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**WOMEN IN DEVELOPMENT**

**MONOGRAPH**



**INVISIBLE FARMERS:  
WOMEN  
AND THE CRISIS  
IN AGRICULTURE**



OFFICE OF WOMEN IN DEVELOPMENT  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, DC 20523

The Women in Development Office was established within the Agency for International Development in 1974 in response to an amendment to the U.S. Foreign Assistance Act. The U.S. Congress required that U.S. bilateral aid "be administered so as to give particular attention to those programs, projects, and activities which tend to integrate women into the national economies of foreign countries, thus improving the total development effort." The primary function of the Women in Development Office is to promote, encourage, and assist efforts to incorporate Third World women's needs and concerns into AID's programs, so that women may become equal partners in the development process. Specifically, the Women in Development Office supports activities which increase the economic productivity of low-income women in less developed nations. Currently the Office funds technical assistance projects, primarily to educate women in practical income generating skills. It also supports those activities which recognize rural women's major role in agriculture and responds to their energy and technological needs. The Women in Development Office maintains a Resource Center where a wide variety of materials are collected and disseminated. For further information on AID's Women in Development program contact:

Office of Women in Development  
Agency for International Development  
Washington, D.C. 20523

I N V I S I B L E F A R M E R S :

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EDITED BY: BARBARA C. LEWIS  
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## EDITOR'S INTRODUCTION

I. Women's Invisibility in Rural Development Planning

The "invisibility of women" in the eyes of government policy-makers, historians and social scientists has been widely noted (O'Barr 1975; World Bank 1979). But nowhere is the phrase more apt than with regard to agricultural policy planning. Women provide a large and vital share of the labor in most Third World agricultural systems. Indeed even where women appear to contribute less than half of the labor hours devoted to farming, their contribution is essential to agricultural production. In some areas, extensive male outmigration results in a female majority among cultivators. The essays in this volume document the extensive contribution of women to agricultural production. The authors also show how the invisibility of women farmers is compounded by inaccurate data, based on inappropriate definitional categories and on faulty methods of data collection.

The essays in this volume emphasize the gains of integrating women as producers into agricultural development. While women are active in all types of cultivation, they are commonly responsible for cultivating the food consumed in their own communities and in their countries' towns and cities. The priority assigned to export crops generating, first, wealth for colonial powers and, now, foreign exchange for Third World governments, plays a significant role in the current Third World food crisis. Capital, technology, extension assistance and male labor have commonly been deployed to increase export crop production. Food for

domestic consumption has frequently been relegated to peasant women, overworked but underproductive.

The failure to recognize women's extensive agricultural activities has great costs. When agricultural planners overlook women's labor inputs, they necessarily fail to anticipate crucial inelasticities in the existing agricultural labor force and to build in crucial incentives for project participants. Thus the project's success is endangered. But where women are implicitly relegated to production of food for domestic consumption, the costs, while not perhaps immediately manifest in project results, are more devastating. The widespread crisis in food production for domestic consumption--causing grave nutritional disorders, increasing shortfalls in domestic food supplies, spiralling food imports in agricultural economies, foreign trade deficits and fiscal disorders--blocks development and threatens survival in many Third World nations. The historical patterns of inattention to domestically consumed food crops is inextricably bound to the marginalization of women agricultural producers. Women, primary providers of food consumed locally and nationally, have been invisible in development programs, but they have felt the impact of land and capital resources diverted from food production to industrial and export sectors. The integration of women producers into agricultural development efforts increases production generally. The case for recognizing and assisting women farmers is most stark regarding food for domestic consumption.

The inequitable impact of development processes and of development assistance programs and the resultant deepening of social stratification has been widely discussed. Although proponents of equity in development have argued the need to ensure that the benefits of development planning

reach rural populations, peasants, and the poorest members of peasant communities, they have not always recognized the legitimacy of rural women's claim to those benefits. Yet rural women's claim is justified both by the marginalization of much of women's productive activity and by the negative impact of broad development processes upon them. Women are frequently consigned to the least rewarding tasks and crops. Often they neither control the goods they produce nor benefit from the labor they contribute. Land and resource pressures resulting from the commercialization of agriculture have caused rural women in many areas to lose economic security and autonomy. The same processes may result in increased labor burdens for women. Food cultivation and food processing for family use and domestic sale are undermined when women are relegated to the least productive land and when women walk ever greater distances to work their plots of land, to collect firewood, or to fetch water. The results are clear: by far the most significant health problem of women world wide is malnutrition (Elair 1980).

Equal access for women and men to the benefits of agricultural growth and rural development is logically distinct from increased productivity, just as greater productivity is not always coterminous with increased food supplies, improved nutrition, greater equality between classes, between men and women or other goals. All careful planning recognizes the variable outcomes for each of several goals and the need to optimize trade-offs between competing goals. Yet this common insight has rarely been extended to the analysis of how agricultural innovation impacts upon women in their productive as well as their reproductive roles. Such an analysis, when undertaken, reveals the considerable congruence between productivity goals (increasing national income and food supplies) and equity (improving

women's productive capability and their disposition of their produce relative to men). For example, effective policy requires not just an accurate understanding of women's agricultural inputs but also of their corresponding benefits. Some schemes overlook that women's labor is essential to a given farming system. But others, while recognizing women's labor inputs, assume that women will continue to contribute their labor under conditions changed by the proposed reorganization of resources. Beyond an accurate assessment of time use patterns for both sexes, an understanding of a community's internal social organization and the exchanges among its members which make it work, is essential. All labor productivity, including women's, is enhanced by adequate incentives.

II. Rural Women As an International Issue: World Conference on Agrarian Reform and Rural Development, Rome 1979, and the Mid Decade Conference on Women, Copenhagen 1980

At the World Conference on Agrarian Reform and Rural Development (WCARRD), held by the UN Food and Agricultural Organization in Rome 1979, the US delegation was among the strong advocates of recognizing women's interest in rural policies. The papers in this volume were contracted by the Office of Women in Development of the US Agency for International Development (AID) to provide background to that delegation.

This conference was not the first time women have received the attention of international development agencies. For many years a number of the United Nations specialized agencies have focused on women's reproductive functions, notably in family planning, in family health and nutrition, and in education. Rural women have benefited particularly from international efforts to improve village water supplies and domestic food supplies, from

medical programs and from efforts to improve maternal health and childcare.

In the 1970s, the status of women has achieved a new level of international visibility. International Women's Year, beginning the United Nations Decade for Women, was marked by the 1975 conference in Mexico City. This added a new dimension: women's issues received direct and uninterrupted attention. The argument that economic development will not remove inequalities between women and man, and may even increase these inequalities, gained currency. Thus it was deemed essential by advocates of women in development that international development practitioners seek to ameliorate women's position directly, rather than to subsume women's interests under the larger umbrella of community and societal development.

The United Nations Decade for Women appears to have elicited a more serious attempt among development practitioners to explore and address women's needs, including the particular problems of rural women. By 1980, some thirteen of the United Nations' specialized agencies (including the ILO, UNESCO, UNDP, WHO, UNFPA, and UNICEF) had programs related to rural women (United Nations 1980). Many of these maintained the older emphasis on women's reproductive roles, while others branched out to support women's productive activities: experimental credit projects and assistance related to food processing and other cottage industries generating income for women. International Women's Year also prompted the formation or revitalization of governmental women's bureaus or agencies in most countries. Whatever their budgetary or political weaknesses (see Staudt below), these governmental machineries serve as a focus for women's concerns and as organizational bases for subsequent efforts by non-governmental organizations and governments alike.

