to receive as many as 20 little plots of land at various altitudes and locations. Agrarian (i.e., titling) and agricultural reforms have been much slower in occurring. As in the case of Mexico, the regime came to depend heavily on peasant support to control other sectors of the polity, particularly trade unions. This dependence has caused widespread caciquismo on the national, regional and local levels of peasant organization in Bolivia, with peasant leaders serving more to control the votes and

filter out the demands of syndicate members rather than press those demands upon the regime.

The innovative aspect of the recent Chilean and Peruvian agrarian reforms were that they sought an organizational format which attempted to hold reformed units together, rather than allowing them to be broken into numerous small parcels. Of course, the Chilean land reform did not survive politically and a process of reconcentration is taking place, the dimensions of which are not clear as yet.

Initially the Peruvian land reform held together only the large commercial plantations in the form of collectives and planned to sponsor a capitalist agrarian reform which would create family size farms that would benefit one-quarter to one-fifth of the peasantry. Pressure from those excluded by or displaced from their parcels as a result of the reform process has caused the government its plans to create a yeoman farmer class and move to create more and bigger cooperatives in the hopes of extending the reform process to more beneficiaries. Numerous difficulties exist with these cooperatives, not the least of which are lack of peasant experience with cooperative organizations and peasant desire to fragment reform units. The military government has announced plans to transfer resources from the more endowed to the less endowed cooperatives, but it is not clear as yet how serious the regime is about this, whether it has

found a workable organizational vehicle for doing so, and whether it can overcome the political resistance of the richer agrarian reform units.

SECTION V: NEEDED FUTURE RESEARCH

In Latin America no information--except perhaps personal income statistics--is more difficult to obtain than reliable employment data. To better meet this need governments can do several things. One is to take agrarian censuses according to the conditions of access to land (or, security of access to land) as well as by farm size. A second thing would be to place emphasis on locating and counting underemployed people--not only in rural towns, but in outlying settlements and harder to get at areas as well.

An important gain would be to design and implement data collection on rural employment not every 10 years, but on an ongoing yearly basis. Via adequate sampling techniques, ways can be found to give an idea of migratory flows; available seasonal employment in agriculture; wage rates, etc. Such information would be of great value in understanding the pressures and trends in regard to landlessness, and the design of low cost ways to monitor this may be a real contribution to the enormous problem of unemployment.

In a similar sense, both quantitative and qualitative information is lacking about the behavior of the commercial

agricultural sector: analyzing the extent to which large export-oriented plantations can absorb labor and expand or contract their land usage is just as critical to studying the landless as studying the landless themselves. Rodolfo Quiros Guardia concluded from his research on the plantation sector in Central America that the expansion of this sector is a difficult process to distinguish. This is true partly because plantations sometimes expand by lands already under their control, merely displacing tenants or hired hands. Also, when they do buy up lands from the minifundio sector, this process often cuts across administrative boundaries, making it difficult to detect by normal census procedures. Quiros also observed that another reason knowledge of the effects of the export sector on the subsistence sector are not well known is simply because research on the subject is lacking.[29./]

A third area of needed research which compliments the previous two is a constant monitoring of the real wages and costs associated with seasonal migrant labor. If we stress this form of employment, it is because it is a critical source of income for a large number of people in Latin American countries--possibly second only to the cultivation of small subsistence plots. In the absence of being able to increase on-farm employment, perhaps the most feasible policy alternatives to consider are ways to increase the net earnings of migrant laborers. Real wages

and costs for seasonal agricultural employment must be calculated not simply in terms of head-of-household migrants, but in terms of all family members who perform such labor. Some important questions to have data on are: does it benefit a family to be paid strictly in terms of cash, or cash and kind? What variables determine the value of one form of payment over the other? How much opportunity and mobility is there for seasonal workers to discover information about wages, working conditions and real costs associated with working on different plantations? What are the factors that are critical to increasing the seasonal migrant's decision-making ability and real income derived from the sale of labor? An adjacent research need is to investigate the contracting procedures for seasonal and casual laborers and the extent to which they detract from the workers' ability to earn higher wages.

Even when quantitative monitoring or good micro case studies cannot be done, a need exists to make estimates of the "escape valves" each country has to equilibrate the imbalances between human needs and physical resources in densely populated rural areas. What do the rural poor do: subdivide land; cultivate more intensely; migrate to other areas; control family size; or reduce levels of living? What seem to be the trends in the escape valves open to them? To what extent are there escape valves continuing or failing in their ability to relieve population pressure? What kinds of public policies are necessary to preserve the flexibility of some of the less onerous options?

If we were more accurately informed about the size of, trends in and barriers to internal and transnational migration within the Latin American region, we would better understand an important escape valve for the landless. More information is needed about the migratory flows from the Northeast of Brazil to other areas of the country, and also about the migratory flows from the highland to the lowland areas of the Andean countries. About the only satisfactory reporting of a major transnational flow is from Mexico to the United States. We need to know more about the dimensions of the flow from Haiti to the Dominican Republic; from Bolivia to Argentina; or among the Central American Republics. If demographic research put less emphasis on searching for statistical causality and more emphasis on reporting migratory flows and the factors influencing them, they would be much more valuable to evaluating the situation of the landless and near-landless.[91] In terms of needed research on local level institutions and behavior patterns, in Latin America also there is a paucity of good anthropological studies which shed light on how peasants calculate their income-earning strategies and try to reduce the risk of being unemployed. Failure by external agents to understand that many peasants spend only 25 to 40 percent of their disposable days of labor in on-farm activities can ruin development programs that are too excessive in their time requirements.

If we were more informed of how peasants calculate their income earning and employment strategies we would have a better basis for distinguishing more successful strategies from less successful ones. How much do peasants invest in networks to secure employment for themselves? How do they calculate the costs of going further and further beyond their home communities to seek employment? How much does their income-earning situation affect decisions about family size, about what to grow, etc? What kind of entrepreneurial and cultural characteristics distinguish the peasant who is able to maximize the renumeration from his in-farm/off-farm labors? Finally, given the fact that many peasants have only 60-90 days to spend on their parcels, what kinds of technologies, improved practices, etc. have possibilities for raising their yields?

Another kind of needed local level research is studies of the economic and political middlemen who, in many areas, are replacing the traditional landlord as the dominators of peasant destinies. The need is not to study formal organizations among the peasantry, but to search for the situations where leaders are made accountable to peasant clients and therefore avoid becoming caciques.

Finally, in terms the impact of public policies on the landless, two significant policy initiatives are occurring within the Latin American region which merit attention. One is the programs for "integrated rural development" being undertaken on a substantial scale by the governments of Mexico

and Colombia. The second important policy initiative is the attempt by the Peruvian government to broaden the benefits of its recent agrarian reform by creating a system of large regional cooperatives which propose to transfer income from richer to poorer agrarian reform units.

For governments and policy analysts faced with situations in which much less direct reforms are possible, perhaps a needed strategy of policy formulation and research is one similar to that of central place theorists who make recommendations for the placement of goods and services on the basis of identifying what is lacking in an area that would move it to the next higher level of commercial complexity. Given the formidable institutional obstacles faced by the landless and near-landless, this kind of approach to research might be useful in identifying and removing obstacles that would move certain occupational groups (minifundistas, permanent landless workers, migrants to frontier areas, seasonal migrants, etc.) toward greater income and employment security. For example, the question could be asked: what is lacking in the social, political or economic environment of communities that could reduce the power imbalance between, say, casual laborers, in an area and local elites. The Colombia case study presents an example of how one researcher did this in regard to moving minifundistas in the direction of greater income and on-farm employment.

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COUNTRY PROFILE: BOLIVIA

Population (1977): 4,500,000

Workforce (45% of population): 2,025,000

Percent Ag Workforce: 70%

Agricultural Workforce[1]: 1,417,500

I. Incidence of Landlessness and Near-Landlessness

The lack of census data for Bolivia (the last census was 1950) makes it impossible to offer precise global statistics about the incidence of landless or near-landless peasants and their relative share of factors of production in relation to larger farmers. It is not even possible to extropolate from the 1950 census because Bolivia underwent a social revolution in 1952 which changed the land tenure structure reflected in earlier data. Fragmentary evidence does exist, however, about various categories of landless groups.

As of 1975 the Agrarian Reform authorities had given parcels to 303,543 families. Although these beneficiaries were secure in the sense that they had titles to land, as many as 80 percent of them had insufficient land or insufficient access to other resources (credit, extension, etc.) to make the land productive.

In addition, authorities estimate that 350,000 people--roughly 70,000 families--have migrated down to the eastern tropical lowlands in and around the Santa Cruz area of Bolivia. The majority of this colonization is spontaneous or semi-directed. These farmers practice a slash and burn agriculture and simply move to new lands every 305 years when the soil becomes exhausted.

Besides the minifundistas or squatters on frontier lands, Bolivia has a large number of agricultural laborers who migrate in search of work on commercial plantations. The flow to the Santa Cruz area averages between 40,000-60,000 yearly; and the flow to Argentina (mostly to the sugar estates in Tucuman) fluctuates between 50,000-80,000 yearly.

Bolivia is not an industrialized economy. Roughly 80 percent of the workforce engaged in secondary activities--135,000--are artisans working in small cottage industries.

Finally, there are the unemployed. No one knows for sure how many fall into this group but Bolivia has a very young population; 52 percent are under the age of 20. The World Bank estimated that in 1970 there were 300,000 children in rural areas who did not go to school but who lacked employment. 1./ This was in addition to the officially estimated unemployment rate for 1970 of 16 percent of the workforce.

Totaling these fragmentary figures we arrive at the following:

		Families	Workers
LABORERS:	seasonal/temporary		120,000
	under, unemployed		400,000
CULTIVATORS:	secure, but with insufficient resources	242,000	456,000
	insecure	70,000	140,000
ARTISANS:			135,000
	TOTAL:		1,431,000 workers

The figure of 1,431,000 economically marginal members of the workforce may be conservative in relation to other estimates. In the Bolivian Altiplano, a region where 56 percent of the rural population lives, the World Bank calculated that agricultural activities took up only 17.68 percent of the disposable time. Employment rose to 30 percent of the disposable man/days if other part-time activities such as occasional employment in the cities or mines were included. Estimates for the second densest region in the country--the Yungas and Inter-Andean Valleys around Cochabamba containing 29.8 percent of the rural population are hardly better: agricultural activities absorbed 24.37 percent of the disposable man/days and all activities used only 36.39 percent. 2./

Another indicator of very high rates of rural unemployment are wages paid in rural areas. From its surveys the World Bank estimated that 56 percent of the rural workforce was not able to earn even the minimum wage in the regions they worked in. This percentage rose to as high as 85 percent in the Altiplano and reached 20 percent in the more modern agricultural areas in and around Santa Cruz. 3./

A final estimation of the numbers of people falling into this poorest of the poor category may be gleaned from the Bolivian government's own estimation of the distribution and amount of income per capita:

Distribution of Income, 1969

Category	Annual Income Per Capita*	% Population
Proprietors	1,779	2
Salaried Workers	348	21
Peasants and/or Independent Workers	68	77

*Figures are in US dollars.
Source: 4./

II. Causes and Trends in Landlessness and Near-Landlessness

The Bolivian Land Reform. The amount of land redistributed to peasant families has been very little because most peasants simply became owners of the land they were already working for hacendados when the Revolution occurred. The three major changes occurring in the wake of the land reform are that: First, many peasants are now owners with title to the land. Secondly, many of the archaic work relationships between landlord and serf were abolished. Prior to the Revolution a worker attached to an hacienda estate had to give as many as six days of free labor per week to the estate. Now that this form of rent has been legally abolished peasants are freer to sell their services, with the consequence being a trend toward the increased payment of wages in rural areas.

A third change brought on by the land reform are new kinds of marketing practices. Now that the landlord no longer disposes of the agricultural surplus, trade fairs and new market places have sprung up in rural areas. The middleman--enterprising

peasants who own trucks and are able to buy or transport agricultural commodities from the farm, has become an increasingly important figure in the rural political economy.

As for the distributional effects of the land reform, most studies show that the peasantry is better off in absolute terms as a result of no longer having to pay rent to the landlord. Comparing pre-reform and post-reform habits, Ronald Clark estimated that between 1952 and 1966 the consumption of a peasant family tripled. One indicator of this has been the increased consumption of manufactured goods. Taking as an example the case of one typical ex-hacienda estate, Clark found that among the 200 families that worked there in 1952 there was only one house with a laminated roof; one bicycle; seven sewing machines and one radio. On this same estate in 1966 there were 40 houses with laminated roofs; 80 bicycles; 120 sewing machines and 100 radios. 5./

Another item that has greatly increased in the post-Revolution period is education. The number of students went from 74,000 in 1952 to 361,000 in 1971. The number of secondary schools grew from 59 to 327 in the 1952-1966 period. Primary schools increased from 1,875 to 5,570; and teachers went from 2,808 to 7,941. 6./

Although the land reform has had a liberating effect in terms of social relationships and has made the peasantry better off in absolute economic terms, it has not improved the bulk of the rural population's standing vis-a-vis urban sectors or the rural middle and upper classes. Indeed, the fragmentary evidence available indicates that income disparities are growing.

Trends in Income Distribution--Bolivia

Year	Rural per Capita	Urban per Capita	Ratio
1960	25	173	7.0
1965	28	198	7.1
1970	28	237	8.5

Source: 7./

Three reasons seem to be responsible for the trend of worsening rural/urban income differentials. First, although the agrarian reform laws stipulate that traditional estates without mechanization and employing no form of advanced agriculture are subject to total expropriation, the law makes an exception for modern agricultural enterprises. No more than a third of the property of a 'modern' enterprise can be expropriated. Thus huge estates have been formed in fertile areas recently opened up for cultivation.

Secondly, the land reform has not proceeded at an even pace in all regions of Bolivia. Land reform has advanced most quickly and extensively in the highland areas and Inter-Andean valleys surrounding Cochabamba where peasant syndicates were strong. In a number of areas vestiges of the previous agrarian structure still exist including concentrated landholding; unremunerated peasant labor; and very weak peasant organizations. 8./

Finally, the process of distributing land has created a number of authority positions in the countryside which corrupt individuals have taken advantage of to increase their personal wealth and power. These include agrarian officials who adjudicate

land titles or distribute credit, officers of campesino syndicates at the local, canton and departmental levels; holders of local authority posts such as the mayor, tax collector, school board member, etc.; and economic middlemen. This practice of caciquismo is a new form of domination to replace the previous form of social control exercised by the traditional landlord.

Land concentration, uneven implementation of the agrarian reform, and caciquismo are the major factors explaining income inequality in rural Bolivia. Below we can see that productivity in the Altiplano--an area of small holdings--is markedly inferior to the rate of growth in Eastern Lowlands, the area of commercial agriculture.

Regional Distribution of Population, Cultivated Land and Agricultural Production--1970 (in percentages)

	Altiplano	Valleys	Lowlands
Population	56.1	29.8	14.1
Cultivated Area	43.5	33.0	23.5
Agricultural Product	33.9	39.3	26.8
Annual Growth Rate in Product per Worker, 1965-70	- 5.1	3.0	7.0

Source: 9./

An additional trend affecting productivity and employment in rural Bolivia is the tendency toward the fragmentation of landholding in highland areas and a reduction in the absolute size of parcels. It's a traditional practice for peasants to

cultivate parcels at several altitudes to minimize risk of natural disaster. The land reform did not interfere with this practice. Molina cites a case in the Altiplano where two haciendas were broken into 1,666 parcels to be divided among 115 families. Each family on one hacienda received an average of 10 parcels; each family on the other received an average of 15.7 parcels. The size of the parcels varied between 120 and 1500 square meters. 10./

The above example is not an extreme case. Some peasants have as many as 90 parcels, with plots amounting to no more than a row or two in size. Fragmentation not only wastes time in traveling to and from so many plots, but it impedes conservation measures and also yield-increasing practices.

Along with fragmentation is a trend toward reduction in the absolute size of landholdings. Urioste claimed that from 1950-1973 the average size of landholding declined from 6.4 hectares to 3.4 hectares per family. 11./ A study by the UN/FAO which surveyed 1,640 properties in the Altiplano Norte discovered the following size-distribution of farm units:

Land Tenure in the Altiplano Norte

Average Size	Percent of Total Survey	Number of Cases
1.5 ha	56	921
3.5 ha	23	371
6.2 ha	16	263
8.5	5	85
TOTAL	100	1,640

Source: 12./

III. Public Policies Affecting the Landless and Near-Landless

The Bolivian government has tried two approaches toward the rural unemployment problem. One has been to open up frontier agricultural lands in the eastern plains area so that the landless population of the highlands can migrate there. The second policy approach has been to attempt to change the agrarian reform laws to provide for parcel consolidation in the highlands. In the case of both measures, however, emphasis has been less on employment creation and income equality and more on production efficiency--which is likely to produce even greater income disparities over time.

In the case of opening up the agricultural frontier similarities have been noted between Bolivian policies and the Brazilian approach to agricultural modernization. Bolivian law provides that large grants of public land may be made to corporations and institutions for the purpose of establishing modern agricultural enterprises in the eastern lowlands. Huge cattle ranches have been formed, as well as commercial estates growing cotton, rice and sugar cane. In the sense of aggregate economic growth these estates have been successful in freeing Bolivia from costly food imports. But no social criteria have been applied to assure that the large landholdings justify their size by creating more employment, paying better wages, etc.

As for land consolidation, already in the Lake Titicaca area titles will not be issued for properties less than five hectares. Proposed legal changes are to expropriate land if it is left fallow for more than two years; and also to consolidate

small farms to form cooperatives. One Bolivian sociologist, Javier Albo, warned that the cost of consolidation would be a more equitable distribution of income and power because the application of the law as it currently stands would lead to a greater concentration of land in the hands of medium-size farmers and large agricultural and cattle enterprises. 13./

IV. Labor Conditions, Wages and Organization Among the Landless and Near-Landless

Two factors that will weigh heavily in the future position of the peasantry in the Bolivian political economy are the treatment of agricultural wage laborers and organization among the peasantry.

Agricultural Laborers. Every year harvesters of cotton, rice and sugar cane migrate to the Santa Cruz area. Seasonal workers suffer from a complex of problems that prevent them from earning decent wages. The three biggest problems are: low salaries which don't give workers just compensation; the lack of adequate legal protection for agricultural labor; and the lack of organization among this occupational group. The present General Work Law excludes agricultural workers from participating in legal negotiations to determine such things as the social benefits seasonal workers should receive; minimum safety and health conditions; and medical benefits.

The biggest problem that stands in the way of a smooth and increasing flow of migratory labor towards commercial farms on

the Eastern Lowlands is that the wages paid don't represent sufficient incentive to cover the bother and expenses of migrating. Javier Albo gives an example of the highest advertised wages on the cotton plantations. On surface appearance it would seem that the picker who works hard and saves his money could take hom the equivalent of US $500 after two and a half months of work. But the sad reality is quite different. After taking out the price of food, deductions, dues, and in some cases cheating on the weight of the picked cotton, workers generally earn between US $25-$37 per month. Albo says that the best indicator that this wage does not offer sufficient economic incentive is the fact that the bulk of the Bolivian agricultural workers (between 50,000-80,000) still prefer to cross over into Argentina while at the same time cotton goes unpicked in Bolivia. 16./

It has been suggested that the best way to deal with this problem of an unsteady labor supply from a social point of view is to from unions of cotton pickers and sugar cane cutters like the organizations that exist in Argentina. Union representatives could then participate in the negotiation of labor contracts and in checking to see that abuses such as false weighing don't occur.

Peasant Leagues. Bolivia has an extensive system of peasant leagues. It was the more militant of these peasant organizations which originally pushed the agrarian reform into its radical phase. Since the Revolution the regime has depended heavily on these leagues to stay in power. Peasant

militias were sent against miners when the regime sought to clamp down on political demand. However the relationship between the leagues and the political elites has developed into one of social control rather than being a vehicle to pressure for peasant interests. The leagues enjoy little political autonomy--a change in the regime beings a change in the national and regional level peasant leadership. Even at the local level leadership positions are clogged by caciques.

V. Research Needs

An agricultural census has just been taken in Bolivia. A major need is to analyze the data collected about the distribution of landowning and the forms of tenure obtained in the census.

Micro studies have indicated that caciquismo is an important method of local domination in rural Bolivia. Yet comparative analyses are lacking that focus on caciques, examine the sources of their power, and analyze where and why other more participatory institutions exist at the local and regional levels.

Finally, the development of commercial agriculture in Bolivia needs careful monitoring. To what extent do commercial, agro-interests function as a unified and powerful interest group to make demands upon public resources? The wages and work conditions of landless labor, legislation affecting them, and the power of the regime to create more employment and better conditions on large commercial enterprises needs to be followed closely, especially since the landless labor category will probably increase in size.

Endnotes--Bolivia

1. Primary source: The World Bank, Report on Bolivia, mimeographed, 1972. Secondary source: Salvador Romero Pittari, "Notas sobre la Estratificacion Social en Bolivia" in Rev. Paraguaya de Sociologia, Vol. 13, No. 35, (Jan.--Apr., 1976) p. 18.

2. Ibid, p. 15.

3. Ibid.

4. OEA/IICA/CIRA, Reforma Agraria en Bolivia, La Paz, 1977.

5. Ronald Clark, "Bolivia" in P. Dorner, ed., Agrarian Reform in Latin America, Madison: U. Wisconsin, 1974, p.175.

6. Reforma Agraria en Bolivia, p.76

7. Primary source: Ministerio de Planificacion, 1975; secondary: Romero, op. cit., p.11

8. See Daniel Heyduk "The Hacienda System and Agrarian Reform in Highland Bolivia", Ethnology, Vol. 13, No.1 (Jan., 1974); or Kevin Healy, Power, Class and Rural Development in Southern Bolivia, Ph. D. dissertation, Cornell University, 1977.

9. Romero, op. cit.

10. Reforma Agraria en Bolivia, p. 61

11. Reforma agraria en Bolivia, see the appendix written by R. Urioste concerning land tenure in the Altiplano Norte, p. 26.

12. Reforma Agraria en Bolivia, p. 60

13. Javier Albo, "Bodas de Plata o Requiem por una Reforma Agraria?" Revista Paraguaya de Sociologia, Vol. 13, No. 3 (Apr--Jun, 1976) p. 39. Another excellent discussion of caciquismo is contained in Andrew Pearse, The Latin American Peasant, London: Frank Cass & Co., 1974, pp.158--161.

14. World Bank, Report on Bolivia, p. 227, as cited in Romero.

COUNTRY PROFILE: BRAZIL

Population: (1975) 107,000,000

Workforce (42%) 44,940,000

Percentage of Workforce in Agriculture: 44.2

Agricultural Workforce 19,603,400

I. Incidence of Landlessness and Near-Landlessness

The 1966 CIDA survey of land tenure and socio-economic conditions in rural Brazil classified 65.3 percent of farm families or 59 percent of the economically active persons in agriculture as "under-privileged farm people." Since Brazil has experienced no major structural reform in the meantime, it is not unreasonable to assume that that proportion is valid today. The population which CIDA identified as underprivileged was differentiated into the following occupational categories.

CULTIVATORS	% Farm Families	% Farm Workers
A. owners of minifundio	7.5	8.7
B. tenants	2.8	3.2
C. occupants	2.6	3.1
D. mixed tenure forms	0.1	0.1
E. producers w/administrators	0.1	0.1
TOTAL PRODUCERS	13.1	15.2
LABORERS		1./
F. workers on minifundios	0.2	0.1
G. sharecroppers	22.7	16.7
H. permanent workers	-	19.1
I. temporary workers	64.0	31.0
j. other workers	-	17.9
TOTAL WORKERS	86.9	84.8

Recasting these proportions in terms of the categories used in this study we arrive at the following approximate figures*:

LABORERS	permanent	2,148,255
	temporary	3,406,695
CULTIVATORS	insecure and/or sufficient	970,524
	secure/insufficient	467,165
TENANTS	insecure/insufficient	2,230,234
ARTISANS, OTHER		2,024,533
	TOTAL	11,247,406 economically active persons

The CIDA figure of 59 percent landless or near-landless seems to be the lower boundary for estimates on the subject. Andre Gunder Frank estimated in 1950 that 2 percent of the people dependent on agriculture for their livelihood were landless. If the near-landless are included, this figure rises to 81 percent of the persons economically active in agriculture.[2]

The figures on landlessness were derived as follows:

Ag Workforce - CIDA "underprivileged farm workers" %
19,063,400 - 59% = 11,247,406

CIDA occupational categories were regrouped into the categories used for this study as follows:

permanent laborers	H
temporary laborers	I
cultivators	A
sec/insuf tenants	B,E
insec/insuf tenants	C,D,G
artisans, other	F,J

As for the distribution of rural poor among regions, Brazil is so large and has such variety that it is difficult to make a few generalizations that are meaningful. Nonetheless, the indicators below point out some of the important regional differences.

Brazil: Regional Economic Indicators--1970

	National Area %	Total Rural Pop. %	Total Income %	Per Capita Income*
North	42.0	5.3	2.0	$ 51
Northeast	18.2	29.3	12.2	$ 40
Southeast	10.9	28.4	64.5	$151 2/
South	6.8	31.6	17.5	$ 99
Center-West	22.1	5.2	3.8	$ 70

II. Causes and Trends in Landlessness and Near-Landlessness

The factors most responsible for rural poverty are the economic and political institutions of Brazil. The absolute lack of cultivatable land is not a constraint in Brazilian agriculture. Rather, the unequal distribution of land and other factors of agricultural production are the major causes of income inequality and absolute poverty for large numbers of peasants in rural Brazil.

Using the 1950 census, CIDA estimated the agrarian structure by size-class to be the following:

	% Farm Units	% Land Area	% Total Labor
Sub-family	22.5	0.5	11.4
Family	39.1	6.1	25.9 3/
Multifamily (medium)	33.7	33.9	41.4
Multifamily (large)	4.7	59.5	21.3

The 1967 census does not contradict the overall picture presented above; 50 percent of the farm units surveyed in 1967 were above 100 hectares in size.

Although the latifundia class is not a major power in Brazilian national politics, it is a sector that the current military regime pays off. The way in which this favoritism takes place has skewed the distribution of productive resources even more in favor of large farm units in the last 13 years. To encourage export promotion and agricultural modernization, government policies have heavily subsidized the capital factor in Brazilian agriculture in the post-1964 period. Subsidies have taken the form of preferential import exchange rates, tax exemptions, and highly concessional loans for producers and users of chemical fertilizers, lime, agricultural chemicals, machinery and livestock feeds. Much government money has also been invested in "green revolution" type research seeking to raise yields with a combination of improved seed varieties, fertilizers and irrigation.

To indicate some of the effect that subsidization of capital has had on the problem of rural unemployment, in 1960 there were 60,000 tractors in use in Brazil. By 1970 there were 156,000 tractors. In addition, the introduction of the self-propelled combine in Brazilian agriculture has not only facilitated the replacement of areas formerly sown with labor-intensive tree crops to wheat and soybeans, but it has also displaced labor and small producers from these two industries.

The social effect of subsidizing capital would not be so severe had it not been coupled with policies that increased the cost of labor. Several policies like the introduction of minimum

wages in rural areas, social welfare programs financed through payroll taxes, and social regulations such as the one requiring the establishment of schools when a farm employs a minimum number of workers have raised labor costs. One result has been cited above--the shift to capital intensive, labor-displacing technology. A second result is the replacement of permanent laborers with day laborers. The statistical incidence of the second result is not known for every state in Brazil. But to give an example of where it is known, in the state of Sao Paulo the number of resident laborers fell from 288,000 in 1955 to 32,000 in 1969 while the number of day laborers increased from 226,000 in 1964 to 350,000 in 1970. 4./

The state of Sao Paulo is unique in the country in having the only agricultural labor force which is not only declining relatively in comparison with urban labor force, but is declining absolutely. This downward trend can be explained in part by mechanization and in part by the rural exodus caused by the increasing cost of labor. It is also due to the fact that consumption patterns in urban areas have shifted in favor of meat and meat products; wheat; vegetables and some fruits and away from the products associated with lower income levels. These relative demand shifts have encouraged changes in production patterns and in turn have stimulated the modernization process. 5./

Other evidence from the coffee regions of the state of Parana also indicate rapid, large-scale displacement of agricultural labor. During the 1960-1970 decade, 40 percent of the total coffee plantings in a large study area were eliminated

by frost, government policy, etc. Of the land released from coffee cultivation, 50-80 percent of it was converted to extensive cattle production by 1975. At the same time, heavy mechanization occurred. The change in coffee production alone displaced 150,000 workers in Parana, with only 30 percent of them being reabsorbed by other rural jobs or urban employment.

The significance of the trends in Sao Paulo and Parana increases when one takes into account that both of these states are in an area that traditionally has given employment to large numbers of poor peasants migrating from the Northeast.

III. Policies Affecting Rural Poverty in Brazil

Any discussion of government policies affecting conditions of the landless and nearlandless must be prefaced with a statement about the current regime. Brazil's military government has pledged itself to implement "institutional" rather than "structural" reforms--i.e., reforms which seek to make the existing system of production more efficient without changing the distribution of income, status and power *per se*.

This bias is nowhere clearer than in policies for Northeast Brazil. The Northeast is divided into three bio-climatic zones: the Zona de Mata, a humid fertile strip along the coast; the Agreste, a transitional area between the wet coast and dry interior; and the Sertao, which is subject to severe periodic drought. Because of its abundent rainfall the Zona de Mata is capable of carrying a much denser population, but the region is dominated by land extensive sugar cane cultivation. As a reform measure government efforts have centered around trying

to get landowners to cultivate more intensively using biological and chemical inputs. But sugar production is regulated by price controls and cane quotas; and with existing controls the farmers cannot recoup fertilizer costs. In the absence of a modification of the land tenure structure, cultivation remains land extensive.

A second policy to alleviate poverty in the Northeast has been to provide irrigation programs for the drought-ridden Sertao and resettle families on them. So far the cost per family of such schemes has been excessively high, in addition to the fact that reform recipients have lacked the skills to take advantage of irrigation agriculture. 7./ Market integration has also been very thin, making it difficult to use the water for anything other than growing foodcrops, which is not very efficient.

Kenneth Fredrick's assessment of the impact of public policies on rural poverty in the Northeast was as follows:

> Current political forces and government policies should be expected to make no major changes in the extensive cultivation and dominance of sugar cane in the Zona de Mata. There will probably be a small number of prosperous farmers who will supply a growing share of the Northeast market using irrigation, fertilizer, and improved seed; and a rapid growth in the numbers of and deterioration in the economic position of the majority of farmers in the Agreste and Sertao. 8./

In the case of a drought emergency, SUDENE, the federal development agency for the Northeast, has the authority to implement a crash employment public works program in the hardest hit areas. The last crash program in 1970-1971 was funded by SUDENE, state governments, USAID, the World Food Program, other foreign assistance, and private firms. Laborers were recruited from the poorest rural strata and preference was given to heads of families, although persons as young as 14 were allowed to work. The productivity of the work projects was not high and the work quality was poor. Often times this was due to poor health conditions in work camps and also because the laborers themselves felt that the renumeration they received was insufficient incentive to do a good job. Workers received a wage comparable to what an agricultural day laborer in the area was paid, in addition to food rations. As to the scope of the emergency program SUDENE was able to mount, estimates are that at its peak time, employment was provided to 16.6 percent of the economically active persons in the areas hardest hit by the drought--some 345,000 persons in all. 9./

A third policy affecting the landless--the National Integration Program--has financed two highways to the Amazon, and also colonization projects adjacent to the roads in order to move excess population into frontier areas. Here again the regime's preference for institutional reforms and in favor of capital are pronounced. An effort has been made to attract new industry to the North and Amazon regions to ease unemployment problems. But, to give one example, one of these industries, a cattle concern, has 678,000 hectares. In all, over 70 percent

of the land in the North and Central West regions are held in estates of over 1,000 hectares, reflecting the exaggerated extent of speculation and under utilization of land. 10./

The basic thrust of the Brazilian government's program is simply to expand aggregate agricultural production by any means, especially agricultural exports. Brazil, which produces only 20 percent of the oil it consumes, must find a way to pay its astronomical fuel bill, and agriculture is regarded by the regime as the key to doing so. Agricultural exports are expected to earn $9 billion in 1977, which makes Brazil an agricultural superpower second only to the United States.

In contrast to the stagnant productivity in areas of traditional agriculture, rapid agricultural expansion has taken place almost exclusively on frontier lands by affluent farmers who have concentrated on cash crops for export. Perhaps no where in the world are large farmers as coddled as they are in Brazil by generous government subsidies in the form of tax incentives, extremely soft loans and price supports.

An illustration of the dimensions of the regime's subsidies is the case of one large farmer who recently purchased 48,000 acres in the "Cerrados" of Goias. The farmer himself estimates that the government, through negative-interest soft loans, will end up financing 80 percent of his land investment. In addition, federal roads connecting this farmer's estate to markets in Belo Horizante and São Paulo have in a few years time driven up the value of his land from $8 to $60 an acre. This farmer anticipates that his total investment will be amortized in five years' time. 11./

IV. Working Conditions, Income and Employment Differences Among the Landless and Near-Landless

A paucity of data exists to show the relative living conditions and incomes of underprivileged rural workers and what factors are responsible for those differences. The CIDA study on land tenure and socio-economic inequality draws a picture of labor in the Northeast being subject to, "... an array of low wages, hard work, deception of workers, extortion and usurious interests, hunger, inadequate housing, insecurity and migration." 12./ But there are differences within the rural workforce in regard to tenure security, housing and general standard of living. These differences depend on whether the individual is a sharecropper, a tenant, a permanent worker or a seasonal migrant.

Tenancy is usually established for the purpose of clearing land. The tenant enjoys relative freedom of choice regarding cultivation and sale of foodcrops and must pay a fixed rent in cash regardless of yield. The tenant receives nothing but a plot of land, which is usually given to him for a short period of a year or so. He uses his own seeds and tools.

The sharecropper is literally a dependent agricultural laborer in that he is often tied to the establishment by debt although he is not tied to any one piece of land. Forman cites the case of peasants who were given small paddies of rice to tend for 2-3 months. They had to borrow to eat while the rice was growing--a sum with interest charged that was later

subtracted from their share of the crop. A charge per kilo was also made to use the landlord's husking machine, in addition to the peasant's having to pay the salary of the man who ran the machine. In all the sharecropper lost a considerable portion of his share of the harvest, although he was originally supposed to receive 50 percent. When the rice was harvested the sharecropper had to move off the land to another plot where he raised corn and beans and gave the landowner 20 percent of the harvest. 13./

In terms of workers, contracts vary widely from place to place and carry with them a variety of sub-tenancy arrangements. For example with permanent sugar workers, a 1965 presidential decree provided that every worker had to have at least two hectares near his house to grow subsistence crops. A 1963 statute stipulated that each permanent worker had to be provided with a house, for which he paid 20 percent of his salary in rent. Forman observed that plantation workers seemed to have a higher general standard of living and more security than peasants who are simply hired to clear land and produce foodstuffs. 14./

V. Needed Future Research

Two areas of needed research have been noted in the preparation of this report. One is for more differentiation of the types of underprivileged farmers in Brazil by region, as well as information on their relative access to land; incomes; living conditions and forms of organization. Additional research on the various poverty brackets, the reasons for them, and factors

promoting mobility between them could be useful in designing programs to aid this target group in the future. The role of migration, both within regions and between regions, needs to be studied for its effects on income and employment among the poorest rural strata.

Secondly, there is still a need to investigate the causes of rural poverty per se, especially the effect public policy has on it. If the major causal factor of worsening rural poverty is the severe wage constraints of the type that were practiced in the 1960's, then presumably some form of careful wage hikes might be in order to restore the real income levels of the working class. If, however, the major cause of growing inequalities is due to the special incentives offered to capital and asset holders then the question arises as to how crucial these are for present growth performance. Can they be removed or altered in such a way as to subsidize labor instead of capital? Can specific packages of technology be designed that can be applied and exploited successfully by smaller distinct from large farmers? The Brazilian government is placing much emphasis on varieties responsive to water and fertilizer but whose inputs are out of reach of the majority of farmers. Some agronomists have speculated that yields could be increased through use of indigenous inputs such as organic fertilizer, mulch and lime. Also sorghum--which is drought resistant and has nearly the nutritional value of corn--might significantly improve the food situation if research were undertaken on the conditions for cultivating it in the Northeast.

More social benefit might be derived if costly government irrigation projects were reduced to a few small pilot projects that sought ways to reduce implementation costs, increase small farmer productivity, etc. Once better organizational models were found more and better projects could then proceed.

Endnotes--Brazil

1. Comite Interamericano de Desarrollo Agricola (CIDA), Land Tenure and Socio-Economic Conditions in Brazil, Washington: The Pan American Union, 1966, p. 1321.

2. Andre Gunder Frank, Capitalism and Underdevelopment in Latin America, New York: Monthly Review Press, 1968, p. 249.

3. Stephen Robock, Brazil: A Study in Development Progress, Lexington, Mass.: Lexington Books, 1975.

4. CIDA, op. cit.

5. Agricultural Modernization in the State of São Paulo, São Paulo: State Department of Agriculture, 1973, p. 231.

6. Ibid. See also, Ruy Miller Paiva, et. al., Brazil's Agricultural Sector: Behavior, Problems and Possibilities, Sao Paulo: XV International Conference of Agricultural Economists, 1973, p. 220.

7. Lloyd W. Strachan, "A Survey of Recent Agricultural Trends in Northwestern Parana," LTC Newsletter No. 40 (June, 1973), Madison, Wisconsin.

8. Kenneth D. Fredrick, "Agricultural Development and the Rural Northeast," in Contemporary Brazil: Isues in Political and Economic Development, Rosenbaum and Tyler, eds., New York: Praeger Books, 1973, p. 289.

9. Ibid, p. 294.

10. Shepard Forman, The Peasantry in Brazil, New York: Colombia UP, 1975, p. 42.

11. Emile Costa, "Planning and Organization of Frentes del Trabalho in Northeast Brazil," Geneva: ILO, 1974.

12. New York Times, 4/14/77, p. 2. For a comprehensive discussion of macro-economic agricultural policies of the Brazilian Government see: Norman Rask, et. al., Farm Growth in Brazil, Colombus, Ohio: Ohio State University, 1973.

13. CIDA, op. cit. p. 270.

14. Forman, op cit. p. 60.

15. Ibid, p. 63. See also: Andrew Pearse, The Latin American Peasant London, Frank Cass, 1975, pp. 174-179.

COUNTRY PROFILE: COLOMBIA

Population (1975) 23,000,000

Workforce (1970) 40% of the population--9,200,000

Percent Agricultural Workforce: 49.2%

Number Agricultural Workers: 4,526,000

I. Incidence of Landlessness and Near-Landlessness

According to the 1966 CIDA survey of land tenure in Colombia the agricultural workforce was distributed among farm size categories as follows:

Farm Size	% Ag Workforce
Multifamily Large	2.3
Multifamily Medium	4.1
Family	27.2
Sub-Family	57.7
Landless Labor	8.7
	100.0

1./

CIDA found that more than half of the agricultural population consists of families with sub-family size parcels. Forty percent of all surveyed farm units did not exceed two hectares in size and many were below that level. Of the sub-family farm units, at least a third were worked by peasants who weren't even owners of the land--which means that in addition to problems with tenure insecurity, earnings were only 50-90 percent of what was produced on this plot. 2./ CIDA differentiated the "sub-family" farm size category into the following tenure statuses:

A.	ownership	65.0%	
B.	renting	4.2%	
C.	share-cropping	15.0%	
D.	labor-exchange	2.1%	
E.	other rent forms	5.2%	3./
F.	squatting	2.4%	
G.	mixed tenure forms	4.4%	
H.	other forms	1.7%	
		100.0%	

Regrouping the CIDA categories into the divisions used in this study, we come up with the following estimates of the numbers of landless and near-landless in Colombia*:

LABORERS	permanent	391,760
	temporary	393,767
CULTIVATORS	secure/insufficient	565,876
	insecure/insufficient	1,131,751
TENANTS	secure/insufficient	224,639
	insecure/insufficient	253,338
ARTISAN/OTHER		44,399
	TOTAL	3,005,530 economically active persons

*As to the way in which the figures for the landless categories were calculated:

[Ag Workforce] X [CIDA sub-family, landless workers] = landless-nearlandless population

4,526,400 x .664 = 3,005,530

Tenure forms vary quite a bit for the landless and near-landless across regions in Colombia. Half of the country's rural population is concentrated in 429 mountainous municipalities which surround important urban areas such as Botota. In the 200 most densely populated of these municipalities there are only 1.3 hectares of land per rural inhabitant, including forest areas, towns, roads and wastelands. Land in the minifundia zone (departments of Boyacá, Cauca, Cundinamarca, Nariño, Santander and Santander Norte) is generally owned, rented, sharecropped or held in a combination of these three tenure forms.

In the coffee zone (departments of Antioquia, Caldas) the ownership of small parcels and sharecropping predominates. Workers are generally given one-fourth of the crop in exchange for tending the coffee bushes.

Land in the Inter-Andean Valleys (departments of Huila, Tomila and the Cauca Valley) is mostly rented out in larger commercial estates, generally for a fixed payment of rent.

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*(continued)

The CIDA categories were converted into landless categories as follows:

permanent workers	C
temporary workers	CIDA laborers
cultivators, sec/insuf	1/3 A
cultivators, insec/insuf	2/3 A
tenants, sec/insuf	B,G
tenants, insec/insuf	F,D,E
artisans, other	H

Renters are either urban middle class merchants or professionals, or small farmers seeking to better themselves. Many of these commercial farms tend to have high capital investments and are mechanized.

Areas in northern Colombia along the Caribbean and also on the eastern side of the Andes are not well-connected to the rest of the country with good transportation systems. Landless laborers migrate to these areas where they obtain work clearing land and seeding it to pasture in exchange for being able to sow subsistence food crops for a year or so.

In general, the fertile coastal valleys are characterized by a higher proportion of landless labor than are the minifundia areas at higher altitudes.

II. Causes and Trends in Landlessness and Near-Landlessness

The post-World War II surge of agricultural mechanization; a chronic inflation which has made landholding an end worthy in itself; and the 1961 agrarian reform law which provides for expropriation of large landholdings and distribution among former tenants has caused large numbers of illegal expulsions of subsistence farmers who rent, share-crop or exchange their labor for a small piece of land. This decline is evident in comparing the 1960 and 1970 agricultural censes. Every size category of farms above 10 hectares showed increases in both absolute numbers and land area held, including farms of 1000 hectares or more. In contrast, farm size categories below 10 hectares declined both in numbers and area held, as can be seen below:

Sub-Family Farms in Colombia, 1960-1970

	Number of Units				Land Area	
	1960		1970		1960	1970
Farm Size	No.	Cumulative %	No.	Cumulative %	Cumulative %	Cumulative %
LT 1 ha.	298,071	24.7%	251,262	22.9%	0.5%	0.4%
1 - 3 ha.	308,352	50.2%	278,555	46.5%	2.5%	1.9%
3 - 5 ha.	150,182	62.6%	136,490	58.5%	4.5%	3.5%
5 - 10ha.	169,145	76.6%	155,547	72.2%	19.9%	18.4%

Source: 4./

This 11 percent decline of sub-family farm units occurred despite the fact that in absolute numbers the rural population increased by over a million and a half people during this same period.

To examine more closely the forces behind this trend toward the increasing concentration of landholding, the data below suggest that mechanization does indeed correlate with a declining population on the land.

A result of mechanization, land reform laws and increased concentration of landholding has been tenant expulsions, increased rural unrest and land invasions. This is true especially in coastal departments, which have higher percentages of land held in latifundio estates. 5./

Haney reports that many of the larger estates which once provided considerable employment to minifundia families through traditional patron-client linkages have been subdivided into smaller estates. 6./ To some extent these traditional alliances have been replaced by informal contractual arrangements between

Mechanization and Rural Out-Migration in Colombia, 1951-1973

Departments	No. of farms per tractor			% Rural Population		
	1951	1960	1968*	1951	1964	1973
Antioquia	1.184	503	454	60	47	33
Atlántico	45	29	27	12	9	6
Bolivar	126	71	30	60	55	47
Boyacá	398	256	39	84	76	69
Cundinamarca	83	55	15	79	65	65
Magdalena	69	46	36	63	58	49
Meta	66	29	7	63	53	44
Nariño	418	333	57	76	70	65
Tolima	62	34	5	72	58	51
Valle	43	20	8	50	30	23

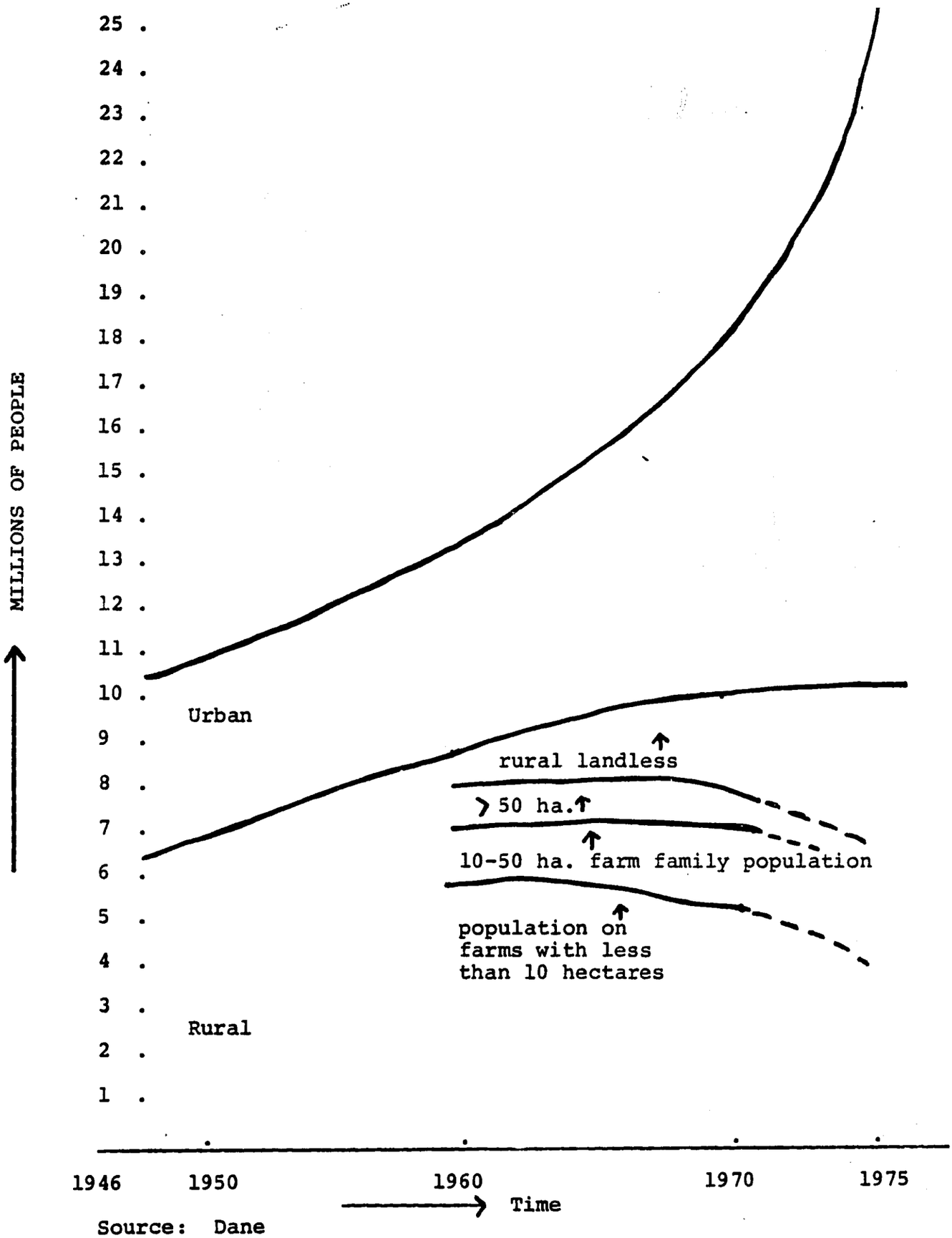
* r = .54 at the .10 level of significance.

Source: 7./

landowning professionals and merchants of rural towns with minifundistas or landless peasants in the hinterland.

Another consequence of land concentration and population growth has been greater crowding onto the minifundia farm regions and accelerated fragmentation and sub-division of already tiny sub-family farms. Dorner and Felstehausen report that increased population pressure has caused major destruction of soil resources due to intensive cropping and poor soil management practices. 8./ A ruther dangerous ramification of fragmentation and intensive farming of the cloud forest zones in the higher altitudes is that it severely disrupts the hydrological systems of lower areas.

GRAPH 1--COLOMBIAN POPULATION 1946-1975



Source: Dane

The result of these trends on the landless and near-landless in Colombia is that, despite an estimated annual outflow of 200,000 migrants, and a continued relative decline in the agricultural population, thousands of new families are being absorbed into the densely settled areas of the country through the process of land fragmentation. Haney concludes that, "this demographic pressure not only adds further menace to the rapidly depleting resource base in the minifundia regions, but appears to be leading toward decreasing average levels of living in some areas." 9./

III. Public Policies Affecting the Rural Poor in Colombia

In Colombia agrarian reform has been concerned primarily with government owned land. Between 1961 and 1969, 2.8 million hectares were allotted, but 96 percent of the land was government-owned, and 91 percent of the titles granted represented *de jure* recognition of applications of farmers already cultivating this land. Although agrarian reform has been considered as the principal instrument for achieving a better distribution of wealth, the general strategy for the agricultural sector in Colombia puts principle emphasis on aggregate growth and pays no attention to modifying property relationships. A finding of the 1970 agricultural census is that INCORA, the land reform agency, failed to achieve any substantial redistribution of land, infact, that the concentration of landholding increased. INCORA's own projections about the dimensions of landlessness in 1970 are as follows:

families without land:	190,000	
families on minifundias:	658,000	
families with parcels from 5-10 hectares:	37,000	10./
tenants and sharecroppers:	50,000	

Two major problems with the land reform to date have been the need to enable more land to be expropriated; and problems with the form of tenancy after land reform has taken place. When INCORA was established in 1962 it settled families on individual farms. When these proved to be inefficient the decision was made to establish communal farm operations but to date no plan has evolved for how to do this.

In the absence of a favorable political climate which would enable INCORA to redistribute latifundias, is there anything that can be done to improve income and employment in the minifundia sector? It is interesting that CIAT (Centro Internacional de Agricultura Tropical) thinks not. In its 1974 annual report CIAT stated:

> Data from rural development projects in the highlands of Mexico, Peru and Colombia suggest that agriculture is often only a minor part in the total income of subsistence farm families. Furthermore, the situation of small farmers in the highlands is often one characterized by limited land and a lack of well-developed infrastructure. Efforts to ameliorate that poverty should focus on the development of rural industries, rural education, rural public works programs and nutrition supplementation.
>
> The role of new agricultural technology in promoting the welfare of these rural poor is limited and in many zones would be of lower priority than other programs mentioned above. Furthermore, the agriculture of the highlands has evolved over long periods of time on relatively infertile soils and is believed to be operating at a level near its potential. With these traditional but efficient systems, the probability of substantially increasing food supplies through new agricultural technology is low.

> The lowlands of Colombia appear to have a greater potential for increasing the small farm's total food output. Some factors known to limit production are subject to manipulation through new technology. These limiting factors include unfertile soils, insects, diseases and weeds. Water control is a frequent problem in many areas. 11./

IV. Socio-Economic Conditions and Characteristics of the Landless and Near-Landless

To analyze further the living conditions and income-earning possibilities among the rural poor, let's examine the minifundia sector. Adams and Schulman distinguish three types of sub-family farms: independent minifundia; the commercial minifundia and the dependent minifundia. 12./ The independent minifundia is one where the family's labor supply is devoted to the direct exploitation of the small farm and production decisions are oriented principally by direct consumption needs rather than market conditions. Large landholdings seldom affect this type of minifundia and off-farm employment is not an important factor.

The commercial minifundia also absorbs much of the family's labor supply but most production decisions are closely tied to market conditions and not to direct consumption needs. Small units of this type tend to be concentrated in the coffee regions, the tobacco areas, and in the margin around large cities where truck farms are common.

The third type of minifundia--the dependent type--is distinguished by the fact that a substantial part of the family's income is derived from off-farm employment. To give an idea of how large this last category is, Albert

Berry claims that approximately the bottom half of income earners in rural Colombia receive by far the largest part of their income as agricultural laborers on other farms. Berry says that it seems unlikely that the lowest five deciles of his income distribution study--those with 10 hectares or less--earn much less than 75 percent of their income this way. 13./

Subtypes of this dependent minifundia could include small parcels located either on or nearby large estates; or a subfamily farm located relatively near an urban center. In the latter subtype some production is for home consumption, but commercial crops are also grown. A majority of income of this latter type nonetheless comes from day labor on large holdings, work in urban centers or from artesanal activities within the home itself.

Adams and Schulman surveyed income earning possibilities in the town of Sopo, 23 miles north of Bogota where they found 450 minifundia units, about 200 of which were "dependent" types. They concluded that parcel consolidation would be of little use since only a handful of the minifundistas could benefit from combining several scattered parcels. Such measures as supervised credit and the formation of cooperatives--which have success among commercial minifundia--have only limited applicability among dependent minifundias due to the absolute lack of land and also to a lack of managerial experience of the minifundistas themselves.

As for a policy such as labor legislation, Colombia has a rather complete labor code to regulate working conditions of

farm laborers. It includes a minimum wage; severance pay based on length of service; annual vacation and bonuses; extra pay for work done on Sundays and holidays; and medical benefits. But Adams and Schulman found that aside from occasional gratuities given to estate workers by the large landlords, few of the elements of the labor law were actually being fulfilled. There was an almost total ignorance on the part of workers in the Sopo area of their rights under the law; and even those who knew of some elements of the law were afraid to demand their rights for fear that dismissal might follow. 14./

Another alternative for the dependent minifundio would be to obtain more land for these units, perhaps through expropriation parcelization, commercial parcelization, or inducing large landowners to rent or sell more land, perhaps by raising land taxes. After his recent study of income distribution, Albert Berry concluded that unless employment is created outside the agricultural sector, "there is no short-run (10-20 years) solution for the unequal distribution of income that does not involve land distribution." 15./

V. Needed Future Research

No accurate statistics seem to exist on the number of rural laborers without land. Census figures are presented in terms of the size of the farm unit, and not in terms of tenure rights, security of access to land, etc. Such presentations tend to underestimate the number of landless laborers, especially those who do not hold permanent jobs. Although it

is difficult in every country to arrive at accurate estimations of landlessness, an additional way that this could be monitored in Colombia is by measuring seasonal migration to coastal estates, demand for labor, and wage rates. Selected sampling of this phenomenon would give valuable information about trends in rural (un)employment.

As land concentration and over-crowding of minifundia areas increases, research attention must be paid to the "escape valves" which equilibrate the imbalances between human needs and physical resources. Studying Fómeque, a minifundia community in the department of Cundinamarca surrounding Bogotá, Emil Haney observed that through such means as land fragmentation, land use intensification, reduction in the levels of living, high mortality rates and migration to other parts of the country, the burgeoning population of the community had always adjusted to shortages in local physical resources. Present day indicators suggest to Haney, however, that the previously cited stabilizing forces no longer provide the same degree of flexibility and potential as they did in the past. Declining mortality rates have increased the absolute number of those who depend upon the land. At the same time migration opportunities in Fómeque have been sharply reduced as accessible colonization areas become densely settled and seasonal agricultural labor requirements are supplied from growing local labor forces and mechanization. 16./ Demographic/employment studies need to be done in Fomeque and elsewhere to find out what the response in terms of peasants' income-earning strategies is to these diminishing escape values.

As opportunities for colonization and seasonal employment in other areas decline, Haney suggests that one coping response may be an intensification of cultivation practices. Detailed study of Fomeque seems to contradict some of the opinions expressed in the previously cited CIAT Annual Report. Among the dependent minifundia of Fómeque agriculture was not a minor part of their income, and in fact was the key to their being able to sell fruits and vegetables off the farm. 17./ Peasants in this area were adopters of fertilizers and improved seeds, and differences of up to 10 times in commercial crop yields could be explained by differences in technology and administration. Haney concluded that substantial potential existed for increasing production and employment through extended use of chemical and genetic technology combined with soil improvements and better techniques for using water. A continuing research need of major importance is for social scientists to assist extension and technical research agencies in achieving improved practices that are appropriate to minifundistas.

Central place theorists make recommendations for the placement of goods and services on the basis of identifying what is lacking in an area that would move it to the next higher level of commercial complexity. Given the formidable institutional disadvantages faced by minifundista producers in Colombia, this style of research could be useful in identifying and removing obstacles that would move minifundistas from pure subsistence production towards increased income and employment both on and off the farm. The question could be

asked: what is lacking in the social, political or economic context of communities that could reduce the power imbalance between minifundistas and local elites and/or enable the former to increase their income? Grunig found that in the Colombian context a successful minifundia farm had the following characteristics: (1) a minimum amount of three to four hectares of good quality land or a larger amount of poor quality land; (2) intensive marketable crop; (3) a stable and remunerative market; (4) situationally relevant technical information (extension) along with available modern inputs; (5) roads and modern transportation facilities; (6) adequate and flexible credit; (7) schools. He noted that provision of any one of the seven requirements would help alleviate the campesino's situation, but that these items would be most effective if the previous requirement in the order had been listed first (i.e., schools; credit; roads; technical information and modern inputs; markets; an intensive crop; land). 18./ More of Grunig's type of research needs to be done that takes important categories of landless or near-landless groups, sorts out the institutional obstacles to their increased economic and political power, and then tries to see which of those obstacles can be removed first, which second, etc.

END NOTES - COLOMBIA

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2. CIDA, ibid., p. 132.

3. CIDA, pp. 113-114 based on the Colombian census (DANE of 1964.

4. La Politica Agraria en Colombia, 1950-1975, Bogota, 1975, p. 8.

5. Roger Soles, "Rural Land Invasions in Colombia," Madison, Wisconsin; Land Tenure Center Research Paper No. 59, 1974.

6. Emil Haney, "Possibilities for the Economic Reorganization of Minifundia in a Highland Region of Colombia " Madison, Wisconsin: Land Tenure Center Research Paper No. 43, 1971, p. 4.

7. Piet Spijkers, "Agricultural Mechanization and Population Composition in Colombia," Paper presented at the Latin American Studies Association national meetings, November 1977.

8. Peter Dorner and Herman Felstehausen, "Agrarian Reform and Employment: The Colombian Case," International Labor Review, Vol. 102, No. 3, (September 1970), p. 224.

9. Haney, op. cit.

10. Politica Agraria, op. cit., p. 117.

11. Centro Internacional de Agricultura Tropical (CIAT), Annual Report -- 1974, pp. 221-222.

12. Dale W. Adams and Sam Schulman, "Minifundia in Agrarian Reform: a Colombian Example," Land Economics, Vol. XLIII, No. 3, (August 1967).

13. R. Albert Berry, "Land Distribution, Income Distribution, and the Productive Efficiency of Colombian Agriculture," Food Research Institute Studies, Vol. 12, No. 3, 1973.

14. Adams and Schulman, p. 280.

15. Berry, op. cit., p. 227.

16. Haney, op. cit.

17. Emil Haney, "El Dilema del Minifundio en Colombia," Dualismo Vol. 1, No. 1, (September 1971), Universidad Veracruzana, Xalapa, Veracruz, p. 152.

18. James E. Grunig, "The Minifundio Problem in Colombia: Development Alternatives," Inter-American Economic Affairs, Vol. 12, No. 23.

COUNTRY PROFILE: PERU

Population (1977): 15,893,543

Workforce (42% of the population): 6,675,270

Percentage of Workforce in Agriculture: 44.5%

Workforce in Agriculture: 2,970,501

1. Incidence of Landlessness and Near-Landlessness

Any discussion of rural socio-economic conditions must revolve around an attempt to assess the impact of the land reform carried out by Peru's military government since 1968. By 1976 approximately 11 million hectares had been distributed, benefiting some 340,000 families--approximately one-third of the rural population.

The reason it is difficult to estimate the distributive scope of Peru's new agrarian reform is because the organization of reform units is complex and also in its fledgling states. It remains to be seen the extent to which reform units will be able to increase employment and income distribution in the rural areas, or will be converted into closed corporate societies dominated by those fortunate enough to have gained membership when the reform units were initially formed. This is an important question, because estimates of the number of people left out of the benefits of the agrarian reform range from 55-65 percent of the economically active persons in agriculture.

Comparing the pre-reform and post-reform situations, recent policies have not changed Peru's land tenure structure *per se*. Indeed, landholding has become even more concentrated as a result of the agrarian reform. But enormous estates are

no longer in the hands of private landlords; rather, they are ultimately controlled by the government. Jose Maria Caballero commented that the agrarian reform has produced two principle results to date. One is the reordering of capitalist commercial agriculture, making it more dependent on the State. The other is the destruction of archaic relationships of domination and exploitation between traditional landlords ("gamonales") and the peasantry. 1./

The government's commitment to maintain large concentrations of land and not permit fragmentation is what distinguishes the Peruvian agrarian reform from agrarian reforms in Mexico and Boliva. The organizational model for doing this in Peru is the production cooperative. Modern commercial plantations on the Coast have been converted into reform units called "CAPs" (Agrarian Production Cooperatives) whose members are ex-estate workers. In the Highlands, large cooperatives (mostly for livestock, although a lesser number principally raise crops) are called "SAIS"--Social Interest Agrarian Societies. In a SAIS, members are juridic persons rather than real persons. Membership in larger SAIS cooperatives consists of smaller service cooperatives, peasant communities, etc., each of whom receive a share of the benefits, although participation in actual production varies. 2./ Approximately 76 percent of the land adjudicated by the agrarian reform has been in the form of CAPs or SAISs. On the Coast, CAPs are generally run as collectives. In the Sierra, only 23 percent of the CAP and SAIS units are farmed collectively, the other units being divided among the farm families who are its members.

In addition to the reform units, peasant communities have received about 7 percent of the adjudicated land; "Campesino Groups" in the process of forming CAPs have received another 10 percent; and private individuals have been given six percent. 3./ No priority has been given by the government to the elimination of a large sector of minifundista farmers found mostly in the Sierra. Indeed, in areas with excessively small or fragmented holdings such as the southern Sierra, subsistence farmers have received no land at all. Looking at who has benefited from the reform up to 1973, the majority of those who became CAP members were the wealthier segments of the agricultural workforce--the permanent plantation labor who operated commercial estates on the Coast. A second group who benefited were workers on large livestock concerns in the Sierra. A third group which has emerged with a greater amount of economic power as a result of the reform is the "kulak" class of family and middle-size farmers in coastal areas.

Below is the distribution of land after the reform ended its period of active adjudication of property relationships, according to one recent analysis.

To now make a determination of the actual numbers of landless and near-landless in Peru, the table below indicates that approximately 40 percent of the economically active persons in Peru are engaged in subsistence agriculture. This estimate is not out of line with the findings of the CIDA study on Land Tenure and Socio-Economic Conditions in Peru (1966). The CIDA study calculated that 89 percent of the

Land Tenure Structure in Peru--1976

Enterprise Type	% Economically Active Persons	% Arable Land
Commercial Collective	1.7	21.5
Mixed Collective*	0.3	3.0
Independent Commercial Farmers	2.5	21.3
Peasant Farmers	40.0	54.2
	44.5	100.0

*This category includes CAPs or SAIS such as those in the Highlands which are not yet run on as complete a commercial basis as, for example, the sugar cooperatives on the Coast. 4./

workforce in agriculture consisted of sub-family farmers (57 percent); tenants (10 percent); and landless laborers (22 percent). 5./ However, the CIDA study was based on the 1961 agricultural and population censuses, which were before the land reform occurred.

Trying to assess the effects of Peru's recent land reform on the basis of total income received. Caballero estimated in 1976 that only 22 percent of the workforce in agriculture would have a permanent source of work (salaried or non-salaried) that would yield an income capable of meeting basic family needs. Caballero estimated that another 25 percent of the agricultural workforce would have stable work on the new reform enterprises, although the income derived from this would not be enough to meet basic family needs. Finally, another 55 percent of the agricultural workforce who are landless or near-landless would be excluded altogether from the benefits of the agrarian reform. 6./

Caballero's estimates are in reasonable accord with those of another analyst, Colin Harding, who wrote in 1974 that if landholding limits laid down in the agrarian reform law were respected, it would still leave 350,000 landless laborers with nothing, quite apart from the 300,000 families with one hectare each. According to legal specifications, there was enough land for 79,916 farms on the Coast with 171,000 families qualified to receive one. In the Sierra the situation was worse: there was enough land for 69,622 family farms with 681,000 potential recipients. 7./

Based on evidence from several sources, we project the following approximate numbers of economically active individuals falling into the occupational categories employed in this study*:

LABORERS	permanent	62,976
	temporary	314,880
CULTIVATORS	secure/insufficient	519,552
	insecure/insufficient	188,934
TENANTS		94,464
ARTISANS, FOOD PROCESSORS, ETC.		393,360
CONSTRAINED AGRARIAN REFORM BENEFICIARIES (Those not earning enough to satisfy basic needs)	individual coop members	445,575
	Members of Agrarian Committees	297,050

Total Rural Poor: 2,316,991

* The way in which these figures were calculated is explained in an annex at the end of this country profile.

II. Causes and Trends in Landlessness and Near-Landlessness

Employment trends in rural Peru have not been encouraging. In the 1960s large coastal estates mechanized heavily and cut their employment drastically. Sugar plantations cut employment in half. In other crops such as rice and cotton, sharecropping and tenancy were eliminated. Consequently the rural population on the Coast became increasingly crowded onto the meagre resources of the minifundia sector and dependent upon whatever part-time work could be found.

It appears that the agrarian reform has increased the displacement of labor. The reform program set out with the orthadox aim of giving "land to the tiller" in family-size units and also consolidating small and medium size private property along commercial farming lines. To consolidate this class of commercial farmers, landowners were given the option of carrying out their own voluntary reform outside areas of declared agrarian reform zones. In the scramble to parcel up estates, permanent and temporary laborers suffered. One author estimates that in the Canete Valley south of Lima, 2000 permanent laborers--40 percent of the workforce--were being thrown out of worker turned into casual laborers because of the smaller labor requirements of the new parcels of land. 9./

The result of scarcity of good farm land and the increased competition for it has been a sharpening of social differentiation in the countryside. Some were able to defend themselves much better than others. Yanaconas, or, attached estate laborers, as a group have fared much better than migrant labor and sub-

tenants. If we look at one example of pre-reform and post-reform division of income, it can be seen how change has dramatically favored the permanent (vs. temporary) labor force.

Changes in Income Distribution on the Coastal Sugar Estates

Year	Workers		Administrators		Day Labor		Owners	
	% pop	% income	% pop	% income	% pop	% income	% pop	% income
1968	77	47	11	25	11	3	.03	36
1972	70	73	15	23	15	4	--	--

Source: 10./

Horton reports a similar sharpening of cleavage among the peasantry in the Sierra. On SAIS units in the Puno, for example, the conflict is between ex-estate workers and the peasant communities and private holders on the edges of the reform property. In an area where unemployment is critical, the peasant communities and minifundistas want the idle cropland held by the SAIS. But cooperative members prefer to mechanize before allowing more families into the cooperative by letting them use idle farm land. 11./

The natural tendencies of reform beneficiaries to prefer to form closed corporations are exacerbated by government policies that have maintained and probably increased the advantages of large estates over small farms in the acquisition of resources and improvement of production methods. Nearly all government assistance to agriculture is concentrated on the production cooperatives; less technical assistance is available to small farmers than before the reform; and it appears that

large cooperatives are disproportionately favored by government priorities in the acquisition of machinery, fertilizers, seeds and irrigation water. Horton observes that while this allocation of resources may increase food and fiber marketings in Lima, it may well lower the total value of agricultural and livestock production and the welfare of rural and provincial people. 12./

A final political trend which may have important bearing on the plight of the landless and near-landless in Peru is the fact that the military government has received little popular support from the implementation of agrarian reform, despite the amount of land that was expropriated. In part this is due to the fact that two-thirds of the agricultural workforce have not benefited from the reform in direct, tangible ways. It is also due to the fact that the organizational model chosen to carry out the agrarian reform has no historical roots among the Peruvian peasantry; so the tensions caused by setting up cooperatives has dampened support for the regime even among those who are direct reform beneficiaries. This lack of popular support for the government and its cooperative programs may cause the regime to invest its funds where it gets the greatest short-run economic and political returns. Horton speculates that:

> Since the returns (to government funds) are likely to be calculated in terms of productivity and not participation, more is likely to be spent on credit and technical assistance than on adequate leadership and cooperative training of peasants. Moreover, government funds are likely to be invested in areas already most productive and best integrated into the market system. To the extent that this is true, government policies are likely to improve the

best reform enterprises and disregard the poorest ones.

13./

Recalling that 25 percent of the rural workforce are "constrained agrarian reform beneficiaries," political events may be the trends that are the most important phenomena and therefore merit the most careful monitoring at this moment in Peru.

III. Public Policies Affecting Landlessness

By the Peruvian Government's own estimate, 66 percent of the rural labor force is underemployed and unable to earn an income sufficient to meet their minimum basic needs -- this calculation being made in 1974, a full six years after the onset of agrarian reform. 14./ The government has taken several steps to cope with this enormous unemployment problem. The formation of CAPs and SAISs is only one step in the transformation taking place. These reform units have been united into large regional central cooperatives for purchasing inputs as well as machinery and for marketing products as well. The government has also created a large purchasing corporation (EPSA) in order to eliminate profiteering middlemen.

The regime admits that there is not enough land in Peru for everyone to be included in the agrarian reform, especially in the Sierra where most of the SAIS cooperatives engage in labor extensive livestock raising. The government plan is therefore to create food processing industries, textile and artisan industries, mining operations, etc. The apparatus to

generate off-farm rural employment and at the same time service agrarian reform beneficiaries are large central cooperatives called "Integrated Projects of Rural Development" (PIARs) which group many units within a region together. By April, 1973 there were 52 PIARs in existence, and another 53 planned by the end of 1974. International financial institutions have been considering loans to establish textile industries in hopes that greater demand for wool will spur greater production and also create jobs for the landless.

The PIARs have a great potential to substantially widen the distribution of benefits of the agrarian reform and create more employment, especially since one of their objectives is to equalize the levels of productivity and income among base level units. Problems arise, however, with the permanent workers on wealthier cooperatives who are reluctant to share profits with outsiders. For example, Horton found that in many highland reform enterprises cropland now lies idle. When questioned about how this land could be brought under cultivation, cooperative leaders and members universally advocated mechanization rather than turning it over to families outside the cooperative for cultivation. Horton also concluded that neither the Ministry of Agriculture's nor financial institutions' experts are willing to sacrifice profits for employment. His comment was that, "Everyone passes the buck, and the employment effect of the land reform and its associated diversification projects seems destined to be minimal." 15./

Several other government policies may also work against the ability of these large cooperatives to create more employment and better distribute the benefits of agrarian reform. One is the tendency of the government to control both the economic organization of reform units and political organization among the peasantry. Such a degree of state control, coupled with the newness of the cooperative form of organization, results in little grass roots support for the government's plan of transforming the countryside.

A second obstacle to creating greater rural employment is the decapitalization of the rural sector that occurs as a result of the agrarian reform debt. Nineteen million soles (US $300 million) must be repaid by land reform units for equipment, installations, cattle and land. But the government has decreed that landlords can only invest these funds in urban industrial development rather than in agriculture or rural industries. 16./

V. Needed Future Research

Careful monitoring is needed concerning three aspects of the agrarian reform: 1) the 25 percent of the economically active rural population who are "constrained agrarian reform beneficiaries"; 2) the plight of the rural majority of landless and near-landless who were not directly incorporated into reform of organization among the peasantry and the extent to which genuine participation in decision-making and political representation are created, or whether the new reform units

will become dominated from above by political bosses and government bureaucrats.

Peru Annex--Landless calculations were determined as follows:

Ag Workforce (A) for 1977 =	2,970,501	
	- 653,510	(Ag Workforce able to meet basic family needs--.22A)
	2,316,991	(Ag Workforce not earning enough to meet basic needs)
	- 742,625	(Constrained Agrarian Reform Beneficiaries, .25A--now called "B")
	1,574,366	(Landless or near-landless population not receiving benefits from agrarian reform--"C")

"B" was divided as follows:

CONSTRAINED AGRARIAN REFORM BENEFICIARIES	individual members of cooperatives	=	.60 B
	members of agrarian communities	=	.40 B

"C" was apportioned thusly:

LABORERS	permanent =	.04 C
	temporary =	.20 C
CULTIVATORS	secure/insufficient =	.33 C
	insecure/insufficient =	.12 C

TENANTS = .06 C

ARTISANS = .25 C

A decision was made to divide "C" into 20% laborers, 25% artisans and 55% cultivators of various sorts on the basis of the CIDA study, and also in recognition of the fact that a large number of rural people work on artisan and other off-farm activities due to the scarcity of cultivatable land in Peru.

The 'Cultivator' category of "C" was disaggregated according to the proportions reflected in the 1972 Agrarian Census, which supplied the following information:

1972 Census of Cultivators with 20 Ha. or Less

Tenure Category	% Cultivators
Proprietor	56.0
Customary Proprietor (30+ years on land)	8.0
Cultivator with Rights in Adjudication	4.4
Precarious Proprietor (LT 30 years on land)	6.5
Renter (with contract)	7.4
Communal Cultivator	8.4
Hacienda Worker (feudatario)	6.4
Other	3.3

8./

Hacienda workers were listed as "permanent laborers" in the landless categories.

End Notes -- Peru

1. Jose Maria Caballero, "Sobre el Caracter de la Reforma Aqraria Peruana," Latin American Perspectives, Vol. IV, No. 3, (Summer 1977), pp. 146-159.

2. For a more detailed analysis of CAPs and SAISs see Douglas Horton, Land Reform and Reform Enterprises in Peru, Madison, Wisconsin: LTC-IBRD Report, 1974.

3. Caballero, op. cit., p. 148.

4. Ibid., p. 150, Table I.

5. Centro Interamericano del Desarrollo Agricola (CIDA), Tenencia de la Tierra y Desarrollo Socio-economico del Sector Agricola: Peru, Washington: Pan American Union, 1966, Appendix I-IV, p. 52.

6. Caballero, op. cit., p. 149.

7. Colin Harding, "Land Reform and Social Conflict in Peru," in Lowenthal, ed., The Peruvian Experiment: Continuity and Change under Military Rule, Princeton: Princeton UP, 1975, p. 244.

8. Caballero, op. cit., p. 157.

9. Harding, p. 222., citing from Cynthia McClintock, "The Impact of Agrarian Reform Organization on Attitudes and Behavior of Organization Members in Peru," Unpublished manuscript, Massachusetts Institute of Technology (1974), p. 11.

10. Santiago Roco, "The Peruvian Sugar Cooperatives: Some Fundamental Economic Problems, 1968-1972," Economic Analysis and Workers' Management, (Belgrade)9: 1-2 (1975), Table 3, p. 33.

11. Horton, op. cit., p. 153.

12. Ibid., p. 125.

13. Ibid., p. 181-182.

14. FAO/IICA/CENCIRA, Cambios Contemporaneos en la Estructura Agraria Peruana, Lima (1976), Table 21, p. 36.

15. Horton, op. cit., p. 169.

16. Adolfo Figueroa, "Agrarian Reforms in Latin America: A Framework and an Instrument of Rural Development," World Development, Vol. 5, No. 1 & 2, p. 262.

THE CENTRAL AMERICAN COUNTRIES

The most important social characteristic of agriculture in the Central American republics is the large amount of seasonal laborers working on plantation estates. Quiros Guardia found that agricultural laborers in Guatemala derive an average of 52 percent of their total annual income from seasonal employment. In El Salvador 97 percent of the agricultural labor force is employed during the harvest of export crops while only 32 percent is employed during the slack season. In Nicaragua's Pacific coastal region small farm owners labor one-third of their time on large farms and plantations for one-fourth of their income. 1./

Existing man-land ratios compell small producers to seek seasonal employment on large plantations to supplement annual earnings. Oftentimes they have no choice about how they do so because they are in debt to the labor contractor who recruits them.

For large producers migrant labor allows savings on overhead and other costs while meeting labor needs at peak points. Coffee plantations use 60 percent of their total annual labor between October and January; for cotton 78 percent is used from December to February; and for sugar cane 70 percent is used from November through April.

Relations Between the Subsistence and Export Sectors

Largely because of inadequacies in national census data the detection of direct expansion of the export sector through claiming resources of the subsistence sector is a difficult process to distinguish. This is partially true because consolidated industries such as bananas or coffee expand largely

on the basis of resources already under their control. In other instances, national statistics fail to record the process of expansion of the export sector because of a lack of correspondence between politico-administrative units and agricultural regions. On the whole, however, research is lacking on the subject.

The next few paragraphs present a little of the evidence that is known about the expansion of export crops and their effect on land use and employment.

Bananas. After a period of stagnation, banana production in Central America made a dynamic comeback in the 1950s and early 1960s. This expansion has been concentrated primarily in the Atlantic lowlands of Costa Rica. Since there was ample undeveloped land in the Atlantic region, the expansion of banana production did not claim significant amounts of land. Nevertheless, banana production did require considerably increased amounts of land. Nevertheless, banana production did require considerably increased amounts of labor. As a result, other larger farms in the area that were unable to enter banana production because they lacked adequate physical or financial resources shifted to labor-saving enterprises such as beef cattle production. 2./

Cotton. Cotton production as large scale commercial operations is a post-World War II phenomenon. Nicaragua is the region's largest producer with 46.2 percent of exports and 44 percent of its land in cotton in 1965-1968. El Salvador

and Guatemala have 28 percent and 21 percent of the region's exports. Honduras and Costa Rica are minor producers (3.8 percent and 1.1 percent).

Cotton is best suited to the ecological conditions prevailing along the Pacific coast. Before its advent these areas constituted one of the agricultural frontiers where peasants unable to find land or employment in the highlands were absorbed as squatters or as tenants or sharecroppers on livestock haciendas. Cotton upset this stability. Land tenure institutions made it simple to divest campesinos of land for the large scale production of this export crop. The result was a massive displacement of campesinos and a decline in the production of basic grains. Displaced campesinos were forced to emigrate to other frontier areas; join the migrant labor force; or crowd into the minifundio sector. In Nicaragua labor displacement followed by emigration was of such magnitude that as early as 1964 part of the cotton crop was lost due to labor shortages. Mechanization soon followed. In heavily populated El Salvador, with no agricultural frontier, the traditional sector was forced to absorb a major proportion of the displaced campesinos. Many peasants migrated, most illegally, to Honduras. 3./

Quiros has gathered evidence that shows when the export sector expands, the process tends to be irreversible. In the case of permanent crops such as coffee or bananas, adverse technical or price conditions may reduce total output, but the land area under cultivation tends to remain constant

because of prior heavy investment. An example is the United Fruit Company which has simply shifted its land to other uses such as African palm, beef cattle, basic grains for the regional market and pineapple to export. 4./

Another example that the decline in export production is not accompanied by an expansion of subsistence agriculture is the cotton industry in El Salvador. Beginning in 1964 declining prices forced large amounts of land to be shifted out of cotton production. Of this acreage, 47.3 percent was planted to corn; 33.7 percent was turned to pastureland; and 7.6 percent was planted to rice. Of the 15,700 manzanas turned to pasture, only 1500 were actually planted with improved pasture, the rest being left idle. Rather than being returned to campesinos' hands under various tenure arrangements, the land was used for extensive livestock grazing. 5./

Future Trends in the Behavior of the Export Sector

The contraction of the cotton industry cited above and its subsequent conversion to corn production typifies a general trend toward the polarization of the production structure of basic grains caused by the emergence of large scale, technologically advanced firms in a market traditionally dominated by peasant producers. High government price supports coupled with declining prices for export crops have made relative prices more favorable for producing food staples on a large scale. The Central American Common Market has also opened the way to a larger area and has reduced the risk of adverse price

effects. An additional factor attracting large agricultural enterprises to the production of basic grains has been the inability of the subsistence sector to expand production enough to meet the needs of the growing urban areas in Central America.

Future Research Needs

Attention should be given to monitoring the expansion of the export sector and the effect its behavior has on employment and income distribution. Export agriculture is a principle source of employment in each of the Central American republics. More research is necessary to study the direct employment ramifications of decisions taken by large agri-business transnationals and also the indirect effects these decisions have on other farm units both in the surrounding area and in the subsistence agricultural sector.

Central America Endnotes

1. Rodolfo Quiros-Guardia, "Agricultural Development in Central America: Its Original Nature," Madison, Wisconsin: Land Tenure Center Research Paper No. 49, 1973, p. 75.
2. pp. 82-3.
3. pp. 85-6.
4. p. 90.
5. p. 91.

COSTA RICA

Population (1977): 1,918,465

Active Workforce (19): 44% of the population--851,814

Percentage Ag Laborers (1963): 60%

Number of Agricultural Workers: 511,088

I. The Incidence of Landlessness and Near-Landlessness

Concerning the number of rural poor, the US Agency for International Development estimated that in 1977, 41.7 percent of the total population of Costa Rica fell below the income level established for minimal living conditions. ($150 per capita in 1969 dollars). This "moderate" estimate (AID notes that both higher and lower estimates have been made) of approximately 800,000 people is divided among regions as follows:

Regional Breakdown of Poverty in Costa Rica

Region	No. of People	% of Poor	
San Jose urban agglomeration	240,000	30.1%	
Rural Periphery including:	559,200	69.9%	
Central Outer Ring around San Jose	198,000	24.8%	69.9%
Outer Regions	360,800	45.1%	

Source: 1./

AID found that the largest concentration of poverty was the populous ring of rural inhabitants around the metropolitan San Jose area. However in absolute terms the lowest incomes, poorest standards of health, housing, services, etc. are found

in the outer regions along the Pacific and Atlantic coasts. AID estimated that of the population of rural poor, 70 percent were not engaged in farming activity--i.e., they were landless. The 1973 agricultural census also reveals the existence of a large mass of agricultural laborers working on plantation estates:

Costa Rican Agrarian Structure--1973

Farm Size	% Units	% Area	% Labor
Sub-Family	46	2	25
Family	32	10	20
Multi-Family Medium	15	21	13
Multi-Family Large	7	67	42
	100	100	100

If we were to recast these estimates of poverty in terms of the occupational categories being used in this study, we would arrive at the following numbers*:

LABORERS:	permanent:	17,793	
	temporary:	160,134	
CULTIVATORS:	insecure/insufficient:	47,429	(less than one hectare)
	insufficient:	28,826	
ARTISANS and others who find work in urban areas:		109,454	
	TOTAL:	363,630	economically active individuals

*This calculation is based on allowing a dependency ratio of 2.2 for every economically active person. 800,000 - 2.2 = 363,636 active poor workers in agriculture. Of these persons AID estimated that approximately 30.1 percent were found in urban areas, either in artisan or service activities. Of the remaining rural population, 70 percent of this was estimated to be landless. Approximately 10 percent of the landless rural labor is permanently employed on plantations.