As this volume suggests, these concerns cannot be adequately addressed



without a fundamental redefinition of women's role in rural production. Thus the Rome Conference (WCAERD) became the focus of efforts by governmental women's bureaus and non-governmental organizations (NGO's) to document development practitioners' previous neglect of women farmers and the resultant costs in terms both of equity and of national development. These eight papers, commissioned by the Women in Development office of AID, were part of that office's effort to gain recognition within the US delegation and the international community, of women's vital place in rural development. Thus these papers figured in the dialogue within AID as well as with concerned NGO's such as the Hunger Coalition. They continue to fill an important gap in the literature on women and agricultural development.

These eight papers address diverse questions regarding women in rural development, including forestry, off farm rural employment, agricultural extension, legal status and access to land and organizational and political resources. They vary in rhetorical style and normative emphasis as well as in substance. Some emphasize materialistic theory while others combine cultural and material explanations of women's status. Some posit economic autonomy for women as the primary goal, while others stress security and improved material well being. Some link women's position in Third World countries with the analysis of North South relations put forth by advocates of the New International Economic Order (NIEO), while others focus more narrowly on the need to alter agricultural planner and project design within the current parameters of foreign assistance.

Yet they all document the need for action to assist women in their agricultural activities. Taken as a whole, the volume underlines the extent to which rural women have been marginalized in all regions of the

world. The papers relate how developmental efforts such as agrarian reform, extension services and international relief have exacerbated the crisis in agriculture by ignoring women's need for productive resources. And they show why the type of development assistance currently channelled to rural women is wholly inadequate to advance equity for women or to reverse the crisis in agriculture: the full integration of women as producers into rural development efforts is essential.

The World Conference on Agrarian Reform and Rural Development made substantial progress toward these ends. The recognition of women as participants in the rural labor force and their demand for equity is seen in the Declaration of Principles adopted by the participating governments at the Conference. The section on Women in Development articulates the need to provide rural women with the means by which to increase productivity and to acquire benefits commensurate with the labor they routinely contribute. It also calls for legal action permitting women full and equal access to land and to other productive resources, to relevant agencies, to economic and political associations, to public services and to educational institutions. Because of its specificity and its scope, the WCARRD section on the integration of women into rural development merits full reproduction:

Integration of Women in Rural Development (from WCARRD  
Declaration of Principles)

Recognition of the vital role of women in socio-economic life in both agricultural and non-agricultural activities, in accordance with the goals of the United Nations' Decade for Women, is a prerequisite for successful rural development planning and programme implementation. Rural development based on growth with equity will require full integration of women, including equitable access to land, water, other natural resources, inputs and services and equal opportunity to develop and employ their skills. There is also an urgent need to expand knowledge and statistical data on all aspects of women's roles in rural activities and to disseminate this information in order to promote greater awareness of women's role in society.

Governments should consider action to:

A. Equality of Legal Status

- (i) Repeal those laws which discriminate against women in respect to rights of inheritance, ownership and control of property, and to promote understanding of the need for such measures.
- (ii) Promote ownership rights for women, including joint ownership and co-ownership of land in entirety, to give women producers with absentee husbands effective legal rights to take decisions on the land they manage.
- (iii) Adopt measures to ensure women equitable access to land, livestock and other productive assets.
- (iv) Repeal laws and regulations which inhibit effective participation by women in economic transactions and in the planning, implementation and evaluation of rural development programmes.
- (v) Ensure full membership and equal voting rights for women in people's organizations such as tenants' associations, labour unions, cooperatives, credit unions and organizations of the beneficiaries of land reform and other rural development programmes.

B. Women's Access to Rural Services

- (i) Provide agricultural inputs and social and economic services to women through non-discriminatory access to existing delivery systems.
- (ii) Establish special recruitment and training schemes to increase the number of women in the training and extension programmes of development agencies at all levels, including professional fields from which women have been traditionally excluded.
- (iii) Broaden the range of agricultural training and extension programmes to support women's roles in activities of agricultural production, processing, preservation and marketing.

C. Women's Organization and Participation

- (i) Promote collective action and organization by rural women to facilitate their participation in the full range of public services and to enhance their opportunities to participate in economic, political and social activities on an equal footing with men.
- (ii) Establish systems, with the involvement of women's organizations, to identify and evaluate obstacles to women's participation and to monitor progress and coordinate action,

especially with regard to agricultural services, educational services and school enrolment, health and other social services and employment and wages.

- (iii) Revise procedures for the collection and presentation of statistical data for the identification, recognition and appreciation of the participation of women in productive activities.
- (iv) Promote research and exchange of information and establish and strengthen programmes to facilitate and ease the burden of women's household work, such as day care centres, in order to permit their greater participation in economic, educational and political activities. Also promote understanding of men's responsibilities to share household duties.

#### D. Educational and Employment Opportunities

- (i) Ensure educational opportunities of similar quality and content for both sexes and provide special incentives such as reduced fees for increased enrolment of girls and women in schools and training programmes.
- (ii) Promote income-generating opportunities for women and guarantee equal wage rates for men and women for work of equal value.
- (iii) Establish and strengthen non-formal educational opportunities for rural women, including leadership training, instruction in agricultural as well as non-farm activities, health care, upbringing of children, family planning and nutrition.
- (iv) Evaluate and take steps to minimize the possible negative effects on women's employment and income arising from changes in traditional economic patterns and the introduction of new technology.

(Source: From Part I: Conference Decisions, Declaration of Principles, IV. Integration of Women in Rural Development, the World Conference on Agrarian Reform and Rural Development, Rome, 12-20 July, 1979, Food and Agricultural Organization of the United Nations.)

### III. The Eight Essays

This volume's papers are not significant solely as elements of the international process or American aid policy. They are also well documented expositions of women in rural development issues, affording considerable

depth on certain problem areas (forestry, extension services, participation and organization, land law and access to land and rural off farm employment) as well as more general formulations of existing policy and alternatives. Each of them includes a survey of relevant research, a critical evaluation of women's place in the economic activities in question and the impact of development processes and of particular projects upon women. Each concludes with a succinct and clear set of propositions concerning how project design and execution must be altered in order to integrate women into rural development. And finally each provides an invaluable bibliography of recent research.

The collection opens with Rae Lesser Blumberg's "Females, Farming and Food: Rural Development and Women's Participation in Rural Production Systems." This is a broad-ranging and theoretically ambitious essay providing a provocative and challenging perspective on the more specific articles that follow. Using a three part focus on women as rural producers, as property controllers and as members of society, Blumberg applies to women a framework which has recently gained considerable currency among students of international political economy. She argues that, although Third World women may provide much and even most of the labor in agricultural production, only when they also control the means and fruits of production will they attain improved status as social and political beings. Combining an evolutionary perspective grounded in anthropology and the world economy approach widespread among historical sociologists, Blumberg argues that as societies have undergone technological development and increased integration into international markets, rural women in those societies have been progressively marginalized. Challenging prevailing assumptions about modernization and development processes,



the author posits a relationship between class and sex stratification which she documents with regard to migration, increasing scale in agricultural production, the growth of wage labor, landlessness land reform and settlement schemes.

Although Blumberg is distinctive in her effort to present a parsimonious and inclusive theory, she also presents a number of propositions designed to guide practitioners in policy and project design. For example, derived from her analysis of who benefits from increased production, she underlines the importance of positive motivation for rural women. She also documents the gaping lacunae and distortions in existing data on women's contribution to agricultural production. Her plea for the data necessary to understand the impact of social change on rural women and agricultural systems is complemented by a detailed list of the questions which researchers should ask.

Frances Hill, a political scientist whose earlier field research and writing is on development in Tanzania, has recently undertaken extensive research on American farm women. This recent work, exploring changes in American farm families' kinship structure and in American policy, provides the empirical basis for the comparative analysis contained in "Women in Agriculture: American Farm Women in Global Perspective." Hill shows how the transition from the stem to the nuclear family has increased the insecurity and dependence of American farm women who must, like women in all patrilocal societies, find a niche in their spouse's kin group. This in turn is related to the prevailing property and inheritance laws which motivate fathers to leave farms to their sons, bypassing their wives, in order to avoid inheritance taxes. The second principle public policy area affecting women's status which Hill addresses is the American system

of agricultural extension services. Often praised for the assistance they have long provided to American farmers, these programs have, since early in the twentieth century, reflected the national ideal of wife as homemaker. Designed to provide information and expertise to male farmers, these programs have offered home economics to American farm women. Hill's contemporary data show that, despite these institutional and cultural pressures, American farm women are highly informed regarding agricultural techniques and financial management. Yet theirs is an uphill battle because of the sex bias in pertinent public institutions.

Hill's analysis provokes reflection on two levels. She provides trenchant criticism of modernization theory as it has been elaborated in the past two decades. American progress and the trajectory envisioned for developing countries must be reevaluated in the light of how the incorporation of American agriculture into the modern legal-bureaucratic order has failed to serve women. Of immediate practical relevance is the widespread institutional transfer of United States' model of agricultural extension to developing countries: these institutions, damaging to women in the American context, are particularly harmful and inappropriate in the Third World context where women are often the primary agricultural labor force.

In the final portion of her essay, Hill underlines numerous commonalities between American farm women and those in developing countries, which she sees as explained by commercialization and concentration in business. She does not see these trends as irreversible, as her concluding recommendations regarding the design of agricultural education and technical assistance make clear.

Like Hill, Jacqueline Ashby reports that agricultural extension efforts have had a negative impact on Third World women. In "New Models for Agricultural Research and Extension: The Need To Integrate Women," she utilizes her training in agronomic research and project design and social systems analysis to document how the invisibility of women in past programs has undermined their status and productivity. She also discusses the components of corrective extension programs at a high level of specificity and grapples seriously with cost factors and cultural constraints.

Ashby's point of departure is that effective access to all rural farmers is required if agriculture-led strategies are to be implemented and the existing biases in favor of the progressive farmer corrected. Within this perspective, she surveys a number of development efforts, underscoring Hill's thesis regarding the pervasive influence of the home economics-home science approach to women. She presents data on agricultural labor force participation and decision-making to inform her discussion of alternative program design and implementation. Like Blumberg, she notes the data gaps regarding the work of rural women region by region. Her specialized training emerges most usefully in her discussion of evaluative research on remedial attempts to improve extension staff quality and staff-clientele communications. Her recommendations are enriched by her awareness of barriers to optimal solutions, such as cultural restrictions rendering male extension less effective with female than with male peasant farmers on the one hand, and the acute shortage of female extension staff on the other. She weighs the benefits of seeking fully trained degree-holding female staff versus trained paraprofessionals recruited from among uneducated village women in a particularly instructive

manner.

Christina Jones' "Women's Legal Access to Land" is a rare and valuable article on a topic particularly underdocumented. A lawyer with a doctorate in comparative law, Jones assembles examples of land reform legislation from such diverse sites as Mexico, Iran, the Philippines, Kenya, India and Tanzania. She shows how significant precedential court decisions and administrative discretion shape the impact of legislation on women. Jones distinguishes between ownership and use rights in traditional law, and then demonstrates how land reforms have in some cases removed what economic security and independence women enjoyed under traditional law. Reformist modernizers in parliaments, government bureaucracies and on the bench, seeking variously to ensure equality and productivity among male farmers, to ensure maintenance of dependent family members, and to preserve the family, have altered traditional codes in ways unjust to women. The legal means which reformers presume to promote these goals, as well as the relationship between these goals and women's interests, require scrutiny.

Particularly valuable are Jones' comparisons of countries' actual statutes governing the same legal questions in which she shows how one statute better serves women's vital interests than the other. Thus her criticisms and suggested reforms are not based on hypothetical solutions but rather on existing alternatives whose workability and impact can be empirically explored. Jones also uses existing sociological research effectively to explore the relationship between legislative intent and legislative impact: thus Moroccan family law, justified by its presumed stabilizing effect on the family, appears in fact to promote marital instability.

Jones treats the complex and sometimes obscure interaction between statutory law and legal precedent in a lucid manner. She makes clear that a statute's impact cannot always be assessed in vacuo. Thus she uses case law to show how women of differing familial status--married or divorced, widows, women with and without sons--are differently affected by a given law. Jones is not only persuasive regarding the crucial importance of legal access to property, but also shows the effect of legal principle and underlying assumptions, and how the legislator, judge and land reform official all determine the law in practice. The reformer can thus see several avenues through which law can be changed, whether improved or subverted.

Constantina Safilos-Rothschild analyzes another public policy arena and argues that political empowerment is a crucial component of development. In "The Access of Rural Girls to Primary Education in the Third World" she documents first, the extent of sex bias regarding access to primary education by region, second, institutional, cultural and familiar sources of that bias, and third, the numerous and varied ways education promotes both women's status and rural development.

The principle of equal access to education surely enjoys more widespread acceptance and formal governmental support than the principle of land ownership rights or access to agricultural extension benefits for women. Yet the numerous forces compounding sex bias and the cycle of poverty are less widely appreciated. Safilos-Rothschild argues that the realization of equality between the sexes in education requires far more than formally equal access to schooling. Girls' greater household work loads and lower nutritional levels affect school performance while parental concerns with chastity, the frequently great distances between home and school, and



parental expectations of adult earning power lower girls' chances of attending school. The author argues that public policy must address the multiplicity of social, economic, and cultural barriers undermining educational achievement among the rural poor and rural girls through a variety of strategies. For example, school calendars can be adapted to local crop cycles, and female role models in teaching and administration will alter the attitudes of parents and of girls themselves. And village schools built and maintained by villagers will be accessible to girls and truly valued by local populations. The author argues that rural girls' educational needs are advanced by policies aiding all poor rural children as well as those specifically benefiting girls. Her concluding policy recommendations reflect this view.

Ruth Dixon's "Jobs for Women in Rural Industry and Services" addresses another aspect of rural poverty: the progressive underemployment and disemployment of rural women due to land scarcity and compounded by commercial concentration and capital-intensive development. In her survey of women's employment, Dixon assembles and carefully documents available statistics by country and by region, and then shows how the categories used in data collection systematically distort reality. These categories fail to reflect the multiplicity of economic activities rural women, particularly the very poor, are likely to pursue. Women categorized as employed in agriculture or as unemployed frequently often, in fact, combine cultivation with petty trading and manufacture in order to ensure their survival.

These survival strategies of the very poor are often overturned by the innovations of private businesses and/or national and international developers. New technology accompanied by increasing scale in these

commercial activities may increase social inequality, so that ostensible progress means disaster for the economically marginal, frequently women. Most arresting are Dixon's examples of the elaborate arrangements by which the very poor exhaustively use local products (often regarded as wastes by developers) and locate every conceivable market: these illustrations are of particular interest to those concerned with intermediate technology and energy efficient activities. Dixon's analysis elaborates the consequences, unintended and unnoticed, of development initiatives and challenges planners to put the vast existing labor pools to humane and productive use.