II. Causes and Trends of Landless ness and Near-Landlessness

Figures show that the share of income captured by the lowest 20 percent of the population declined during the 1961-1971 period from 5.0 percent to 4.2 percent. The two major reasons for the worsened position of the poorest income strata are increased unemployment and increased concentration of landholdings.

In the 1960s Costa Rica enjoyed relatively low unemployment rates of near four to 5 percent of the workforce. Beginning in the late 1960s, however, the labor force began to increase much more rapidly than employment. Failure to create employment has been due in part to Costa Rica's excessively high wage structure, payroll taxes and required vacation and bonus payments which total 31 percent of salaries in 1977-78.

In addition, the subsidized price of capital encourages labor substitution. According to the Central American Common Market Treaty there is a 100 percent exemption of import duties on machinery equipment, plus other high exemptions on materials, fuels and taxes. These incentives, plus low interest loan rates, have greatly lowered the cost of labor.

Such trends are as evident in agriculture as they are in industry. Carlos Saenz's survey of 300 prosperous farmers in all regions of the country who regularly used hired labor revealed that 70 percent of those interviewed had reduced the labor input per unit of land on their farms since 1950. When asked why they moved away from more labor intensive methods of production, 64 percent of the farmers mentioned the enforcement

of increasing minimum wage laws and/or the cost of compulsory contributions to welfare programs. Another factor mentioned was the relative ease of obtaining credit for certain labor-saving activities, notably beef production. Favorable credit terms for the purchase of farm machinery also provided incentive for heavier mechanization.

In the case of one export crop, coffee farms have reduced labor inputs primarily by substituting herbicides for manuel tools and by using coffee varieties which require less pruning. Heavier reductions have been carried out in the processing and selection of the coffee beans. In one instance the use of labor in the selection of processed coffee beans was reduced 90 percent by the installation of a mechanical sorter. 2./

The heaviest reductions of labor occurred on farms producing exclusively dairy products. These were achieved in all cases by changing the fodder system from green feeds to permanent pastures.

The worst cases of all, however, occurred where capital-intensive farms not only displaced labor but expanded the land area under their control. This phenomenon has happened in the Guanacaste region on the Pacific coast where the topography allows for extended, efficient use of machinery. It is known that between 1955 and 1963 tractor use in this region increased 12.3 times; mechanical planters 15.4 times; and mechanical harvesters 15.4 times. A number of small and medium farmers have sold their land in this region and in the Heredia and Limon areas.

One indicator of the increasing concentration of landholding is the threefold increase between 1963 and 1973 of minimundia farm units of less than one hectare. These infrasubsistence farm units grew from 3,661 to 14,413 during this period.

One cause for the increasing concentration of landholding is undoubtedly the expansion of the export agricultural sector. Banana production has expanded significantly during the 1970s, as has the production of beef cattle. Bananas are a high technology, land intensive crop. From the point of view of employment the problematic export is beef cattle since most productivity has come as a result of expanding acreage in pasture, and not by increasing technology in order to use land more intensively.

In addition to the relative costliness of labor in relation to capital and the expansion of the export agriculture sector, there is another important demographic-institutional trend that will undoubtedly have a profound effect on landlessness. This is the fact that Costa Rica no longer has an abundant surplus of unclaimed frontier agricultural land which displaced peasants can simply squat upon and make their own. An indicator of this has been land invasions that have taken place recently both in the South Pacific and Atlantic Shelf regions.

III. Public Policies Affecting the Landless and Near-Landless

The government of Costa Rica has initiated a number of programs to redistribute income including high support prices

for agricultural production; minimum wage legislation and inclusion of previously uncovered non-contributors in the social security system, etc. It has also expanded services in health, nutrition, education; family planning; potable water and low-cost housing. Indeed, in the 1975 federal budget nearly 40 percent of the total budget was spent for social services.

A low cost rural health program is now providing coverage to approximately 50 percent of the 650,000 people in towns of less than 500 population. The basic mechanism for redistribution is the Family Assistance and Social Development Program which focuses on nutrition; care and feeding of children and pregnant women; potable water; rural housing; and community development. To finance this program the government will increase the general sales tax to eight percent and a payroll tax to five percent by 1978.

In agriculture the government's programs have included making credit available to small farmers; the formation of production cooperatives; and the titling and resettling of landless laborers by the Land Tenure and Colonization Institute (ITCO). To date ITCO has resettled few persons, generally in areas of land invasions and political unrest. Land is not currently being expropriated in Costa Rica for agrarian reform in any real sense. ITCO and/or reform beneficiaries pay the full market value for it. 3./

Future government plans call for the creation of more employment in industry and agriculture. However an obstacle to this may be Costa Rica's membership in the Central American Common Market, an organization that gives strong subsidies to the importation of capital intensive technology.

V. Research Needs

Costa Rica has a large number of small farmers in the central highlands oriented toward market production. Their technology is fairly high and a wide variety of quality produce is grown. Exports of fresh and frozen fruits and vegetables have just begun in recent years. But marketing efficiency and technology is very low and seems to pose a major drawback for the future. The possibility of expanding employment and production among commercial minifundistas in the highlands should be investigated. Studies are needed to find out what the bottlenecks are towards expanding production among this group.

The efficiency of land use in the formerly frontier coastal regions also needs to be investigated. Are the persons who have title to these lands actually cultivating them? If not, what kind of tax policies, titling, infrastructure or other types of investments are necessary to get more land in these regions into production and more people employed upon it?

Costa Rica

Endnotes

1. U.S. Department of State, Development Assistance Program, FY 1977: Costa Rica, Washington, 1976, pp. 6-7.

2. Carlos Saenz, "Population Growth, Economic Progress, and Opportunities on the Land: the Case of Costa Rica," Madison, Wisconsin: Land Tenure Center Research Paper No. 72, 1972, p. 64.

3. Jose M. Salazar, Sr., et. al., "An Innovative Agrarian Policy: The Case of Costa Rica" a paper presented at a conference on land reform sponsored by the Land Tenure Center, Madison, Wisconsin, July, 1977.

COUNTRY PROFILE: EL SALVADOR

Population (1975): 4,100,000

Workforce: (42% of population): 1,722,000

Percentage of Workers in Agriculture: 63%

Number of Ag Workers: 1,094,860

I. Incidence of Landlessness and Near-Landlessness

The agricultural census of 1971 enumerated 357,000 rural families in El Salvador, 10 percent of whom cultivated a farm unit of over five hectares. As can be seen from the table below, the total land area held by the farm-size categories is roughly even, but the average size of the farm units (reflecting the number of cultivators in each category) varies enormously. The data suggest that El Salvador's agricultural sector is divided into two populations of cultivators: the agri-business and family plantations versus a large population of landless or near-landless laborers. A report by INCAE says that 67 percent of the campesinos in El Salvador do not own their own land and 80 percent are either landless laborers or work farms of less than two hectares. 1./

El Salvador's Agrarian Structure--1971

Farm-size	No of Farms	% Farms	% Area	Ave. Size (Manzanas)*
Infrasubsistence	132,184	44.8	4.8	0.8
Sub-Family	118,911	43.9	22.5	4.3
Family	15,710	5.8	23.1	33.4
Multifamily Med.	3,250	1.2	21.1	147.0
Multifamily Lg.	813	0.3	28.4	791.0

A manzana is .7 hectares

Taking into consideration that the bulk of El Salvador's minifundestas must pay rents on the land they farm, then the distribution of rural income is even more skewed than the statistics on farm size alone would indicate.

Land Tenure Patterns on Small Farms

Farm Size	Percent of Land Owned	Percent of land Rented	Percent of Land Share-Cropped	Percent of Land in Other Forms
5 to 1 Ha.	27.7 %	53.0 %	8.6 %	10.6 %
1 to 2 Ha.	40.3	46.3	3.4	10.0
3 to 5 Ha.	69.4	25.0	0.0	5.6
5 to 10 Ha.	84.9	11.0	0.0	3.6
10 to 20 Ha.	90.8	6.6	0.0	2.5

2./

Major regional variations also occur in the quality of land, a two hectare plot in western coastal areas being equivalent to ten hectares in the eastern region of the country. The largest estates also own most of their land in the best agricultural areas of the country.

If we recast these figures in terms of the categories used in this study we arrive at the following calculations*:

LABORERS	permanent:	136,538
	temporary:	166,880
CULTIVATORS	insufficient:	41,430
	insecure/insufficient:	165,723
TENANTS	insecure/sufficient:	82,861
	insecure/insufficient:	331,446
ARTISANS, OTHERS		75,654
	TOTAL	1,007,000

*Calculations used to determine the landless figures were as follows:

35,000 (families over 5 ha.)	1,094,860	(Ag Labor force)
x 2.5	87,000	
87,000	1,007,000	(poor rural majority)

251,095 (cultivators w/LT	1,007,000	
x 2.5 5 hectares)	627,738	(cultivators)
627,738--insecure/insufficient cultivators	379,272	(landless)

Among the landless, 36 percent were figured as permanent laborers. Among the cultivators, one-third were figured as owners (167,938) and two-thirds as tenants (334,796). The divisions between the "secure/insufficient" and "insecure/insufficient" categories were 20 percent/80 percent. Artisans, petty merchants, etc. were estimated as constituting .20 of the landless labor force.

The previous totals compare thusly with the figures from the 1971 agricultural census:

Category	1971 Census Families	1971 % Families	% Ag Laborforce 1977 Study
Families w/out access to land	85,000	24%	23%
Families w/LT 1 ha. (insufficient)	133,000	37%	53%
Families w/1-5 ha. (more sufficient than previous category)	104,000	29%	14%
Families w/ GT 5 ha.	35,000	10%	10%
TOTALS	357,000	100%	100%

II. Causes and Trends Affecting the Landless and Near-Landless

From 1950-1970 the population of El Salvador doubled. El Salvador has also come to the point where it has no agricultural frontier land. Further increases must come from the export sector moving onto the lands of the subsistence sector or vice versa.

Institutionally, El Salvadorian agriculture is characterized by a high concentration of resources in the hands of agricultural exporters. To give one example, coffee occupies more than one-fifth of the national land under cultivation. Four percent of the country's growers control about 60 percent of the coffee land and 75 percent of the national production.

Large landowners not only wield enough political influence to kill policy proposals aimed at modifying the tenure structure, but they are also able to maintain low wages free from any

governmental attempt to enforce minimum wages or the provision of other social benefits. Shortages of agricultural labor within El Salvador at these low wage rates and bad working conditions are simply offset by the migration of tens of thousands of workers each year from Guatemala and Honduras.

One economist well expressed the mentality of El Salvador's elites in not making an attempt to raise the wages of agricultural laborers when he said:

> Each of El Salvador's main agricultural exports (cotton, coffee, sugar) appears to require plantation-type farming. Plantations require abundant supplies of low cost human labor, particularly at harvest time. Due to the lack of export diversification it is hard to see how El Salvador can compete on world markets with these particular crops unless people are willing to keep plantation wages and living standards low. 3./

The land tenure situation deteriorated significantly between the 1961 and 1971 censuses. The number of farms under one hectare increased from 107,000 to 132,000. The same trend was observed for farms of less than 10 hectares. It is likely that this deterioration has continued since the 1971 census. 4./

The farm size situation alone does not reflect the seriousness of the land tenure problem. In the 1971 census, 60% of all farms were being operated under some kind of lease or rental arrangement. Demand for land to rent is very high among many small farmers and consequently rents are high and farmers have little leverate in negotiation agreements with land owners. In 1976, land rents ranged from US $40-120 per manzana for a single crop period of

eight months. Land purchase prices are also high and because long term credit is not available, land purchase is usually not an alternative for the landless or near-landless. 5./

In addition to the serious and deteriorating land tenure situation, several other aspects of El Salvadorean agriculture constrain income earning possibilities among the peasantry. Coffee, an important cash crop grown by minifundistas, (almost two thirds of the coffee farms are less than one hectare in size) tends to have low yields in El Salvador in comparison with other countries.

Agroindustry, potentially a major consumer of primary agricultural products, especially the food processing industries, tends to be plagued by marketing problems which restrict its ability to stimulate production among small farmers and employ more landless labor. In vegetable production, for example, vegetables can only be grown in the dry season in El Salvador because of weather conditions whereas they can be produced all year round in Guatemala's climate. As a result, instead of purchasing locally grown produce, the major vegetable buyers prefer to import from Guatemala, even during the dry season, in order to insure steady supplies during the rest of the year. Large bottlenecks exist in extending the backward linkages of the food processing industry to small and poor farmers. Small farmers produce only 14% of the raw farm product consumed by agroindustry; the balance is supplied by large farmers and imports.

III. Public Policies Affecting Landlessness

In June, 1975 the Government of El Salvador passed a law

creating the Salvadoran Institute of Agrarian Transformation (ISTA). It's aim was to improve the social and economic conditions of the rural poor, primarily by establishing more equitable and secure land tenure rights for lower income agricultural families. However, when ISTA announced its first project which included expropriation of approximately 380 farms (56,000 hectares) in the country's cotton and livestock area, the private sector launched a massive opposition campaign. The government received little or no support from any influential sector of the society and thus negotiated with the private sector and sent an amended law to the legislature which was rapidly passed. ISTA will continue to function, but on a much reduced scale; it cannot unilaterally expropriate cultivated lands. ISTA's program is now restricted to cash payments and relies on the voluntary sales and confiscation of farms which do not comply with the government's social betterment and masimum productivity requirements. 6./

In an effort to assure fair treatment to a large number of farmers (60% of the total) who are farming under some form of rental agreement, the Government of El Salvador passed a Rent Law in November 1974. This law set guidelines for tenancy agreements and reorganized the agrarian reform agency. It stipulates that: i) all land rental agreements must be in writing and notarized; ii) the minimum term for rental agreements shall be three years and are automatically renewable; iii) maximum rents shall be set by their farms in basic grains (corn and beans) with the percentage to be determined by the Ministry of Agriculture; iv) cotton and sugar growers must plant a part of their farms in basic

grains (corn and beans) with the percentage to be determined by the Ministry of Agriculture; and v) sharecropping arrangements are prohibited. The result of this is unknown since there has been no evaluation made to date of the impact of this law on farmers who are renting land. Some parts of it, however, are being enforced and many observers feel the net effect has been a reduction in land available for rent. p. 10. 7./

IV. Income, Employment and Organization Among the Rural Poor

Micro-level studies on wages, working and living conditions of the rural poor are lacking but the following estimates of relative income and relative employment levels are available prepared by the USAID Mission to El Salvador in 1973. (See page).

As for organization among the peasantry, there exists the Salvadorean Communal Union which by 1975 had 200,000 members, 90,000 of which paid dues. Membership in this organization includes both males and females and occupations vary from seasonal migrant laborers to estate workers to tenants to squatters on private lands and proprietors who need credit and technical assistance. This peasant organization has so far been able to attract a significant amount of funding (half its budget) from international development agencies, which lessens its dependence on the Salvadorean government. Activities have included the cooperative farming of leased land; administering loans to small farmers; womens development programs; and some lobbying with the federal government for agrarian reform. By 1975 the SCU was debating whether to organize agricultural labor in El Salvador. This would mean

Category	1973 Income (colones)*	Well-Being (Expressed as % + or - minimum)#	Employment in Man-Days/Family@	% Under-Employment
Landless Family	680	32% below	190	65%
Family w/LT 1 ha.	840	16% below	270	50%
Family w/1-5 ha.	1,650	65% above	410	25%
Average Family	1,060	6% above	290	47%
Family w/5-50 ha.	10,000			
Family w/50-4000 ha.	70,000			
Average Urban Family	8,000			

* a colon = US $ .40

minimum income for a family of six was calculated at ¢ 1000 or US $ per member

@ a family was considered to have 575 man-days (275 x 2)

Source: 8./

exercising a more explicitly political role than the SCU had previously played, as well as adopting a stronger orientation toward landless labor groups, the building of strike procedures, greater agitation for reform and implementation of labor laws, etc. Speculation was that the SCU would continue to work with a number of groups in the countryside rather than focus on any one occupational group because in this way it stood a better chance of maintaining funding from international sources. 9./

Groups like the Union Communal Salvadorena and Parcelaciones Rurales have been important in assisting small farm renters and landless laborers with land purchase and financing and by providing technical and marketing assistances. But these private sector agencies reach only a limited number of poor rural families, and increased public support could greatly accelerate such programs. These peasant organizations are limited by finances, personnel, poor access to many rural areas, inadequate public institutions serving the agricultural sector, and rightwing landlord terrorism.

V. Research Needs

Data is largely lacking on wages, working conditions, migratory patterns and organization among temporary and permanent laborers on plantation estates.

No monitering has taken place of the effects of the Government of El Salvador's rent control laws. Has it displaced renters? If so, to what extent? What services are lacking in order to place rental arrangements on a more legal basis? How can this law be selectively enforced in certain areas without causing major displacement of small tenants?

In terms of creating employment for the landless, research is needed on the development of backward linkages in order to supply agro-industries with raw materials. One study found that for about eighty percent of the farms from 3-10 hectares, potential exists to expand the area under cultivation 30-50%. Lack of labor or technology does not appear to be an obstacle for these farms, but marketing problems loom large. Research is needed on what saleable crops these small farms could find a market for. 10./

Agricultural economists have complained that the commodity mix on small farms whereby minifundistas grow corn and beans rather than employing multiple cropping techniques to produce more renumerative cash crops is a major cause of low incomes in the agricultural sector. Given the underdevelopment of public institutions to assist the landless and near-landless, possibilities for private groups such as the Salvadorean Communal Union to orient minifundistas toward a higher paying commodity mix should be explored.

End Notes -- El Salvador

1. Instituto Centro americano de Administracion de Empresas (INCAE) "Salvadorean Communal Union: Campesino Organization for Social Change." Managua, 1975.

2. U.S. Agency for International Development. Agricultural Sector Assessment: El Salvador, Washington, D.C., 1977, table 10, p. 32.

3. David R. Reynolds, Rapid Development in Small Economies: the Example of El Salvador, New York: Praeger, 1967, p. 19.

4. AID, Agricultural Sector Assessment, p. 3.

5. Ibid, p. 9.

6. Ibid. p. 73.

7. Ibid., p. 10. See also, Ivo P. Alvarenga, "Alternative Strategies for Land Reform: the Case of El Salvador in Land Reform, Land Settlement and Cooperatives, (UN/FAO) 1977 - No. 1, pp. 25-30.

8. Enrique Garcia Ayavira, "Rural Income and Employment," Unpublished manuscript, Agency for International Development, Washington, D.C., 1974, pp. 3,7,9.

9. INCAE.

10. AID, Agricultural Sector Assessment, p. 49.

COUNTRY PROFILE: GUATEMALA

Population (1977): 6,000,000

Workforce: (45% of the population) 2,700,000

Percentage of Workforce in Rural Areas: 70%

Rural Workers: 1,890,000

I. Incidence of Landlessness and Near-Landlessness

Data gathered by the UN Economic Commission on Latin America (1965) indicates that 9 percent of the economically active persons in agriculture were employed in the lowest income-earning strata. 1./ The CIDA study of Land Tenure and Socio-Economic Conditions in Rural Guatemala (1966) claims that 88 percent of all rural families are subsistence farmers. These two estimates seem to be the higher and lower boundaries of an agrarian structure characterized by a very high proportion of poor rural people.

The three major occupational categories among the rural lower classes are minifundistas, temporary (seasonal) laborers, and permanent workers on plantations (called colonos in Guatemala). CIDA found that only about 10 percent of the cultivators were tenants; 57 percent owned their land; and the rest were agricultural laborers.

With such a high degree of rural poverty it is not uncommon that most economically active people depend on the same types of activities to earn a living (a combination of subsistence farming, seasonal labor in agriculture, and artisan or petty commerce activities). In terms of income earning differentials, the critical variable is not so much

what occupation or tenure status a peasant has, but rather where he works. To be able to have a subsistence plot on the more fertile lowlands of the coast is much more valuable than a highland plot of the same size. Indeed, the worst poverty exists among the highland subsistence farmers where poor natural resources and excessive population pressures are worsened by cultural backwardness and racial discrimination against the Indian populations who live there. It is a widely held desire to obtain a plot and/or a permanent position on a coastal estate. Institutional factors block this, however. Large estates hold much of the land and they refuse to take responsibility for the Guatemalan peasantry except to meet their peak seasonal labor needs at harvest time. Hence the bulk of the peasantry combines subsistence farming with seasonal migration which is necessitated by an inability to satisfy minimal food requirements from the subsistence plot alone.

Because this subsistence farming/seasonal migration pattern is so pervasive (almost insured by the prevailing land tenure and political institutions), differentiating occupational categories is not as relevant for Guatemala as it would be for countries that do not have plantation economies. Nonetheless, we estimate the following distribution of occulations among the landless and near-landless in Guatemala*:

		FAMILIES	PERSONS
LABORERS	permanent	90,000	198,000
	seasonal	175,000	385,000
CULTIVATORS	insecure/insufficient	290,400	638,800
	secure/insufficient	114,900	252,780
TENANTS		50,000	110,000
ARTISANS		35,963	79,120
	TOTALS	756,263	1,663,200

*As to how these calculations were made, the 1964 agrarian census reported these numbers of families in the following occupational categories:

CULTIVATORS	"parvifundistas" (GT 2 ha)	215,000 families
	"microfundistas" (LT 2 ha)	85,000 families
	Cultivators who do not own their own land	130,000 families
	Agricultural workers (excluding seasonal migrants)	100,000 families

The migrant labor workforce that came to coastal estates in 1965-66 was estimated to be between 300,000-400,000 workers. 3./

In a 1970 publication the Guatemalan Government estimated that the yearly rate of increase among these tenure categories was as follows:

parvifundistas:	5,800 families
microfundistas:	2,300 families
tenants:	3,200 families
agricultural workers:	2,500 families

These rates of increase seem somewhat inflated, especially when applied to 1964 census data in order to yield 1977 estimates.

The 1977 figures, therefore, were brought roughly in line with the occupational proportions in the 1966 CIDA study. The CIDA estimate of 88 percent of the rural workforce as being landless or near-landless was also accepted to determine number figures.

II. Causes and Trends in Landlessness and Near-Landlessness

Institutional Factors. Guatemala closely fits the prototype of a plantation economy. There is a vital connection between small farms and large fincas: the peasants need off-farm income in order to survive and the plantations need cheap labor. If somehow subsistence farmers had enough land and were not compelled to go to the fincas, there would be a labor shortage and the agro-export system would be in danger. The whole agricultural economy--plantations and the minifundia sector--work as a single system. The chief requisites to make it function are large concentrations of land and a large labor force at subsistence levels to harvest the surplus of the land cheaply.

If we examine the fragmentary evidence available on income trends, the tendency has been for the average earnings of persons in the subsistence sector to decline.

Relative Shares of Eight Minifundista Departments in Guatemala's Total Population, Gross Domestic Product, and Per Capita GNP, 1951-1966

	1951	1964	1966
Gross Domestic Product, %	16.0	8.0	6.4
Total Population, %	41.9	39.1	38.7
Subsistence Sector Per Capita GDP (in quetzales)*	97	62	51

*The quetzal is equal to the US dollar.

Part of the reason for this downward trend in income of the rural lower class is attributable to the fact that employment in the plantation sector is not expanding. Given the limited world demand for primary goods such as coffee, cotton, sugar cane, the outlook for increased demand for labor is not good.

Also, several of these export crops are moving away from the intensive use of labor. Cotton, for example, is now highly mechanized in almost all aspects of production and uses labor-saving inputs such as pesticides, herbicides, etc. Although sugar cane is still cut by hand, the planting, cultivating and hauling operations are largely mechanized. Although cattle production is not mechanized, it is carried on at very low technological levels, making extensive use of land and labor and paying little attention to pasture improvement, good breeding practices or control of parasites and diseases.

Another obstacle to raising the income of the rural poor is the imbalance of economic and political power between the subsistence and plantation sectors. Ninety percent of all farm units in Guatemala controlled less than 20 percent of the farm area in Guatemala in 1964. At the other extreme, less than three percent of the farm units controlled 60 percent of the area in farms. Commenting on these large farms a group of agricultural economists from Iowa State University stated:

> While producers of some crops use modern methods and improved technology, many of the large

farms in the commercial sector appear to be farmed neither intensively nor efficiently. There is a high degree of absentee ownership. Large farms are also wasteful of land in that they encompass a much larger area than is used for production. 6./

Another factor which may significantly influence the rural poor in their struggle for subsistence is that Guatemala is characterized by a high level of para-military rightwing violence. Amnesty International estimates that some 20,000 have been killed in political violence, particularly highland peasants liquidated in "counter insurgency" operations. The hand of the Guatemalan military and police forces--and of the rightwing extremists within them--has been strengthened by international support. Between 1966-1972 approximately $40 million dollars is known to have been spent on modernizing the Guatemalan military and police forces, with most of the money coming from the US government. In 1977 Guatemala joined with other Latin military regimes in rejecting US military aid in protest to US congressional hearings on Guatemalan civil rights. 7./

III. Public Policies Affecting the Landless

Since the overthrow of the nationalistic Arbenz regime in 1954, most of the policy measures directed toward the peasantry have consisted of coercion to repress them. Major counter-insurgency operations carried out by the

Guatemalan military with the support of and at times the active participation of the US Government began sweeping over rural areas in 1965. Counter-insurgency operations are still being carried out today, in addition to the extra-legal violence of right and left wing terrorists and landlord groups. During the same period, proposed policies to increase the wages of migrant workers or improve working conditions have been defeated, as have proposals for voluntary (paid) land reform and land taxes. There are major political parties in Guatemala who favor more rational use of the land and rural unionization. Up to this point, however, they have been excluded from control of the regime. 8./

The current government of conservative President Kjell Laugerud has made efforts to control some of the extra-legal violence and extend more education and health services out into the countryside. Laugerud has sponsored some colonization projects in the sparsely populated northern department of El Peten, and the formation of cooperatives among peasants in order to overcome poor natural resources and lack of roads and markets once they got there. Although surplus land is available in El Peten and other regions, colonization does not appear to have great potential to alleviate problems of rural poverty in Guatemala because of the lack of political will to carry it out. Not only is the budget for colonization underfunded, but most of the good lands available have gone so far to individuals with large landowning or military interests. 9./ No coalition of political forces has come to power since Arbenz with enough

power to oppose in effective ways the interests of large landowners and agro-exporters.

IV. Wages, Income, Working Conditions Among the Landless and Near-Landless

Perhaps the best micro-study for any of the Latin American countries exists on the incomes and working conditions of migrant Guatamalan laborers thanks to the research of Lester Schmid.

Schmid sampled a group of 120 highland peasants who migrated down to work on 43 plantations growing coffee, cotton and sugar cane. He found that at least two-thirds of the plantation labor was obtained through labor contractors. Contractors are often money lenders in the subsistence sector; thus a large number of plantation laborers are procured through debt. Since the contractors recruit from the same areas all the time there is no escaping debt obligations to them unless a peasant is willing to abandon his home and plot in the highlands. Most labor contracts are made only with the head of the family or with the head and older sons. Wives and younger children often contribute to fulfilling the obligations of the migrants, but in most cases they are not acknowledged workers and are therefore unable to receive food rations, payment of passage, etc. Typically, laborers are contracted for 30 day periods at a time in order to give farm administrators more flexibility in fulfilling their labor needs. 10./

As for wages and the way they are determined, on coffee fincas the picked coffee was measured by means of a wooden box

into which the loose coffee was dumped. The box by law is defined to hold 100 pounds, but on three fincas where Schmid measured it, the box held 123, 135 and 150 pounds respectively. The average wage paid per box was $.72-$.75. 11./

On cotton plantations, the standard measure for determining wages was 100 pound lots of picked cotton. The standard deduction is supposed to be five pounds for the weight of the sack, moisture, foreign materials, etc. Schmid found, however, that discounts ranged anywhere from 10-25 pounds. Wage rates per lot varied from $1.08 to $1.30.

With sugar cane wages varied from $.40-$.80 per ton cut.

All of the coffee workers, most of the sugar cane workers and a quarter of the cotton workers said they were paid the seventh day as required by law. Seventy percent of the coffee workers, 50 percent of the sugar workers and eight percent of the cotton workers were also paid official holidays. Coffee and sugar fincas were more likely to pay for holidays of the finca; give compensation to workers when ill; supply free medicine; and allow the picking of fruit. 12./

Housing varied considerably from finca to finca. On a few cotton farms and most coffee farms shelters consisted of a roof supported by poles without walls or partitions of any kind. There was one finca employing thousands of workers with no shelter whatsoever. However there were other fincas with shelters made of concrete block with screens on the windows. On most fincas workers slept on the ground, in hammocks or on straw mats. About 30 percent had sanitary facilities

or electricity. Ninety-five percent of the large farms had water supplied by a well.

The amount of food supplied in rations was generally below the amount workers said they ate in their home communities. About half said they either brought food with them or that they purchased food while on the finca.

Seventy percent of the workers said they'd been ill some of the time or all of the while working on the finca. Many had dysentary; 25-30 percent said they had malaria; some had poisoning from insecticides. Most of the fincas had a clinic and 23 of the 43 had a nurse to staff it. 13./

As for length of employment and earnings, migratory workers on cotton fincas worked an average of 74 days per year; on sugar cane farms, 99 days; and on coffee plantations, 126 days.

The average amount earned on the fincas was $103 for 101 days work. Of this, about 53 percent was taken back to the community, the rest being spent for food (32 percent), clothing, debts to the labor contractor and incidentals. The earnings brought back to the home community nearly eliminated the deficits incurred by living expenses in home communities. IT IS SIGNIFICANT THAT FOR MARRIED WORKERS A DEFICIT STILL EXISTED. 14./

In general living conditions were better for permanent labor on the plantations than for migratory workers, and for procured work for themselves rather than those recruited by a labor contractor. The permanent workers were usually able to have a house of their own. Over one-third had electricity;

60 percent of the houses had windows; and 25 percent had cement floors. Almost all of the houses had laminated or tile roofs.

A majority of the coffee and sugar cane fincas aided their aged residents and widows in one way or another. Most of the coffee and sugar cane fincas also furnished schools and paid teachers salaries.

Schmid found, however, that the opportunity for migrant workers to remain on the fincas was extremely limited.

V. Research Needs

Previous agrarian censuses have not paid much attention to ascertaining the exact tenure status of cultivators (squatters? share-croppers? customary tenure?) and other economically active people in rural areas. Such information would be valuable in understanding the constraints faced by farm families in increasing on-farm employment and income.

Policy advisors have recommended that more attention be given to the diversification of production in the subsistence sector, and particularly to the technical improvement of corn and beans, which would release land for diversification and make peasants more able to try new crops. 15./ An important need is to adopt this technical research to the cultural milieu in which the subsistence cultivator functions. Information is scarce about how much disposable cash income peasants have to afford inputs; how many disposable days of adult labor are available at what times of the year for on-farm employment, etc. Because many subsistence farmers employ part-time farming

strategies, we need to be more familiar with how and why peasants calculate to allocate time and other resources to on-farm versus off-farm employment. It may be that many cultural and socio-economic obstacles exist which must be modified in order to increase basic food yields.

Another important area of needed research is the contracting procedures for seasonal laborers. In some instances individual peasants can contract to hire themselves out without paying a contracting middleman. In other instances whole villages--indeed, regions--are contracted by individuals who establish and maintain with peasant laborers a continuing relationship based on debt. How much room for maneuvering does a peasant have in obtaining seasonal work? Does this depend on his personal skills; his economic position; the nature of the community or region in which he lives; the kind of export crops he's harvesting; or the particular plantation on which he works? The design of labor legislation throughout the Latin American region would be aided by knowing more about cultural, political and economic variables which increase or decrease the contractor's power vis-a-vis migrant workers.

A final research need of major importance is to have more accurate information about the real wages and real costs of migratory labor. Real wages must be calculated not simply in terms of male, head-of-household migrants, but in terms of all family members who perform migratory labor. Does it benefit a family to be paid strictly in terms of cash or cash and kind? What variables determine why migrants prefer

one form of payment over others? How much opportunity and mobility is there for migrants to discover information about wages, working conditions and real costs associated with working at different plantations? What are the factors that are critical to increasing the seasonal migrant's (or, migrating family's) decision-making ability and real income derived from the sale of their labor?

Guatemala Endnotes

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4. Report of the Guatemalan Government on Colonization, Agrarian Transformation, Rural Development and Agricultural Labor, Geneva: UN/ILO, 1970, pp. 22-3.

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8. For a current analysis of political forces in Guatemala, including the more progressive parties, see International Affairs Reports, op. cit., pp. 4-8.

9. NACLA, Guatemala, New York, 1974, pp. 21-22.

10. Schmid, op. cit., pp. 15-16.

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COUNTRY PROFILE: MEXICO

Population: 60,500,000

Workforce (1975): 18,704,000

Percent Workforce in Rural Activities: 40.6%

Number Rural Workers: 7,600,000

I. Incidence of Landlessness and Near-Landlessness

The agrarian structure of Mexico is one of the most complex in Latin America. Because of its proximity to the United States, penetration by foreign capital, and post-1940 agricultural modernization policies, Mexico has a sector of commercial agriculture that is as technologically advanced as any that exists in the industrialized capitalist countries.

Due to a social revolution which eliminated the hacienda social structure and debt peonage, Mexico also has a very large number of self-employed cultivators owning small parcels of land. Originally the Mexican government's policy during the period of rapid, massive land reform which occurred during the 1930s was to keep reform beneficiaries together in a collective farm structure called an ejido. But post-1940 policies promoted fragmentation so that 80+ percent of all ejidatarios today have become in effect minifundistas.

Finally, there is a sizable population of subsistence cultivators whose production habits are determined more by a low, steady-state technology and traditional social practices than by anything else. The bulk of these traditional farmers are of indigenous extraction. As an indicator of their numbers, the 1970 census registered 3.15 million persons

who still regularly spoke indian dialects. The largest concentrations of indigenous inhabitants were found in the states of Oaxaca, Puebla, Chiapas, Veracruz, Yucatan, Mexico and Hidalgo.

Delbert T. Myren estimated that the number of farm families falling into these three general categories was as follows:

* Modern (Commercial) Ag Sector:	20% farm families
* Transitional Ag Sector:	45% farm families
* Traditional Ag Sector:	35% farm families

Except for showing concentrations of dialect-speaking peoples it is difficult to say exactly where these sectors are located geographically. The standard literature on Mexican economic development says that a sector of commercial agriculture formed in the irrigation districts of the Pacific Northwest. But large scale irrigation projects have become uneconomical in the northern Mexican states and government investment has shifted to the central states. Commercial agriculture followed this shift so that today it does not correspond to a particular area, but to irrigated districts all over Mexico. Also, the commercial sector and the transitional sector of cultivators are not physically separate but exist in a symbiotic relationship, the former drawing land and labor from the other at will.

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*The modern sector was defined as cultivators consuming less than 25 percent of what they produce. The transitional sector consumes between 25-75 percent of what is produced. The traditional sector consumed in excess of 75 percent.

To further break down Myren's gross categories, recall that the result of social revolution and land reform was to fragment landholding and fail to form a sector of collectives that could absorb new persons entering the laborforce. On top of this, commercialization concentrated resources in the rural sector, so that Mexico today is characterized by a large number of landless or near-landless.

Occupational Category in Agriculture	% Workforce (1975)	No. Persons (1975)
Employer	2.5	190,000
Salaried Worker	5.2	395,200
Day Laborer	43.7	3,321,200
Self-employed	22.2	1,687,200
Ejidatario	16.0	1,216,000
Unpaid Family Labor	10.4	790,000
TOTALS	100.0	7,600,000

For the purpose of delineating a target group for its own poverty programs the Mexican government in 1973 estimated that there were 12 million people in rural areas whose per capita incomes were less than US $100 a year--roughly half of the population in the countryside. 3./ If we look, however, at the productive resources controlled by the various size-categories of Mexican farmers, as many as four-fifths of the cultivators appear to be landless or nearly so.

A factor complicating the estimate of the rural unemployed in Mexico is the close proximity of the high wage US economy. Estimates are that approximately 5.2 million illegal Mexicans work in the US economy for some period of time each year. 5./

Division of Land and Value of Production Among Size Categories of Mexican Farms, 1960

	% Farm Units	% Value of Production	LAND AREA % Cultivatable	LAND AREA % Irrigated
Infrasubsistence or Sub-family	84.1	23.1	34.0	2.7
Family	12.6	24.4	20.0	25.6
Multifamily Med.	2.8	22.0	15.1	32.7
Multifamily Lg.	0.5	32.3	30.0	39.0

This is what probably keeps the poverty category closer to the 50 percent estimated by the Mexican government, rather than the 84 percent indicated by the figures on farm-size above. However, a large percentage of the workforce in Mexican agriculture would additionally slip down into the poverty category if employment opportunities for them in the United States were to constrict significantly.

Accepting for now the Mexican government's figure of 12 million rural poor, we then estimate that there are 4.8 million economically active persons below poverty levels. To place them into the categories employed by this study the occupational proportions of the 1970 census for agriculture were used.

LABORERS (47.5%)	permanent:	*
	temporary:	2,137,500
CULTIVATORS (24%)	secure/insufficient:	1,080,000
	insecure/insufficient:	*
TENANTS		*

AGRARIAN REFORM BENEFICIARIES:	(17.3%)	778,500
ARTISAN/OTHER	(11.2%)	504,000
TOTAL		4,800,000 economically active persons

II. Causes and Trends in Landlessness and Near-Landlessness

Surveys indicate that income inequality is increasing in Mexico. For example, in 1950 the lowest 50 percent of income recipients accounted for 19.1 percent of all personal income; but by 1958 they received only 16.7 percent and by 1969 only 15 percent. During the same two decades the share of the wealthiest 20 percent grew from 60.4 percent to 64 percent of all disposable income. Within this process the unequal distribution of economic benefits between urban and rural people has been especially clear. A survey conducted by the Banco de Mexico in 1969 showed that although 40.8 percent of Mexican families had incomes of 1,000 pesos or less a year, the proportion of farm families reached 66.1 percent while non-farm families had only 25.6 percent. 6./

The above inequality has been heavily influenced by institutional factors. The Mexican government has played a major role since 1940 in accumulating capital in the hands of the upper income strata and in transferring resources from

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* To explain why certain categories were left blank, permanent laborers in Mexican agriculture are often skilled workers who do not fall into the poverty categories. Renters and sharecroppers are often large farmers or agri-businesses. Mexico does not have widespread toleration of the practice of squatting in rural areas. Title insecurities where they do exist, are principally among ejidatarios.

agriculture to urban/industrial development. For example, Cynthia Hewitt de Alcantara analyzes how a dual structure of supply was set up for large private farmers on the one hand and ejidatarios (land reform beneficiaries) and minifundistas on the other. The inefficiencies and poor service of government credit, seed, fertilizer and marketing agencies made factor costs higher and factor quality lower for small producers--putting them at a disadvantage to compete with larger commercial farmers even when the quality of their land was the same. 7./

Competence aside, government agencies have at least offered services to ejidatarios and small farmers possessing irrigated lands. The majority of land reform beneficiaries and private minifundistas possessing rainfed lands, forest areas, etc. have operated practically in a vacuum of public concern for their well-being. Although half the country's cultivatable land had been formed into ejidos during the radical phase of the land reform, during the 1940-1970 period nothing was done to organize ejidatarios, improve their practices and make ejidos efficient in terms of production. Consequently most ejidos fragmented with members each receiving land to work by themselves. In the absence of production credit many ejidatarios rented their land to larger private farmers, left it fallow, or turned to hard-bargaining local money lenders. Thus a new system of social domination emerged in the post-land reform period, much as it is doing in Bolivia today. The new system in Mexico is based less on visible ownership of large extensions of land, and more on control via marketing and credit. In comparison

with the previous hacienda system, most observers have agreed that the domination mechanisms operating in Mexican agriculture today are more complex, more impersonal, and much more difficult for the peasant to identify exactly who it is that is removing his production surplus. 8./

Two additional factors are important in establishing the distribution of productive resources in rural Mexico. One is the increasing penetration of US investment in food processing and in the export of fruits and vegetables to the American market. Control mechanisms are no different than those regularly operating in the commercial and transitional sectors: credit and production quotas. Taking the strawberry industry as an example, Ernest Feder discusses the dangers such investment represents for improved income distribution and employment in rural Mexico. US demand for the Mexican agro-exports fluctuates like a roller coaster. If Californian or Texan producers expand cultivation, or if demand in the US economy for fruits and vegetables slumps, Mexican production quotas are the first to be viciously cut back. And since US buyers do this unhampered by the Mexican government, no social criteria are used in determining whose production gets cut back. On the contrary, Feder's findings show a bias against government-organized ejidatarios and small producers and in favor of large private farmers. 9./

The other factor affecting the distribution of resources in the countryside is the Mexican political institutions which effectively prohibit possibilities for peasant organization independent of government control. During the Cardenas

Administration the Mexican State eliminated agrarian leagues independent of its control and formed a National Peasant Confederation (CNC). Today the CNC has made alliances with and extended its influence over all agrarian organizations in Mexico except one. The ability of the regime to preclude class-based organization among landless laborers, minifundistas and ejidatarios has been instrumental in allowing the commercial sector to concentrate land and water and to pay wages well below the established minimums. Considering that the Mexican peasantry has a history of social revolution and given the fact that the bulk of the rural work force are affected by the fluctuating expansion and contraction of commercial production, one sees how important these political mechanisms are to the efficient, peaceful functioning of Mexico's agricultural economy.