Much of Dixon's illustrative material is from parts of Asia where landlessness is most pronounced and her specific suggestions for increasing employment opportunities by introducing new rural industry, innovative ways of processing local produce and of combining local resources are accompanied by largely Asian examples. But the underlying warning is clear: land is a finite resource everywhere and much apparent development in agriculture and commerce can swell rural unemployment and inequality. Dixon's arguments have wide application, for nowhere in the Third World can agricultural development be divorced from the innumerable manufacturing and marketing activities by which "peasants" survive. Rural development must maintain and increase off-farm employment possibilities as well as increase agricultural production and on-farm employment opportunities. Dixon's policy recommendations call for more accurate analyses of these needs and include numerous suggestions for policies and projects consistent with this view of societal development. (See also Dixon 1980 for an important overview of policy evaluation and policy impact related to women.)

"Women's Organizations in Rural Development" by Kathy Staudt argues that political empowerment is a crucial component of development. Development policy must promote this elusive goal if development efforts are to have an enduring impact. Through a survey of research on elite and mass political participation in industrialized and Third World countries, Staudt documents the disproportionate influence of men and analytically explores its components. By focusing on organizational participation rather than electoral participation commonly studied by political scientists, the author achieves a conceptually rich and more widely applicable understanding of political participation.

Organized, collective action is the avenue through which rural women can ensure their economic advancement and governmental responsiveness. Staudt then addresses two central and interdependent aspects of this process: the achievement of internal group cohesion and of external access to societal power brokers and governmental decision makers. To provide empirical evidence regarding these processes and to provide guidance for development practitioners, Staudt sets forth an unusually careful and complete survey of relevant social science research. The result is a valuable statement regarding those variables contributing to effective organization which can be systematically manipulated in development efforts.

Staudt also addresses two debates salient among students of women and development: the desirability of sex-segregated versus sex-integrated strategies for political empowerment of marginal groups and the potentially negative impact of external intervention in socio-political processes. She makes a carefully reasoned case for sex-separate strategies among Third World rural women. And she enumerates the ways external

intervention can undermine the organizational effectiveness of projects' presumed beneficiaries. A solution proposed--channelling aid through non-governmental organizations, rather than governments--merits particular attention. Thus Staudt addresses one of the most difficult questions of development planning--how to promote the political empowerment of the less privileged--and uses social science with full awareness of the many pitfalls of political and social engineering.

"Women in Forestry for Local Community Development" by Marilyn Hoskins is an appropriate concluding essay because of its emphasis on programming in the pressing but little recognized area of forestry. Because forestry projects in developing countries have been conducted largely by foresters without contact with, or input from, local groups, Hoskins makes a two-pronged argument. First the urgent forestry needs of developing countries can only be met within the context of community development with community participation, and secondly, successful community forestry projects must recognize and include women's interests in forestry.

Unlike the other papers in this volume, Hoskins does not present a region by region overview or survey of the "state of the art." Rather she presents extensive illustrative case material drawn from her immediate experience in the West African Sahel, supplemented by examples from Asia and elsewhere. Her observations regarding the desirability and difficulties of community participation in the planning and execution of development projects, including her appended "Suggested format for a project management plan," are particularly pertinent to the development practitioner responsible for project implementation.

Although Hoskins is persuasive regarding the need for community



participation in development, she recognizes the inherent problems of attaining coordination and commitment. Because forestry projects typically take several years to mature for harvest, participants in community projects must wait a considerable time for their rewards accruing from their contributions of labor, land and material. Thus forestry projects face problems of incentives for community participation which are particularly acute. Hoskins illustrates how providing immediate money for food incentives for community participants can undermine community responsibility and commitment. Hoskins' thorough and careful discussion of incentives, collective and individual, and of delayed rather than immediate rewards, complements Staudt's preceding discussion of incentives and organized group action. Hoskins' suggestion that participants in all phases of a project make a formal and public commitment at the project's outset is a provocative response to this problem.

Ranging from forestry to rural industry, from agricultural extension to the shortcomings of land reform and their possible remedies, the articles in this volume widely document women's legitimate interests in agricultural development. The volume is not exhaustive. Nor can it offer a universally applicable operational prescription of how best to integrate women into rural development. Planning must respond to situational variables including the social organization of work (the sexual division of labor variously combined with family, clan or community groups), the ratio of men to women farmers (due to male or female out-migration), and the productivity or marginality of women's economic activity relative to men's (whether women specialize in commercial farming, domestic food production, manufacture or commerce). But operational

solutions must follow reconceptualization of the problem of rural development to include women as economic actors rather than as dependents, consumers and homemakers.

The data and analysis in these articles demand a restructuring of agricultural planning toward the dual ends of equity and productivity. The criticisms of existing practices are extensive and the challenge is considerable. But the Third World's need for agricultural development, and particularly for food consumed domestically is urgent. This volume marshals compelling evidence that rural women have a vital role to play in its resolution.

## REFERENCES

- Blair, Pat. Programming for Women and Health. Paper prepared for Office of Women in Development, PPC/FID. July 1980.
- Dixon, Ruth B. Assessing the Impact of Development Projects on Women. AID Project Evaluation Discussion Paper No. 8. Office of Women in Development and Office of Evaluation, PPC, AID. Washington, D.C., 1980.
- O'Barr, Jean. "Making the Invisible Visible." African Studies Review, Special Issue edited by Hafkin and Bay. Vol. 18, No. 3, 1975.
- United Nations. Women in Rural Areas, Item 8(b) of the provisional agenda. World Conference of the United Nations Decade for Women: Equality, Development and Peace. Copenhagen, Denmark, 14-30 July 1980.
- World Bank. Recognizing the "Invisible" Woman in Development: The World Bank's Experience. World Bank, Washington, D.C., October 1979.

Chapter One

FEMALES, FARMING AND FOOD: RURAL DEVELOPMENT AND WOMEN'S  
PARTICIPATION IN AGRICULTURAL PRODUCTION SYSTEMS

by

Rae Lesser Blumberg, Ph.D.



## I. Introduction

During the decade of the 1970s, two issues have become dominant concerns in the "mainline" international development community: (a) "development with equity," and (b) food. In this paper, I suggest that it is poor rural women who constitute the hitherto largely invisible but crucial common element--indeed, perhaps the ultimate determinant of success or failure--in guaranteeing both development with equity and food in the Third World.

To make this argument, we shall examine the present--and past--conditions and contributions of rural women in comparison with their men-folk. This comparison will include the relative position of women as (1) producers, (2) property-controllers and (3) people. The first involves the sex division of labor in the group's main economic pursuits. The second involves the sex division of resources, i.e., each sex's relative control over the means and fruits of production. The third involves the sex division of non-economic life opportunities and well-being. In previous work on a cross-societal paradigm of sex stratification (Blumberg 1974, 1978, 1979), I have suggested that women's relative economic power is the main determinant of their relative equality as people, regarding a wide variety of life options and aspects of well-being. Work, in and of itself, does not seem to enhance women's relative equality in "life options"<sup>1</sup>--although it does seem to be a prerequisite in most societies to women's acquisition of substantial economic power.

It was Ester Boserup who first suggested that the processes of Third World "development" (i.e., the combination of unplanned macro-economic trends in the world political economy and planned development policies

in various Third World countries) frequently have led to the greater economic marginalization of women (1970). In terms of the three factors listed above, such "development" often has had the general consequences of (1) increasing rural women's work load; while (2) decreasing their resource base (both absolutely and relative to their menfolk), and, consequently, (3) decreasing their well-being and opportunities as people. In turn, it will be argued, what happens to poor rural women profoundly affects both their country's agricultural system, and its general level of well-being.

The essay's five-part argument follows a brief overview of the development-with-equity and food issues. First, we examine how the overarching trends in the world economy and Third World development policies have affected the lives of the rural poor. Second, drawing largely on case studies, we explore how rural "development" has affected females' roles and resources in farming and food systems in Africa, Asia, Latin America and the Middle East. Third, we assess the discrepancy between the portrait of women in agriculture painted by the case studies and that painted in national and international statistics, and list the data required to test conclusively the proposed hypotheses. Fourth, human evolutionary history provides a baseline against which to evaluate the contemporary picture. We conclude with policy suggestions on how female contribution to farming and food systems may be (a) recognized, (b) preserved where threatened, and (c) enhanced for the purposes of achieving both "development with equity" and an equitable supply of food for the people of the Third World.

#### Development with Equity

The emergence of the development-with-equity issue has signaled the gradual demise of the "modernization" approach to development. That focus

stressed capital-intensive projects, used GNP growth as the measure and goal of Third World advancement, and assumed that development could be fostered almost without reference to the underlying social structure of the country or its position in the world economy. In contrast, the development-with-equity approach speaks to the question of "Development for whom?" It stresses the distribution of the economic pie, rather than its mere growth. Little more than a decade ago, development-with-equity was an isolated cry from the "periphery" (both the countries on the periphery of the world economy and the iconoclasts or radicals within the development "community"). Today it has been taken up in many quarters--even among the ranking development planners in the core countries themselves. It involves both an internal and an external perspective.

Core country development experts tend to be more sensitive to the internal ramifications of the development-with-equity issue, since evidence has been accumulating steadily that the combination of capital-intensive development projects and the seemingly inexorable trends in the world economy have been contributing to an increasing gap between the haves and have-nots within Third World countries. For the limited group of beneficiaries, the world economy-oriented pockets of development have brought the shiny imported toys of high technology and luxury-oriented consumer goods. For the many, it has meant labor displacement in the countryside and an ever-growing shortfall of jobs as urban industrialization fails to generate sufficient employment. One result of the changing relations of production is a swelling tide of temporary and permanent migration, of people searching for subsistence. Another result is soaring rates of landlessness and impoverishment, as the conversion to wage labor and the increasing concentration of land holdings proceed apace.

The chilling prospects implied by [these trends] can be more fully appreciated in light of recent estimates for Asia and Latin America that indicate that rural households below the "small farmer" category represent a majority of the labor force (Esman 1978: Tables 1-4). In Asia, the percentage of landless rural households ranges from 25 percent in Bangladesh to 41 percent in Java; marginal cultivators from 13 percent in India to 45 percent in Bangladesh. Combined landlessness and near-landlessness exceeds 75 percent in Java, Bangladesh and the Philippines. In Latin America the proportions of landlessness and near-landlessness ranges from 85 percent in Bolivia and Guatemala to 55 percent in Costa Rica. In Mexico nearly 30 percent of the rural households are headed by landless agricultural workers; in Brazil nearly half of the rural households are effectively landless. (Stokes, et al. 1979:65)

Current international statistics classify fully 800 million of the rural poor as "destitute" (FAO/WCARRD/INF.3, 1979:i) and their numbers are expected to increase rapidly (IBRD 1977, estimates that by the year 2000 about 1.1 billion people in the non-communist developing countries will be suffering from absolute poverty). And many statistics document the widespread erosion of real income:

A study of rural areas in the Philippines indicates that real wages have decreased 50 percent since 1957 (Kahn 1977); in Mexico, de Alcantara (1976) estimates that real wages declined by more than 15 percent between 1950-1970; other studies of West Malaysia (Lee 1976) and Egypt (Radwan 197 ) indicate a similar increase in rural poverty. (Stokes, et al. 1979:65)

Recognition of these facts and the potentially massive instability that they engender has prompted a new concern with development projects aimed at filling "basic needs" (for example, AID's "New Directions" approach).

But the development-with-equity issue has an external component as well. In fact, many advocates of this position claim that the negative tendencies within countries documented above are the result of the increasingly unfavorable position of the non-oil exporting Third World countries vis-à-vis the developed nations, particularly the industrial

capitalist ones. The external emphasis of the development-with-equity issue is symbolized by the call for a New International Economic Order. As the "second decade of development" draws to a close, the gap between rich and poor countries has been widening unrelentingly. Most of the non-oil exporting developing countries remain suppliers of a limited range of primary export (usually agricultural) commodities under increasingly unfavorable terms of trade. This "unequal exchange" includes the widening gap between prices of the developing world's primary exports and those charged by the core countries for manufactured goods (Emmanuel 1972). A less well known aspect of this unequal exchange is that prices received by Third World countries also have been falling farther and farther behind those charged for the cereal grains which a growing number of these lands are forced to import from the U.S. and Canada (Omvedt 1975). This brings us to the world's growing food crisis, which also has an external and an internal aspect.

#### Food and the Fear of Famine

The external aspect of the food crisis is represented by the fact that more and more Third World nations (largely agricultural producers themselves) are becoming net importers of food dependent on the world's No. 1 food exporter, the United States. It has been estimated that the United States plus Canada account for about 90 percent of the world's export cereal grains (principally wheat), and that some six multi-national corporations account for roughly 90 percent of that 90 percent (Cox 1974). In short, the United States controls more of the world food economy than the OPEC states control of the world petroleum economy. United States agriculture is so energy- and capital-intensive that it is

marked by quite low productivity per hectare but enormous productivity per worker (Hayami and Ruttan 1971). So the United States' exportable food surpluses and Third World dependence rise concomitantly. Even in a crop like rice, where United States production in 1971 amounted to only 1.3 percent of world output, America is the main seller on the world food market, supplying 23.8 percent of global rice exports (Omvedt 1975:5, citing FAO data). Moreover, all indications are that Third World food dependence will continue to increase over the short term: "Current production and demand trends indicate that the cereal deficit of the developing world, which stood at 16 million tons in 1970, will rise to over 90 million tons by 1985" (FAO/WCARRD/INF. 3, 1979:iv). And while there is no dearth of Western experts predicting catastrophic famine, most seem to take little cognizance of how agricultural production is organized in Third World countries.

The most popular scenario for disaster remains runaway population growth--the old Malthusian nightmare of geometric population growth outstripping arithmetic food supply growth. Since 1972, an exceptionally devastating year of widespread bad weather, climatic trends have been increasingly invoked as the cause of future famines. Many experts (for example, Reid Bryson) are concerned about a feared long-term and severe cooling trend, although a minority forecast a hothouse carbon dioxide "greenhouse effect." And some agricultural experts are concerned about the potential for ecological/plant genetics destruction as ever more of our food is grown under conditions of monoculture agriculture using a smaller and smaller number of high-yielding strains of a very limited number of cultigens.<sup>2</sup>

In contrast, recent work on the internal aspect of the Third World

food deficit focuses on the social relations of agricultural production that tend to promote vicious circles of agricultural stagnation and short-fall. On the one hand, faced with growing numbers of rural landless and urban poor who must buy food with incredibly limited amounts of cash, developing country governments must act to keep food prices as low and as stable as possible. But on the other hand, the combination of low prices for food and increasingly marginalized food producers exacerbates the short-fall in food production (see de Janvry and Garramon 1977). Nutritional standards fall, and the nation must spend scarce foreign exchange to stave off starvation. Contributing to the problem is the fact that most of these countries devote most of their inputs assistance (research, extension, credit, seeds, fertilizer, pesticides, etc.) to the production of export crops---frequently inedible ones---while food crops are all but ignored. But is it "benign neglect"?