As to the overall trends on rural income and employment, if one believes Barbara Tuckman's figures (shown below) they indicate a tendency for incomes to have moved upwards in the rural areas between 1960 and 1969.

THE GREEN REVOLUTION AND AGRICULTURAL INCOME IN MEXICO
Monthly Agricultural Income by Regions
1960 and 1969 (%)

	Income Brackets (pesos)	Mexico	North	Pacific North	Central	Gulf	Pacific South
1960	up to 499	89.93	87.78	74.83	92.16	91.29	93.71
	500-2499	8.26	10.17	22.20	6.16	7.06	5.06
	2500 +>	1.79	2.03	2.98	1.68	1.64	1.25
1969	up to 499	77.02	74.17	30.20	80.28	84.03	89.38
	500-2499	20.97	23.05	64.69	18.07	14.61	9.53
	2500 +>	2.02	2.79	5.12	1.66	1.36	1.10

Source: 10./

On the otherhand, Cynthia Hewitt de Alcantara's argument--also based on analyzing the 1970 census--is that while minimum wages for landless labor rose, opportunities to work declined. Thus the real income of landless laborers fell from 850 pesos in 1950 to 700 pesos in 1970. As for minifundistas, analysis of census data shows that infrasubsistence farms provided those who worked them with an average of 291 pesos in 1969. CIDA calculated that in 1960 the same farm-size category produced an average of 500 pesos.

The most accurate thing that can be said is that analysis of income trends shown by the 1970 agricultural census are still not conclusive.

III. Public Policies Affecting the Landless and Near-Landless in Mexico

The Mexican government is carrying out three policies to increase rural employment and decrease differences in rural/urban income. One policy is for the Ministry of Hydraulic Resources (SRH) to concentrate more attention on the poorer central and southern regions of the country. A relatively neglected problem with the SRH, however, is the question of corruption with regard to the distribution of water. Political will seems to be lacking to enforce laws that apportion water among the various sizes of farms. So the social value of decentralizing irrigation infrastructure is going to be significantly diminished if more attention isn't paid to how the water is distributed.

A second redistributive policy has been to expand CONASUPO, the government price and marketing agency to acquire and sell food stuffs. Whereas CONASUPO formerly bought from large commercial farmers, it now buys more from smaller producers and has also furnished the latter with expanded warehouse and storage capacity. CONASUPO also dramatically increased its number of retail outlets during the Echeverria Administration (1970-76); it now has over 5000 stores. During Mexico's recent bouts with inflation, devaluation and monetary stabilization--all of which have inflicted heavy punishment on lower class income and consumption--CONASUPO has played a useful social function in holding down prices of basic items so that lower classes had a bit more access to them.

The third and most important government policy is to decentralize planning and the delivery of services by dividing Mexico into 100 micro-regions of rural development. The Investment Program for Rural Development (PIDER, in Spanish) has so far invested about $500 million since 1973 in 86 of these micro-regions; and an investment of another $700 million is planned over the 1977-82 period. By 1982 the PIDER program is calculated to affect one quarter of the rural population--approximately 5 million people--either directly through permanent jobs in rural industries and temporary public works employment, or indirectly through the construction of feeder roads, water and electric supply systems, schools, etc.

Seventy percent of PIDER investment for the 1977-82 period is scheduled for directly productive activities such as small

scale irrigation; production credit; development of livestock, fruticulture, forestry and fisheries projects; and small scale rural industries to employ the landless. The rural industries include food processing; small industries producing low-cost goods for local consumption and labor-intensive artisan industries. In addition, another 22 percent of the 1977-1982 PIDER investment is earmarked for the construction of feeder roads using labor-intensive methods; rural marketing programs, organization and training of farmers; and extension service to promote improved farming methods. These last three emphases have been very neglected aspects of Mexican government policy prior to just recently; so it is significant that public investment is being made in the social-organizational aspects of rural development in addition to constructing infrastructure and providing more services.

The PIDER program responds not only to the priorities of the Mexican political elites who are quite conscious of the country's serious problems with employment and income distribution, but also to the urging of the US government that more rural employment be created in order to stem the flow of Mexican migrants into the American economy. US-backed lending agencies such as the World Bank and the Inter-American Development Bank have approximately matched funds with the Mexican government to finance PIDER. This in itself is a significant development because whatever initiatives the regime in Mexico can take in terms of rural development are conditioned to a significant extent by willingness in Washington to increase grants, loans, import quotas, etc. So it is significant that

the Carter Administration is showing willingness to cooperate in Mexican rural development activities.

IV. Income and Employment Among the Landless and Near-Landless: Evidence From a Micro Study

A microcosm of the interrelated problems of minifundismo, poverty and rural unemployment which we've been discussing is a study of conditions in the Sub-Valley of Toluca done by Dr. Rene Barbosa-Ramirez. This particular area is interesting because it is located in an industrial growth pole formed between Mexico City and Toluca, a state capital to the northwest. So what the study reflects is not simply opportunities on the land, but opportunities (or better, the lack of them) afforded by urban industrialization.

When it was surveyed in 1970 the Sub-Valley of Toluca had approximately 40,000 farm units; and the proportion of ejido to private farm units was approximately 2 1/2 to 1. The characteristics of the area included excess population; too little land useful for agriculture; a deficient technology; insecure tenure due to lack of documentation; little or no technical assistance or credit; plus the existence of early or late frosts and hurricane-like winds. What is income and employment like under such adverse institutional and physical conditions?

Calculating that each worker had 252 disposable days of labor, Barbosa found that the average time spent cultivating the land was 10.3 percent of this amount. If off-farm employment was added on, the average total time worked was

34.7 percent of the disposable man-days of labor. 11./

Data on the income of these farm families was as follows:

Farm Size and Net Income in the Sub-Valley of Toluca--1974+

Strata	No of Hectares	% of total ejido parcels	Total Net Income per Fam Member*	Total Daily Income Per Family Member*
1.	.01-- .5 ha	35.5%	$105.76	$0.29
2.	.50--1.0 ha	25.8%	$ 67.68	$0.18
3.	1.01--1.5 ha	9.7%	$101.28	$0.28
4.	1.50--2.0 ha	11.8%	$ 7.44	$0.02
5.	2.01--2.5 ha	2.1%	$ 39.92	$0.10
6.	2.51--3.0 ha	4.4%	$ 48.72	$0.13
7.	3.01--3.5 ha	-	-	-
8.	3.51--4.0 ha	6.4%	$ 14.56	$0.04
9.	4.01--4.5 ha	1.1%	-	-
10.	4.51--5.0 ha	1.1%	$308.00	$0.84
11.	5.01--5.5 ha	-	-	-
12.	5.51--6.0 ha	2.1%	$117.12	$1.32
PRIVATE PROPERTY				
	Less than 5 ha	99.7%	$112.64	$0.31
	More than 5 ha	2.3%	$563.84	$1.54

+ A sampling of farm families was taken. N = 99.

* Monetary amounts are given in US dollars. US $100 was figured by the Mexican government as the minimum necessary income per person.

V. Research Needs

The political elites are aware of the critical social problems in Mexico. Attention is needed to monitor the PIDER

program, particularly its success or failure in creating employment and its ability to raise incomes among a significant number of people. Making resources for rural development (vs. large farmer agricultural modernization) is in itself a major step forward. But corruption is a virulent disease with Mexican public policy; so plans to invest money in the countryside will matter little if they are not matched by the political commitment to see that the programs are directly benefiting the most disadvantaged rural groups. Without a doubt, however, PIDER is unmatched in the entire Latin American region for the content and scope of its program--so there is much to be learned from following its progress.

END NOTES - MEXICO

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6. Cynthia Hewitt de Alcantara, Modernizing Mexican Agriculture: Socio-economic Implications of Technological Change 1940-1970, Geneva, UN Research Institute on Social Development, 1976, p. 119.

7. Ibid., see Chapter 2.

8. Rodolfo Stavenhagen, "Social Aspects of the Agrarian Structure in Mexico," in Agrarian Structures and Peasant Societies in Latin America, Stavenhagen, ed., New York, Anchor Books, 1971. For an example of the renting of ejido lands see, A. Rene Barbosa and Sergio Maturana, El Arrendamiento de Tierras Ejidales, Mexico, Centro de Investigaciones Agrarias, 1972. An example of commercial penetration of agriculture and the difficulties of minifundistas in opposing it is: "Del Monte: Bitter Fruits," NACLA's Latin America and Empire Report, Vol. X, No. 7, pp. 12-15.

9. Ernest Feder, Strawberry Imperialism, The Hague: Institute of Social Studies, 1977, Research Report Series No. 1.

10. Barbara H. Tuckman, "The Green Revolution and the Distribution of Agricultural Income in Mexico," World Development, 1976, Vol. 4, No. 1, Table 5, p. 23.

11. Hewitt, op. cit., p. 133.

12. A. Rene Barbosa Remirez, Empleo, Desempleo y Sub-Empleo en el Sector Agropecuario, Mexico: Centre de Investigaciones Agrareas, 1976, p. 262.

13. Ibid.

A Regional Survey of Landlessness and Near-Landlessness in Africa*

The common view among development practitioners that there is little "landlessness" in Africa is substantially correct in a formal or statistical sense. Compared with most of Asia and Latin America, there is considerable land available in the aggregate, and overall man-land ratios are relatively low. Yet, if we take a more functional view of man-land relations in Africa, considering what is required to provide a rural family with adequate sustenance and income for a reasonably secure and dignified life, we find problems of "landlessness and near-landlessness" that pose significant barriers to achievement of developmental goals.** In this regional survey we will sort out as best we can with available data what these relations are and what they portend. This will not be an easy task and it may lead to some misleading generalizations since the African continent covers an enormous area marked by extremely different physical and societal conditions.

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**In the discussion that follows, the abbreviation "LLNLL" will be used to refer either to the problem of "landlessness and near-landlessness" or to persons who fall into an aggregate category of the "landless and near-landless." The context will make clear which is meant.

Diversity even within a single country is often so great as to make many generalizations misleading. And data drawn from case studies in one part of a country may not hold up in another area of the same country much less as generalizations about the continent. Still, with these qualifications in mind, we will proceed to generate some general perspectives on landlessness in Africa.

Two general factors make the land situation in Africa less formidable than in some other parts of the Third World. We should note first the overall availability of land. Only Rwanda, Burundi and Mauritius have population densities of more than 100 persons per square kilometer of total area, and densities of only ten, twenty or thirty persons per square kilometer are fairly common. Of course, one should look at population in relation to agricultural area, as is done in Table I, to get a better idea of man-land relationships. Still, most countries appear to have a good deal of useable land available per capita. The major exceptions apart from those countries mentioned above are Kenya, Nigeria and, most seriously, Egypt, where the entire population is concentrated in the narrow Nile Valley. Apart from these countries and some other pockets (such as on oases, along major river valleys, or on fertile plateaus) of concentrated settlement elsewhere in Africa, we find little density of population to compare with Bangladesh, Java, or El Salvador.

Table I

Population Density Per KM^2 of Agricultural Area (and Per KM^2 of Total Area), 1970

Under 25		
Botswana	2	(1)
Libya***	2	(1)
Mauretania	2	(1)
Namibia**	2	(1)
Central Afr. Emp.	5	(1)
Chad	7	(3)
Mali	12	(4)
Somalia*	13	(4)
Gabon***	15	(2)
Madagascar	19	(11)
Angola**	19	(5)
Mozambique**	20	(12)
Zambia***	20	(6)
Niger	22	(3)
Zaire***	22	(7)
Tanzania	23	(14)
Congo	23	(3)
25 to 50		
Swaziland***	25	(24)
South Africa**	27	(21)
Upper Volta	28	(20)
Algeria	30	(6)
Ivory Coast	30	(13)
Ethiopia	31	(20)
Senegal	34	(20)
Lesotho	36	(34)
Cameroons	37	(12)
Liberia*	38	(11)
Sierra Leone	39	(36)
Sudan	47	(6)
50 to 100		
Benin*	52	(24)
Ghana	61	(38)
Guinea	63	(18)
Morocco*	65	(35)
Togo	72	(33)
Tunisia***	75	(31)
Rhodesia**	89	(17)

Table I (cont.)

100 to 250		
Uganda**	116	(60)
Malawi	150	(38)
Gambia*	180	(32)
Burundi	206	(129)
Kenya*	234	(19)
Rwanda	235	(136)
250 to 1,000		
Nigeria*	362	(60)
Mauritius	746	(409)
Over 1,000		
Egypt	1,172	(33)

*1970 figure extrapolated from 1960 IBRD data
**1975 figure calculated from FAO data on land use; not exactly comparable, but close
***estimated from similar countries

Note: "Agricultural area" includes area under pasture or tree crops, so the meaning of these numbers can be affected in two ways: (a) density would be practically much greater where most of a country's agricultural area was cultivated rather than in range or forest; and (b) the definition of what is "permanent" pasture or forest crop area can vary among countries, producing some distortion in the statistics.

Sources: IBRD, World Tables 1976 (Baltimore: Johns Hopkins Press, 1976), Table 2, pages 510-512; and FAO, Production Yearbook 1976 (Rome: Food and Agriculture Organization, 1976), Table 1, pages 45-47.

Another factor somewhat mitigating the land situation in Africa is the more flexible systems of land tenure with a communal basis found in much of Africa. In recent decades, legal or de facto freehold ownership has been expanding rapidly in many parts of the continent, however. The "traditional" system whereby all land is held communally, to be allocated to households on the basis of need, has become more an ideal than reality.* Still, in rural areas there often remains a normative expectation that persons needing land should be given access to enough at least to maintain their families. Where not all useable land has been assigned, individuals can often get plots to cultivate even if the land is not particularly good or may need clearing. Such a situation means that persons having no land and little money may have some alternative to becoming tenants or agricultural laborers or leaving the rural sector. These may be the only alternatives open to an Asian or Latin American peasant where land is scarce and all has been assigned to owners.

The statistical fact of low population density, or its converse of high land-man ratios, is misleading in

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*The United Nations' Sixth Report on Progress in Land Reform (New York, 1976) notes the breakdown of traditional land tenure systems in favor of privatized holdings in Ethiopia, Ghana, Kenya, Cameroon, Morocco and Senegal, with countervailing trends toward collective or cooperative agriculture in Algeria and Tanzania (pages 28-49).

some respects, as is the easier institutional access to land in Africa. As much as two-thirds of Africa's surface is unexploitable for agricultural or livestock production because of mountain ranges, deserts, deficient soils, irregular rainfall, or infestation of disease. Although much of the land of Africa supports some form of vegetation, in many areas the combination of soil and rainfall permits only the most extensive cultivation, with fallow periods up to twenty years, or intensive cultivation requiring sophisticated and costly investments in irrigation and drainage and massive amounts of fertilizer. For a household to have access to 10, 20, 30, or even 50 acres of land means little when long fallows are necessary or huge investments would be required to make the land very productive. It is a fact that the best lands for production have already been taken up and the fertility of lands at the margin is usually either not very great or requires large investments to become productive.

Agricultural production in Africa has been declining relative to its population. According to FAO statistics, per capita agricultural output in 1975 was <u>five percent less</u> than the average level for 1961-65. Arable and permanent cropland in use went up about one percent a year during this period, from 190 million hectares in 1961-65 to 204 million in 1970 and 215 million in 1975. Yet the agricultural population in Africa went up twenty percent in a decade and total population by thirty percent. The

slower expansion of cultivated and cropped area means that agricultural land per person in agriculture went down by eight percent, and for the population as a whole, by fifteen percent. This helps to account for the decline in per capita agricultural production. Yields per hectare would have gone up by about ten percent over the decade. Table II shows the changes in land area used for agriculture on a country by country basis. Over half the countries have had little or no increase over the last decade. This suggests there is less "margin" for expanded cultivation than is commonly supposed because one should have expected area cultivated at least to keep pace with population if there were adequate land available.

As seen from Table II, several of the small, densely populated countries--Rwanda, Burundi and Gambia--were able to increase their agricultural area significantly. But the largest of the heavily settled countries--Egypt, Kenya and Nigeria--were not. Accordingly, per capita agricultural production in these three countries in 1975 was 98, 91, and 85 percent, respectively, of the 1961-65 levels, as seen from Table III. Here too we see that most of the countries were in 1975 producing less per capita than ten years before, some much less. This reflects diminishing quality of land at the margin as well as generally low productivity in the agricultural sector.

The clearest indication, apart from statistics on land per capita, that the land base in Africa in inadequate

Table II

Increase in Arable and Permanent Cropland in Use, 1961-65 to 1975 (1961-65 = 100)

No Increase	1970	1975	Good Increases	1970	1975
Tunisia	99	99	Egypt	112	112
Liberia	98	101	Upper Volta	107	113
Benin	100	100	Ethiopia	110	114
Central Afr. Emp.	100	100	Malawi	107	116
Chad	100	100	Mauritius	113	114
Niger	100	100	Mozambique	113	115
Libya	100	101	South Africa	113	115
Mauritania	101	101	Gabon	116	116
Namibia	101	101	Angola	115	117
Sierra Leone	101	102	Uganda	112	119
Algeria	99	103	Sudan	103	121
Cameroon	102	103	Botswana	102	112
Congo	100	104	Rhodesia	118	124
			Swaziland	113	125
Modest Increase			**Significant Increases**		
Ghana	101	106	Burundi	126	132
Madagascar	103	103	Gambia	117	132
Zambia	103	104	Rwanda	111	145
Ivory Coast	103	105	Mali	148	150
Lesotho	104	104	Tanzania	153	181
Senegal	101	108			
Kenya	103	106			
Guinea	105	106			
Guinea Bissau	105	108			
Nigeria	107	107			
Toto	107	107			
Morocco	106	108			
Zaire	107	108			
Somalia	105	109	Africa	108	113

Source: Calculated from data in FAO Production Yearbook 1976, Table 1, pages 45-47.

Table III

Agricultural Population and Production, 1975 (1961-65 = 100)

	Agricultural Population	Agricultural Production	Per Capita Production
Niger	126	84	60
Togo	123	85	60
Mauritania	117	87	68
Mauritius	100	89	72
Angola	114	92	72
Chad	111	99	78
Guinea	120	108	83
Ethiopia	121	111	84
Mali	121	112	85
Nigeria	112	118	85
Algeria	122	125	85
Mozambique	111	114	87
Somalia	121	116	87
Zaire	123	121	87
Ghana	114	120	89
Uganda	126	124	89
Kenya	132	135	91
Upper Volta	117	119	92
Madagascar	125	127	92
Morocco	121	130	93
Rhodesia	132	143	93
Cent. Afr. Emp.	119	123	96
Lesotho	114	120	97
Egypt	119	132	98
Congo	102	131	100
South Africa	129	142	100
Namibia	119	155	100
Sierra Leone	115	137	100
Benin	119	129	106
Burundi	113	129	106
Senegal	120	145	109
Tanzania	126	155	109
Zambia	124	158	110
Botswana	117	143	111
Cameroon	115	140	113
Liberia	116	145	113
Gabon	102	129	114
Libya	75	172	115
Gambia	115	145	116
Malawi	119	157	119

Table III (cont.)

	Agricultural Population	Agricultural Production	Per Capita Production
Sudan	128	169	119
Rwanda	128	173	124
Ivory Coast	121	174	130
Tunisia	105	181	140
Swaziland	118	198	145
Africa	120	130	95

Note: The index number for "agricultural population" was calculated for 1975 using 1965 as the base (1965 = 100). Also, the FAO index for agricultural production per capita uses national population as the base, giving a measure of changes in the adequacy of national agricultural production. Changes in agricultural production per capita are thus not the result of changes in the first two columns.

Source: FAO Production Yearbook 1976, Table 3, pages 61-63, and Table 5, page 75.

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to support much of its population is the extent of migration from rural areas to the towns and cities, as well as mines and plantations, as discussed below. While this movement is often attributed to the "pull" of higher earnings or simply to cash wages plus the cultural environment of more urbanized surroundings, we find that there is significant "push" from the constrained and unstable agricultural conditions in many parts of Africa. The data on migration in Africa are equivocal concerning which is the stronger pressure causing exodus from rural

areas.* Certainly we find large numbers of men (and some women) literally forced to seek some contributions to their livelihood in areas away from the penury of poor land and scarce water, aggravated by meager infrastructure and services. This will be considered in the next section.

In this regional survey we will be concerned with identifying the extent of LLNLL in African countries and examining what is known about the consequences of this condition. In several ways, this survey will be less satisfactory than for the regions of Asia and Latin America. The problem is more diffuse under African circumstances. As noted already, only in certain places are the gross man-land ratios starkly confining, producing unambiguous landlessness. Tribal or communal land tenure systems, even if in flux as noted above, often make moot the question of formal-legal access to land. Thus, measureable problems of "landlessness" per se are not so common. But insufficiency of productive arable land, or even land for assured livestock production, is common. This means that classification of LLNLL must be made

*In their summary of findings from the African Rural Economy Program conducted at Michigan State University, Byerlee, Eicher, Liedholm and Spencer cite evidence that rural-urban migrants (in Ghana) originate in above average income households, which is contradicted by other studies (e.g., in Kenya) that migrants frequently come from landless households or from densely populated regions. Rural Employment in Tropical Africa, Working Paper No. 20, February, 1977, p. 117. We will take this question up below.

more often on differences in degree more than kind. It requires more "judgment calls" than when land's productive potential is fairly uniform and some absolute thresholds can be set below which rural households fairly certainly belong in one category or another of LLNLL. In Africa, a family with access to twenty or thirty acres may be poorer and more insecure than a Javanese peasant household owning less than an acre of land.

This problem of classification is complicated by the poorer state of land data in Africa. In some countries land taxation has not been a basis for financing the state as it has been elsewhere. There cadastral records are generally non-existent. Other countries collect land taxes but have never completed cadastral records, relying on locally kept records of doubtful validity. Apart from this, "ownership" is less readily identifiable even when surveys are made. Households may have usufructory rights without any legal right of ownership, and given practices of leaving land fallow to restore its fertility, ownership area and location may shift continually. Where land for herding and grazing is involved, this problem of identifying land ownership is practically unresolvable. Notable exceptions here are where grazing areas are known to belong to given clan units, though in such cases the boundaries may be vague. So we must begin this survey with the caveat that both concepts and data, which are more appropriate and ample

in other regions of the Third World, pose particular difficulties when assessing LLNLL in Africa. We can nevertheless marshal data from various countries and assess their implications for a world-wide consideration of how LLNLL bears on problems of assisting the rural poor.

Data Poor

Because data on LLNLL--extent, causes and effects--are very sparse for practically all African countries, ranging between fragmentary and non-existent, our survey must rely on often scattered sources. The FAO and IBRD data cited previously are some of the few reasonably comparable statistics, and they are national aggregates, providing little sensitivity to local variations within a country. We have been able to construct several country profiles where data were more readily available and highlighted problems of landlessness in Africa: Upper Volta in West Africa, Egypt in North Africa, and Kenya in East Africa. Egypt and Kenya (along with Nigeria) present the most serious instances of population density among the larger countries of Africa. Upper Volta in turn is taken as representative of Francophone Africa in the savannah region. We have less complete data for a number of other countries, and in this regional survey we draw on both sets of national statistics and on international data sources.

For purposes of discussion, the region has been divided into four sub-regions: West Africa, North Africa, Eastern and Central Africa, and Southern Africa. Our consideration is generally limited to some 45 countries, leaving aside a number of enclave and associated island nations except for the Malagasy Republic (Madagascar), because their situations are so special and their populations small. Again, within Africa we find wide variation in geography, ethnic solidarity or cleavage, religion and degree of industrialization. Since these things affect land tenure rules, migration, labor force participation rates, etc., few generalizations can be made for the whole region, or even for sub-regions, though we will try to establish general patterns to the extent these seem warranted.

Where data are available, we frequently encounter various incomparabilities. To discuss and compare categories of LLNLL, we need to have some common standard, such as rural population or rural labor force, or to know what constitutes "full employment" so estimates of "underemployment" owing to land shortage can be made. The following kinds of difficulties are encountered in trying to make such standard comparisons using available data:

1. Definition of "rural." The "rural" population is generally defined as a residual category, i.e., that which is not "urban." Unfortunately, there is no standard definition of what is "urban" throughout Africa. Ethiopia,

Gabon, Kenya and Liberia regard as urban any localities of more than 2,000 inhabitants. Zaire uses this figure but counts any smaller communities as urban if the predominant economic activity is "non-agricultural." The Central African Empire uses 3,000 as the cut-off point, and Ghana and Zambia use 5,000, provided "the majority ... depend on non-agricultural activities." Other definitions include that of Guinea which simply lists "urban centers," Sudan which lists "68 towns," and Swaziland which identifies "localities proclaimed as urban." (UN Demographic Yearbook, 1976, p. 183).

2. Definition of "labor force." Criteria for delimiting the labor force vary. We find a 1966 labor force sample survey in Algeria making no distinction between urban and rural population, setting no lower age limit, and showing only 1.8 percent of the female population as "economically active." A 1964 census in Libya used six as the lower age limit for the labor force and considered only 2.7 percent of the female population therein. A 1977 report on employment in Mauritania provides statistics only on "adult males" in the labor force. One can hardly compare these with data reported in a 1966 survey in Lesotho which set 15 years as the lower age limit and partly because twelve percent of the entire population was recorded as "absentee workers" (mostly in South Africa), 56.6 percent of the female population was listed as "economically active." Also, many of the

Moslem countries do not count housewives at all or establish a special category of "unpaid family aids" which is usually not included in aggregate labor force figures. Nigeria distinguishes between people who are "economically active" and those who are "economically effective." Some countries lacking the organization or infrastructure to survey the non-monetized sector, simply count salaried and wage workers (usually in the urban areas) as "labor force." Inter-country or inter-region comparisons based on such disparities in the basis for analysis would be foolhardy. To render the data comparable would require access to the original censuses or surveys and a huge amount of time and money to re-process them. Given the constraints on this study, we had neither access nor resources for this.

3. Definition of "full employment." There is no consensus on what constitutes a standard of full employment. Grissa (OECD, 1975) notes that although government census data are usually based on the average of 250 days per year for "full employment," in rural areas with cereal monoculture, 100 days per year may be considered average. It appears, based on a review of the literature by Cleave (1974) that an average of 1,000 hours per year are worked by adults engaged in tropical agriculture in Africa. But in Egypt, this figure is more than twice as high, and the corresponding amount of work in parts of Asia is as much as 3,000 hours. (See Byerlee, et al., 1977,

p. 15). That the average in Africa is so much lower stems from the non-availability of productive work during the dry season, as most farming is limited to one crop per year and agricultural labor is fully employed during peak planting and harvesting periods. Depending on what standard is chosen to represent "full employment," very different estimates of underemployment due to lack of land (or sufficient good land) will result. Further, there appears as yet no criterion for full employment (or underemployment) among the 12-15 million pastoralists on the continent. So we have to make estimates always relative to the country and category as seem most appropriate. Probably no single criterion is appropriate under all circumstances, and thus we are constrained from offering as many summary figures as would be desireable for designating more adequately the magnitude of LLNLL in Africa.

In surveying the literature for comparative data even when a reasonable idea of "rural labor force" can be defined, two other problems come up. There is a great deal of geographic mobility among African populations, and the size of a country's population is often ambiguous. Indeed some countries, such as Ethiopia, have never had a census. In much of West Africa, rural people find little difficulty in crossing international boundaries to seek employment. Some persons may get

counted twice in census data or not at all.* In North Africa, geographic mobility results in significant out-migration to Europe, creating in Algeria at least a deficit of skilled labor. There is also intercontinental migration from Francophone African states to low-skill jobs in Europe. In East Africa, the phenomenon is more internal, either rural-rural or rural-urban. But in Southern Africa it is a significant external movement. As noted already, at least twelve percent of the population of Lesotho was considered "absentee workers" in the last sample survey, and in farm surveys in Swaziland and Botswana, we find about one-quarter of farms to be female-managed due to male out-migration to South African wage employment. All this movement complicates assessment of the extent of LLNLL.

This geographic mobility is matched by occupational mobility as well, especially in the rural sector. A large proportion of rural people follow "mixed strategies" of economic survival which make it difficult to classify them. Unfortunately for our task of analyzing LLNLL, the complexity of occupational mixes often increases the poorer people are. A nation-wide survey of household income in Kenya found that persons with less land had significantly higher percentages of income from non-

*Both Ghana and Upper Volta determine citizenship by blood rather than by place of birth, so their populations are difficult to ascertain. Upper Volta lists two population figures, one "actual" and one "resident.

farm employment, both regular and casual. Those with less than two hectares of land also had a higher percentage of remittances from relatives, indicating greater migration in the families with smaller holdings who bolster household income by having members move to towns. Even in households with eight hectares or more, there was still great diversification of activity as thirty percent of income came from non-farm activities. This pattern is recorded in Nigeria as well, where Galetti, Baldwin and Dina (1963) found that about 25 percent of male farmers who have farming as a primary occupation had "subsidiary callings" as well. They noted further that there was a tendency for these people to practice non-farm occupations more intensively in some years more than others. So one cannot know how typical is the distribution by occupation shown in a survey taken in any particular year. This adds a cautionary note to the interpretation of data. At best, given existing statistics we can only characterize orders of magnitude with a view to presenting discernable trends and ascertainable causes and consequences.

Classification of Landless and Near-Landless

We find in Africa almost as much as in Asia and Latin America a range of situations in which persons either lack access to land for their and their family's livelihood or have such a constrained or tenuous relationship to land that their production is insufficient

for decent subsistence. In order to understand the extent and effects of LLNLL, we need to differentiate categories that permit us to identify origins and incidence of LLNLL, as any policy measures must be tailored to specific problems to be effective.

Classification is made difficult, as are solutions, by the geographic and occupational mobility mentioned above. This is exemplified by the ambiguity which Grissa (OECD, 1975) reports for Tunisia. He estimates that 80 percent of the urban unemployed males counted there in census data as "laborers and artisans" or "undetermined" are actually rural youth who have migrated to the cities in search of a wage-earning job. He further estimages that 80 percent of these will eventually be absorbed into the agricultural sector when they fail to find urban employment.* How many of these should be regarded as "landless" is a matter of judgment. Those who get jobs and remain in the cities do not belong within our purview. But those who cannot get employment should be taken into account some way. And those who return to agricultural activity are most of them likely to be for some time agricultural laborers, tenants or partly redundant family labor, possibly awaiting land by inher-

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*In its survey in Sierra Leone, the MSU study on African rural employment found that gross rates of rural-urban migration were three times higher than the net rate, i.e., for every three persons who went to urban areas, two returned to rural areas (Byerlee, et al., 1977, pages 114-115).

itance. To exclude from consideration all of these rural youth because they are located in towns and cities at the time would be misleading, though not all should be classified as LLNLL. To the extent possible, one should exclude those who could establish at least a minimal family-size farm in the rural areas and thus are in the city by choice and those who are reasonably certain of obtaining urban employment. Unfortunately, such distinctions are seldom possible given the state of such data for African countries, and thus our estimates are often fairly gross.

I. Agricultural Laborers and Rural Workers

The proportion of the African rural population in this category is relatively smaller than in Asia and Latin America for two reasons. First, in gross terms there is more access to land in Africa, leaving aside the questions of quality and productivity, and second, the monetized wage economy is still smaller here than elsewhere. So there is no rural proletariat as extensive as in parts of Asia and Latin America. There are, to be sure, variations among countries, so that the number of non-agricultural laborers and self-employed rural workers can range from a few percent to perhaps ten percent, including rural-to-urban migrants who have not and will not be able to find employment in towns. Probably the extreme case would be Lesotho where twelve percent of the entire population are "absentee

workers" mostly in South Africa, particularly in the mines. We will be concerned here more with agricultural laborers as they constitute a larger number in Africa.

Commercialized agriculture is more limited in Africa than the other major areas of the Third World, whether in the form of large-scale private farms or plantations. But we do find persons entering wage employment because agricultural possibilities in their own home areas are limited. We are concerned here with assessing the extent to which such work is a consequence of inadequate land access and poses problems for promoting rural development with broad benefits therefore. We would not regard as a "problem" for development policies and programs any persons with stable employment in industrial, service or agricultural work that offers them more welfare and security than individual or family farming as such persons diversify the base of production and income. On the other hand, where employment of labor is more a matter of "push" from the land than "pull" from the modern sector, we would consider these laborers and workers as within our purview of concern.

Three general conditions account for most of the paid agricultural laborers found in Africa: (1) excessive population density, (2) establishment of plantations or settler farms, and (3) seasonal unemployment. Only in Egypt is the number and proportion of agricultural laborers very large, as much as one-third of the rural

labor force as reported in the accompanying country profile. As noted already, this is the one country in Africa with unusually great demographic pressure on the land. To be sure, most of Egyptian agriculture is irrigated so that there are multiple crops per year, creating a greater demand for labor. Intensification of cropping and population density go together here in much the way that Boserup (1965) predicts. Still, this has resulted in impoverishment rather than advances for the growing under-class of agricultural workers who have no access to land, even after land reform implementation. In other countries where population density is less, the circumstances and incidence of persons in this category are different.

A second circumstance for significant numbers of agricultural laborers is the establishment of plantations in many African countries, and of large farms by European settlers, particularly in Kenya, Rhodesia (Zimbabwe) and South Africa. Permanent agricultural laborers working in such commercial operations have usually reflected land pressures, being drawn from the denser or poorer areas of a country or neighboring countries such as Malawi. Statistics on plantation workers are not consistent or complete. Even an ILO commission set up almost twenty years ago does not have more than sketchy data on plantation workers in Africa, with no general report more recent than 1970. Fragmentary data are

presented in Table IV with comments to give some idea of the situation for this sub-category.

Whether the incidence of plantation workers is a sign of landlessness or land constraints is debated in the literature. Certainly it can be argued that plantations offer opportunities for stable cash income and thus "pull" workers from the agricultural hinterland. But the fact that plantation workers come most often from densely populated or otherwise impoverished areas argues for the "push" explanation. In perhaps the most detailed study of plantation work (Ardener et al., 1960), sociologists found that workers on the Cameroon Development Corporation came not, as one might suspect, from the most densely populated tribal areas, but from the sparsely settled ones. However, employment, trading and agricultural opportunities were greatest in the former, so most plantation workers came from the tribes "least able to spare migrants." (p. 198).*

Any who consider plantation work desireable enough to "pull" people from other agricultural pursuits that are at all rewarding should consider experience in Tanzania

*This is not to say that all workers came because of "push" from their home areas. But less than 20% gave "pull" reasons for staying in plantation work. When asked whether they would like to return home, nearly half (42%) said they would if there were more adequate opportunities agriculturally and economically, while nearly as many (40%) gave a sociological version of the "push motivation, saying they would not return because they liked being free of relatives and community associations. (Ardener et al., 1960: 260).

Table IV

Reported Incidence of Plantation Workers

	Number	Estimated Percent Rural Labor Force*	Source and Comments
Cameroon	52,306	2.9	32,306 in East Cameroons (ILO, 1970: 49), 13,578 workers on CDC plantations estimated 70% of total (ILO, 1966: 56)
Ghana	27,339	2.2	1960 Population Census of Ghana, Volume IV; 1970 census figures not published in similar breakdown
Ivory Coast	105,000	7.2	Estimated half of 200,000 Upper Volta workers employed in agriculture plus 5,000 on foreign-owned industrial estates (ILO, 1966: 56); figure of 200,000 given in ILO (1970: 52) but may refer to UV workers
Kenya	157,769	4.5	Figure reported by Kenya government, out of total of 593,989 in wage economy (ILO, 1970: 52)
Liberia	24, 971	6.3	Reported employed for wages in

*Percentages estimated for rural labor force in year the figures were reported for plantation workers.

Table IV (cont.)

	Number	Estimated Percent Rural Labor Force	Source and Comments
(Liberia)	24,971	6.3	agriculture (ILO, 1970, 52) but not specifically for plantations; lower than New York Times Almanac figure for 1970: 425,000 in wage labor force, one-quarter in agriculture, mostly on rubber plantations, which would give figure closer to 100,000, or around 25%.
Mauritius	67,483	32.8	1961 figure for employment on sugarcane plantations, the major economic activity of country (ILO, 1966: 65)
Nigeria	25,670	0.2	1965 figure from government (ILO, 1970: 53); probably for foreign-owned plantations only
Tanzania	156,710	4.4	1962 figures for employment on sisal (117,465), tea (19,115), coffee (16,010) and sugarcane (4,020) plantations (ILO, 1966: 64)
Uganda	52,343	1.8	1968 government report (ILO, 1970: 54)

and the Ivory Coast which had some of the larger plantation activities in East and West Africa. It is reported that between 1944 and 1958, the Sisal Labour Bureau brought 410,000 workers and 180,000 family members into (then) Tanganyika, repatriating 340,000 persons in this period for a net addition of 250,000. The majority of these immigrants came from the land-starved Belgian colonies of Ruanda and Urundi (now Rwanda and Burundi), and most of the rest from Mozambique where colonial policies permitted semi-forced recruitment (ILO, 1966: 54). Because of Tanganyika's status as a U.N. mandate, its residents had to be treated less coercively than in other colonies, so the large influx indicates the extent of voluntary aversion toward plantation work. (It should be noted that in much of Tanzania, land was not very fertile but it was abundant.) In the Ivory Coast, no reliable figures on plantation labor force have been reported according to the ILO because no census of agricultural labor force had been done, but in the mid-1960s, about 100,000 workers were engaged in plantation crop operations plus 5,000 on foreign-owned plantations (ILO, 1966: 56). This number represented about half of the 200,000 seasonal or semi-permanent migrants from Upper Volta, where workers were specially recruited for the plantations, particularly from among the land-constrained Mossi (see the country profile for Upper

Volta).* We find the same pattern here as in East and Central Africa, that most of the plantation workers are drawn from areas where population density creates land scarcity or where environmental conditions greatly limit agricultural possibilities.

A similar situation prevails with regard to permanent agricultural laborers on large commercial farms in Africa, in almost all cases set up by European settlers.** In Kenya, the most fertile part of this country, only one-seventh of which is arable anyway, was expropriated by settlers and became known as the "White Highlands," with dispossessed Kikuyu agriculturalists practically forced to become wage employees. Still in 1960, 4,000 European farmers owned some three million hectares of the best land (80% of the total area with reasonable and reliable rainfall), according to the ILO Kenya study (1972: 86). When after independence these farms were sold to African owners, despite some transfer of parcels to small-scale farmers, the previous distribution has

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*It has been said, reflecting European ethnocentrism and lack of experience with the rigors of plantation work, that the influx is "largely due to the fact that in the Ivory Coast, where tribal traditions cause tilling the soil to be regarded as beneath man's dignity, many rural inhabitants are loath to take agricultural work." (ILO, 1966: 52). Rather, we find that work on plantations is generally avoided in favor of other opportunities if they are available.

**An exception would be the coffee-growing Buganda area of Uganda, where Elliot reports that some of the larger farmers have permanent labor force of up to twenty workers (1975: 102).

remained fairly intact. Just four percent of the farms (those over 4,000 hectares) encompass nearly half (47%) of the total area, while the 23% of farms, those under fifty hectares, have less than one percent of the area (ILO, 1972: 36). This has resulted in one of the highest proportions of agricultural wage labor in Africa, about twenty percent.* Hired workers, reports the ILO (1972: 334) "tend to be poorer people with small or badly farmed plots, or the landless." Out of a total number of 1.7 million rural households, it estimates 300,000, about 18%, are "landless" (1972: 33).

The situation is even more extreme in Rhodesia (Zimbabwe) and South Africa, where white settlers have appropriated most of the good land for themselves. Rhodesian land is divided approximately evenly between the European and the African populations. But since the former is only 5% compared to 95% for the latter, this means that Europeans have almost twenty times more land (and better land) per capita than do Africans. In South Africa, the African population (nearly 70%) is restricted to owning land in the demarcated "Bantustan" areas which are only 13% of the country's area and often the least

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*The ILO study (1972: 39) reports 657,000 persons engaged in regular wage employment in rural areas, and a minimum of 226,000 in casual wage employment for at least part of the year, making respectively 15% and 5% of the rural labor force.

desireable land for agriculture. The effect of these maldistributions is, predictably, the creation of large proportions of the African population having to work on European farms or in white-owned manufacturing or service establishments. The two governments involved boast of the higher money incomes received for such labor, but there is no denying that the coercion of land deprivation is behind such employment, and there is no proof that the quality of life for such laborers is preferable to that sustainable with adequate access to productive agricultural land.

Seasonal migrant agricultural labor is a more pervasive manifestation of land constraints in much of Africa. It so happens that the slack season for agriculture in some areas of West Africa, for example, coincides with the time of peak labor demand in the forest zone along the coast (Berg, 1965: 164). It can be argued that this is an "efficient" allocation of labor resources, producing an optimum agricultural production (Barber, 1960; Berg, 1965; Moses, Beals and Levy, 1967; Beals and Menezies, 1970). People in areas that have limited rainfall or other adverse conditions restricting opportunities for productive agricultural labor move to find work in areas enjoying more favorable natural endowments during part of the year. This sounds very reasonable, ignoring the human and social costs involved and the fact that this movement is forced upon people

whose productive possibilities are constrained by lack of water control, lack of infrastructure and lack of public services. The distribution of such seasonal migrant labor is not random but follows a rather distinct pattern according to land and water availability.

In Ghana, for example, where the north suffers from an acute dry season, it is reported that more than half of the working age males have engaged in seasonal migration to the south for work on cocoa farms, in the mines, or any other opportunity to gain income (Beals and Menezes, 1970). Before World War II, this migration was only 35,000, reaching 46,000 by 1945. It accelerated to 200,000 in 1954 according to road transport records, apparently slowing afterwards, as foreign migrant laborers began to come in larger numbers from Upper Volta, Niger and other Sahelian countries, though often they will stay for longer periods, several years, if decent jobs can be found. In the 1960 census, 14 percent of the Ghanaian population age 15 and over was of foreign origin.

The categorization of agricultural laborers is difficult because there is a continuum from "seasonal" to "temporary" to "permanent," and from local casual labor to migrant labor within the country to foreign migrant labor. It is hardest to identify the number of seasonal or local casual laborers, but this is not so serious for our purposes because these are usually persons included under the categories of "constrained cultivators" or

"vulnerable small farmers." In Upper Volta, we find about 44% of the population in these categories, or 2.5 million persons in such households. About 426,000 Voltaics can be counted as permanent migrant laborers, most of them outside the country, probably half of them in the Ivory Coast and ten percent in Ghana. Another 204,000 are temporary migrant laborers, away for less than five years, while another 1,335,000 appear to be seasonal migrant laborers (60% of the rural farming labor force age 15 and over). This latter group comes within our two categories mentioned above, though permanent and temporary migrants would not.

The significance of such labor movement can be seen in Ghanaian census statistics, which show 54,224 foreign farm workers and agricultural laborers out of a total of 111,690 in 1960 (the numbers would have increased by at least half now), and 22,898 foreign "farm caretakers" out of 49,654. This latter category covers persons who are looking after cocoa farms, usually for an absentee owner. They are really tenants, who receive a share of the proceeds of the farm, usually one-third (abusa) though sometimes one-half (abunu). With the increase in availability of such labor, this kind of tenancy has been increasing in Ghana. An FAO study in the Offinso area found only 25% of cocoa farms to be owner-operated (UN, 1976: 32), and the World Bank found a similar proportion in the Suhum area--after it had

made a large loan for cocoa rehabilitation. The profitability of the project was seriously jeopardized by having assumed the cocoa farms in the area would be mostly owner-operated.

The need for migration on a long-term or permanent basis is quite evident in Upper Volta because of the land and climate conditions. Similar pressures for migration exist in Malawi, where one-quarter of the adult male population has sought work outside the country, and in Lesotho, where 12% of the entire population are recorded as "absentee laborers," most of them away working in South Africa. Mozambique also has a significant proportion of its adult population working in South Africa, though in its case, the man-land relationships are not as pressing as in its two neighboring southern African states. We do not find land pressures as great in Eastern or Central Africa as in the sahelian zone of West Africa or in and around South Africa.

In countries where land is scarce, as in Egypt and Kenya, the number of casual laborers, distinguished from permanent or migrant laborers, is significant though hard to determine. In Egypt, the most densely populated of the African countries, the total number of agricultural laborers in 1960 was about 4.5 million out of a total population of 25.8 million. Somewhat over 600,000 are classified as permanent agricultural laborers, and about 500,000 as intermittent migrant laborers. This leaves as many

as three million in some uncertain state of employment, depending on whatever jobs they can find throughout the year if available. We have better statistics in Kenya, where the ILO report (1972: 39) reported a minimum of 226,000 in casual wage employment, at least five percent of the total potential rural labor force.

The situation found more generally in African countries is that little wage labor is supplied or used in agriculture on a regular basis. There is often seasonal migrant or casual labor, as in Upper Volta where nearly half the rural population may do some labor off their farms during the dry season. But the kind of unemployment and underemployment associated with having large numbers of permanently "casual laborers" such as in India and Pakistan, is not common, given enough access to land during at least part of the year. Seasonal variations are important. The MSU study cited above on African rural employment found that:

> "Farmers in tropical Africa, with the exception of large farmers and plantations, generally use less hired labor than in other parts of the world. In large part, this reflects the existence of a generally high land/labor ratio and the lack of a class of landless laborers, or even of substantial differences in farm size among farmers except in countries such as Kenya and Ethiopia. At peak seasons, therefore, when labor could [usefully] be hired to release seasonal bottlenecks, most farmers in a region will be experiencing similar bottlenecks." (Byerlee et al., 1977: 21)

This is to say that when there would be a demand for labor in rural areas, for planting or harvesting services, its supply is most limited. Surveys do show that the percentage of labor hired by African farmers averages something less than twenty percent, though it is sometimes higher for larger or cash crop oriented farmers (Cleave, 1974). With a figure even as high as ten percent, there must be a considerable proportion of the rural population which for some reason finds it more remunerative to work on someone else's land rather than fully on their own (from which they would receive all rather than a part of what they produce).

One category of agricultural laborers and workers which is found in some Asian and Latin American countries but not much in Africa is that of attached or bonded laborers, persons required by indebtedness or social discrimination to provide labor on terms very unfavorable to themselves. There have been certain ethnic groups maintaining traditional types of "patron-client" relationships. The classic case of this in Africa was the overlordship of the Tutsis over the Hutu majority in Rwanda and Burundi, coincidentally an area of great population pressure on the land.* Under quite different

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*In these densely-settled areas, tall Nilotic pastoralists had been able to establish hegemony over sedentary Bantu agriculturalists. Political dominance was formalized through chiefly roles, but the pastoralists also benefitted more from the exchange of goods and

man-land conditions in the central Sahara, the nomadic Tuareg had had similar dominance over the blacker-skinned Bela (or Bourza), whom some ethnographers have referred to as "slaves." Such social practices have been forbidden by national governments but may still be maintained to some extent beyond the scope of enforcement. In any case, we are not disposed to include these groups as such in our analysis of LLNLL. Another kind of "bondage" often reported in the anthropological literature is a common requirement that a young man seeking to marry must work for some years for his or his bride's family to earn, or fulfill, the bride-price demanded. We would not associate this status either with our study of LLNLL. There are few references in the literature to a class of indebted agricultural laborers as are commonly found in other parts of Asia and Latin America. What references there are were mostly for North Africa, specifically for Egypt and Morocco, but without statistical details amenable to comparative analysis.

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services with the agriculturalists than vice versa. While the Hutu were often regarded by the Tutsis as "chattel," the latter didnot claim ownership of the land being cultivated. Tutsi sovereignty was overthrown in Rwanda at the time of independence from Belgian colonial rule, and it has been seriously shaken in Burundi. Similar overlordship by Hima pastoralists over Bantu agriculturalists in western Uganda (Ankole, Toro and Bunyoro) has also been weakened or annulled by the government though some practices of privilege probably persist.

The category of "rural-urban" workers, persons who have left the rural areas to seek work in towns and cities without success, is very hard to estimate. Enumeration of urban unemployment is often quite understated, as noted in Nigeria where the government reports a figure of 4.5% but Kilby finds urban rates approaching 14% (cited in Byerlee, 1973). Rates or urban unemployment in Ghana, officially estimated below 10% are generally thought to be more like 20 to 30%. As previously reported, Grissa (OECD, 1973) concluded that 80% of the urban male unemployed in Tunisia will eventually return to cultivating, and Gregory (1973) found extremely high levels of temporary migration to urban areas in Upper Volta, with persons returning to farming over a period of years. Most of these people have some education, are unskilled and take work either in agricultural or non-agricultural labor, by day or by contract as available. Because this is an indefinite, interstitial status, where people have left one base but not yet established another, it is not surprising that one cannot get good data on "rural-urban" workers as we have identified the category. In many countries where such persons are better educated than the average level in the rural area they come from, we would regard them as responding to the "pull" of urban opportunity more than to the "push" of land limitations. What is found, however, is that the flow of persons from rural to urban areas is differentiated,

with differing motivations. A study by Spencer and Byerlee (1976) on migration in Sierra Leone found that better-educated persons tended to come from higher income circumstances, but that uneducated migrants originated in households with below average incomes. In rural areas, this lower level is usually due to insufficient quantity or quality of land, so this indicates that some share of this category belongs under the LLNLL rubric, even though we cannot say what this share would be for every country.

II. Cultivators

Out of the estimated rural population in Africa of 312 million, figuring that approximately fifteen million should be counted as "laborers and workers" in the rural sector and another roughly fifteen million are "pastoralists and nomads," this leaves about 280 million persons who are cultivators (including families, who are commonly doing agricultural work whether counted as part of the labor force or not). How many of these may be considered in a "near-landless" condition? Our purpose is to assess how many, or what proportion of rural persons, would not be well served by the kind of "package programs" being now supported in many African countries to "serve the small farmers," often with foreign assistance. As such we are concerned with tenants and share-croppers as one category, with constrained cultivators--those who have some land but not enough to employ themselves

and their families fully, and with vulnerable or marginal farmers--who in the forseeable future will be landless or seriously constrained.

Tenancy has not been common in Africa as much as in Asia, where cultivators to get any access to land often had to submit to a system of unequal benefit from labor. Institutional constraints rather than sheer physical scarcity of land, particularly those established by military conquest, could of course provide the basis for tenancy. In Egypt prior to 1952, tenancy was the rule in the countryside, with owner-cultivation the exception, on perhaps only twenty percent of the area. The land reform instituted by the Nasser government aimed at eliminating tenancy, distributing land to be cooperatively cultivated as described in the country profile. Current figures show over 500,000 tenants and sharecroppers still, most of whom have no secure claim to maintain their status (more favorable than that of the landless agricultural laborers). Together with their families, tenants would be at least fifteen percent of the rural population. These data probably understate seriously the extent of tenancy since by other estimates, perhaps half of the cultivated land in Egypt is under some form of rental arrangement (see country profile). In Ethiopia prior to its 1974 revolution, there was also a semi-feudal landowning system in the highland areas (Cohen and Weintraub, 1975). In southern areas

of the country this was highly exploitative, but at least most of the rural population could be encompassed within the system, there being few landless laborers. Although current information is scarce, tenancy appears to have been eliminated in Ethiopia, with peasants now operating within associations providing various degrees of collective or individual ownership. It is suspected that as more detailed micro studies are carried out on the so-called communal or tribal areas it will be discovered that legal arrangements quite similar to tenancy existed in the past and that the numbers of such "tenants" have been increasing in recent years.

A different kind of tenancy, one more voluntary than created in feudal or quasi-feudal situations, is found in West Africa and already mentioned. Owners of tree crops like cocoa or coffee in countries like Ghana, Nigeria and the Ivory Coast have often found it advantageous to enter into a sharecropping arrangement rather than hire labor, to give the other party more incentive to tend the trees well. The sharecropper ("share-treer," one might call him) gets one-third or one-half of the harvest, and often the right to grow food crops for himself on land between and around the trees (Hill, 1963; Galetti et al., 1963). In 1960 in Ghana there were about 50,000 "caretakers" compared with 110,000 agricultural laborers and 450,000 cocoa farmers or farm managers. These proportions have probably changed con-

siderably in the last fifteen years. As we reported previously, a FAO study found only 25% of cocoa farms being operated by owners (U.N., 1976: 32).* According to the 1960 census, already in 1960, about half the "caretakers" came from outside Ghana, and half of them from land-constrained Upper Volta. The increase in "abusa" or "abuna" arrangements could well represent a consequence of greater land pressure in the north of Ghana, Upper Volta and other areas farther from the cocoa belt, making it easier for cocoa farm owners to get cheap labor. At the same time, Ghana has been experiencing rising unemployment of its own population, not solved, however, by trying to reduce the number of foreign Africans working in that country (see discussion of the 1969 Aliens Compliance Order below).

The number of "constrained cultivators," agriculturalists and their families who lack enough productive land to provide for themselves a decent and secure basic existence, is impossible to estimate except in fairly gross terms. We cannot use any specific size of holding as a cut-off, as the quality of land (and amount and reliability of rainfall) must be taken into account,

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*Elliot (1975: 52) reports a survey in Ghana which shows 40% of cocoa farms operated entirely by family labor, but a majority of these were not yet bearing, so this large survey (N = 3,700) supports the FAO figure. When visiting a World Bank cocoa rehabilitation project based around Suhum, Ghana in 1975, we learned that about 3/4 of the farms had absentee owners.

as well as the infrastructure and public services needed to support attainment of at least their basic needs. In some areas of Kenya, Rwanda and Burundi, parts of Northern Nigeria as around Kano, and of course Egypt, we find not only that the man-land ratios produce a significant degree of landlessness but also the size of holdings for a majority of cultivators is below that which yields an adequate income for subsistence.

The land distribution in Kenya, noted already to be quite skewed, shows half (52%) of smallholders to have less than two hectares, less than 15% of the total area (ILO, 1972: 36). Some of these migh earn enough from high-value cash crops such as tea or pyrethrum to have a reliable if modest income for themselves and their families, so not all are below the level where they can participate in and benefit from programs for "small farmers." The ILO study figures that about 250,000 smallholders with incomes between $145 and $265 a year, though limited by insufficient or poor land, or lack of knowledge or capital, could with assistance make considerable improvement in their circumstances. (Some, it notes, may hire seasonal labor, though rarely permanent labor.) But below this group is <u>a majority of farming families, 620,000</u>, who:

> "lack the ability to raise the productivity of their land more than marginally. Their income from farming their own land is usually less than £60 ($145) a year including the

> value of food crops. . . . It is inevitable that at this low level of agricultural production and income these families must either exist in extreme poverty or must obtain income from sources other than their own farms by seeking work in the rural areas or in the towns." (ILO, 1972: 37)

So, in Kenya, we find twice as many constrained cultivators as "small farmers." Because there is such population density relative to agricultural land in Kenya, its situation is more serious than most other African countries, except Egypt.*

We find sizeable proportions of the rural population in large areas of West, East, and Southern Africa in this category of constrained cultivators. We estimate about 14% of the rural population in Upper Volta are farmers who, due to poor soils and remote location, will probably remain out of the mainstream of activities for many years to come (see country profile). In the heavily populated regions of Yatenga, Koudougou and Ougadougou, holdings are small, up to one hectare per able-bodied adult (Elliot, 1975: 46). The soil is weak, erosion is widespread, and rainfall uncertain. Even under these conditions, moreover, we find land and income unevenly distributed, so that 3.5% of the households

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*There a 1965 survey showed 40% of farmers having less than two feddans (about two acres). Given population growth in the past dozen years, this figure is likely to be over fifty percent by now. Even in 1965, only twenty percent of farmers had more than five acres (see country profile).

account for 46.7% of total expenditure (ibid.). Similar circumstances appear in Chad and Mali. According to an FAO report (1975), the population in the rural north of Chad, constituting 41% of the country total, has very poor farming. Holdings are only one to one and a half hectares, and people cannot grow cotton, rice or peanuts there. Only 2.2% of the population have farms of more than five hectares, and it is estimated that plows are only feasible on farms of at least three hectares. Even so, plows would improve production by only 20 to 25%, according to Willaert (1977). Landholding data are not available for Mali, but regional average incomes indicate that close to sixty percent of the rural population are living and working in regions with incomes $30 and $40 per capita as of 1972 (Stedman et al., 1976). Even these low figures disguise skewed income distributions, which imply quite unequal distribution of land. The cultivators who are the worst off are those of the Seno-Dogon region on the southern plateau. "This area has no unused land that could be developed even if new irrigation resources were made available," (Stedman et al, 1976: 2-3).* The situation is not so

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*The Lacustre and Sixth regions are also exceeding their carrying capacities for cultivation, according to the report, and cultivators in these regions are suffering considerable economic deprivation. The low levels of welfare are in part attributable to the effects of the Sahelian drought during the early seventies, but after several good years, drought conditions have returned, according to the New York Times, December 29, 1977.

constrained for cultivators in the forest zone of West Africa where rainfall is assured, even if soils are not always very productive. This is true also for much of East and Southern Africa, though land constraints are reported for parts of Uganda as well as Kenya. Malawi and Lesotho present situations more like Upper Volta and Mali.

We would call attention also to a category of "marginal" or vulnerable small farmers who in the forseeable future are likely to become landless or seriously constrained for a variety of reasons. As noted already, a significant amount of land, perhaps one-third of the arable area, is cultivated with a rotational period of long fallow. This is necessitated by the soil structure and balance of nutrients. Unlike in temperate zones, where eighty percent or more of the biomass's nutrients are in the soil and the remainder in the vegetation, in the tropics the relationship is generally reversed, with the great majority of nutrients in the forest, grass and other foliage rather than in the ground. Slash-and-burn techniques of cultivation return to the topsoil many of the minerals held in the vegetation, but due to soil and temperature conditions, nutrients leach away fairly quickly, and after a year or at most several, soil fertility is depleted and must be left fallow for some years, 5, 10, 15, sometimes even 20, to replenish the nutrient supply.

Population growth cuts the land available per capita in half every 25 years. Some of this pressure can be accomodated by shortening the fallow periods where the soil is not suitable to continuous cultivation. But this expedient hastens the day when the land can no longer support the population dependent upon it. At some point when fallowing has been reduced below the minimum set by biological and geological conditions, fertility will decline rapidly and soil erosion will become serious. Fallowing is particularly required for many forest soils. So although the forest zone is for now more favored in terms of land availability, with few "constrained cultivators" as we have defined them, it contains a large number of "vulnerable" small farmers. The number cannot be known in total because the prospects for any specific group ten or twenty years from now depend on the interaction of soil type, population growth, and agricultural practices. Agricultural development programs based on intensification of production, as most of them are, often jeopardize the fragile ecological balance which sustains African populations now but which could break down.

Population growth, of course, will affect small farmers whether or not the soil itself is vulnerable to deterioration. Wherever the amount of arable land is fixed, subdivision of holdings must occur unless the non-agricultural sector of the economy can absorb all

the increased population beyond the replacement rate for agriculturalists. Fragmentation of holdings results wherever equal inheritance prevails, as provided by Islamic law and many traditional cultures. This means that without national legislation, we can expect the holdings of three or four to ten acre range in most countries to be in the two to five acre range by the year 2000. In this range, farmers can no longer readily provide for themselves and their families by working the land available to them. Without improved production packages or agricultural priorities, families need at least one acre per capita under cultivation to maintain subsistence levels of living. Conventional crop intensification approaches, usually monocultural, are not likely to achieve the increases in production needed to make ever smaller holdings able to support the growing number of families.

We have not here considered the effects of lack of access to infrastructure and public services, so common throughout rural Africa. To some extent, constrained cultivators and vulnerable small farmers can come closer to providing for their families as these services are increased, particularly irrigation in areas of scant or unreliable rainfall. But if all were counted whose incomes and security are adversely affected by lack of infrastructure and services, we would end up with most of rural Africa in the LLNLL category in terms of land and income insufficiency. We would rather point

up the lack as a common condition, knowing that it is unlikely African governments will have the economic resources to make more than modest improvements between now and the year 2000. The failure to make more widespread gains will contribute to a growing number of persons who simply cannot get access to enough productive land in conjunction with government services to satisfy their and their families' basic needs.

The various criteria for determining the extent of cultivators in a constrained or vulnerable position cannot be applied across the board, and besides, the data are not accessible from enough countries to make any firm measurements of the extent. Based on the few rural income and small farmer surveys available which have attempted to delineate land tenure status or "poverty lines," e.g., Botswana and Kenya, we would estimate that about forty to fifty percent of agriculturalists, or about 100 million people, are in this "marginally landless" condition, with the number growing year by year.

III. Pastoralists and Nomads

The pastoralist and nomad population in Africa is estimated at 12 to 15 million, or forty percent of the world total. This group is roughly divided as follows: 2-3 million in North Africa, 4-5 million in West Africa, 3-5 million in East and Central Africa, and perhaps 100,000 in Southern Africa. Understandably, population figures on these groups are the hardest to come by. Our

efforts to estimate nomadic population by country eventually had to extrapolate from ethnic data, figuring in West Africa, for example, what percentages of the Tuareg or Fulani would in that country be nomads. Even in Mauritania, a country with one of the highest percentages of nomads, there is no knowledge of their number. Feral estimates nomads to be sixty percent of the national population, though with only 15% indicated as sedentary and only eight percent in the capital city, one wonders where the other one-sixth of the population would be (Feral, 1977). USAID, on the other hand, estimates the population to be 70% nomadic, 20% cultivators, and 10% urban (Development Assistance Program: Senegal, Mali, Mauritania, March 1975). With discrepancies like this, only gross numbers can be reasonably presented.

Pastoral populations, those who rely on livestock rather than agriculture, are not all nomadic, and those more settled are easier to get data on. Some of the more important pastoral people are the Masai of Kenya and Tanzania, the Somalis in Somalia and adjoining areas, the Fulani throughout West Africa, the Tswana of Botswana, and various groups in Central Africa (the Tutsi in Rwanda and Burundi, the Tonga in Zambia, and the Hima and Karamajong in Uganda). For pastoral people generally, land is not held individually but is rather a common asset for grazing cattle, goats, camels, etc., which are individually owned. This land may or may not be "owned"

by families or clans. In some countries, such as Ethiopia prior to 1974, the land is claimed by the state as government land which nomads may use (Cohen: 1973, 373-374). There is some question whether nomads and pastoralists should be considered among the LLNLL since livestock are the relevant asset rather than land. But there are numerous problems associated with land for pastoralists and nomads that make their subsistence problematic and deserving of consideration.

In the past, pastoral and sedentary populations have lived in their respective spheres with little conflict. However, there is now increasing competition for land:

> "with new agricultural development programmes and increasing population, the amount of land used for agriculture has been increasing at a fast pace in the Sudanean zone. With large tracts of land added every year to the cultivated surface, land available for grazing is gradually becoming more scarce every year. . . . Gradually, as pastorals are barred from large areas around cultivators' settlements, they are pushed back from land over which they had long-established grazing rights." (U.N., 1976: 25-26)*

Moreover, as agriculturalists increasingly use their savings to purchase and maintain livestock as assets,

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*This report, Progress in Land Reform (1976) has a very good discussion of pastoralists' relationships in Africa (pages 22-27), a subject usually unexamined.

the competition takes on more urgency for the pastoralists. As a general rule, governments favor agriculturalists over pastoralists, perhaps because a settled population is thought easier to control and tax, or is judged more loyal and responsive to policy directions.

There is the other land-related problem with respect to pastoralists and nomads, and that is the maintenance of ecological balances. The Sahelian drought in the early seventies accelerated the spread of desert environment and forced nomads and their herds toward the less dessicated areas to the south of their usual territory. Great losses of human and animal life resulted from this contraction of the area suitable for livestock grazing.* No matter what the causes for this, the tragedy of the Sahel has underscored the dependence of widespread populations in Africa on land and water resources, whether individually owned or not. It is in the nature of a pastoralist economy that it is extensive rather than intensive, that it operates in environments of poor soil and uncertain rainfall where settled agriculture

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*There has been some concern that desertification was a consequence of overgrazing due to livestock overpopulation and poor management practices by the nomads. But this seems to have been mased on ignorance of the social and economic mechanisms for maintaining ecological balance. More recent stress has been put again on climate conditions, particularly as these have reversed themselves and the desert has retreated rather than advanced. See Horowitz, Brokensha, and Scudder (1977).

would be mostly unfeasible. The flexibility to move where grazing and water are more adequate is what permits the system to survive. Land constraints on such movement, such as the extension of agriculture into pastoral areas, impair the livelihood of pastoralists, at the same time the new agriculturalists embark on a tenuous existence, often exhausting the soils within a few years.

Pastoralist societies are not as idyllic or egalitarian as some romantic views of them would suggest. Whatever the past situation, it appears that concentration of cattle-owning, equivalent to concentrated land ownership, is occurring, leaving many without assets and faced with the choice of working to tend someone else's livestock or leaving pastoral existence.* Where there are fairly precise data, the picture is rather grim. In Botswana, it has been found that 45% of rural households own no cattle--in a country where cattle are the main

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*"Due to recent trends, the relationships within and between the clans and tribes are gradually breaking up. Where previously the various strata enjoyed reasonable security within the over-all collective structure, relations are now becoming more and more individualistic. This has lead to a paradoxical situation: the same conditions which lead to the concentration of wealth and political power in the hands of a few loosen the hold of those few on the labor force essential to the proper maintenance of their newly acquired wealth, usually livestock. All it now takes is a year or two of short rains and what is left of the stock of a tribe or clan lands in the hands of a few individuals. The deprived, who are no more bound to the traditional society, either leave for urban areas or try to subsist on precarious cultivation." (U.N., 1976: 24).

source of wealth, income and status (Rural Income Distribution Survey in Botswana, 1974/75). To be cow-less is the same as being landless in an agricultural society. We find a variety of tenancy relations--share-cowing, like the share-treeing in West African cocoa and coffee production. This creates a lower class of dependent, asset-less persons which is growing as a proportion of pastoralist societies.

Under this general category we include specific groups of hunters and gatherers, persons whose livelihood comes from the natural environment, not through cultivation or animal husbandry. This number is small and decreasing, as the encroachment of other forms of economic activity impinge on the habitat which hunters and gatherers need. The most noted of these are the Ituri pygmies of the dense rainforest in western Zaire, and the bushmen of the Kalahari desert in Southwest Africa (Namibia) and Botswana. Little can be done to assist these people except to preserve their natural environment so the wild game and flora they harvest are maintained. Other measures would amount to cultural genocide and there is no current justification national or foreign governments can give for this. We note but do not further consider this special group.

A final category, not included in our general scheme because it is not specifically an object of agricultural and rural development is refugees. At present there

are about one million refugees in Africa, from colonial rule, ethnic and political conflicts (U.N., 1976: 21-22). They are "landless" in a double sense, and doubly deprived therefore. In as much as they usually have some claim to land in their country of origin, and could conceivably reclaim it at some time, we will not deal with them as a special group for analysis. But their plight should not be forgotten since theirs can be for some time the most desperate of situations.

Causes

The discussion of kinds and incidence of LLNLL has already sketched the principal cause for this condition: overpopulation in some densely settled areas, elsewhere population pressing on the limits of productive land. This is too simple an explanation, however, as population growth is itself a complex phenomenon as yet inadequately explained by demographers or anyone else. The carrying capacity of land is itself a variable, not a fixed thing, depending on agricultural practices and the investment of some combination of labor and capital. Moreover, land use and adequacy are a function of expectations and knowledge generated in the broader society and economy. We should also not ignore the impact of governments and their policies. While usually intended to benefit the rural population, they may themselves contribute to growing landlessness.

Population growth is too complicated a subject to

deal with here in any detail. Many explanations of it are simple-minded Malthusianism, assuming that population will expand to consume all available resources. We do find that areas supporting intensive, continuous agriculture have much higher population densities, but there is some ambiguity about cause-and-effect (Boserup, 1965). Students of demography are finding variations of growth rate within populations that suggest some determinants over growth more subtle than crude Malthusian limits. In Kenya, for example, both the nomadic population of Galla, Somali, Masai, Boron and others, and the sedentary Kikuyu are quite land constrained (though in different ways because one uses land extensively and the other intensively). Yet the former are increasing their numbers by about 2% per annum in contrast to the national average of 3.3% which the land-starved Kikuyus approximate. It appears that population growth is affected more by a complex set of opportunities and constrains than any mechanical man-land ratio. For people lacking assets such as land or having little of them, labor is their only means of sustenance and improvement. Hands are the capital of the poor. Among the Kikuyu, for example, it would appear that upward mobility of children through education and tribal connections is at least perceived by parents as a good gamble. Indeed, it is common throughout Africa that many parents will hope their children leave agriculture for white collar jobs, which are more stable

and regular in terms of the income they provide. Although rapid population growth among the lower classes in a society may work against them collectively by increasing the excess of labor, reducing its per capita access to land and other assets and its bargaining power in the labor market, the decision to have more children can be "rational" for any particular family. At the same time, we must reckon that some lower groups have also lower fertility rates, so no general statement or prediction can be made. Population growth is a fact in Africa. This we know. And we know also that it will continue for decades given the age structure of the present population. So we must reckon with worsened man-land ratios in the aggregate for the foreseeable future, as Africa's population doubles by the year 2000.

The quality of land and regularity of rainfall present special problems in Africa which have been alluded to already. There is still surprisingly little understanding of tropical and savannah agricultural systems, or of the social systems exploiting them. Many of the technical proposals for increasing the land under cultivation by investment and intensification have proven disastrous in Africa, the most notorious being the East African Groundnut Scheme which failed spectacularly in Tanzania after World War II. Not all indigenous practices for dealing with the soil and the uncertainties of the environment are "optimal." (These uncertainties

are not just a matter of rainfall, but of myriad crop diseases and pests, which include wild hogs, monkeys and elephants.) Still, most of the adaptations to particular circumstances, such as the system of long fallow, up to twenty years where agronomically optimal and man-land ratios permit, take account of physical constraints which conventional modern "packages" overlook. The physical conditions of agriculture in Africa are not a "cause" of LLNLL, but the limits they present contribute to the growing problem there.

To some extent, LLNLL can be seen as socially induced quite apart from social influences on population growth. How satisfactory a subsistence existence is, indeed, what is needed for "subsistence," will be affected by knowledge of other opportunities. There are objective bases for "landlessness" and "constrained agriculture" in Upper Volta, for example, as overpopulation on a limited ecological base is a fact. But the movement of Mossi and other Voltaics off their meager farms, to find work in Ghana or the Ivory Coast, during the dry season or semi-permanently, is induced by the greater prosperity of the forest zone. Elliot (1975: 46-47) estimates that wages for laborers in Ghana and the Ivory Coast are three to fifteen times higher than the average rural cash income in Upper Volta as of 1968-70.* There

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*In Ghana, an average rural Voltaic can earn a cash income 3.9 times greater as a permanent laborer

are opportunities available to Voltaics fleeing the harsh conditions of the Sahel because:

> "Nationals with access to land are reluctant to accept work as hired laborers at the same wage rate as migrants from the Sahel. . . . Except in those few areas where population pressure has reduced access to land, there is little incentive for an Ivoirien national to work in the plantation sector." (Elliot, 1975: 50)

The movement of persons, giving up the land they have some access to in their home area is thus in some sense a function of factors outside their area. We would, however, underscore the "push" behind this. Elliott characterizes the situation for migrants as follows:

> "A characteristic of permanent labourers in East Africa is that productivity on their own farms has fallen so low that they are better off working for an exiguous cash income on farms of others. The reason for that low productivity is usually lack of fertile land and occasionally lack of complementary labour. In West Africa the same pattern is clear, with some important modifications. The first is that the supply of labourers is the result both of land pressure in the normal sense of high population density and of the infertility of the land that is available....The most striking contrast is not between the north of Ghana or the Ivory Coast and the forest belt, but between the cash earnings of farmers in the countries on the Saharan fringe such

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in the food-growing forest area or 5.2 times greater in the cocoa belt; the minimum wage for any regular employment in Accra is 7.1 times greater. Income on an Ivory Coast plantation is 5.6 to 8.2 times greater, and fifteen to eighteen times greater in industrial employment

> as Mali, Chad and Upper Volta, and those of the forest zone farmers. With small average land holdings, an unreliable climate, poor soil, and minimal infrastructure, cash incomes in the rural areas of these northern countries are tiny. Furthermore, there are virtually no opportunities for earning income from non-farm employment. The small public service, concentrated in the more developed regions (particularly the capital), and a tiny industrial base can absorb very few migrants from the rural areas. Further, the failure of labour-intensive agriculture to generate even seasonal demand for hired labour means that the peasant farmer from Mali or Upper Volta has only one possibility for increasing his cash income--migration to the south. (Elliot, 1975: 109-110)*

Under such circumstances of constrained cultivation in The Sahelian zone, it is understandable why agriculturalists are encroaching on the land until now used by pastoralists for their herds. One of the causes for deterioration in the circumstances for pastoralists in West Africa (and some parts of East Africa) is the encroachment by cultivators on grazing territory (U.N., 1976: 25-26). So the poor beggar the poorer still.

Government policies have not played a very enlightened role in coping with LLNLL. With regard to the problems of the pastoralists, governments in Africa have often viewed them as "aliens," trying to force them into sedentary

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*Elliott's book is an extended analysis of Third World poverty, commissioned by the World Council of Churches and drawing on extensive data on East and West Africa and South and Southeast Asia.

agriculture (U.N., 1976: 22-23). But this puts them in competition with agriculturalists, whom the governments generally favor anyway.* The standard approach to agricultural development which tries to "modernize" the rural sector economy in general promotes commercialization of agriculture, the consequences of which for the rural poor are discussed in the summary report of this project. The trend toward polarization in landholdings is discussed in the next section, but we should note that it is directly or indirectly the consequence of most government policies which favor the advancement of the "progressive" farmers, those who are better educated and with larger holdings as a rule. Their success has led to the buying up of smaller holdings, hiring labor or possibly mechanizing production.

Mechanization is still at a fairly low level in Africa. The tropical soils often do not lend themselves to tractor cultivation. Indeed, the productivity of some of the lateritic soils can be destroyed by this, turning them to unuseable hardpan. If African soils and climate were more suitable to mechanization, perhaps

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*A stark example of misdirected sedentarization of nomads, or at least expropriation of their territory, was under the imperial government in Ethiopia. There the Afar people were displaced by creation of the Awash Valley Authority to create large agricultural estates (under multinational corporations) where pastoralism has previously been practiced. The consequences for the pastoralists were disastrous (Bondestam, 1974).

LLNLL would have advanced much further by now. But we do find mechanization proceeding in Kenya, Ethiopia (at least until the revolution), Egypt, Ghana, and other countries.

In Ethiopia under the Imperial government, in the Chilalo district where an agricultural intensification project (CADU) was started with Swedish assistance, mechanization of wheat production led to widespread evictions of tenants, much to the consternation of the donor. About 20% to 25% of the tenant population was evicted, 80% of these because of mechanization according to a U.N. study (U.N., 1976: 29-30). By 1974, approximately 3,000 tenant households had been put off their land, and it was predicted that eventually 90,000 rural people would have been evicted to make way for commercialized farming on large holdings (Cohen, 1974). Most of those evicted in this case were thought to have found land to rent in other areas of the country. The revolution in that year slowed and pretty much halted this trend, but not before widespread dislocation and hardship had occurred in Chilalo.

In Egypt, it is estimated that the displacement of labor resulting from agricultural mechanization will be fifty million man-days by 1985, with the trend likely to continue because the Five Year Plan for 1976-1980 calls for increased emphasis on mechanization (see country profile).

In Ghana, the government has sought to promote large-scale rice farming in the north, heavily subsidizing mechanization. To facilitate land acquisition, often held up by the ambiguities of traditional tenure arrangements where the right to confer title or use rights can be contested, the government has decreed certain areas as "agricultural areas" where it, rather than the traditional decision-makers, can allocate leasehold rights directly (U.N., 1976: 32). No figures on displacement from the land are available, but a detailed study by Winch of labor and capital inputs shows the capital-intensive method reducing labor inputs per acre by 94% without increasing yields (see Byerlee et al., 1977: 49).* The policies are surely contributing to reduced access

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*Fred Winch's thesis on "Costs and Returns of Alternative Rice Production Systems in Northern Ghana: Implications for Output, Employment and Income Distribution" (Michigan State University, 1976), analyzes and compares several combinations of factors. The most mechanized method, using tractors at all stages and combine harvesters for 77% of the area, was found on farms averaging 119 acres, compared with 1.1 acre in the "traditional" holding using bullock ploughing and hand labor. Labor input per acres was 37.8 and 690.7 hours, respectively, with yields of 7.1 and 7.5 bags per acre, respectively. The financial costs per ton were 42% lower on the capital-intensive operations due to government subsidies (the capital-labor ratio was 8.5 compared to 0.4). But calculation of true economic costs showed a difference of only 7% if that much. The optimum holding for efficient production was around fifteen acres, with tractor services hired for ploughing but all other work by hand. This required two hundred hours of labor input and yielded 8.3 bags per acre.

of northern Ghanaians to land and income in an area already poor and land-constrained due to the harsh dry season. The increased production is at the expense of food crops otherwise grown in the area by more labor-intensive methods.

The study of rice growing in northern Ghana is unique for its detail on land, labor and capital use in so-called "modernized" agriculture, but the problem it points to is not. We cannot determine how much of the growing problem of landlessness and near-landlessness can be attributed to government policies, particularly agricultural "modernization" and commercialization. But a hard look should be taken at all such efforts, not just in terms of possible labor displacement but in terms of food production as well. The more extensive practices with mechanized cultivation do not necessarily yield more output per unit of land. Only where lack of labor is truly a constraint on production will mechanization contribute to increased total output.

Trends

The most significant overall trend is that with which we began this regional survey, the declining production of food per capita. As there are no serious labor constraints overall, the decline can be attributed to a combination of poorer quality of land at the margin, inadequate incentives for agricultural producers (including infrastructure and services), and movement of productive

labor power out of the rural sector to the towns and cities. To be sure, the latter is a function of the other two as the rural sector has been neglected by most governments' policies, and the kind and amount of investments made have not been appropriate and sufficient to reverse the food decline. Of special significance is the possibility of still further declines, mentioned above, if fallow periods are shortened too much and soil deterioration sets in.

Even so, the supply of land can diminish in absolute terms. Egypt, which can ill-afford any loss of land, is losing an estimated 40,000 acres a year from urban spread for buildings, roads, etc.* Population growth, of course, reduces land availability in relative terms unless area cultivated increases faster than population. Egypt's situation is most acute, as the per capita supply of agricultural land has fallen from 0.5 hectares in the early fifties to only about 0.2 hectares per capita now. In 1974 it was estimated that 44% of the rural population fell below the poverty line, up from the estimates of 35% for 1958 and 27% for 1964 (see country

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*The Aswan dam was intended to increase land availability in Egypt through irrigation, as noted in the country profile. But it has proven less of an asset than expected. Poor drainage has caused problems of soil salinity, and the dam has stopped flooding downstream which replenished nutrients from alluvial deposits. The recent discovery of deep underground water deposits in the desert cannot be exploited effectively for decades.

profile). This trend parallels the changes in land distribution, as land reform measures in the latter fifties appeared to improve the lot of tenants, if not landless laborers, but the momentum for redistributive policies was lost by the latter sixties and land distribution became more unequal again.

The trend toward greater inequality in landholdings is rather general in East and West Africa according to Elliot's study (1975: 24-40, 53-58). As communal patterns of land tenure give way to legal or de facto freeholding, the more "progressive" minority expands its area of cultivation, assisted by government policies on research and extension, credit, marketing and other services. Sometimes even in spite of government efforts as in Tanzania to reduce inequality, the trend toward concentration can be observed. One area in that country which had almost perfectly equal usage of land twenty years ago has shifted to having 53% of the land owned by just 9% of the households (Elliot, 1976: 33). In Ghana and the Ivory Coast, it is observed that urban residents have been investing savings in buying up cocoa farms, reducing the share of owner-operated and raising the share of tenanted ones. A similar displacement of pastoral herdsmen has been reported with agriculturalists and urban traders getting into animal husbandry, reducing the area pastoralists have access to (U.N., 1975: 25-26). Within pastoralist societies, as noted already, there is

a trend toward concentration of cattle ownership. So these two trends together with reported overstocking mean that larger proportions of these populations will lack access to the assets needed to maintain a decent and reasonably secure living.*

Unfortunately, we cannot be much more precise in presenting trends on land or asset status. As we have noted, the data are still sparse and sketchy at any point in time. There are few comparable data to be found that show changes over time. The most complete data are from Egypt and perhaps they show an unrepresentatively dismal picture. Yet almost all accounts and even fragmentary data point in the same direction, to a worsening in the land situation, so we can at least say there is no basis for assuming the situation will improve without vigorous policy action.

Consequences

If data are scarce, differentiating individual or

*The question of "overstocking" is now a controversial one, the question being whether agricultural scientists can estimate better than can pastoralists the "carrying capacity" of particular grazing land, and whether specific instances of deterioration in range quality are due to pastoralists' increasing their herds out of ignorance or due to circumstances like adverse weather beyond anyone's control. See Horowitz, et al. (1976) on this. An example of estimated overstocking can be found in Upper Volta where the carrying capacity of the Sahel zone is thought to be 10 to 12 head per square kilometer, whereas in 1966-69, the stocking rates were 16 head of cattle and 30 sheep/goats per square kilometer. Even with a 25% loss in animal population due to the drought, the zone would be "overstocked." USAID, Development Assistance Program, FY 1975: Upper Volta and Niger, Washington, March, 1975, p. D-36.

family status by landholding so that the varieties and incidence of LLNLL can be identified only in gross terms, even less information is available on the consequences of LLNLL for different groups. Census data are almost always reported by geographical area, by age and sex, often by educational level, occupation or ethnic group, but almost never by land status. Surveys have provided some basis for estimating income differences in some countries, but in general we can say, regretfully, that only fragmentary information can be reported.