In many instances, governments have not intervened until the crisis point has been reached. For example, in recently drought-wracked Upper Volta, it was observed that "not until the famine of 1973 did the satisfaction of food requirements figure in the list of governmental priority development objectives" (S.A.E.D. 1978:23). More recently still, the Los Angeles Times (June 15, 1979:1-B-1) reported on the aftermath of 1979 food riots in Monrovia, Liberia that left 41 persons dead: "The riots erupted April 14 after the government announced that the price of rice, a staple in the Liberian diet, would be raised from \$22 to \$30 per 100-pound bag. The price hike was intended to give farmers an incentive to increase production." The farmers are still waiting for this incentive, however, because the riots caused the government to abandon its plan to raise the price of rice.

Between crises, the impetus toward cash crop export agriculture typically results in food crops being grown on increasingly marginal land by an increasingly hard-pressed labor force who may hardly be able to grow enough for their own families, let alone to produce a marketable surplus. Moreover, these subsistence-oriented food producers can't afford to take chances with their families' lives. So they prudently stick with the tried and true varieties characterized by low yields, to be sure, but also by low variance of yield (Scott 1975). Meanwhile, the contradictions deepen and the food crisis grows.

Women, the True "Invisible Hand"  
in the World Food System

The above discussions of development-with-equity and the food crisis typify the literature on these questions in that women are nowhere mentioned. From such discussions, who would suspect that poor rural women are disproportionately driven into deeper marginalization than their menfolk, both by the local impact of world economic trends and by most development plans aimed at rural populations? Even more to the point, who would have suspected that the majority of the world's food is produced by women?

Yet both seem to be the case. This paper attempts to document what happens when women are put at the end of the line of development priorities. The women themselves tend to lose control of whatever means or fruits of production they previously had at their disposal, and find themselves plunged into circumstances of greater uncertainty and marginality. (Boulding calls women "the periphery of all peripheries," and refers to women subsistence farmers as the "fifth world" [1979].) To the extent that this neglect typically results in lower nutrition, pro-natalist pressures and greater concentration of resources in the hands of a narrow male elite,



even "GNP development" is slowed. Concomitantly, "development-with-equity" may be aborted.

With respect to women and food, the problem begins with national statistics that rarely record the work poor rural women do (see, for example, Deere 1977; Garrett 1976). However, recent United Nations estimates indicate that they are doing more than almost anyone suspected:

It has been estimated by ESCAP and ECA that women provide 60 to 80 percent of the agricultural labour in Asia and Africa; in Latin America, according to ECLA, the percentage is 40 percent. (UN A/33/238, 1978:5).

Only in Sub-Saharan Africa and certain parts of Southeast Asia had there been any general perception of women as agricultural producers. This recognition (often a disapproving one) has been most manifest in those areas of horticultural production characterized by Boserup as "female farming" zones (1970). Even here, national statistics concerning women's agricultural participation vary wildly. None approach the levels estimated by the Economic Commission for Africa in Table 1.

Three points should be briefly mentioned concerning the table. First, the 70 percent share of women in agricultural production may come as a surprise to developers accustomed to the much lower rates found in national accounts (women-in-development people, for whom this table is becoming a "standard exhibit," tend to talk primarily with each other). Second, it is evident from the data that women's role extends throughout the entire food system: 50 percent of storage, 100 percent of processing, 60 percent of marketing--as well as 100 percent of cooking. Often, women's contributions to areas of the food chain other than cooking are even more "invisible" than their participation in production. Third, women's access to non-formal education (Part C of the table) may be

Table 1. African Women's Participation in: (A) Production/Supply/  
Distribution; (B) Household/Community; and (C) Non-Formal  
Educational Access

Responsibility	Unit of Participation *
<u>A. Production/supply/distribution</u>	
Food production	0.70
Domestic food storage	0.50
Food processing	1.00
Animal husbandry	0.50
Marketing	0.60
Brewing	0.90
Water supply	0.90
Fuel supply	0.80
<u>B. Household/community</u>	
Bearing, rearing, initial education of children	1.00
Cooking for husband, children and elders	1.00
Cleaning, washing, etc.	1.00
House-building	0.30
House repair	0.50
Community self-help projects	0.70
<u>C. Areas of Access to Non-Formal Education</u>	
Agriculture	0.15
Animal husbandry	0.20
Cooperatives	0.10
Arts and crafts	0.50
Nutrition	0.90
Home economics	1.00

\*Units of participation are calculated on the basis of estimates of women's time as a percentage of all the time expended in a particular task. Units of participation were proposed in: Data Base for Discussion on the Interrelations between Women in Development, their Situation, and Population Factors, UN Economic Commission for Africa, 1974. Units of participation were determined first for areas within countries, then for countries, then for Africa.

Source: The Changing and Contemporary Role of Women in African Development, UN Economic Commission for Africa 1974; Country Reports on Vocational and Technical Training for Girls and Women, UN Economic Commission for Africa 1974; studies, mission reports, discussions.

This table was compiled from versions of the above materials in UN A/33/238, Effective Mobilization of Women in Development: Report of the Secretary General 1978:9 and Zivetz, Laurie, "The Impact of Rural Development on Women and Its Consequences for Fertility in Africa" 1979:2.

characterized as reflecting "a perception of women's roles which has been translated into development programs and policies" (Zivetz 1979:1). If that is so, it is evident that development is being short-changed because it is primarily women's "non-economic" roles that have been translated into training programs. It goes without saying that the women themselves are being shortchanged, as are their families.

What can we make of the high rates of participation in production shown in this table? Do these data indicate a recent aberration from some historic, well-nigh universal role of women as non-producers? Are economically active women just another distortion of development? Conversely, are there strong patterns of female participation in production that cross-cut countries at different levels of development? These are important questions for several reasons. First, if, in fact, women have been productive throughout most of human evolutionary history, this knowledge has been little recognized outside a narrow circle of specialists. Second, it appears that sex division of labor in production varies significantly by social class and development pattern and is being greatly affected by contemporary trends in the world economy. Before exploring the specifics of female economic roles around the world, let us sketch in some of the contemporary economic trends and development policies that are transforming Third World agriculture--and the lives of both poor rural women and men.

## II. The Cultivation Crunch

The penetration of the market economy into the countryside has tended to increase uncertainty in the lives of the rural poor by undermining pre-existing systems of security and communal aid. It also has tended

to displace labor. Both trends have been observed not only in contemporary Third World rural areas but also in Europe from the earliest days of the commercialization of agriculture. International trade in agricultural commodities contributed to the initial rise of European capitalism in the fifteenth century (Wallerstein 1974).<sup>3</sup> By the early part of the nineteenth century, the inherent dynamism and innovation of the feverishly expanding capitalist system produced the Industrial Revolution in Europe. Manufactured goods from the core countries flowed outward. What flowed back, on ever more favorable terms as colonialism consolidated the control of the core countries, were the raw materials and agricultural products needed by the new industrial nations to fuel the insatiably expanding capitalist-industrial colossus.

As a three-tiered world system emerged (core, semi-periphery and periphery countries, in Wallerstein's terminology), export-oriented enclaves progressively developed in the latter two categories of societies. The penetration of the "cash economy" proceeded unevenly.<sup>4</sup> But even in the most remote rural areas, residents were forced to exchange some production or labor for cash, since money became required for a growing variety of transactions--including taxes. However, to the extent that these rural people continued to provide the bulk of their subsistence needs via non-capitalist modes of production, their monetary returns from their output or work remained low (see, for example, Deere 1976). Most of the benefits of this state of affairs flowed to the core countries.<sup>5</sup>

This pattern of development tends to accentuate internal inequalities as well.<sup>6</sup> In part this is because development in the Third World has tended to be highly capital-intensive--even though the process was predicated on cheap labor (Amin 1976; de Janvry and Garramon 1977; and

Deere 1977). Numerous studies in numerous countries document how little employment the transferred technology of the core countries has generated in developing nations. This is to be expected since the technology was developed to serve large-scale industries in the core countries where factor prices (given a long era of cheap energy) favored and favors capital-intensivity over labor-intensivity. What may strike many as surprising is that planned government development policies in most Third World nations enthusiastically promoted the capital-intensive path to "modernization." The resulting inequities have been greatest in the countryside, where the severest hunger, and seeds for an even deeper crisis in both food and development, are to be found.