On earnings, there are some figures available on wages of rural laborers. In Ghana, agricultural laborers earn $40 to $75 a year plus clothing, housing, and food; rural non-farm laborers earn about $100 a year but without as many "fringes." (Elliot, 1975: 112). This will hardly support a person let alone a family. In Kenya, earnings are similar, about $55 a year for casual agricultural workers (192,000) and $60 for regular agricultural workers (186,000). Wage earners on small farms earn about $90 and on large farms about $165, with those in non-farm employment getting about $110. Perhaps more meaningful are household incomes. The ILO figures that for 1968-70, about 330,000 households had an annual income of $50 or less--smallholders, pastoralists, unemployed and landless persons--14% of all households; while 1,140,000 households (48%) were only in the range of $50 to $150 a year--workers employed on small holdings

and in rural non-farm enterprises, and a sizeable number of smallholders (ILO, 1972: 39, 77, 74). In Uganda, the general rate of one shilling a day was reported for agricultural laborers, which would amount to about $30 a year cash income, though the value of food provided could bring this up to about $50. What is significant is that the rate was one-third the minimum legal rate for rural areas and twenty percent that for small towns (Elliot, 1975: 105). All of the figures we have seen are miserably low for agricultural labor, even though labor shortages are often reported. Employing farmers appear disposed to go without as much labor as they could use, rather than pay higher rates. Elliot says with respect to Ghana: "the balance of evidence suggests that real wages have in fact fallen over the last fifteen years," (ibid.: 114).

Tenants and sharecroppers do not fare much better, it appears, except for cocoa tenants (abusa "caretakers") in Ghana, who have incomes ranging from $250 and $300 with another $50 to $100 from other sources (ibid.: 112). This is a remunerative crop, and absentee owners have to provide incentives for proper care of their investment (trees). Still, the social differences exist and we find a marked difference in the percentages of children of landholders and of sharecroppers who are attending school: 78% compared to 43%. This discrepancy has a long-run effect on occupational mobility and earnings

that leaves tenants as a class inferior to landowners (ibid.: 112-113).

The incomes of smallholders vary tremendously. In Kenya they are reported averaging $270 (ILO, 1972: 77), although many are in the range of $50 to $150 and some even below $50 for a household. In Upper Volta, on the other hand, a 1973 study (cited in the country profile) revealed a net average disposable income of only $2.13 per capita. It is impossible to generalize as incomes depend so much on the suitability of specific areas for cash crops and on market accessibility. Other indicators of productivity and welfare should be used besides income, such as educational access, conditions of health and nutrition, and security against declines in living standards.* Data on these are hardly available,

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*Insecurity is one of the hardest things to measure and compare, but it is surely one of the most important consequences of marginal land status. Elliott notes that even if wages for agricultural laborers in East and West African countries are low and in general constant, "in some other respects the level of living . . . is hardly distinguishable from that or at least the smaller farmers themselves. They are provided with lodging and eat no worse than the farmer and his family. The privations of rural life on a low income are common to both small employer and employee, and there is no reason to assume that access to other forms of consumption, such as medical care and clean water, is worse for the employee than for the employers. But in one crucial respect the permanent labourers are the least privileged of all employees. For except when they can establish an obligation upon the employer, e.g., through marriage, they have no security of employment. A change in the farmer's circumstances, a fall in the price of an export crop, disease of the plants or sickness of his own body--any of these can deprive him not only of his cash income, but also of

though we did note above comparative statistics on children's school attendance for tenants and landowners in the Ghanaian cocoa sector.

The impact of LLNLL conditions on the family can be sketched even if not quantified. Elliott has considered the situation of the family left behind by a migrant laborer "to survive on the subsistence it can produce and the remittances it may or may not receive from the migrant."

> "The fate of the farm family in which the father is absent, and either unemployed or failing to remit regular gifts back to the rural area, is at best insecure and at worst disastrous. . . . Providing no expensive disasters such as drought, litigation over land, fines, or serious illness occur, the level of consumption of the family need be no worse than that of the villager with male adults present. But the family is exceedingly vulnerable . . . to withdrawal of support by the kin group . to harassment of all sorts . . . even more vulnerable to natural disasters than most other families precisely because those who would normally be most adept at securing assistance, either from official sources or more likely from kin groups, are not on the spot. And it is vulnerable to even quite small changes in the economic milieu in which it operates. A rise in school fees, reduction in the fertility of the land, cessation of demand for casual labour, the unforeseen need to undertake major improvements on the farm, and perhaps most

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his very subsistence. . . . If he is lucky, he can return to his own village and live on the subsistence production of his family, either nuclear or extended. If he has worked his way further from his home base, or if he simply has no home base, he is then of all men the most vulnerable." (1975: 106-107).

> of all, the sudden drying up of remittances from town as the migrant either loses his job or decides to start a new family in town--any of these can upset the delicate equilibrium of the family and, without substantial support from the kin group, can lead to almost total destitution." (ibid.: 99-100)

The situation of women can be quite adversely affected by the necessity of male migration out of land-scarce or land-constrained communities in search of work elsewhere, although their situation may not be much better with adult male household members at home.* Probably the most serious situation for women is in Lesotho, where almost half the adult males have found it necessary to seek income opportunities outside the country. It has been argued by Deere (1976) that women's labor subsidizes the economic development of African countries along capitalist lines.** There is a tendency in the

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*The ILO Kenya report says: "Women left in charge of a farm are often strained by the manifold claims on their time and energies. Their husbands may be away in town, but many rural women are under strain even with husbands by their side. Here there is no under-utilisation of labour--rather the contrary--and perhaps no time even for aspirations or feelings of frustration. Excessive claims press upon their time and very limited (and often insufficiently aided) capacities--leading to low incomes. And there is the ever-present risk of the calamity which may make it no longer possible to cope." (1972: 72)

**As men get employed in industries or commercialized agriculture, they can be paid nominal wages because women operating the family farms provide at least a minimum of food and income for the family. It would otherwise have to be supported out of the man's earnings, or the household would not survive and the man's labor would have to be withdrawn from the capitalist

literature to think of economic activity in terms of male household heads, but this is misleading and mistaken. The consequences of LLNLL affect all members of a household lackingland or sufficient land to give them year-round productive employment. These are persons whose need for development assistance is greatest but who will not benefit from the standard programs for agricultural improvement.

There is growing concern about adverse effects on the environment from population pressures on the land. While there is some question as to how much of the desertification of the Sahel region in West Africa could be attributed to human overpopulation with its larger animal herds--weather was certainly the primary cause--it does appear that the crisis of the early seventies was at least in part man-made. Government policies had undercut the flexibility of movement which has been the nomads' first line of defense against drought conditions. No matter where the responsibility rests, the carrying capacity of the area was exceeded, with deterioration of the environment resulting. One can only hope that with better rainfall and reduced population it will regenerate after some years.

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sector of the economy. By working at nominal wage levels, men are contributing to profits and capital formation in the "modern" sector, underwritten by women's unremunerated labor.

Where agriculture is more settled, we are beginning to find the first evidence of environmental degradation from overpopulation. On the densely-settled Mossi plateau of Upper Volta, but also in rural areas surrounding town centers elsewhere, trees are being cut for firewood enough that erosion is resulting (see country profile). Other problems have been created for ecological balance in Egypt as a consequence of building the Aswan dam to provide land for cultivation through irrigation in that land-starved country (see country profile). As of now, the environmental situation is not imperiled as in parts of Asia and Latin America by population pressure on the land. But as land that is increasingly "marginal" is brought under cultivation, and fallow periods are further reduced, there is great danger that the problem of landlessness and near-landlessness will accelerate through environmental deterioration the dwindling supply of productive agricultural land per capita.*

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*The ILO Kenya report discusses in a technical appendix the problems associated with the large numbers of landless people there moving from overcrowded areas to unused previously marginal areas. "First, a decrease in average rainfall in Kenya is associated with an increase in variability. Hence these areas are high-risk areas for cultivation, and drought and subsequent crop failures can be expected. Secondly, the magnitude of a famine clearly increases directly with the size of the population in the area concerned. . . Thirdly, these zones are liable to violent storms at a time when the ground cover is at a minimum. There are many steep slopes, and it is probably true that surface soil degradation and erosion in these areas are chronic. Fourthly, agronomic research is completely inadequate to the needs, and certain important questions such as the growing

Policy Measures

There are a wide variety of measures which governments can take in response to LLNLL. Where land is scarce, uncultivated land may be brought into production through clearing, irrigation or disease eradication. Where unequal ownership precludes cultivators from receiving the benefits of their labor, land may be redistributed through reforms. Where the land yields too little under present practices to support a rural household, improved practices may be provided. Where the fruits of agricultural labor are unfairly distributed because of the weak bargaining power of workers, they can be organized in some form of association or cooperative. So far, none of these measures has been notably successful in Africa. Perhaps this is because the problem has not become urgent enough to require serious and sustained efforts. But experience shows in Asia and Latin America, and in Egypt for that matter, that where land-man problems are serious, appropriate policy action is not necessarily forthcoming and may even be more staunchly resisted or more systematically thwarted in implementation because the implications of some resource redistribution are more threatening. So, we cannot assume that governmental

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of [various crops] and dry-land crop husbandry techniques are almost entirely neglected at present. Fifthly, public works, utilities and services are below national standard because of past neglect." (1972: 405-406).

efforts will intensify to cope with the growing problems. No one policy response appears likely to be adequate. In each country, some carefully-designed combination of policy measures will be needed, and will probably need considerable foreign assistance.

1. Land Extension. The most popular approach to problems of LLNLL is to bring new land under cultivation as this permits some to gain without disadvantaging others. Unfortunately, the majority of experience with this in Africa has been unproductive. The costs of clearing, irrigation, roads, and other infrastructure have been usually exhorbitant. There have been agronomic problems as the soils or rainfall have often proven unsuitable to the kind of extensive, often mechanized production planned. There have been problems in getting persons to settle on the new land in many cases, so that the costly investment is not fully utilized. There is the well-known "success story" of the Gezira scheme in the Sudan (Gaitskell, 1959), but it is matched by the Kongwa scheme in Tanzania (Frankel, 1952) and the Mokwa scheme in Nigeria (Baldwin, 1957). There are usually good reasons why land previously uncultivated was left unsettled (Lewis, 1954; see also previous footnote).

Where land has been unused because of disease such as onchocerciasis (river-blindness) or trypanosomiasis (sleeping sickness, carried by the tsetse fly), its

eradication can be a boon. In Upper Volta, a major effort has been mounted with foreign assistance to eliminate onchoceriasis, carried by the black fly, which infests about ten percent of the land. As reported in the country profile, to date some 447 families (roughly 5,000 people) have been resettled, trying particularly to alleviate the population pressure on the Mossi plateau. But this shift has been insignificant so far. It is estimated that 20,000 persons have already migrated spontaneously to the oncho-freed zones but this is only a guess. Certainly, to the extent this effort is successful, it will improve the lot of previously constrained cultivators.

Some efforts to extend cultivation compete with the land used by pastoralists. More intensive cultivation may benefit a larger number of persons, provided that the land is suitable for this (it may require a huge investment such as in irrigation). A bad example of such an effort has been noted already in pre-revolutionary Ethiopia, where the Afars of the Awash valley were displaced to make room for large estates, particularly for sugar production (Bondestam, 1974). In that case, with the degree of mechanization introduced by the multinational corporations involved, there was little employment generation even with the intensification. In Kenya, it is proposed that land settlement be introduced into the district now inhabited mostly by Masai pastoralists

(ILO, 1972: 172). The net benefits of such measures have to be very carefully weighed, taking into account the suitability of the soil for permanent cultivation. Even when it is nomads who are being sedentarized, rather than settlers brought in, as is being attempted in many Sahelian countries of West Africa (see for example, Upper Volta country profile), the advisability of such policies is questionable.

2. Land Reform. The major policy for dealing with problems of LLNLL has been land reform in many countries, though not so often in Africa because tenure relationships there have been different by and large. Egypt after the 1952 revolution embarked on a major land reform effort, ultimately involving 12.5% of the land and benefiting 9% of the rural population, a major reform by most international standards. Still, as reported in the country profile, the landless were largely excluded from the redistribution--only tenants and permanent laborers benefited.

One of the best means for extending the cultivated area is through introduction of irrigation, either to permit more than one crop a year on land already cultivated or to bring otherwise unused land into cultivation. This is of course what the Egyptians have attempted with the Aswan dam, with some success but impending deterioration of the gains, as reported in the country profile. Irrigation according to conventional large-scale approaches

is, it turns out, very expensive. The ILO Kenya report estimates that 160,000 to 200,000 hectares could be developed in that land-hungry country through irrigation. However, the economic costs are likely to make this unfeasible for the foreseeable future. The range of costs per hectare for such irrigation is $1500 to $2500, up to $5,000. Even so, the report concludes that with a family on 0.8 hectares irrigated able to earn a cash income of $180 to $200, "it is almost inevitable that irrigation development will become increasingly important, particularly in the 1980s and 1990s." (1972: 174). Since at present, only 6,000 hectares of land is irrigated in large-scale schemes in Kenya, it should be noted that immense social dislocation and change are implied by this possible plan, apart from the exhorbitant economic costs. Still, with the growing population pressure on the land, the ILO report may be correct, that land extension through irrigation is "inevitable." We would note that the costs of large-scale schemes are usually higher than on smaller ones, with effective utilization also often much lower. So the possibilities for more dispersed and smaller-scale schemes should be explored very carefully before commitments are made to the more dramatic but risky large operations. An interesting discussion of irrigation potential and small farmers along the Niger is found in Horowitz, et al., 1977.

Given a shift in government policy after the death

of President Nasser who introduced the Egyptian reform, it also appears that earlier effort to get credit, services and other support to the small farmers and land reform beneficiaries has slacked off, and middle farmers are now becoming more dominant and prosperous in the countryside again. This underscores the importance, noted elsewhere in the Third World, of accompanying land redistribution with government services to give small cultivators access to the inputs needed to make their plots of land as highly productive as they can be. (The most productive agriculture in the world is found in Japan and Twiwan with household farms in the range of one hectare.)

Ethiopia and Algeria have had land tenure structures that produced inequality of income and denied large numbers of rural people adequate access to land. After the 1974 revolution in Ethiopia, a massive land reform effort was made, but it appears too early to assess the full impact of the reform (Cohen, Goldsmith, and Mellor, 1976). In Algeria, an extensive land reform program is still underway, with a strenuous effort to tailor the expropriation of excess land and distribution of new holdings to ecological and cropping conditions. Since 1971, 43,000 households, over 200,000 persons, have benefitted from the program as over 600,000 hectares have been redistributed in the first phase. But since an estimated 900,000 rural families are unemployed or under-

employed, the need for continuing distribution is great. The one million hectares to be made available in the first phase is to be supplemented by another two million hectares in a second phase. With an average of ten hectares needed to employ and support one family, the program will not solve all LLNLL problems in Algeria, but a serious improvement should be possible (U.N., 1976: 46-49).

In Kenya, following independence, most of the large farms operated by European settlers were bought up (with British financial assistance) and their land was distributed in settlement schemes, some providing rather small farms to Kenyan farmers and others resulting in fairly large farms under African management. Analysis of output, employment and profitability has shown that these economic goals decline when holdings exceed six to eight hectares, so the ILO report recommended subdivision of the larger holdings created under the "low density" schemes, providing land for as many as 100,000 new families (1972: 171). The settlement schemes have been a matter of some controversy, as much of the land distributed to smallholders, often not backed by requisite services, was bought up or leased by larger farmers. These larger units yield more profit per operator, but as indicated above, they do not produce more output or employment. Farms under ten acres, averaging 7.3 acres, have almost six times more gross output, almost

seven times more net profit, and use almost nine times more labor input per acre, compared with the large farms created under the settlement schemes, averaging 125 acres (ILO, 1972: 167). The economic justification for redistribution of larger holdings into smaller ones is unambiguous. This relationship between size and productivity of holding is found almost everywhere where land is scarce and labor plentiful.

One kind of "land reform" legislation often proposed when it seems impossible to declare or implement land redistribution is tenancy reform, legally giving tenants a right to remain on the land as long as they fulfill their work obligations, and often setting maximum rents. Such legislation was not effective in Ethiopia before the revolution, but one could question whether any attempt was made to enforce it. In Egypt, a 1952 law required that all rental arrangements be in writing and for a minimum of three years, with landlords and tenants sharing equally in the cost of cultivation and in the produce from the land (50-50). It has become more difficult for landlords to evict tenants, but enforcement of the rent ceiling has been very lax. Black market rents have been widespread, and in 1960, such rents were estimated to be on average 80% above the legal maximum (see country profile). Such an outcome is not unusual, as experience in South Asia where tenancy reforms have often been legislated is that they are extremely difficult to enforce,

and often have the perverse effect of giving landlords reason to evict tenants before they can establish a legal right to continued tenancy, switching to more exploitative agricultural wage labor arrangements.

3. Agricultural Intensification. In principle, one of the best ways to improve the situation of LLNLL is to raise yields. This should give smallholders more income, tenants more for their share, laborers more job opportunities, and all lower prices for food, which is the major item of household expenditure. To be sure, costs of production may eat up much or most of the added income, landlords may appropriate all or most of the increase from tenants, mechanization may be introduced with the other "modern" inputs, and middlemen as oligopolistic buyers and sellers of food may acquire much of the margin. So a number of factors may keep the LLNLL from benefiting much if at all from agricultural intensification programs so long as their bargaining power is weak.

Where benefits are possible from the new inputs and practices, it may still not be feasible for LLNLL to have access to them because of the skewness of government services. Leonard (1977) found in Kenya that extension agents were 42 times more likely to visit a "progressive" farmer than a small farmer, one of those who made up the large majority. His analysis of the factors making for this bias suggests that government policy

and direction could improve the distribution of services. Perhaps less easily overcome is the bias against extension agents serving women agriculturalists, who operate about one-third of the smallholdings in rural Kenya (as shown by Staudt 1976-76). To improve the situation of LINLL, such discrimination by size and sex, surely found in other African countries, needs to be eliminated.

It is quite possible that the package of practices developed so far by agricultural scientists is inappropriate or unaccessible to constrained cultivators. We find that in Chad, as many as one-quarter of all farmers do not have holdings large enough (three hectares or more) to make a plow a profitable investment. This limitation might be overcome by cooperative organization or at least mutual-aid arrangements, but the credit to purchase plows would then have to be provided on such a basis. In Upper Volta, credit for bullocks and plows generally requires an investment of $150 to $300. This is an absolutely unrealistic improvement for farmers, even with cooperation, where cash incomes average only a few dollars per capita, as reported in the country profile. Less than five percent of farmers in the country presently use animal traction, and the government has plans to reach fifteen percent of farmers by 1980 with the improved production package. At this rate, it will take 50 to 75 years to reach them all, but even such a projection is not very meaningful, because different

strategies than the conventional package of practices and inputs delivered to individual farmers will be required.

4. Farmer Organization. It appears that some sort of organizations among small farmers, tenants, agricultural laborers, rural artisans, etc. are required to cope with the economic and social problems of the LLNLL. This has been generally discouraged, as individualistic rather than collective solutions have usually been promoted by public policies. There has been widespread government efforts to support agricultural cooperatives, but without any commitment to encourage autonomous, self-sufficient organizations acting in farmers' (let alone tenants' or laborers') interests. The experience with cooperatives has been fairly uniformly unsuccessful in Africa, as seen from the UNRISD survey (Apthorpe, 1972) and an overview of East African cooperatives (Widstrand, 1970). Some combination of bureaucratic paternalism, corruption, or lethargy and/or domination by larger farmers has usually stripped the organizations of whatever capacity they had for effective action on behalf of small farmers. Invariably, tenants or laborers have been left out entirely from organizational assistance. One of the few fairly successful government efforts, at least in the initial years, was in Egypt, where special cooperatives were set up for land reform beneficiaries, paralleling the cooperatives for other

farmers in the community (Harik, 1974). Our country profile indicates that the effectiveness of such cooperatives in Egypt has now been largely lost as a result of the government's failure to continue strong political support from above. Bureaucratic corruption and large farmer domination became endemic, and the whole cooperative system has been called into question.

The organization of laborers is seldom found in Africa. There are unions among plantation workers in most countries, but they cover only those with stable employment and those who are paid fairly well compared with marginal farmers or agricultural laborers. Elliott reports a strike by tea pickers in Kenya in 1970 when tea growers tried to reduce the price paid them by nearly thirty percent. This was unsuccessfully resisted, but he notes there were relatively favorable circumstances: the number of pickers was fairly small, the area was compact, and most of the pickers came from the same tribe. This case does not negate his generalization that agricultural laborers are without much countervailing power against their employers (1975: 104).

The capacity of African workers for organization has often been deprecated, but the lack of organization reflects more the unlikelihood of success against employers' power backed by government force in most cases. There is an example already in 1898 of porters in Thana (then the Gold Coast) organizing a union to get higher wages

for carrying goods to the Northern Territories. The British commissioner at the time deplored the ability of these laborers to bring the colonial government practically to its knees over this question of wages (Kimble, 1963: 100). There are numerous examples of spontaneous organization, but little sustained effectiveness unless supported by the government. As with cooperatives, it is essential, if there is to be successful organization among small farmers, tenants, laborers or artisans, that official sanction be given, to keep the administration from strangling (often with good intent) the initiatives of rural people and to keep the more prosperous rural residents from taking over the organization and subverting the capacity for collective action.

This survey of policy measures is fairly brief, but the amount of successful experience to report is fairly limited. Directions for policy development and experimentation can be pointed out, but there is as yet no "package" of policies assured to work for the LLNLL in a particular country. In each, there must be some evolution and testing, with full government backing, to devise ways and means of coping with the growing problem of landless and near-landlessness we have identified.

Research Needs

It would be easy to give a compendium of sheer

data needs since so little is known in any comprehensive way about the magnitude and situation of landlessness and near-landlessness in Africa. Rather, we will suggest here some of the policy-related areas that appear most urgent for coping with problems as they are emerging.

1. Research should be organized in a number of countries, indeed within the countries to reflect intra-country differences, to establish what is the actual situation with regard to transition from communal to more commercialized land tenure. There appears to be much myth about African tenure systems, as privatization appears to be proceeding very rapidly. But policy makers should know what is the real situation and how fast it is changing. To what extent is privatization, de facto or de jure, actually cutting people off from access to land which has been a traditional right? This and related questions need to be answered.

2. Almost nothing is known systematically about the debt situation of small farmers and landless.* We

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*One intriguing bit of data we came across in our literature search was Rene Dumont's reference to usury in Madagascar, by landlords around Lake Alaotra who opposed extension of hydraulic engineering projects because this would undercut the loans they made in kind (grain) to tenants who had to repay this a few months later two- or three-fold, an incredibly high implied rate of interest (1966: 5).

do not find evidence of the kind of oppressive and expropriating moneylending to be found in many parts of Asia and Latin America. But capital bondage may be on the increase and any sensible efforts to assist the welfare and productivity of LLNLL needs to take account of their access to capital, for productive purposes as well as for special consumption needs.

3. Labor migration is if anything on the increase. More should be known about the extent, timing and pattern of migration, seasonal and semi-permanent, from rural areas that are land-constrained to find jobs and income elsewhere. What are the conditions of the migrants where they work? What are the circumstances of the migrants' families, whether they remain behind or join him (more and more now, her).

4. The relationship between pastoralists and agriculturalists is now more vivid in people's minds as a result of the Sahelian drought. As Africa has such a large proportion of pastoralists, they present special problems and concerns. One might be concerned about preserving unique ways of life, but we would limit our concern here with the effects of encroachment on pastoralists' land by settled agriculture. Are the physical environments able to support permanent production? What are the consequences of uneven rainfall? May there be irreversible damage to the productivity of these areas? The pressures to take more land from pastoral

use will increase, but this may be self-defeating, worsening production possibilites in the long run.

5. The general problems of resource conservation need to be looked at more extensively. Persons who are economically and socially marginal tend to be pushed to the marginal land. There is accumulating evidence in other parts of the Third World that the landless and rural poor are becoming, by necessity, ravishers of the environment (Eckholm, 1974). Simply trying to bar them from unused land is no answer as they must find ways to survive or will be driven to desperate means against their better situated countrymen. Extensive and innovative research will be needed to find ways in which marginal lands can be productive without being destroyed in the process. Efforts to "develop" a country may undermine its resource base if not well-conceived and well-founded. LDCs have an imperative to stabilize their base as a precondition for further development.

6. The possibilities for collective organization among LLNLL need to be explored. These range from more effective cooperatives--for production, marketing, etc.--to social and political associations among the rural poor, so their needs can be more reliably put into the political process and their efforts can be more fruitfully directed into self-reliant improvement. Savings associations, canteens for better nutrition, child-care cooperatives, etc. may prove to be useful means. Most African countries

have a vital tradition of "local improvement" associations. These have, under the influence of colonial government and post-independence regimes seeking to buy support with government largesse, been converted into "dependent" and atrophied extensions of their former existence. Revitalizing this tradition would seem to be a necessary and reasonably inexpensive approach to alleviating problems of the LLNLL. Where such improvements are not made, more aggressive political organizations would seem to be the indicated alternative.

The research needs for coping with the problems of the LLNLL in a productive way are vast. We have not gone into the needs for information on health, nutrition, fertility and mortality, incidence of tax policies, intergenerational mobility, etc. which would give a better picture of how governments, domestic and foreign, might better assist. Rather we have suggested what appear to be priority areas for substantive research. Success in these areas will depend on some broadening and deepening of the statistical basis on which economic and social analysis can be conducted. Thus, some investment in improvement of statistical services is necessary. But we would not suggest deferring action on substantive questions until the statistical base is better laid. Well-conducted surveys can substitute for comprehensive census as in providing the data for drawing conclusions about problems such as land tenure, rural debt, migration

and its effects, pastoral-agricultural competition, resource conservation and collective organization.

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COUNTRY PROFILE: EGYPT

General

One of the first priorities of the 1952 Revolution was that of addressing the serious inequalities in the system of land ownership. At the time of the Revolution, almost 60% of the rural population was effectively landless. Through a series of agrarian reform laws, the class of large (often absentee) landlords was virtually destroyed, and its holdings distributed to smaller farmers. The basic structural inequalities of landownership and income persisted, however, and subsequent government policies had the effect of reinforcing the economic and political power of middle and richer peasants at the expense of small peasants. The problems of the landless peasants were never really directly addressed at all and, under the pressure of rapid population increases, this group has grown until by 1972 it was thought to comprise about 50% of the agricultural population. This problem is exacerbated by the fact that Egypt's settled area is among the most densely populated in the world: less than 4% of the land is suitable for cultivation.[1]

Types or Categories

Country aggregates for Egypt are indicated in Table 1. These statistics are drawn largely from two sources: the

Egyptian Population Census of 1960 and a Survey of Rural Employment Problems in the UAR conducted by the Egyptian government and the International Labor Office in 1965. All later statistics (and to a certain extent these as well) should be regarded as estimates.

Statistical Incidence

Breakdown by Type

Laborers and Workers

According to the 1960 Census, paid laborers and workers constituted 34.7% of the rural work force. While this group does contain some highly skilled workers (such as farm machine operators) the majority of rural laborers perform manual agricultural tasks requiring little training. Most such laborers come from small farms operated by large families and in turn find employment on the larger estates (although some are attached to smaller farms through kinship ties).[1a]

In addition to the permanent labor force, there is also a large reserve of casual farm laborers who enter the work force during the peak seasons of sowing and harvesting. Such workers are usually hired on a daily basis, with little security of employment. In 1960, about half of these workers were children under the age of eighteen. The size of the casual agricultural work force is difficult to determine with any precision, for among the landless, those at the fringes of employment, the distinction between agricultural and non-agricultural work loses much of its relevance; most perform whatever jobs they can get.

This is clearly the case with the most marginal of the landless: the tarahil workers, a group drawn largely from Upper Egypt where employment opportunities are fewer. Those who fall into this category work as casual farm laborers for an average of three months a year, during the peak agricultural season. For the rest of the year, they work intermittently on public works projects (tarahils) such as canal maintenance. On the average, they are unemployed for five months a year.[2]

Through bonds of kinship and, more commonly, debt, these workers are usually attached to particular labor contractors. Their problems have only recently attracted the attention of the government and the policy measures (discussed below) taken on their behalf have been largely unsuccessful. Nonetheless, the position of this group may have improved somewhat during the sixties as defense needs and public works projects (in particular the construction of the High Dam at Aswan) absorbed additional manpower from the rural areas.[3]

Rural-Urban Migration

For the past century, both the rural and urban populations of Egypt have been increasing in absolute numbers. This increase, however, has been far more rapid in the urban areas with the result that the proportion of the population that is rural has declined from over 80% before World War I to about 58% today. In recent years this trend has become more pronounced. Since the early fifties, the urban population has been growing at an average annual rate of about 4%, compared to a rate of

2.5% for the nation as a whole. As the rate of natural increase has been about the same in both the rural and urban areas, this difference is largely attributable to the phenomenon of rural-urban migration.[4]

Within this migratory stream, some sex differentials are apparent. In 1960, for every 100 females in the age group 15 to 65, there were 94 rural males as opposed to 104 urban males. For the age group 10 to 24, however, there was a slight preponderance of rural males, partly the result of young women migrating to the cities to find employment as domestics. On the whole, however, urban migration usually involves the movement of families rather than individuals.[5]

The consensus in the literature seems to be that the root of this migration lies not primarily in pull factors (although the cities do offer many services and advantages) but rather in the push of rural landlessness. The system of inheritance, combined with the ever increasing rural population serves to fragment holdings until they are too small to support a family. At that point families often move to the city, usually to Cairo, Alexandria or, more recently, the Suez area.[6]

One notable aspect of this process of migration in the Egyptian context is the tendency towards overurbanization of the largest cities. In general, the larger the city, the faster it grows. While it should be remembered that overcentralization of the population in the largest cities (particularly Cairo) has been characteristic of Egypt for centuries, the problems

this phenomenon create are nonetheless enormous. The case of Cairo is particularly illuminating, as its population density today is fifteen people per 100 square meters. One recent study indicates that the average household in Cairo has nine members and that one third of these households live in dwellings of only one room, another two fifths in dwellings of two or three rooms.[7]

Furthermore, migration to the cities has by all accounts proceeded at a rate far beyond the absorptive capacity of industry. Thus most new urban immigrants must resort to informal jobs doing what they can. Of those who do work, information on the extent of remittances to the rural areas is sketchy. Nonetheless, the consensus is that income transfers of some significance do take place, largely through kinship ties.[8]

Cultivators

The exact extent of tenancy in Egypt is, again, difficult to determine. One problem lies in the fact that many owners lease out large areas (divided into smaller plots) on a seasonal basis, but such seasonal tenancy arrangements are not usually taken into account in the agricultural censuses and surveys. Nonetheless, estimates today suggest that perhaps half the cultivated land in Egypt is rented.[9]

This figure, however, should be interpreted with caution, as the terms "landlord" and "tenant" are often colored by

subjective valuations not always applicable in the Egyptian context. As credit is usually least available to owners of very small plots of land, such farmers are often unable to rent additional land to supplement their own, inadequate holdings. Yet at the same time, ownership of even a very small piece of land confers a degree of prestige. Thus such owners rarely sell their land. Rather, they will often enter the labor force as paid workers and at the same time rent out their small plots of land to very large landowners. Thus, most of the owners of small parcels of land (less than 1 feddan*) are, statistically, absentee landlords.[10]

Because of this, it may make more sense to discuss rural conditions in Egypt in terms of the number and size of holdings (owned, rented, or mixed). Table 1 presents a breakdown in both forms, the following discussion is in terms of holdings.

By almost all accounts a two feddan farm is considered the minimum amount of land needed to support even a small family. Nonetheless, in 1965, roughly two thirds of all agricultural families possessed less than this. These peasants with under two feddans are at the brink of landlessness and some of their children will certainly fall into this category. Many are permanently in debt and most supplement their farm incomes by engaging in paid labor as well. Those peasants holding two to

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*1 feddan = 1.038 acres

five feddans (25% of all landed families) enjoy only a slightly higher degree of security.[11]

Nomads

Information on this segment of the Egyptian population is often incomplete, as nomads have not usually been included in the Egyptian censuses. Government policy towards the bedouins has been one of encouraging sedentarization, however, and today their number is estimated to be only about 78,000.[12]

Trends

The combination of a rapidly growing population settled on an essentially finite amount of land and a system of inheritance which calls for equal distribution of land among all sons has produced a trend towards increasing fragmentation of the land into ever smaller holdings and towards an increase in the number of landless and near landless peasants.

The majority of the rural laborers and workers come from this large and growing stratum of landless peasants, a group which in 1970 was estimated to comprise 33% of the rural population or 1,279,000 families.

While the overall trend has been towards an increase in the number of landless peasants, this trend has also varied over time. Again, these trends are difficult to determine with any real precision as hard data on the extent of landlessness are, even today, virtually non-existant. Nonetheless, some broad conclusions can be drawn. Estimates and census data, as far as they permit, indicate that prior to the Revolution, the

number and percentage of landless peasants had been steadily rising for several decades. In 1929 the number of landless families was estimated at 508,000 or 24% of all rural, agricultural families. In 1939 this had risen to 887,000 and 38%, by 1950 to 1,217,000 and 44%. After the Revolution, in the period from 1952 to the mid-sixties, there was a steady fall in the absolute number of landless families, while the period from 1966 to 1970 witnessed a new increase in their absolute number due in part to the continuing population pressure and the freeze of agrarian reform.[13]

It should be noted, however, that the agrarian reforms were never intended to deal directly with the problem of landlessness. In fact, they probably hurt a large segment of the landless population--those engaged in casual labor, as preference in distribution of land was given to tenants and permanent laborers. Furthermore, the breakup of the large estates led to an initial reduction in the demand for hired agricultural laborers, a reduction only partly offset by the increased employment in such public works projects as the High Dam at Aswan.

These economic changes are dealt with in more depth later, but it should also be noted that they coincide with political changes that have taken place in the power structure of the rural areas. While the land reforms essentially destroyed the political power of the old landed oligarchy, they did not produce a concomitant shift in power towards the landless or

small peasants. Rather, the rural group that has benefitted most from the Revolution and the subsequent land reforms has been the class of rich peasants, owning 20 to 50 feddans of land and dependent on hired labor and modern technology. Many of these peasants were able to increase their holdings through distress sales of the large estates, while the landless and marginally landed peasants lacked the capital to take advantage of these opportunities. Since the reforms, this group has extended its power in more overtly political ways as well. In 1969, for example, rich peasants were able to exert their influence to deprive illiterate peasants (67% of the adult rural population) of the right to be elected to seats on the management councils of the cooperatives.*[14]

Since Sadat, the entire policy governing the economics and politics of the rural areas has been in a state of flux. On the whole, he has slowed the process of Nasser's earlier agrarian reforms and instituted policies that create an atmosphere more favorable to the richer peasants. With Sadat's encouragement, U.S. agricorporations have begun joint ventures with Egyptian firms. Some landowners whose property had been seized without proper compensation or due process have since had it returned. While the number of landowners so affected has not

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*Similarly, in 1972, the Assembly, again through pressure from the rich peasants' lobby, rejected a bill that would have imposed taxes on fruit orchards which are largely owned by the richer peasants who have the initial capital for such ventures and who can afford to wait until the trees reach maturity.[15]

been great, the symbolic implications of such an action are perhaps of greater significance.[16]

For the poorer peasants and the landless, possibilities for acquiring new land are now largely restricted to the newly reclaimed areas. Policy on distribution of this land, however, has been flexible. Some of the land has in fact been distributed to landless peasants (including 200,000 acres from the reclaimed areas of Aswan, as well as lands in the desert areas). Some of the land which has been reclaimed through the General Organization of Land Development and the General Organization for Desert Development has been distributed to the poor through the Ministry of Agrarian Reform. In such areas the reclaimed land is divided into several villages of 5,000 acres each to which farmers, particularly younger ones, are encouraged to settle. Such policies have not always met with immediate success. When state farms were established in the newly reclaimed lands of the Tahrir (Liberation) Province in the sixties, the conditions there were so harsh that the government was unable to attract sufficient voluntary migration and finally resorted to settling the land with prisoners.[17]

In other areas, where conditions are not so severe, the government has instituted a variety of policies. Some reclaimed land has simply been sold at auction to the highest bidder, and tens of thousands of acres of land have, since 1974, been distributed (fee simple) to individual members of the Syndicate of Agricultural Engineers, an organization with a lobby more

powerful than that of the amorphous group of landless peasants.[18]

Causes of Conditions

Demographic-Environmental Factors

Egypt's settled area is one of the most densely populated in the world. Less than 3% of her 247 million acres are under cultivation and little more than 1% of the remaining desert is considered potentially productive on the basis of known technology. Thus a large and rapidly growing population of today over 38 million must survive in the small area of land along the Nile Valley and in the Delta.[19]

The extent of this increasing density can be seen in a number of ways. In the early fifties, the per capita share of agricultural land was 0.5 feddans. Today it is 0.2. There are regional variations to this density as well. In 1960 the population density of Upper Egypt was 990 people per square kilometer of cultivated land, in Lower Egypt the figure was 750. Both figures would clearly be higher today as the population of Egypt has increased by about 12 million people in the interim.[20]

On the other side of the ledger, it should be added that the cultivated land, though severely limited, is also quite productive. Because of multiple cropping, Egypt's 6.4 million acres of cultivated land produced in 1965 the equivalent of 10.6 million crop acres. Nonetheless, Egypt is thought by many to

have already achieved a close to optimum intensive cropping pattern, particularly since the completion of the High Dam at Aswan in 1971. Nature itself presents the limit, as Egyptian agriculture, with the exception of a narrow strip of poor land along the Mediterranean, is based almost entirely on irrigated water from the Nile.[21]

Still, if water and soil limit the availability of new land, and if the maximum of multiple cropping is almost attained, there remains the possibility, within these constraints, of increased yields through higher productivity, as the average crop yields of Egypt are far below those obtained on Egypt's experimental farms.[22]

Despite this cautious assessment, it should be added that the Egyptian government has completed several projects of land reclamation. The Aswan Dam is the most well known, but there are others as well, among them the New Valley Project, which was the result of a discovery of underground water reserves in the Western Desert. Official statistics put the amount of land reclaimed from 1960 to 1970 at 884,300 feddans. But this figure disguises many serious problems. First, this amount of land was only half the projected target figure. Furthermore, of this land, an estimated 160,000 feddans have already relapsed into wasteland. The productivity of the remaining land is said to be very low. Of the land reclaimed through the Aswan Dam, some 80% is already thought to be threatened by the rising water table.[23]

In any event, one estimate suggests that the overall cultivated acreage of Egypt has actually diminished by about 200,000 acres due to the effects of urban encroachment (which absorbs over 40,000 acres a year) and construction of canals (which today take up 14% of Egypt's cultivated land). Furthermore, land reclamation projects, along with many other rural projects that found favor in the Nasser era are now being quietly abandoned as much of the country's resources now go to defense needs. Today, despite the fact that total output and per acre yields are higher than they were two decades ago, Egypt must still import large quantities of food to be able to feed its population.[24]

Of course, one important factor in this regard is Egypt's high level of population growth. To cope with this, the government of Egypt has instituted a vast program of family planning. Begun on a countrywide basis in 1965, the program is based on education and distribution of pills and IUD's at low or no cost. By 1972 over 3000 family planning clinics had been established. In the rural areas, this amounted to one clinic for every two villages. Furthermore, there are several indications that Egypt's birth rate may now be declining (though the family planning program is only one of many factors). The annual birth rate of 4.2% in 1969 had, by 1972, fallen to 3.6% (resulting in a decline in the rate of population growth from 2.8% annually to 2.2%). While this decline has been more rapid in the urban areas, the decline in fertility, though

slower, appears to be uniformly regular in the rural areas as well.[25]

Ownership and Tenure, Familial Roles

The Egyptian laws governing matters of land ownership and inheritance fall into the more general category of personal status law, where the sharia, or religious, laws have been adopted into the Egyptian civil codes with only minor alterations. Thus both the law and practice of inheritance is to divide land with a resulting fragmentation of land into ever smaller parcels.