#### The Rich Get Tractors and the Poor Get Moving

As background, it must be stressed that prior to the push for agricultural mechanization, most Third World countries (except previously horticultural areas) already had highly class-stratified systems and inequalitarian land tenure arrangements. Some of these were indigenous, as in much of Asia; others were imposed, as in Latin America. In both cases, those already in control of the principal means of agricultural production proved to be in a much better position to control the internal benefits of its "modernization."

Most capitalist-oriented Third World governments have stressed certain commonalities in their development strategies over the last two decades.<sup>7</sup> Industrialization was pushed to be paid for by earnings from increased productivity in the export commodities. Factor prices were typically adjusted accordingly, with substantial incentives offered for importation of capital equipment. Given inflation and generous credit terms,

those who imported the modern miracle machines might end up paying substantially less than their actual purchase cost--"an offer they couldn't refuse" (Ambercombie 1972; Griffin 1974; Thiesenhusen 1971; Ahmed 1973; Gotsch 1973; Frankel 1971; Griffin and Khan 1972; and Stokes, et al. 1979). In short, mainly capital-intensive technological innovation came to the larger farmers in most capitalist-oriented Third World countries due to a combination of indirect macro trends in the world capitalist economy (e.g., agribusiness multinationals' expansion) and direct inducements by the governments involved.

Technological innovation and unequal concentration of the means of production combine in a process which marginalizes more and more of the rural poor and forces many of them out of agriculture. Part of this process is summarized in Figure 1 from Stokes, et al. (1979:67).

The concentration of land holdings and resultant outmigration of the rural poor and landless has been triggered not only by expanding export crops, but also by most of the high yield varieties (HYVs) of the Green Revolution. The benefits of these improved food grains were supposed to go to small farmers. But even where the seeds were distributed free of charge, they required an entire "package" of inputs--from irrigation and/or fertilizer to credit--that were beyond the reach of most small farmers in most areas. In addition, the new miracle grains tend to have high yields of much higher variance than the traditional varieties they were to replace. Poor cultivators cannot afford this risk, nor can their governments afford to subsidize them all. The net result adds another casualty group to those depicted in Stokes' diagram.

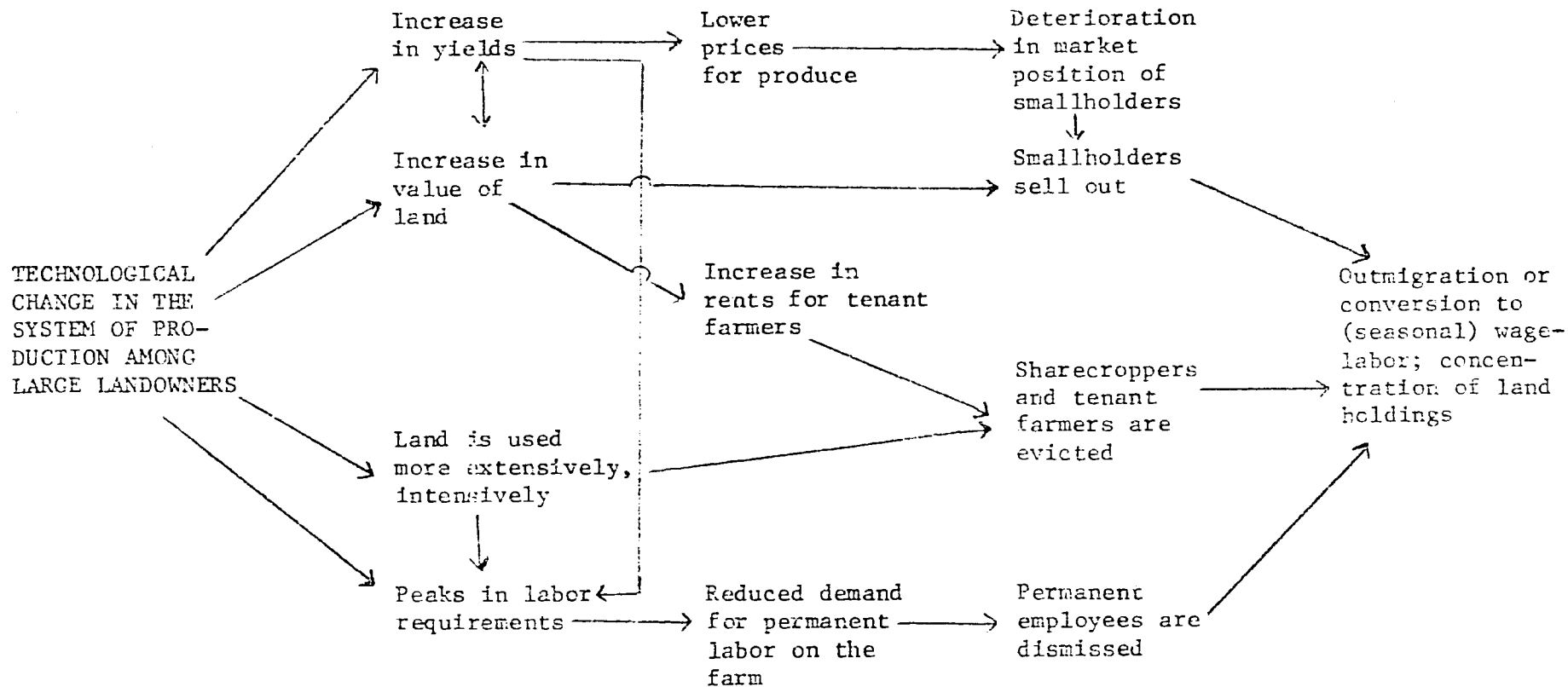


Figure 1. Displacement of the Rural Poor by Concentration of Land Holdings and Technological Change.

Source: Stokes, et al. 1979:67.

Manipulating Fertility, Geographic Mobility  
Family and Female Labor for Survival

Figure 1 summarizes well the risk enhancing and labor displacing effects of agricultural modernization on the rural poor. A large literature explores each of the processes named in the diagram. Thus our attention turns to the coping responses of the rural poor to their deteriorating situation.

The cash economy undermines traditional systems of "social security" and crisis aid, which have not been replaced by new formal institutions in most of the Third World. Thus poor people's survival may depend on how well they can transform the pressures on them into adaptive strategies for hedging disaster.

Two responses may be labelled "demographic": (1) changes in fertility, and (2) changes in migration patterns. In turn, these intensify "modernization"-induced changes in two other areas: (3) household/family structure, and (4) sex division of labor and resources. The first three will be discussed briefly in this section as a prologue to the region-by-region examination of the fourth topic, emphasizing women in agriculture.

Fertility. One adaptive strategy is to adjust fertility. According to the American Association for the Advancement of Science, a "fertility spurt" has almost invariably accompanied the intrusions and dislocations of the cash economy (AAAS 1974). It has been argued that people are not poor because they have too many children; rather, they attempt to use their children to alleviate their poverty (Mamdani 1972). Children of poor rural people in many parts of the Third World seem to bring net positive benefits, often from a fairly early age (White 1975; Schnaiberg and Reed 1974; Nag, White and Peet 1977). In addition, extra children may eventually be



able to work either as local wage laborers or as migrants.

But this strategy, while providing the possibility of betterment for some families and individuals, undercuts the position of the poor as a class. It also disadvantages the entire country in those nations where, as in India, each new mouth represents a net drain on the nation's resources (Enke 1960).