Under the Islamic laws of inheritance a woman is entitled to inherit land (although she may inherit only half the amount of her brother), but it is only on rare occasions that a rural woman will take advantage of this right, for to do so would likely sever all ties with her father's household, hence with the primary source of social insurance. For ordinarily a rural woman can count on her father's and brothers' households for both financial and emotional support throughout her life. With a divorce rate in Egypt of over 30%, this becomes an important consideration, since few women are financially independent. According to the 1960 census, 96% of all rural Egyptian women were totally dependent financially on other family members (the figure for men was 46%).[27]

That Egyptian women are rarely financially independent is indicated by the fact that Egypt has one of the lowest female labor participation rates in the world: 4.8% in 1960. A

shortage of job opportunities is clearly one factor, but of probably greater importance is what is often referred to as the modesty code--a set of norms and values which serve to exclude or restrict women from activities which might test or threaten their virtue (upon which the entire family's honor depends). Particular importance is attached to this set of values in the rural areas and particularly in Upper Egypt. The result of these values has been to exclude women from most activities outside the home; thus women's entrance into the public domain of formal education, politics, and wage labor has been carefully restricted.[28]

However, rural women do, by all accounts, participate to some extent in agricultural activities, but here their work falls largely into the category of unpaid family labor. The extent to which they engage in wage labor is less clear for a number of reasons. Men are often reluctant to report to investigators that their wives do work; as the investigators are usually male, the women themselves are rarely questioned directly. Furthermore, the statistical definitions of women who engage in temporary or seasonal labor vary so widely as to be virtually useless. This is an important consideration, since paid female work in agriculture appears to be largely a response to season demand. Despite the statistical inadequacies, there are also indications that regional differences in female labor participation exist, specifically, that fewer women work in

Upper Egypt where more traditional attitudes on sex roles are coupled with fewer employment opportunities for all.[29]

Information on wage differentials is more accessible. When women do work for pay in agriculture, their daily wages tend to be two thirds of those paid to men, despite the fact that their work day is usually of the same length. Similar wage differentials have been observed for decades.[30]

Reliable statistical information on the extent of child labor is also largely unavailable, again in part due to definitional variations. There is a minimum age for agricultural work of twelve, but it is apparently rarely enforced and there are many reports of children, even as young as five or six, working in agriculture. One study found that children worked in 63% of all rural households surveyed. There also appear to be sex differentials for child labor: the figure is higher for girls, as boys are more often sent to school. When children are paid, their wages tend to be half those paid to adults.

Economic Factors

The most notable technological trend for rural Egyptian agriculture has been a rapid increase in mechanization in the period since the war. This has resulted in a displacement of labor which is projected to amount to 50 million man days by 1985. This is also a trend which is likely to continue as the Five Year Plan for 1976-1980 calls for increased emphasis on

mechanization in the agricultural sector. The products of this increased mechanization have been somewhat unevenly distributed as they tend to be concentrated in the larger holdings. In 1960, for example, there were 12,837 tractors in Egypt (up from 9,972 in 1950), or an average of two tractors for every 1,000 feddans. Farms of under five feddans, however, had an average less than one tractor (.36) per 1,000 feddans, while farms of 50-100 feddans had an average of six tractors per 1,000 feddans. In general, the use of tractors and other improved farm equipment increases with holding size. In the case of tractors, they assume a real significance only in holdings above twenty feddans.[32]

Similar tendencies can be seen in the uneven expansion of mechanized irrigation techniques and machinery. In 1960 there were 29,386 irrigation machines in Egypt (up from 15,170 in 1950). Holdings of less than five feddans (which constituted 84% of all holdings and 38% of the land) had only 17% of the irrigation machines (this, however, was an increase from 7% in 1950). Access to irrigation machines is of special relevance in a country as short of water as Egypt, for here the richer peasants who can afford to buy these mechanically powered water pumps find themselves in a much better position to compete for water during periods of shortage.[33]

But water is not the only commodity of special importance to Egyptian peasants. Another is fertilizer. Both the practice

of continuous cropping and the predominance of cotton (a heavy consumer of plant nutrients) have made application of fertilizer a necessity. This need has increased in recent years with the expansion of perennial irrigation, as the silt from the Nile now settles in Lake Nasser or in the irrigation canals, rather than on the land.

Because of these factors, use of fertilizer has greatly increased in recent years. By 1960, Egypt already had one of the highest fertilizer usage rates among Third World countries, applying an average of sixty pounds per cultivated acre annually. By 1965 this had increased to 103.5 pounds. After 1967, however, with the war and then foreign exchange shortages, this decreased. Today, Egypt has five fertilizer factories and their distribution is a government monopoly, controlled by the Agricultural Credit Organization, which is discussed in more detail below.[34]

Consequences

Number of Days of Work Available

There is still a good deal of disagreement on the extent of under- and unemployment in rural Egypt and, hence, on the annual number of days that rural workers are employed. It is clear, however, that there is a large seasonal variation in employment opportunities. In the spring and summer, labor demand is highest. It begins with the wheat crop in May and continues through September with rice and cotton. During this period the open unemployment rate may be as low as four or five

percent. From October to March, underemployment is the norm; unemployment is probably as high as 25% with an additional 15% of the labor force underemployed. Statistics on this vary, though, for the rural labor survey of 1965 indicated that 83% of all working men were underemployed at some time during the year. In terms of average annual days of work, this survey also indicated the following:[35]

	Men	Women	Children
Days of work	286	188	159
over 6 hours	258	66	130
1-6 hours	28	122	29
No work	79	177	206

In addition to seasonal variation (and variations by sex and age), there were regional differences as well: more working days were reported in Lower Egypt than in Upper Egypt (a difference even more pronounced in the case of women).

Real Wages and Income

Wages, as well as availability of work, tend to vary seasonally (higher during the cotton harvest) and regionally (higher in Lower Egypt). A more complete breakdown is given in Table 2.

Wages have also varied over time. For the agricultural population as a whole, rural income declined during the decade of the fifties, for in that period, the cost of living rose 32%. As this included a rapid increase in the price of basic commodities,

it was felt most acutely by the landless. The incomes of the beneficiaries of land reform improved initially but were soon offset by inflation and cooperative expenses. Towards the end of the decade (1959) the per capita income of the rural population was US$50-55 (as opposed to $210 for the urban population). And even these figures disguised serious inequalities, as farmers with over 20 feddans had per capita incomes 125 times that of farmers with less than one feddan.[36]

On a daily basis, the average wage for rural paid laborers was 12 piasters in 1960.* By 1965 this had risen to 18 piasters for men (11.7 for women, 8.7 for children). But again, income differentials persisted. In 1965 the agricultural laborers (if fully employed) had an annual per capita income of LE49. For peasants with under two feddans, their income was LE68, for peasants with two to five feddans, it was LE103, and for peasants with 20-50 feddans,it was LE2,100. And despite these increases, the real per capita GDP in agriculture rose by only 13.6% in the decade of the sixties, in comparison to an overall rise in real per capita GDP of 20%. By 1970 the per capita income was about LE55 for the rural population and LE110 for the urban population.[37]

Living Conditions and Public Services

While quantitative indices of the standard of living among rural Egyptians are not always available, the general picture

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*1 piaster = 2.25 U.S. cents; 1LE = $2.30; 100 piasters = 1LE.

that emerges is one of common malnutrition, illness, and poverty. Some factors relevant to this matter, discussed in other sections of this paper, include wages and employment opportunities, and the availability of land, farm machinery and credit.

The quality of housing is one other factor. 74% of all rural dwellings are less than 100 square meters in size, 95% have earth floors, and 88% have roofs of palm leaves or reed.

The diet of the rural population is both monotonous and often inadequate. In 1965, of those earning less than LE25 per year, cereals and starch constituted 70% of their diet and other foods, such as meat and vegetables, were prohibitively expensive. Peasants in this category consumed, on average, 2026 calories and 59.5 grams of protein per day, an intake below the estimated subsistence consumption levels of 3,000 calories and 73 grams of protein.[39]

In 1974 it was estimated that 1,833,000 families, or 44% of the rural population fell below the poverty line. Comparable figures are 35% for 1958 and 27% for 1964. These figures correspond with the conclusion drawn elsewhere in this paper--that the initial reforms of the Revolution produced some alleviation of the poverty of the countryside, but that this was soon offset by the population increase and the lack of public policy measures aimed at alleviating the problems of landlessness.[39a]

There have been several attempts to extend government services to the rural areas, with varying degrees of success. Of Egypt's 5,000 villages, less than 2,000 are thought to have

local medical service available. For every 1,000 rural persons there are 0.4 hospital beds (against 4.5 for the urban population). Among the more prevalent health problems are schistosomiasis, hookworm, malaria (especially in the Delta rice areas) and chronic malnutrition.[40]

In 1960, 67% of all rural men and 93% of the women were illiterate. Despite the expansion of educational facilities to rural areas, new schools have been unable to keep pace with the rise in population, thus illiteracy continues to grow.[41]

Migration

External migration has been a negligible factor in recent Egyptian history. In 1966, there were 70,000 Egyptians abroad and 90,600 foreigners working in Egypt. Internal migration has been of more significance. In recent years some short term migrations have taken place, including the movement of many people from the Suez area (then back), and the resettlement of farmers on newly reclaimed land, including the resettlement of about 50,000 Nubians from their homes flooded with the construction of the High Dam at Aswan.[42]

In terms of long term migration, two important movements have been taking place in Egypt for over a century. The first is rural-urban migration, already discussed, and the second is a northward movement of workers from the one and two cropped basin irrigated plains of Upper Egypt to the two to three cropped Perenially irrigated Delta area of Lower Egypt.

Environmental Degradation

Questions of environmental degradation usually center on the impact of the recently completed High Dam at Aswan. As debate on this issue is as yet unresolved, only the major aspects of the environmental concern will be discussed here.

Construction of the dam was begun in 1960 and completed in 1971. It had several purposes (and they occasionally conflict): to provide a source of electric power, to provide water for the reclamation of new land, and to change 700,000-800,000 acres of land from basin or flood to perennial irrigation, hence to multiple cropping. As it cost $1-1.5 billion to build the dam, its success is a matter of some concern.[43]

To begin an assessment, it should be noted that the dam is fulfilling its main purpose--that of producing electric power (though it is apparently doing so at only half capacity). The dam's effects on the land are far more complex. Before the construction of the dam, the Nile's annual flood would deposit a layer of fertile, mineral rich silt on the agricultural land. Today this silt settles in the irrigation canals and, largely, at the bottom of the artificial Lake Nasser (where the flood waters are held and released slowly throughout the year for irrigation and navigation). Today this silt must be replaced by fertilizer. While this result was not unanticipated, it is nonetheless costly and its burden falls excessively on the poor.[44]

The silt had other uses as well, among them a contribution to the reclamation of sandy soils. This, too, is no longer

possible. Even before the dam, however, only 12% of the Nile's silt ever settled on the land. Most of it was carried, in suspension, to the Delta and the sea where it then settled out and, in doing so, balanced the otherwise steady erosion of the Delta shoreline. As this no longer occurs, there is some fear that this erosion may transform two lakes (Manzala and Burullos) into sea bays with a consequent increase in the salinity of the high water table of the newly reclaimed lands in the area.[45]

Furthermore, all along the Nile the newly irrigated land has apparently been improperly drained, which has led to a rise in the water table. As the ground water has a higher salt concentration, this again increases the salinity of the soil, thus lowering its fertility. Since 1970, however, the Egyptian government (with help from the World Bank) has been attempting to compensate for this by installing underground tile drainage.[46]

Other problems center upon the creation of Lake Nasser, for this lake has become infested with water plants, drastically increasing water loss through evaporation. On the other hand, the lake has also produced a new area of fish production, but at the same time, the impoundment of the flood waters has also drastically lowered the fish catch (especially of sardines) in both the Eastern Mediterranean fisheries and in the Delta lakes. Massive fish kills have also resulted from runoffs of pesticides, herbicides and molluscides. Among these has been the copper sulfate which is used to kill the snails that carry schistosomiasis,

a disease whose increased incidence is in turn due to the increase in perennial irrigation, hence to the dam. The snails that carry the disease (which is believed to affect over 50% of the population) thrive in the standing waters of the irrigation canals. Once an area is infected, migrant workers carry the disease to other areas where ease of transmission is exacerbated by the Islamic custom of ablution, by the overcrowding in villages, by the demands of crop cultivation, and by the generally low level of sanitation in most rural areas.[47]

Public Policy Measures

Rural Works

If the environmental impact of the Aswan Dam has been mixed, it did have success in creating employment opportunities throughout the decade of the sixties. During its construction, it provided 155.2 million man days of work in additional irrigation and drainage projects. This amounted to jobs for over 500,000 casual laborers and permanent jobs for 400,000 workers during its phase of operation. Land reclamation projects were also a source of employment during the sixties, although here only half the projected jobs actually materialized.[48]

From a larger perspective, however, neither the construction of the Aswan Dam, nor the land reclamation projects constitute a long term solution to the problems of rural underemployment and there is even some question as to whether these projects

compensated for the reduction in labor demand that resulted from the land reforms.

In the sixties there was one other rural works policy measure of particular relevance to the problems of the casual laborer, as it was directed at the tarhila workers, probably the poorest of the rural landless. These casual laborers, recruited for short periods to work on canal maintenance and other rural public works, are traditionally hired by labor contractors who usually take a sizeable commission and to whom these workers are often permanently indebted. In the sixties government agencies were created to compete with the labor contractors. This policy, however, was largely unsuccessful as the agencies were not empowered to advance the laborers money, as was the custom among the contractors. Such loans were crucial to the workers, not only for financing such major events as births, deaths and marriages, but for merely surviving the frequent gaps between jobs.[49]

Few other policy measures were directly aimed at this class, or at the landless as a whole. One exception was the Nasir cattle project, which distributed cattle on five year interest free loans to sharecroppers, tenants, and agricultural laborers who had not benefitted from the agrarian reforms. In addition to this, there were also some small charity payments made by many agrarian reform cooperatives.[50]

Small Scale Industry

There is very little in the way of rural industry in Egypt.

That which does exist is generally small scale and focused on agricultural products or the service sector. The exact extent is unclear, as the industrial censuses only cover establishments employing ten or more workers and thus may omit some (very) small scale rural industries.[51]

As early as 1957 the government indicated that one of its aims in industrial planning was to produce a more even geographic distribution of industry. Three years later a General Organization for Cooperative Production and Small Industries was established to promote rural industries and handicrafts through provision of technical advice, training, and credit and some new industry did in fact result from this in the newly reclaimed areas of the northwest and along the New Valley. Little else has come of this venture, however, and the First Five Year Plan allocated less than .3% of its industrial investment to rural industries.[52]

Tenant Security

Some measure of tenant security was introduced under the Agrarian Reform Law of 1952 in which it was stipulated that no land could be rented save to the tenant who would actually farm the land himself. This law further required that all rental arrangements be in writing and for a minimum of three years, and that the landlords and tenants would share equally in the cost of cultivation and in the produce from the land. Since the law it has become increasingly difficult for owners to evict tenants.

The government has been less effective in implementing the section of the 1952 law that placed a maximum rent on agricultural land. To the extent that the law is obeyed, tenants of Upper Egypt have gained the most, as rents there were considerably higher. Implementation of this law has, however, been less than complete. Evasion in the form of black market rents is widespread and, in 1960, such rents were estimated to be on average 80% above the legal maximum.[53]

Minimum Wages

Since 1952 a statutory rural minimum wage of 18 piasters a day for men (in industry it is 25) and 10 piasters for women has existed. Throughout the fifties this wage was so much higher than the going rates that the law proved unenforceable and the actual daily wage for men was about 11 piasters a day (a common form of evasion, when not outright, involved unusually long half-days). In the sixties the wages rose but, again, this was more the result of an increased demand than of actual enforcement of the law.[54]

Land Reform

Since the Revolution, the most important public policy measures affecting the rural population have been the Agrarian Reform Laws of 1952, 1961 and 1969. The redistribution and subsequent consolidation of these lands has significantly altered the structure of landownership and management in the countryside.

Before the Revolution, landed wealth was highly concentrated, with less than 6% of the owners controlling about 65% of the land. The land reform law of 1952 altered this system through the compensated requisition of holdings above 200 feddans. In 1961 the ceiling was reduced to 100 feddans and, in 1969, to fifty feddans. Owners in excess of this amount were given a short time to sell and, failing this, their land was expropriated at about one half its market value. The primary aim of the law was a political one--to break the political power of the old landed oligarchy. But it was also hoped that the reforms would create a class of small family farmers.[55]

Once the land was confiscated, it was redistributed to small farmers in plots of two to five feddans. As it was hoped that the program would be self-financing, recipients were required to pay for the land over a period of thirty years. Priority in distribution was given to those who actually worked the land, with preference to small tenants and permanent laborers. Initially, those tenants who also engaged in a trade were excluded from the redistribution, but in practice this was not strictly applied. The results of the land reforms were such that by 1970, 12.5% of the land had been distributed to about 9% of the rural population, or to 1,700,000 people. The relative share of ownerships of less than five feddans has remained roughly unchanged, but the share of land in this category has increased.[56]

The landless were largely excluded from the redistribution and those who gained least from the laws were casual laborers,

for not only did they receive no land, but, as has been noted, the breakup of large estates caused a reduction in the demand for casual labor, affecting an estimated 5-10% of farm laborers.[57]

Cooperatives

After the redistributions were enacted the next policy measure of the government was to consolidate the land into agricultural cooperatives in order to deal with the inefficiencies of the small, fragmented holdings. Beginning in 1952 cooperatives were introduced in the land reform areas on a compulsory basis and attempts were made to introduce them in the rest of the country on a voluntary basis. In 1962 they became mandatory throughout the country. In 1972 there were an estimated 5,008 cooperatives with over three million members.

Each village has at least one general agricultural cooperative to which all the landholders in the village must belong. These cooperatives are affiliated with larger cooperatives at the district and governate levels. Locally, they fulfill a variety of functions. They provide extension services, manufactured agricultural inputs, and credit. They are, further, the only channel for marketing (at fixed prices) cotton and other crops. But initially the goal of the cooperatives was not so extensive. Rather, it was to consolidate land into larger, more efficient holdings so that economies of scale in production could be achieved. In each village, the land was divided into three large blocks of 50 to 100 feddans, each growing a different crop (usually a subsistence crop such as maize or rice, a feed-

crop--usually berseem, and a cash crop--usually cotton). Each farmer was then allotted his land in three sections, one in each block. The policy was one of consolidation, but not collectivization, for each farmer continues to retain ownership, responsibility, and income from his own three parcels of land. Nevertheless, farmers are required to cooperate in crop consolidation, rotation, fumigation, and other matters.[58]

The organizational structure of the cooperatives is nominally democratic. Each is administered by a council of five, elected by secret ballot. The Chairman of the council (usually an agronomist) is, however, a government appointee and it is he who has final authority in matters of agricultural production.[59]

From an administrative point of view there have been many problems with the cooperatives and since Nasser's death the entire system has come under attack for being too centralized and bureaucratic. In 1976 the national board of directors was dissolved on charges of corruption.[60]

Credit

One of the most important functions of the cooperative is that of allocating credit. Under a new system of supervised agricultural credit, first introduced in 1957, cooperatives receive money from the Public Organization for Agricultural and Cooperative Credit which they then allocate to their members. These loans are advanced against the security of the crops (of which cotton is the main guarantee) rather than against land, as

was the case in the past. As money loans are given usually only on the basis of cash outlays in production, the bulk of this credit is in the form of short-run loans in kind, loans of seed, insecticide and, predominantly, fertilizer.[61]

Fertilizer dosages are allocated by crop and the farmer receives his quota at fixed, but low, prices. If he wishes, he may buy more, but at higher prices. The cooperative's supervisor is charged with seeing that the farmer uses his fertilizer, but nonetheless,many sell on the black market.[62]

In addition to short term loans, there are also medium term loans (of five to ten years) for agricultural machinery, cattle and land improvement. While a complete breakdown is not available, there are indications that these loans tend to go to the larger landowners. Rich peasants have access to other credit privileges as well. Only owners of over fifteen feddans are eligible to buy selected seeds at subsidized prices. To insure livestock and to be eligible to buy fodder at subsidized prices, a farmer must have at least three head. Thus the farmer possessing less than this not only lacks insurance, but he must also often resort to the black market to purchase fodder. It is common for the poorer peasants, short of cash, to divert their short run loans in kind. This forces them to use inferior seed and less fertilizer, resulting in lower crop yields, which in turn leads to an accumulation of debts to the cooperative, at which point the cooperative refuses to advance more loans, forcing the peasant to turn to the private money lender and to further

indebtedness. In 1972, of the 2,589,000 farmers in debt to cooperatives, 2,158,000 or 83% were holders of less than 5 feddans (the average debt was LE164). A reportedly common practice is for the richer landlords to borrow money from the cooperatives, then lend it privately (at a higher rate of interest) to the poorer peasants.[63]

When the peasant refuses to settle his debts to the cooperative, or if he repeatedly resorts to black market transactions, the agronomist has the right to open judicial proceedings for seizure of his crops. In practice, supervisors are reluctant to take this action, as it reflects poorly on their own competence.[64]

Research Needs

Egypt is somewhat unusual in that censuses of some sort or another have been taken for at least 5,000 years. Since 1897 censuses have been taken roughly over ten years, up to the most recent, the fourth agricultural census, taken in 1960. This census, along with a rural survey (conducted jointly by the Egyptian government and the ILO in 1965), indirectly or directly, form the bulk of the data used here. While these two documents are very informative, they are also today quite outdated. Thus the first research need would be clearly for more recent information. In this regard it is indeed unfortunate that the Fifth Agricultural Census, scheduled originally for 1971, has not been carried out.

There are, however, other problems with the data. The 1960 Census was taken during a peak month for agricultural labor and thus may understate the extent of underemployment. But by the same token, the 1965 Survey was taken during the slack season, with probably the opposite effect. Beyond this, there are more basic statistical problems. Births and deaths, for instance, particularly in the rural areas are not always registered and for a variety of legal and social reasons, misregistration of ages and marriages often takes place. Indeed, for all the Censuses, under, over, and non-reporting of all sorts of vital statistics appears to be quite prevalent.

Another major problem has to do with the definitions used by the Censuses and by researchers in the field. In reality, of course, the lines between under and unemployment, between agricultural and non-agricultural laborers, between unpaid and paid laborers, fulltime, part-time, and seasonal workers, are often blurred. These sorts of definitional variations are particularly prevalent when it comes to assessing the role of women in the rural and agricultural labor force. Often the work they do, whatever its nature, is simply ignored which tends to throw all the labor statistics off. In much of the literature it is often not even clear if the writer has ignored women altogether, or if he is considering all women or only some (permanently employed, unmarried, women who do primarily domestic work, but help out at harvesting, etc.). Even if this is clearly stated, the next writer may use an entirely different set of definitions, thus

reducing the extent to which any meaningful comparisons can be drawn. The same sorts of problems are apparent when it comes to assessing the extent and nature of child labor. In general, there are virtually no reliable figures on the sex and age composition of the rural work force.

There are other areas that might deserve closer attention, perhaps through monographic studies or small scale surveys. These include a more complete study of rural-urban migration, with information on the type (and wages) of employment among migrants, on continuing ties with the village, and on the extent of urban-rural remittances; more information on black market prices, including wages, commodities and rents; an accurate count of the nomad population, along with an analysis of living conditions and government policy; information on the extent of seasonal tenancy; an analysis of rural credit allocation and indebtedness, with a breakdown by size of holding, and an accurate assessment of the extent of rural landlessness.

Table 1

Landlessness and Near-Landlessness in Egypt, 1960

	Number	Percent								
Total Population	25,771,000 [a]	100	100							
(A) Rural Population	16,100,800 [b]	62		62 [g]						
I Laborers and Workers	7,889,000	49			49 [i]					
A Agricultural	4,508,000	28				28 [k]				
I Permanent	608,000									
2 Casual	1,850,000									
a Local (part-time)										
b Migrant										
i Seasonal										
iii Intermittent	498,000									
B Non-Agricultural	613,000 [c]	21				21 [l]				
1 Professional or Skilled	130,170	3					3			
2 Sales	217,000	5					5 [n]			
3 Craftsmen and Laborers	260,300	6					6			
4 Services and Recreation	304,000	7					7			
(C Rural-Urban Workers)	(4,442,900) [d]	26			51					
II Cultivators	4,159,000	51								
A Tenants and Sharecroppers	523,800	32				32	92			
1 Secure (>5 Feddans)	51,900						8			
2 Insecure	472,600									
a Very (>2f.)	307,400									
b 2-5 f	165,200									
c 5-10 f.	40,300									
B_1 Owners	623,170	38				38 [m]				
B Marginal Owners	582,700	97					97 [o]			
1 Insecure	526,500	94						94		
a Very (>2 f.)	329,400									
b 2-5 f.	197,100									
2 Vulnerable (5-10 f.)	56,200	3						3		
D Tenant-Farmers (Mixed Holdings)	495,200	30				30				
1 Insecure	381,800									
a Very (>2 f.)	183,100									
b 2-5 f	198,900									
E Marginal Holdings - All Types	1,551,200	94					94 [p]			
1 Insecure	1,381,200	84						84		
a Very (>2 f.)	820,000	50							50	
b 2-5 f.	561,100	34							34	
2 Vulnerable	170,000	10						10		
III Nomads	78,000 [e]	1			1 [j]					
(B) Urban Population	8,593,000	38 [f]	38	38 [h]						

Table 1
Supplement

	Later, As Indicated	
	Number	Percent
Total Population	38,000,000 (1975) [q]	100
(A) Rural Population	16,100,800 (1970)	58 (1970)
I Laborers and Workers	8,817,000 (1972) [r]	39 (1965)
A Agricultural	4,655,000 (1972) [s]	
2 Casual		33 (1965) [u]
a Local (part-time)		27 (1965)
b Migrant		
i Seasonal	2,000,000 (1975) [t]	
B_1 Non-Agricultural	734,000 (1970)	
B Marginal Owners		
2 Vulnerable	78,000 (1965)	2 (1965)
(B) Urban Population		42 (1970)

Notes to Table I

a. Unless otherwise indicated, all figures are drawn or interpolated from Abdel-Fadil, pp. 14, 17, 19, 27, 35, 36, 44, and 109.
b. ILO, p. 92.
c. Institute of National Planning, Tables 3 and 4.
d. Nassef, p. 39.
e. UAR Yearbook, p. 66.
f. Nassef, p. 39; percentage of immigrants living in the urban governates.
g. Abdallah, pp. 11, 211.
h. Ibid.
i. Nassef, p. 200; Institute of National Planning, Tables 3 and 4. This percentage refers to the rural population. 79% of the rural population is in agriculture, of these, 35% are employees (employers 10%, self-employed 25%, family workers 30%). 35% of 79% = 28%, plus the 21% not in agriculture = 49%. Abdel-Fadil, however, presents a different breakdown (p. 27) of the (agricultural?) labor force: 34% landholders, 53% family workers, 13% permanent wage labor.
j. UAR Yearbook, p. 66.
k. percentage of the rural population; Nassef, p. 200; Institute of National Planning, Tables 3 and 4.
l. Ibid.
m. percentage of all holdings in pure ownership.
n. Nassef, p. 200; Institute of National Planning Tables 3 and 4.
o. percentage of all owners; i.e., 3% have plenty of land.
p. percentages of agriculturalists with regular access to land of any sort.
q. Economic Survey, 1975.
r. African Statistical Yearbook, p. 5B.
s. Ibid.
t. Economic Survey, 1975.
u. ILO, p. 50.

TABLE 2

Rural Households According to Annual Family Income by Provinces, Economic Type, Labor Units Per Household

Classification	Annual Income (£E)						Total households N=100
	under 50 %	50-99 %	100-149 %	150-199 %	200 and more %	unknown %	
Province:							
Beheira	21	32	26	11	10	-	199
Gharbiya	34	30	16	5	10	5	165
Minufiya	19	28	25	10	14	4	173
Asyut	47	29	13	6	5	-	159
Qena	50	26	12	8	2	2	168
Faiyum	25	33	29	8	5	-	130
Economic type of household:							
Farmers:							
under 2 feddans	32	38	20	4	3	3	188
2 - 5 "	9	38	31	15	6	1	185
5 - 10 "	3	9	31	23	32	2	65
10 and more "	4	4	12	8	72	-	25
Farm labourers	54	27	12	4	1	2	207
Craftsmen	35	35	18	5	2	5	40
Salesmen	38	29	16	7	10	-	56
Service workers	27	40	28	3	1	1	72
Non-agricultural labourers	36	34	14	7	9	-	44
Other employees	17	7	33	17	23	3	30
Other households	68	13	6	5	4	4	82
Labour units per household:							
Less than 0.50 units	3	76	13	1	4	3	68
0.50 - 0.99 "	47	29	13	6	4	1	129
1.00 - 1.49 "	37	36	17	7	4	1	281
1.50 - 1.99 "	30	31	24	5	9	1	184
2.00 - 2.49 "	23	23	27	14	10	3	121
2.50 - 2.99 "	15	35	25	6	14	5	81
3.00 - 3.99 "	18	25	23	15	12	2	85
4.00 - 6.99 "	7	26	27	11	27	2	45
Total	32	30	20	8	8	2	994

Source: ILO, Rural Employment Problems, p. 68.

Notes

1. Radwan, pp. 3, 22.
1a. Nassef, p. 200; Hanson, p. 492.
2. Abdel-Fadil (1975), pp. 46, 145-146; Hansen (1969), p. 309.
3. Hansen (1969), p. 299.
4. ILO, p. 25; Abdel p. 109; FAO, p. 1.
5. ILO, p. 29; Nagi (1974), p. 281.
6. Abdel, p. 114.
7. ILO, p. 28; Abdel, p. 112; Nagi (1974), p. 271; Shiloh, p. 36.
8. Abdel, pp. 62, 115.
9. Economic Survey (1974), p. E24; Abdel, p. 17.
10. Abdel, pp. 17-18.
11. ILO, p. 128; Abdel, p. 41.
12. UAR Yearbook (1966), p. 10; Nassef, p. 13; Darling, p. 680.
13. Abdel, pp. 5, 43-45.
14. Ibid., p. 85
15. Ibid., p. 49
16. Gray, p. 42; Dekmejian, p. 381; Springborg, p. 138.
17. Warren, p. 12; NYT (Feb. 1977); Ahmed, p. 90; Springborg, p. 137.
18. Springborg, p. 137.
19. Warren, pp. 7-8.
20. Economic Survey (1975), p. E23; Nagi (1974), p. 263.
21. Warren, pp. 8, 20; Ahmed, p. 90; Hansen (1975), p. 139.
22. ILO, p. 104.
23. Saab, p. 161; Abdel, p. 127; Economic Survey (1975), p. 624; NYT (Feb 1977).
24. NYT (Feb. 1977).
25. "Egypt, Jobs," Waterbury, p. 6; Central Agency, p. 20.
26. Lippman, p. 32.
27. Nagi (1971), p. 123; Central Agency, p. 11; Tomiche, p. 134.
28. Nagi (1971), p. 44; Hussein, p. 184.
29. Nassef, p. 146; Nagi (1971), p. 44.
30. Abdel, p. 132w.
31. Nagi (1971), -p. 48-49; ILO, p. 33; Abdel, p. 132.
32. Nagi (1971), p. 106; FAO, p. 6; "Arab Republic," p. 123, Abdel, pp. 31-32.
33. Abdel, pp. 14, 31-33.
34. Hansen (1975), pp. 139, 182; Warren, p. 14; Nassef, pp. 11, 91.
35. UN Economic Commission, p. 8; Hansen (1965), pp. 63, 101; ILO, p. 128; Warren, pp. 9, 47.
36. ILO, pp. 68-69; Abdel, p. 68; UN Economic Commission, p. 16; Radwan, p. 27.
37. Abdel, pp. 3, 62; Mayfield (1974), p. 51.
38. Abdel, p. 51.
39. Ibid., pp. 76, 81.
39a. Radwan, p. 42.
40. Mayfield (1974), p. 83; Shiloh, p. 36; Hugoz.
41. ILO, p. 96.
42. Nassef, p. 27; Abdallah, p. 83; Burden, p. 116.
43. Farvar, p. 245; Economic Survey (1975), p. E17; NYT (May 1977).
44. NYT (May 1975); Saab, p. 160; George, p. 159, Worthington, p. 197.
45. NYT (May 1975); Kassas, p. 187.

46. NYT (May 1975).
47. Farvar, p. 246; George, p. 159; Hughes, p. 77; Vander Schalie, pp. 117, 120.
48. Abdel, pp. 125-127.
49. Ibid., p. 46.
50. Saab, p. 116.
51. ILO, p. 94.
52. Ibid., pp. 87-92.
53. Mayfield, p. 21; Abdel, pp. 53-54; Saab, p. 146; Mansfield, p. 177; Hansen (1975), p. 54.
54. Abdel, p. 66; Saab, p. 146; Hansen (1965), p. 281.
55. Abdel, p. 23; Mayfield, pp. 13-14.
56. Saab, p. 35; Abdel, p. 10.
57. Saab, p. 123; Abdel, p. 125.
58. Abdel, pp. 84, 119, 146; ILO, p. 82; Ahmed, pp. 30, 36. Radwan, p. 53.
59. Mayfield, p. 28; Hansen (1975), p. 51.
60. Springborg.
61. Abdel, pp. 86, 146-147; Nassef, p. 31; Ahmed, p. 73.
62. Ahmed, pp. 33-35.
63. Abdel, pp. 147-149; Saab, p. 83. Radwan, pp. 63-64.
64. Saab, p. 98.

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COUNTRY PROFILE: KENYA

General

According to the 1969 census, over 90% of Kenya's population of 10,890,000 lived in rural areas. 70% of these rural households were involved in agricultural activities; and about 300,000 rural households were legally landless. This situation is largely the outgrowth of the continuing pressures of population growth on the land and of the earlier colonial land policies which produced extreme regional disparities. (Landlessness is most prevalent in the denser areas of the Central Province, the Western Province, and Machakos.) The economic implication is one of increasing insecurity, as landless rural families are forced to seek wage employment in a highly competitive market in order to earn a livelihood. Such workers are all the more vulnerable because they are often cut off from many kinship ties, which are traditionally calculated through land ownership. At the same time, however, many landless families also receive remittances from urban relatives while others (particularly employees on large farms) often have informal access to small plots of land (shambas) for family food production.

Types and Incidence

Laborers and Workers

In 1969, there were 657,000 rural workers, 15% of the adult rural population, in regular wage employment in Kenya. In addition to this, there were 226,000 workers, 5% involved in casual labor. Regional disparities are again indicated by the fact that the figures were as low as 13% in the Nyanza and Coast Provinces, and as high as 23% in the Central Province.

Agricultural Laborers

In 1969, there were an estimated 378,000 agricultural laborers in Kenya; 186,000 were permanent, 192,000 were casual. The levels of employment for casual laborers are higher during periods of planting, weeding and harvesting. This seasonality is more pronounced in the case of food crops (especially maize) while many cash crops (especially tea and pyrethrum) have both higher and less variable labor requirements, and thus provide steadier employment. In general, however, the time when labor demand is greatest corresponds with the period when those wage laborers who also own land are most needed at home. Job opportunities are also affected by the increased supply of job seekers at the beginning of the academic term when cash is needed to pay for school fees. Otherwise, payment for seasonal agricultural labor is often in kind or based on some type of mutual help arrangement.

For regular laborers, employment opportunities are found on the large farms, but, more frequently, on the smaller farms. This is in part due to the fact that the larger farms are more capital intensive. However, the large farms also tend to have a lower percentage of land under cultivation and produce a lower output per acre. A survey of the Trans-Nzoia District in 1970 showed that employment (in man-years per 1,000 usable acres) was 93 for farms under 250 acres, 36 for larger farms, and as low as 14 for farms of over 2,000 acres. Employment opportunities in the "modern" farming sector have in fact been declining since at least the beginning of the sixties (at an annual rate of 2.3% by

one estimate). This decline is partly a reflection of changes in land tenure and the concomitant reduction in the area allocated to large farms: as the larger former European lands were subdivided, the new owners substituted family for wage labor. The decline of the sisal industry has also been a factor.

Non-Agricultural Workers

In 1969 there were an estimated 138,000 employees in rural, formal sector, non-agricultural positions. 112,000 of these jobs were in services (primarily central and local government employees). Small, non-agricultural rural enterprises accounted for 82,000 employees, of which 48,000 were regular, and 34,000 were casual laborers (a different breakdown suggests that 68,000 were self-employed and 38,000 were family workers). In 1969, these 51,000 enterprises paid a total wage bill of L5 million. 75% of these businesses were owned by people who also engaged in agriculture.* The "typical" enterprise had an operating capital of L25-50 and was run by a self-employed man (with a primary school education), two family members and one wage employee.

In addition to such enterprises, non-agricultural rural employment is also found in public works projects (such as road building and water projects) which are usually labor intensive. There are also an estimated 100,000 employees in activities such as forestry and charcoal burning. In contrast to the agricultural sector, wage employment in non-farm, rural activities rose by about 40% during the period from 1967-1970.

*Throughout this profile one Kenyan pound equals 1.1545 US dollars.

Cultivators

A complete picture of land distribution and ownership is still unavailable because of the incomplete nature of land registration and because of the many, still recent, changes in land tenure that have taken place since independence.

The number of marginal farmers, defined as those earning under L60 per year, is estimated to be about 620,000. Another approach is to look at the distribution of registered holdings. In 1969, this was as follows:

Size Distribution of Farms, 1970

Size of farm (hectares)	No. of farms	Percentage of all farms	Estimated total area (thousand hectares)	Percentage of all farm land
0-19	417	13.1	4	0.2
20-49	324	10.2	11	0.4
50-99	304	9.6	23	0.8
100-199	364	11.3	54	2.0
200-299	323	10.1	80	3.0
300-399	253	8.0	88	3.3
400-499	218	6.9	98	3.6
500-999	298	15.7	373	13.9
1000-1999	243	7.6	364	13.5
2000-3999	107	3.4	321	11.9
4000-1999	111	3.5	1273	47.3
20000 and over	15	0.5		
All sizes	3175	100.0	2690	100.0

This was estimated by multiplying the number of farms in each group by the average size of holding in that group, as given by the mid-point in each size group. The residual land was attributed to farms with 4,000 hectares and more.

Source: ILO, p. 36

Size Distribution of Registered Small Holdings, 1969

Size (hectares)	Number		Total area	
	Absolute figures (thousands)	%	Absolute figures	%
0.0-0.49	91	11.7	28	1.1
0.5-0.99	121	15.5	89	3.4
1.0-1.9	192	24.6	274	10.3
2.0-2.9	128	16.4	303	11.4
3.0-4.9	104	13.3	404	15.1
5.0-9.9	88	11.3	629	23.8
10 and over	54	7.0	923	34.9
All sizes[1]	777	100.0	2646	100.0

[1]Column totals may not add up exactly owing to rounding.

Source: ILO, p. 36.

There are no precise statistics available on the number of unregistered squatters, but the practice is reportedly prevalent. In 1965, a special commission for squatters was formed and by 1970 it had settled 18,000 families on holdings averaging 4.5 hectares a piece.

Pastoralists and Nomads

According to the 1969 census, there were about 220,000 pastoralists or nomads in Kenya, constituting 12% of the rural population. This population is thought to be increasing at an annual rate of 2%, below the 3.3% figure for the nation as a whole. The exact number is hard to calculate, as the pastoralists' ethnic groups often cross national boundaries. This is true of the Galla, Somali, and Masai, as well as of groups near the Ethiopian borders, such as the Boran and Gabbra (in 1975, their number was estimated at about 58,000).

Nomads move seasonally with their herds as their economic activities center upon livestock. Their diet consists largely of milk, tea, sugar, maize flour, and some meat. In hard times, sheep and goats are slaughtered for food as well. In recent years chickens and eggs have been a more frequent dietary component. Nomadism, in Kenya as elsewhere, is a marginal way of life in which the loss of a family member or an unusually severe drought can be ruinous. In Kenya, a serious drought does in fact occur almost every ten years. The most recent such drought (that of 1973-74) was however far more severe than most and it was exacerbated by the cautious approach taken by Kenyan government

officials. Publicity was minimized; a state of famine was not declared and, as a consequence, international aid was much less than might have been expected. Lack of information, fear of reducing the tourist trade, border disputes with Somalia, and other factors all played a part.

Government policy towards the nomads has varied over the last several decades, but the problems of the pastoralists have never been well understood. Most of Kenya's population is based on settled agriculture, located in the center and south of the country, and it is this area that has attracted the government's attention.

Before independence, the colonial administration (as well as the individual European settlers) took a protective (or paternalistic) attitude towards the pastoralists, and the policy was to minimize the encroachment by settled agriculturalists (especially the Kikuyu) on Nomadic territory. With independence and continuing demographic pressures, incursions onto pastoralist lands have increased, especially in the more arid parts of Kitui, Meru, Embu, and Machakos. At present, the government's policy is to encourage sedentarization of nomads through provision of water holes and through the intensive development of some 5.5 million acres of grazing land in northern Kenya.

Causal Factors

Demographic-Environmental Factors

The population density in Kenya is 150-200 people per km^2, with much regional variation. According to the 1969 Census,

Kenya's population was increasing at an annual rate of 3.3% (an increase from 3.0% from the 1962 Census; in 1972 the rate was estimated at 3.5%). At this rate, the population is expected to double within twenty years. As formal employment opportunities have increased, since independence, at an annual rate of about 1.9%, one implication of the population increase is a concomitant increase in the rate of unemployment.

The government of Kenya has a formal policy commitment to reducing the rate of population growth. This began 25 years ago with the formation of a National Family Planning Association. Today the program is voluntary; it relies heavily on education and is linked to maternal and child health care services. The emphasis is on spacing births rather than directly limiting the absolute number of children. In 1972 there were 235 Ministry of Health sponsored family planning clinics in Kenya. The program is thought to have produced rather modest accomplishments in terms of reducing fertility. The heavy direct involvement of foreign staff (who are responsible for 80% of family planning delivery) who are often unfamiliar with local customs and attitudes is one of the factors which is thought to reduce the program's efficacy. There may also be more general social resistance, for surveys have indicated that social status is closely related to family size. Other studies, however indicate that the desired number of children is decreasing, especially among women.

According to one source, 11.9% of Kenya's 569,000 km^2 is high potential agricultural land, 5.5% medium potential, and

74.1% low potential. Another source suggests that 7% is good agricultural land (good soil, gentle slope, and rainfall that is both adequate and reliable); with another 4.5% to be suitable for crop production in years of sufficient rainfall. 60% is semi-arid desert and the remaining land is suitable for stockraising at varying levels of intensity.

In 1969, there was an estimated 0.8 hectares per capita of good agricultural land (weighing 5 hectares of medium potential land, or 100 hectares of low potential land as one high potential hectare). Once again, there are large regional variations due to the colonial experience. In the former "African Reserves" the population density is quite high (here the availability of good land is about half the national average), while the former "Scheduled Areas" are still characterized by very low population densities. In the district of Narok, the availability of good land is almost nine times the national average. There are also reserves of good land in the Rift Valley and Coast Province. Other districts with low population densities and good land available are those formerly reserved for pastoralists or the former crown lands on which settlement was previously discouraged. Thus despite overpopulation in certain regions, there is additional land available in other areas. Of the total arable land, only 24% by one estimate is actually cultivated. According to another source, the country still has perhaps one million acres of medium potential land available for development.

Partly in response to this, the government has introduced a number of resettlement schemes in areas like the Coast Province where the available land belongs to the state. This has not been the case in areas of trust land (such as Narok) or in areas of private land ownership (where in some cases land prices have risen so rapidly that owners have been holding land unproductively for speculative purposes). By 1971, the government had settled some 35,500 families on 495,000 hectares in the former European areas. Settlement of an additional 45,000 families is estimated to have taken place privately.

Another possibility for increasing the availability of land lies in irrigation schemes. A few large scale irrigation projects have been introduced by the government under the supervision of the National Irrigation Board. To date, the government has put about 6,000 hectares under irrigation. The Board estimates that four new jobs are produced by every irrigated hectare. Another 160,000-200,000 hectares of undeveloped land that could be improved with irrigation is thought to exist, largely in the Tana Basin and the Kano Plains. The largest single impediment remains that of financing, as the cost of irrigating a single hectare ranges from L700 to L2,000.

Ownership and Tenure Rules and Practices

In pre-colonial Kenya, both communal and individual systems of land tenure existed. Early in the 20th century, European colonialists began establishing large scale farms, mostly in

Western Kenya, in an area which became known as the White Highlands. The colonial economy, based on individual land ownership, encouraged the individual systems of land tenure that had existed, but in an uneven way, so that by the time of independence, inequalities of land ownership were an integral part of the Kenyan economy, with 3,600 large-scale European farms located on 3.4 million hectares of the best agricultural land.

The first major land reform was accomplished during the colonial period, in response to the Mau Mau uprising. This led to a policy of land consolidation and registration of title. The second reform was begun during the period of transfer to power and was aimed at achieving African resettlement on the former European estates in the White Highlands. The plan itself was entirely planned (and partially implemented) by the colonial administration. The British government bought the land from the individual Europeans and sold it to the Kenyan government (financed by British loans) which in turn sold it to local farmers.

The land was transferred through two types of settlement plans. The first was a low-density scheme in which land was sold to financially and educationally qualified farmers. Perhaps 1/2 million acres of European mixed-farm and plantation land was transferred in this way, with the large-scale farms kept intact. The result of this program was to encourage a stratum of larger peasant farmers. Outside the former White Highlands, a similar effect was achieved by the rapid extension of private land tenure and by differential provision of loans and technical assistance.

The second scheme, involving 1 1/3 million acres of land, was a high density plan designed to alleviate the pressure of landlessness by providing land to the unemployed and landless. It was carried out within the confines of a system of exclusively private property and individual tenure, again as an outgrowth of colonial administration policy.

A majority of the settlers in the high density schemes came from areas of severe population density and land shortage. This was the primary intention and the program was successful in reducing short-term land hunger. Other considerations also played a part. Most farmers who could establish some customary claim to the land, for example, received title under registration. There was also a politically inspired policy of respecting the traditional claims of various tribes to general regions of land.

Initially, the individual land recipients were chosen by lot. Later, selection committees were formed which interviewed and chose applicants on the basis of unemployment, landlessness, and agricultural background and education. The distributed land was divided into individual holdings sufficient, it was hoped, to provide its holder with an income from $70-280 a year, beyond expenses, loan repayments, and subsistence. The farmers themselves were required to buy the land over a period of thirty years at an interest rate of 6%. In the interim, some limits were placed on the security of tenure: the land had to be used for agriculture and subdivisions and tenancy needed government permission. In many cases, cooperatives were also formed to

market the crops and to deduct the loan payments. They provided economies of scale for equipment and marketing. Eventually, the cooperatives were extended to almost all the resettlement schemes. They were managed by experts who were often, but not always, settlers themselves. In general, the cooperative movement, superimposed from above, with a colonial legacy, has never attracted a great deal of popular support. Today the cooperatives are managed by the government's Cooperative Department; most are in coffee, with some in the dairy and pyrethrum industries.

In 1969 the government decided to terminate the settlement programs, but because of the continuing pressures of landlessness and through the assistance of a British grant, the program was reactivated. The new program involved only 150,000 acres, however, which was divided into family plots of two or three acres and administered through state supervised collective farms.

By 1970, over 2/3 of the old European mixed-farm areas were occupied by about 500,000 Kenyans, with about four million acres of ranch land and plantations (coffee, tea, sisal) remaining European. By 1971, 35,500 families had been resettled on 495,000 hectares of former European land. Through the Haraka (formerly Squatter) Settlement Plan, an additional 15,000-18,000 families were also settled on farms averaging four hectares.

There were problems with these projects, some of which were simply the result of the haste with which they were implemented. Critics argue that the settlers were charged unreasonable rates for the land and that promised services were not adequately

provided. In some cases, paid laborers found themselves at a disadvantage, since the new owners were reluctant to extend customary usage rights.

Despite the settlement programs, the distribution of land ownership remains highly uneven today. About a third of all agricultural land is still in large farms and more than 2/3 of these large farms are over 100 hectares in size.

Familial Roles

According to the ILO study, almost all rural women are regularly involved in economic activities. Most of this is as unpaid family workers in agriculture, since married women have traditional usage rights to their husband's land. Because agricultural activities are carried out in addition to the work of childrearing and household maintenance, rural women are often overburdened. This is particularly the case in the households managed entirely by women (an estimated one third of all rural households in 1969). Yet despite the significant involvement of women in agriculture, it was the government's policy until only a few years ago, not to extend agricultural extension services and advice to rural women. This is changing slowly, and today there are even some female agricultural extension officers.

The reluctance to train women in agriculture may in part be a reflection of the fact that traditional landholding and inheritance rights have not favored women. When a man dies, his land is generally divided among his sons. An unmarried daughter may be permitted to work the land if there is a surplus, but the land

reverts to her brother upon demand. The result is that single, widowed, or divorced women are often effectively landless. With the government policy of encouraging private ownership through formal registration, more women are however,becoming registered title holders.

Women are also at a disadvantage in obtaining wage employment. In 1970, the percentage of women in formal sector wage employment was 14%, about the same percentage as in 1963. In agriculture, their presence had actually declined from 19% in 1963 to 16% in 1970. Much of their work, however, is hidden by the fact that women are normally engaged as casual laborers and, as such, are not always caught by the censuses. As temporary employees, women are also not generally entitled to the workers' protections that sometimes exist in the forms of vacations, sick leaves, severence pay, and social security.

In addition to employment, women have also generally had less access to educational opportunities. In 1969, over 90% of the women over forty had never been to school. For women in the age group 25-40, the figure was still over 75%. For younger women, the situation is improving; today girls account for 41% of primary school enrollments, but the figure is lower for secondary school (31% for Form 1, 24% by Form 4). Educational inequalities in terms of sex are most pronounced among the pastoralists (it is also in this group that polygamy is most common).

Consequences

Employment

Employment opportunities are highly seasonal. The peak periods of labor demand are at weeding and harvesting and this is particularly true of the food crops such as maize. Kenya's cash crops have less variable labor requirements. Once again, there are regional variations, as indicated below:

Estimated monthly variations in the index of total labour demand for crop work in certain districts, 1969-71
(District monthly average = 100)

Month						
April	167	103	135	369	142	175
May	183	93	130	267	111	148
June	131	118	120	85	109	132
July	98	108	102	104	97	136
August	85	111	100	80	96	144
September	123	105	100	92	100	127
October	312	103	103	76	99	95
November	72	93	96	17	84	58
December	65	95	96	12	89	44
January	48	101	90			39
February	45	72	62	11	91	51
March	50	94	67	64	102	49

Source: ILO, p. 42

Real Wages and Income

There is a wide variation in incomes and wages in the rural areas. According to the 1969 census, several groups of people earn over L200 per year and, as such, could be considered well off. These include the owners of many non-agricultural rural enterprises, as well as many non-agricultural workers in the formal

sector. The average annual wages for some of the latter group are often quite high; mining, L397; construction, L797; transport, L455; manufacturing, L227; commerce, L118; Services, L201.

In agriculture, those earning over L200 a year include some skilled agricultural workers, some 225,000 better-off smaller farmers, and the owners of the larger farms. The higher income farmers are generally those with farms in the high potential areas whose incomes have benefitted, since independence, from settlement and irrigation schemes and from land registration. They are usually growers of cash crops such as coffee, tea, dairy products, pyrethum, and maize. Below this group are some 250,000 smallholders with incomes of L60-110 per year.

The majority of agricultural families are those in medium potential areas (or in high potential areas, but with very small holdings). Their income is usually below L60 per year. This group comprises some 620,000 holdings and is at the margin of poverty. Some benefit from remittances from family members who have migrated to the urban areas, but most must supplenent their farm incomes by working as wage laborers. Their wages vary depending on where they find employment. Permanent workers on small farms and settlement schemes earn an average L25 per year, (for casual workers, the figure is L23). On estates or large farms, the annual earnings are L69. While there is not enough data to show the variation in daily wages, in general the high supply of labor tends to keep wages fairly stable (and low) even during the period of peak agricultural activity.

In the small, non-agricultural rural enterprises, the wages of permanent workers were L47 for men, (L34 for women, L19 for children); for casual workers, L37 for men, (L34 for women, and L33 for children).

Using a somewhat different breakdown, the wages were found to be:

		Men (L)	Women
Large farmers	68	73	46
Small farmers	38	41	34
Owners of non-agricultural enterprises	130		
Non-agricultural workers	45	47	34
Self-employed smallholders	113		

Within the last group, however, are some 640,000 small holders earning about L40 a year. There are also regional variations: the average employee on small farms and settlement schemes earns twice as much in the Central Province as he would in the Rift Valley and the Coast Province. Similarly, in 1970, the average employed urban worker earned 14 times as much as the average farm laborer. There are also ethnic variations: 1.4% of Africans, 20.9% of Asians, 54% of Europeans earned over L1200 in 1970.

Living Conditions

A few comparative indices of living conditions in Kenya are a life expectancy of 49 years and an infant mortality rate of 120/1000. Regional disparities are again obvious. The rural-urban differential is suggested by the fact that approximately half the physicians in Kenya are found in urban areas, where

only one tenth of the population lives. Some selected indicators of regional disparities (1970) are indicated in the table below.

Province and district	Population (thousands)	Population per km²	Km. of road per 1,000 km²	Ranking in terms of educational expenditure	Percentage of population in primary school	Area under cash crops as percentage of cultivated area	Percentage of high-potential agricultural land
Coast							
Kilifi	302	24	56.7	19	7.6	66	8.4
Kwale	206	25	60.7	21	7.1	42	15.3
Lamu	22	4	22.2	32	4.6	—	1.1
Mombasa	247	—	200.5	n.a.	10.6	—	—
Taita	111	6	22.5	20	16.7	66	2.5
Tana River	51	1	14.1	25	7.7	—	1.9
North-Eastern							
Garissa	64	1	11.8	31	2.5	—	—
Mandera	95	4	10.6	33	1.5	—	—
Wajir	86	2	17.9	29	[illegible]	—	—
Eastern							
Embu	179	62	123.3	17	17.2	7	24.4
Isiolo	30	1	13.6	30	8.3	—	—
Kitui	343	11	40.8	14	12.4	16	2.2
Machakos	707	50	65.6	3	17.8	24	8.8
Marsabit	52	1	13.7	27	3.9	—	0.05
Meru	597	63	69.0	7	13.3	35	24.3
Central							
Kiambu	476	127	267.3	1	20.9	41	48.1
Kirinyaga	217	146	151.2	15	14.5	23	68.5
Muranga	445	178	204.1	4	21.9	18	84.0
Nyandarua	177	54	127.6	18	19.5	86	75.0
Nyeri	361	108	130.5	5	23.8	37	48.6
[illegible]							
Baringo	162	15	61.2	13	9.8	—	15.6
East Marakwet	159	57	99.8	8	9.7	23	38.1
Kajiado	86	4	39.0	23	9.0	—	1.1
Kericho	479	97	139.3	11	11.2	16	77.7
Laikipia	66	7	55.3	22	12.1	—	13.4
Nakuru	291	40	127.1	13	9.8	—	41.5
Nandi	209	75	133.7	8	9.7	8	85.4
Narok	125	7	46.3	24	5.0	—	49.0
Samburu	70	3	20.2	28	3.3	—	6.7
Trans-Nzoia	124	50	134.6	8	9.7	—	84.2
Turkana	165	2	13.2	26	0.9	—	0.2
Uasin Gishu	191	50	135.8	8	9.7	—	86.5
West Pokot	82	16	71.8	8	9.7	—	28.2
Nyanza							
Kisii	675	304	212.1	9	12.6	31	100.0
Kisumu	401	192	173.4	6	10.8	21	93.7
Siaya	383	151			12.9	9	
South Nyanza	663	114	149.5	10	7.2	20	99.1
Western							
Bungoma	345	113	138.0	12	16.8	13	82.1
Busia	200	119	196.9	16	13.9	20	100.0
Kakamega	783	220	176.1	2	12.4	13	92.3

n.a. = not applicable. — = magnitude negligible.

Source: ILO, pp. 78-79

Indebtedness

Indebtedness has been a significant problem in the government's resettlement projects. The failure of the settlers to repay their loans was one of the primary factors behind the temporary abandonment of the program in the late 1960's. More recently, government policy has involved greater incentives to encourage loan repayment coupled with eviction in the more recalcitrant cases.

Pressures for Migration

In 1969, less than 10% of the population of Kenya was urban (70% of all city dwellers lived in Nairobi or Mombasa), but the urban growth rate was about twice the national average. This was largely due to increased rates of migration from the rural to the urban areas. The primary factor behind this trend (and the first reason cited by most migrants) is the lack of job opportunities in the rural areas. Permanent landlessness (in the sense of no future prospects of acquiring land) seems to be only a secondary cause, though one of more importance for the older and the less educated migrants. Many of the younger migrants are temporarily landless insofar as their fathers are still working land on which their labor is superfluous but which they will eventually inherit. That only a minority of male urban migrants are permanently landless is partly indicated by the reverse flow of migration of men after the age of forty, as they return to the rural areas to claim family land. Landlessness is also a factor of more importance in the more densely populated

regions, (regions which produce the greatest numbers of migrants) such as the Central Province, Nyanza, the Western Province, and the Eastern Province.

The majority of migrants are in many ways among the better off. Most are young men with some education: studies have shown that urban migrants have substantially more education than the male population as a whole and the likelihood of migration increases rapidly with the level of education. Nairobi in particular attracts a large share of those with secondary and higher education.

Nairobi (and, to a lesser extent, Mombasa) is the ultimate destination for most migrants--although their initial move will usually be to the closest town where they are assisted by relatives and friends.

In general, urban migrants retain strong ties to their rural homes. Most expect to return, and many in fact do, though often after an absence of years or even decades. In fact most migrants interviewed have suggested that they would have preferred to remain in the rural areas, had they been able to find employment at adequate wages. Rural links can also be seen in the size of urban wage remittances to rural families: each year L18 million is sent to rural areas by household members in town. A high proportion (on average 20%) of urban wages is remitted by migrants to their rural families (the lower the wage, the higher is the percentage remitted).

Despite the remittances, the absence of the migrants often produces stress on the rural families left behind. About half

of the male migrants are married, of these, 60% migrated without their wives. These women constituted about a third of the 525,000 rural households which were headed by women in 1969. Thus, in addition to household and childraising tasks, these women also became responsible for the majority of the agricultural tasks. The implication of this migration is that during the peak agricultural seasons there is often not enough labor to ensure proper cultivation of the land. There may be some compensation to this phenomenon insofar as peaks of migration correspond somewhat to the slower agricultural seasons, but on this matter, data is quite incomplete.

Rural-urban migration also produces strains in the urban areas: the group of job seekers is growing at a rate estimated to be three times that of new job opportunities in the formal sector. In Nairobi, this had produced an open unemployment rate of 8-14%, with an estimated underemployment rate of 20% for men (the rate for women is thought to be even higher). In addition to rural-urban migration, there is also significant internal migration from other rural areas to those of the Rift Valley and Coast Province. Ethnic barriers sometimes limit internal population movements.

Social Organization

The traditional mutual assistance groups (mwerthya) in Kenya are largely organized through kinship groups and have, in the past, focused on such activities as firewood collection, weeding, ploughing, and housebuilding. More recently, these have found

expression in the self-help movements, discussed below.

Environmental Degradation

Droughts have been the primary source of environmental damage, particularly in the drier regions of northern Kenya. Overgrazing by cattle leads to destruction of the grasscover; similarly, once the forests which are essential as water catchment areas, become depleted through increased destruction by game animals, fire damage, and human encroachment, the rate of desertification increases.

Public Policy

The primary public policy measures in Kenya have been the resettlement projects discussed above.

Intensification of Agriculture

The main sources of technological assistance for farmers in Kenya are the extension agents and the government research stations. The availability of technological inputs, like the provision of credit, and, in general, the ability to grow cash crops, is biased towards the larger farmer. The primary focus of the research stations is on increasing agricultural productivity in the larger farms in the high potential areas. Their advice is often of little use to the smaller farmers (for example, research recommendations are usually in quantities per acre and assume access to tractors and other high technology inputs).

There is also a special program for hybrid maize, but only farmers with 15 acres can get advances until the harvest to cover

cultivation expenses (the same is true for wheat credit). The AFC has as its lower limit for large scale development loans farms with incomes of over L500 per year. For the bias in credit, the government often cites the high cost of servicing small loans. Similarly, commercial banks tend to favor farmers who have additional, non-farming, incomes. In general, credit goes to the large farmer and to the progressive smallholder, who is generally well off anyway. The bulk of development loans, for example, (L7.5 million out of 10.5 million) have gone to the same farmers who received land purchase loans as well. An additional L3 million has been lent to smallholders outside the European land. More than half of this went to the larger farmers in the Central Province. By 1970, about 25,000 farmers outside the settlement schemes had received farm loans (another 20,000 smallholders received L0.5 million worth of credit in the form of tea shoots from the Kenyan Tea Development Authority). Cooperatives are an additional source of credit. Because of the credit policies, rural government debts are usually held by the richer farmers. Debt recovery has been a problem in such instances nonetheless and the usual policy has been not so much one of eviction as of imposed management through the AFC.

Small Industry

The main source of assistance to rural industry has been the Rural Industrial Development Program (established by the Ministry of Commerce and Industry) which was originally linked with pilot programs in 13 selected towns and financed partially

by Danish and Norwegian aid. Like agricultural extension, its activities have been geared to the larger producers. There is also the Industrial and Commercial Development Corporation which has a special fund for rural industries. Under its small industrial loan scheme, it provides 8.5% interest loans for 5-10 years for the purchase of machinery and equipment.

Social Organizations

One of the more interesting examples of local organization in Kenya has been the Harambee self-help movement which has focused on local initiative in identifying needs, mobilizing resources, and implementing projects. It is based on traditional kinship and clan organizations and communal work patterns. With the encouragement of the Community Development Department, local self-help committees have emerged in a number of areas. They have produced a variety of projects favoring in particular the building of schools and health facilities, but also dams, roads, bushclearing, etc. In 1967, 39,863 such self-help projects were underway. While self-help is an integral part of the government's rural development program, there have been tensions. One problem has been that local self-help projects are often decided upon with little attention paid to the government's overall priorities and plans (thus a school may be built where the government would prefer a hospital).

Research Needs

Perhaps the most pressing research need in terms of landlessness and near-landlessness in Kenya is to accumulate and

evaluate data on the many changes in land tenure that have taken place since independence. Attention should laso be devoted to those sectors of the population which do not fall into the category of small landowner, i.e., tenants, sharecroppers, squatters, indebted laborers, migrants and nomads. (The condition of the latter group should also be examined in the context of the capacity of the land they inhabit.) Special attention should also be devoted to regional variations within the country.

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COUNTRY PROFILE: UPPER VOLTA

General

Upper Volta is a small, land-locked country which has no exploited mineral wealth and in which 95% of the population had an annual average per capita income in 1970 of US $ 28, of which about US $ 11 was in cash.[1] It is currently under a military regime.

The country has parallel bureaucratic structures for administration and tax collection (Prefectures) and for economic and social development (Organismes Regionaux de Developpement, or ORDs). For the purpose of this report, the country will be discussed in terms of 4 regions: the North (ORD du Sahel); the East (ORD of the East and Koupela ORD); the Central, or Mossi Plateau (Yatenga ORD, Kaya ORD, Koudougou ORD, and Ouagadougou ORD); and the West (Dedougou ORD, Bobo ORD, Banfora ORD, and Diebougou ORD).

Types of Categories

Major categories for Upper Volta include marginal farmers of whom a large proportion are also seasonal migrants and Pastoralists in a labor force of about 2.8 million. It should be emphasized that all figures given are estimates and should be regarded as illustrative. A major census was undertaken in December, 1975, but the results are as yet unpublished.

Statistical Incidence by Region and Trends

Table I shows the statistical incidence by sub-region for each category found in the country. The rural population is divided roughly by ethnic group as specific life-styles and methods of cultivation can be identified in this manner. The Fulani and Tuaregs are pastorlists and represent approximately 10% of the total population, with all other groups being small cultivators. The urban population is given as population of the two major cities (Ouagadougou and Bobo-Dioulasso) and twelve regional centers, and comprises 5% of the total population.

Trends

Laborers and Workers

Data from this category is not available by region, although it is generally conceded that the majority of migrants come from the Mossi Plateau, or central regions of the country. General trends are: 1) migration to secondary cities and to primary cities in Upper Volta which are now competing with Ghana and the Ivory Coast as potential destinations for migrants, with a concommitant rise in urban growth rates in above 5% per year; 2) the majority of migrants are in their most productive years, 15 - 29, and 95% are from the rural sector; the National Development Plan shows a slight increase in the number of female migrants (from 14% in 1960 to 15% in 1976) although Gregory shows sex ratios almost equal except in Mossi areas, where males still

comprise the majority; this loss of labor in the most productive years has severe implications for the rural sector; 3) migrants are generally still concentrated in the proletarian stratum of the societies of which they migrate, which decreases their potential remittances and/or future contribution to rural sector enhancement; 4) government policy has focused on emigration; internal migration has been defined a problem, but also encouraged through various new opportunities in the urban sectors; the new Plan is purported to encourage development of more real employment opportunities in the Voltaic rural sector, and indeed, most programs have as a primary goal enhancement of rural life; 5) there is some indication that seasonal migration is evolving into more permanent migration as the economic situation in the rural areas deteriorates.[2]

It should be noted that as yet there is no plantation agriculture and little incidence of attached or bonded laborers in Upper Volta. There were in 1970 only 16 "modern" agricultural and food processing enterprises in the country, of which 14 were in the urban areas of Bobo-Dioulasso (10) and Ouagadougou (4).[3] Non-agricultural enterprises which employed salaried workers numbered 34 in the same year, of which all but four were urban.[4] The civil service employed 25,448 and the private sector 22,338 salaried workers in 1976, representing less than 2% of the adult work force.[5] Within this group, those with the greatest problem of

unemployment are the unskilled workers and workers looking for their first job, i.e., the rural to urban migrants predominate. Thus Upper Volta must not only increase wage labor in the rural but the urban sector as well.

Cultivators

It is debatable whether anyone in a country as poor as Upper Volta is above the category of a "marginal farmer," but certain broad divisions can be made based on population density and access to goods and services. It should be emphasized that patterns of land tenure, institutional arrangements, and social and racial constraints, vary immensely by ethnic group, and that not all groups are discussed in the sub-regional profiles. However, there is the common factor that no rural land is held by individuals; it is all alotted through kinship patterns and held through usufruct right in all ethnic groups. No evidence of village chiefs abusing power and becoming de facto landlords was found. Except in the Mossi Plateau, there is little evidence of scarcity of land as yet.

As the population increases without concommitant improvement in management, however, there is evidence of environmental degradation. This is evident particularly in the Mossi Plateau, but also in rural areas surrounding town centers where trees are cut for firewood and increased erosion results. There is also increasing governmental concern about spontaneous migration of whole Mossi villages into the south plateau and the West, creating problems of deforestation and ethnic conflict as well.[6]

The vulnerable farmers (predominantly Mossi) are so because of population pressure and poor farming practices (little use of manure, monoculture, population pressure causing shorter fallow) in an environment with less than 800 mm of rainfall per annum. Trends here include 1) increased migration, with greater incidence of semi-permanent than seasonal; 2) increasing environmental degradation; 3) decreasing levels of living. On the positive side, the government has recognized the problem and is focusing increasing numbers of programs on this region, both in forestry and conservation and in rural development (agriculture and training).

The "constrained farmers" represent those who are on poor land and live in such remote areas that there is little hope they will benefit from government programs aimed at helping the small farmers. These include Gourma who are far away from any market area, and Mossi and Gourounsi who could not economically increase production even with the requisite technological packages at bank rates. There are, however, increasing attempts by government and donors to improve the road network and to expand credit facilities to include these people. The 13.9% figure given for this group is solely an estimate to emphasize that there is stratification among the rural farmers outside of the overcrowded plateau, and that feasibility studies should look closely at village economic status before proferring a "small farmer package."

Pastoralists and Nomads

The Tuaregs represent such a small proportion of the Voltaic population that trends regarding their future will not be discussed in this report. Given that Tuaregs owe primary allegiance to their kinship group and rarely recognize the modern nation state, this seems appropriate. Those that would herd their camels in Upper Volta one season might be tapped for the Malian tax the next, and vice versa.

The Fulani, although comprising less than 10% of the population, are of major importance in that they are responsible for the livestock that accounts for 10% of the GNP and approximately 45% of reported exports.[7] They range from fully nomadic to sedentary in their lifestyle, and have been categorized in this report as semi-nomadic. Estimates of per capita income are generally lower than those of the farmers, but data is dubious and primary capital--cattle and ruminants--represent more valuable (and convertible) savings than the land of the farmers. Trends for this group include: 1) increased insistence of the government that they sedentarise, thus enabling the government access to improve quantity and quality (and marketing) of meat products; 2) increasing ethnic conflict as other groups--cultivators--move into land that was previously pasturage; until now, the Fulani have had a symbiotic relationship with most farming groups, exchanging milk and meat products and fertilizer for grain and grazing rights; as good land becomes scarcer, this relationship may suffer; 3) restrictions on

quantity, and perhaps quality (e.g. breed) of herd, which will upset Fulani social organization and basic cultural values. With development, this group may have the most radical transformation to go through of all previously mentioned.

Causes of Conditions

A macro-picture for the country would have the over-populated and unproductive Mossi Plateau spilling over into all other regions, creating ethnic conflict and land pressure in areas where there previously was none. This phenomenon is occurring now, slowly, but will increase geometrically over time. The clearing of the onchocerciasis-infested zones, planned to accommodate resettlement of one million Voltaics over 20 years, is progressing more slowly than anticipated and may stave the tide but little.

Institutional factors vary, as mentioned, with ethnic group, and, except for the commonality of no private ownership of land, cannot be generalized. There are reports of ethnic conflict between the Fulani and various sedentarized farmers over land rights; government intervention may be necessary in many cases to prevent the farmers from pushing the pastoralists into the poorest pastureland. Increasing migration from the Mossi, Gourounsi, and Gourma areas (i.e., the Central and East) is likely due to the fact that young men are having a more difficult time getting their first fields; they may have to work for a relative or prospective in-law to gain the necessary capital to start

farming, and many opt for the promise of "quick money" in the cities or on the coast rather than stay and farm. Women in the Mossi group are being disenfranchised of land rights, but in the Gouronsi seem to be more encouraged to farm individual plots, so that no national generalization can be made.

Economic factors--both commercialisation and lack of complementary resources--are the major reason for near-landlessness in Upper Volta. With optimism, ORD plans anticipate reaching but 15% of the farmers by 1980. Less than 5% currently use animal traction, and fewer use commercial fertilizer or pesticides. Agricultural credit is in the process of being expanded, but administration of credit programs is poor. Government prices compete with those of the strong traditional merchant classes; two government organizations--OFNACER and the Sou-Comte--compete with each other; and the only really efficient marketing is for cotton by the French mixed company CFDT, which remits profits to France. Financing by donors seems not to be a problem. It is management capabilities and price policy coordination at the national level which is lacking. Combined with very limited infrastructure and production inputs available to farmers, this is a major reason why farmers are not motivated to increase production.

Consequences for Each Category and for Aggregates

Migrants

Data are not available for urban migration within the

country. Gregory reports that the majority of migrants to the Ivory Coast and Ghana are in the rural sector as plantation workers. The average daily wage is sixty to eighty cents.[8] Voltaic emigrants to Ivory Coast and Ghana are usually found in the lowest economic stratum while those who migrate to the cities have only a slightly greater opportunity to enter middle or upper level occupations.[9] Although there are agreements between Upper Volta and Ivory Coast regarding working conditions of migrants, as most Voltaics migrate without assistance from the government recruiting office, they do not always enjoy the benefits. There appears to be a loose network of information for assistance and mutual aid among Voltaics residing in various towns on the coast.

The sending area--such as the Mossi plateau--does not benefit from the migration either. Gregory notes that migrants do not normally return to their homes to invest in rural development; not do they return with new skills which are applicable to the rural Voltaic environment. Although data are very sketchy, it appears that case remittances sent by migrants may range from $50 to $75 per migrant per year. These remittances may be responsible for inflation within the village economic structure (particularly of bride prices) and for the creation of a consumer mentality among rural Voltaics. Data originating in other parts of West Africa indicate that migration of young people in their most productive years may actually result in a net drain on the rural economic structure.

It should be noted that for however long a migrant may stay in another country, he/she always claims nationality by place of birth (or parents' birth) and that conceivably a Voltaic could return fifty years after migration and receive land, assistance in housing, etc. Thus loss of minimal assets is not usually a problem.

Cultivators

The vulnerable farmers, even if they had access to agricultural extension services, might not be economically able to undertake to improve production due to small or parcelled landholding. Credit for animals and plows generally requires the initial assumption of a $150 - $300 debt, and if the farmer cannot assure substantial increase in either cash crop production or in food crop surplus (which is generally the case on the Plateau) he/she may be unwilling to assume the debt. Work in the rural sector in actual farming occupies approximately half of the year; migration is generally the primary option for the other six months. A 1973 study of three villages on the Plateau revealed an average net disposable case income of $2.13 per capital.[10]

Although the various time/budget studies underway have not yet yielded any usable data, other surveys have found that women in the vulnerable farmer category may suffer the most in that they cannot migrate or even hope to migrate due to familial responsibilities. As women in the Mossi and Gourounsi groupings have access to land only through their

husbands, if husbands decide to increase land under cultivation in order to employ new technologies women may lose their rights. Bamal notes in the Lela (Gourounsi) grouping that women are being forced to farm their own individual fields as husbands can no longer pay their taxes, and women must have means of earning money.[11] Men generally have greater access to improved technologies and ORD credit packages than do women.

Degradation of the environment is important on the Mossi plateau. Bamal cites a vicious circle in that people initially over-extend their fields which results in an overextension of work by the farmers which results in poor health.[12] As land pressure has increased, these fields are not being put to the estimated 20 year fallow needed to regenerate their nutrients and structure. Poorer land means poorer harvest and poorer health. Also, trees are being cut more and more for firewood as population needs increase, also contributing to erosion.

Mutual assistance is carried out through the traditional kinship patterns, as in all other groups in the country.

The marginal or constrained cultivators may have more access to land, and might be economically able in theory to undertake improved technological practices if they had access to these practices and if their marketing/commercialisation practices warrented it. The Eicher report cites an estimate that only 53% of the farmers in the southern

sectors of the East could amortize the necessary investment.[13] Lack of access is characterized primarily by remote location, although political choices certainly play a role in deciding where to focus programs and place extension agents. Although Senechal found approximately 25% of annual income came from off-farm sources among the male farmers he studied, it would be higher among the constrained group (approaching 50%).[14]

Pastoralists

Little information is available for the pastoralists of Upper Volta. Degradation of the environment is important; one AID report indicated that the carrying capacity in the Sahel (North zone was 10-12 head/km^2 but in 1966-69, stocking rates were estimated at 16 head of cattle and 30 sheep. goats/km^2 (even assuming a 25% loss during the drought, the zone is overstocked).[15] The Fulani are required to remain above the 12.5 latitude due to tsetse infestation, and overstocking in the Central and Western zones above this line are already occurring. Thus isolated on a relatively fixed portion of land, the Fulani may have to adopt new management practices (and cultural values) if they are to maintain their pastoral life-style.

The primary nutrition of the pastoralists is provided by milk and meat (small ruminants). With government policy promoting the production of beef cattle, and encouraging restriction of cows, nutrition may fall off. This is due

primarily to lower milk availability, but also loss in milk-grain barter with farmers.

Public Policy Measures

As of 1973, the government had not yet recognized rural-urban migration as a major problem, although an office--the Office Nationale de Promotion de l'Emploi--was established to study the emigration problem. The office has recently conducted a rural employment survey and is tackling the problem of creating wage employment and alternative income streams in rural areas. Among the possibilities are the expansion of rural artisan training programs currently conducted by the ILO at two centers (for blacksmiths, carpenters, masons, and well-diggers, and a small-motor repair course was added in 1975); increased craft production both for the rural and urban market; and small enterprise, such as motorized mills, silk production, and more efficient food processing technologies. There are a few rural works projects supported by the World Food Program, but these deal mostly with farmers rather than migrant labor.

There is a major government policy on enhancing the quality of rural life, as the national character of the Voltaic is that of an "independent farmer." Major support of the ORD programs in extension of technology and credit to farmers exists. A national educational reform emphasizing vocational training aimed at rural life-styles is underway; and training of paraprofessionals in social service and health (rather than construction of large hospitals) is in

process. There was supposed to be a new national Five-Year Plan delineating all of the above, but the changing political scene has delayed it.

Inherent in the national emphasis on rural activities is the concept of community development, according to which villages should organize themselves to satisfy their own needs. Thus, on top of traditional organizations there now exist several thousand "groups" and "pre-cooperatives" with the purpose of improving agricultural production, increasing income, and generally improving rural life. Sedentarisation of pastoralists and fixed fields under rational rotation are part of these schemes. This realocation/consolidation of land has as yet not produced any major problems, but may in the future.

One major government scheme--the Volta Valley resettlement scheme--will affect vulnerable farmers to a large extent. The WHO is currently managing a multi-donor effort aimed at eradication of the black fly that carries onchocerciasis (river-blindness) from seven countries in West Africa. Upper Volta is the area most affected; it is estimated that 10% of the land is infested by the fly, and that roughly one-million people have the disease. The Volta Valley Authority (AVV) has been given almost autonomous authority over resettlement of seven zones in the cleared areas, and to date has resettled some 447 families (roughly 5,000 people). Most recruitment is done on the Mossi plateau in order to alleviate the severe land pressure.

Although there are major debates about the AVV program (especially among the international donors who finance most of the activities) it is sure to enhance life for some vulnerable farmers as it progresses. (It will also lead to major ethnic conflict in the West, where infested areas cover traditional Lobi land, and where the Lobi still carry poison bows and arrows and hate the Mossi.) One IBRD official has estimated that spontaneous migration into oncho-freed zones in the West already numbers 20,000, although his data-base is dubious. The AVV has not yet formulated a policy regarding potential conflict with spontaneous settlers, and this also may present a major problem.

Research Needs

The government, as previously mentioned, recently undertook a comprehensive national census which should be published soon. An agricultural census is also underway, and with the expansion of the ORD programs more data on size of holding, production, etc. should be available. Based on this report, more research on rural-urban migration is called for, especially regarding skills of the migrants vis à vis the urban labor market. More in-depth micro-level studies especially among the farmers on the Mossi Plateau should be undertaken to ascertain potential for development, either through farming or other rural enterprise, and to ascertain the extent of land pressure in the area. Economic anthropological studies should be

undertaken with regard to the Fulani, in order to determine more precisely the problems that this group is encountering as its rangelands decline.

In all, research about Upper Volta is scattered and generally of poor quality, although the French organization ORSTOM and the Voltaic CVRS have several excellent reports. The Eicher team emphasizes the necessity of applied or action research, and we concur. Emphasis should be on various facets of agricultural production, including labor allocation.

Table 1

STATISTICAL INCIDENCE BY SUB-REGION*

TOTAL THEORETICAL POPULATION, 1976:	6,273,000
TOTAL RESIDENT POPULATION, 1976:	5,847,000
Total URBAN (including 2 major cities & 12 regional centers)	295,000 (5%)
Total RURAL:	5,552,000 (95%)
Rural Labor Force:	2,792,000

Sub-Region	Rural Population, 1976	
North	Total Rural	285,000
	Fulani	235,000
	Tuareg	30,000
	Other	20,000
East	Total Rural	595,000
	Mossi/Bissa	325,000
	Gourma	240,000
	Fulani	30,000
Central	Total Rural	13,094,000
	Mossi	2,000,000
	Various	649,000
	Gourounsi	295,000
	Fulani	150,000
West	Total Rural	11,578,000
	Marka/Samo	360,000
	Degara/Lobi	350,000
	Bobo	330,000
	Senufo	230,000
	Mossi	150,000
	Fulani	150,000
	Other	8,000

*The table above does not include the migrants. The Five-Year Plan, as well as various other writer, discuss them simply as "Permanent," "Temporary," and "Seasonal." There is little information which can be extrapolated to arrive at whether they are in urban or rural areas. Yet it is an important enough phenomenon that we include the Five-Year Plan figures here:

Permanent Migrants, 1960	250,000
Additional Permanent Migrants since 1960	176,000
Temporary Migrants, 1976 (under 5 years)	204,000 (of whom 95% are from rural areas)

Notes

1. International Bank for Reconstruction and Development (IBRD), Upper Volta: Black Volta Agricultural Development Project, Washington, D.C.: IBRD, August, 1973, p.3. [Estimates of per capita income vary greatly by the exchange rate used. In international reports it is generally set at $60 - $75. Based on various micro-level data, however, I find this lower rate used by the Bank quite reasonable for the rural sector.]

2. Gregory, Joel Wayne, Underdevelopment, Dependency and Migration in Upper Volta, Ph.D. Thesis, Cornell University, 1974, pp. 160-167.

3. Gregory, op. cit., p. 75, citing MEDIAFRIC, L'industrie africaine en 1970, vol. 2, (Paris, 1970?), p. 352.

4. Ibid.

5. Bureau de Travail International Programme des Emplois et des Competence Technique pour l'Afrique (BIT/PECTA), L'Emploi en Haute Volta, Report prepared for the Comite Inter-Etats de Lutte Contre La Secheresse au Sahel (CILSS), Daker, February, 1977, p. 20.

6. Sharpston, Michael, Personal communication, July, 1976.

7. U. S. Department of State/Agency for International Development, Development Assistance Program, FY 1975: Upper Volta & Niger, Washington, D.C.:Agency for International Development, March, 1975, p. D-7 and D-49.

8. Gregory, op. cit., p. 179.

9. Ibid., p. 180-181.

10. ORSTOM, Aspects Milieu Mossi Rural (Ouagadougou: ORSTOM, 1970?).

11. Bamal, Henri, Tiogo: Haute-Volta (Ougadougou: ORSTOM, 1968), p. 48.

12. Ibid., p. 57.

13. Eicher, Carl K.; Sargent, Merritt; Tapsoba, Edouard; and Wilcock, David, An Analysis of the Eastern ORD Rural Development Project in Upper Volta: Report of the M.S.U. Mission, (East Lansing, Department of Agricultural Economics, Michigan State University, January, 1976), p. 65.

14. Senechal, Jacques, Espace et Mobilite Rurale en Milieu Soudan-Sahelian: Le Changement dans l'Isolement (Gourma du Nord-Haute Volta). These de 3eme cycle, Ecole Practique des Hautes Etudes, Centre National de la Recherche Scientifique, Laboratoire de Sociologie et de Geographie Africaines (L.A. 94), Paris, et ORSTOM, Paris, 1975, p. 98.

15. U. S. Department of State/AID, op. cit., p. D-36.