Women, too, may favor such a strategy when increased fertility is not incompatible with women's economic activities. After all, young children may from an early age help relieve women of their burden of repetitive drudgery in fetching wood and water and endlessly processing the staples in the daily diet (Youssef 1979). And where children can help with production tasks, this motivation should be reinforced.

Migration. Development trends tend to disemploy the rural poor and to leave them without alternative employment in the urban cash economy. Where peasant populations are ejected en masse, the immediate results for the individuals involved are surely disastrous. However, wholesale migrations eliminating marginal rural populations are rare. More often, some family members migrate to seek work and provide occasional cash and other assistance to the close kin they have left behind. Selective migration thus offers a possible survival strategy.

Most migration is sex-selective, usually with profound consequences for both family structure and the sex division of labor and resources. In most of the world, migration streams have a heavily male majority. Even in Latin America, where rural-urban migration streams are largely female, seasonal migration tends to be more heavily male. What does this male-selective migration mean for the family patterns of affected groups?

Household/family patterns. One of the major consequences of male-majority migration streams has been a great increase in the ranks of de facto as well as de jure female heads of household. Recent United Nations estimates indicate that women "serve as head of over one-third of the rural households in the developing world" (Leeper 1978:129, emphasis added; see also Buvinic and Youssef 1978, and Blumberg and Garcia 1977). Since female-headed units are almost invariably poorer than their male-headed counterparts (reflecting both women's lower remuneration and the presence of fewer income producers in the average woman-headed household), problems of family well-being in female-headed households tend to be magnified. Family well-being is greatly affected by household composition as well as headship: migration can affect this in various ways. Retention of additional income earners or acquisition of additional dependents can clearly lift or depress family economic welfare. Studies in the United States indicate that the poorest families are least successful in retaining their offspring in residence once those children have begun to earn their own livings (Morgan, et al. 1973).<sup>8</sup> But among the poorest rural Third World families, children's small, and often occasional, cash remittances may make a big difference.<sup>9</sup> And the poorest families are precisely those who seem likely to form flexible sharing networks among kinsmen, as a kind of mutual insurance (see, for example, Stack 1974). In short, although household and family patterns appear to be strongly influenced by economic factors, people also appear to make survival-enhancing adjustments wherever they can (Blumberg, Winch and Reinhardt 1974).

Sex division of labor and resources. It already has been suggested that women's well-being and relative equality are more affected by the extent of women's control over the means of production than by the extent

of their labors. In these terms, recent agricultural development has been negative for women: the results of capital intensive technologically-oriented strategies (depicted in Stokes' diagram above) tend to increase women's work while decreasing their control over resources.

We further argue that this tendency is negative for family welfare as well as for women. This argument is based on the apparent difference between the sexes in the disposal of any new income obtained. Stavrakis and Marshall's research on the introduction of sugarcane production in Belize is illustrative (1978). The results observed in 1973 were (1) the decline of food production, (2) the loss of women's resource base, and (3) no improvement in the generally poor prevailing level of child nutrition. The rise in sugarcane production, controlled by men, generated quite a bit of income locally, which accrued to the men. However:

...money flowed out of the system as fast as it came in, spent on drink, trucks, travel and purchased female companionship. By and large it did not benefit the women at home tending the children and animals. (Stavrakis and Marshall 1978:158)

In contrast, there is some indication that an increase in income generated by and controlled by women will be used for more immediate family welfare concerns. This seemed to be the case in a rural mango puree canning operation established by a women's cooperative in a village in Honduras' poor and drought-prone Pespire region (author's observation 1978). Research to establish the generalizability of this finding is needed.

To reiterate, then, over and above the sex division of labor within a class is the sex division of resources. Changes in the sex resource base appear to affect what is done with increasing or decreasing resources in the class. Thus, we hypothesize that:

Increasing the proportion of a class's resources in the hands of its females will have more rapid and more immediate consequences for the level of individual well-being than comparable increases in the hands of its males.

If this is so, then we have identified still another "contradiction of development" to those causing marginalization and malnutrition among more and more of the Third World's rural poor. Where women's position declines relatively, then--because of women's unique relationship to food and to family welfare--it may be precisely the life- and equity-enhancing aspects of development that suffer disproportionately. This implies that even successful programs intended to make more equitable the distribution of resources between have and have not classes (within developing countries, and between have and have not nations within the world system) may not be enough to bring the hoped-for better life and benefits to the world's rural poor. It follows that a concerted effort to "recognize, preserve and enhance" the role and resource base of women vis-à-vis the entire agricultural system--including food production, processing, storage, marketing, preparation and consumption spheres--is required.

We turn now to women's place in each of these spheres of the agricultural system in the developing world's major regions. How are both the unplanned economic trends and the planned intervention programs affecting women?

### III. Women, Farm Work and Farm Wealth around the World

As final background for this regional examination, let us recapitulate. From the argument thus far, it appears that two kinds of commonalities link the development-with-equity and food issues: (1) economic factors, and

(2) the (largely unrecognized) role of women in agriculture.

Economic factors. The achievement of both development-with-equity and adequate food for all seems to have been hindered by the fact that most Third World nations are caught in a similar "economic niche" with respect to the world economy. Most concentrate on the production and export of a few crops and/or natural resources in capital-intensive ways that increase the gap between rich and poor and the malnutrition of the latter. Because of the deepening cycle of poverty, the most marginalized have not been able to afford adequately to feed themselves; that is, effective demand has remained below the level of food needs (Cox 1978:95). True, more and more Third World governments are spending more and more of their foreign exchange to prevent hunger from getting out of hand (especially among the generally more restive urban population).<sup>10</sup> But ironically, this has resulted in the rural population being doubly penalized: the imported food is less likely to reach them in the first place, and its importation further erodes their return from agriculture. As a result:

Those in the world most threatened by famine are people whose major economic activity is food production! Starvation, 1970s decade version, is primarily a rural phenomenon, rooted in rural poverty. (Fischer 1978:107, emphasis in original)

Women. In most pontificating and programming on Third World food problems, rural women are rarely taken into account. Where they are, it is usually in terms of their recognized final responsibility for preparing and allocating food: they become the targets of "nutrition education." But typically poverty is much more to blame than ignorance for any deficiencies in the diets these women serve their families. And ignorance of a different sort helps perpetuate the poverty of these women: the ignorance of most development experts concerning women's contribution to their country's subsistence base. In the Third World, that contribution is crucial. New

United Nations estimates indicate that "women, as farmers, produce 50 percent of the food and, in some countries, control and operate up to 40 percent of the national marketing system" (Leeper 1978:129). But as we shall now see, that global estimate lumps together regionally disparate degrees of involvement. And it is constructed from a data base of incredible unevenness; until well into the 1970s, studies of women's agricultural role and resources were scarce and often shaky. Accordingly, it behooves us to begin with Africa, where the ubiquity and importance of female participation has resulted in somewhat more (and more systematic) attention to women in agriculture.

### Africa

It is in Africa that we find the best documentation both for what women do in agriculture and for specific instances in which the forces of economic change and deliberate development programs have worked to their detriment. The results of the Economic Commission on Africa (1974) study have been presented above (see Table 1). Other detailed quantitative studies of African women's agricultural system involvement include Cleave (1974), Clark (1975), Haswell (1963), Weil (1973), Rald (1969), and de Wilde (1967). The general picture they present is one of very high female involvement, often far surpassing male involvement.

Given that most of these societies have a horticultural base, this is to be expected: males are the main labor force in only about one-fifth of known horticultural (hoe-cultivation) societies.

And even though colonial administrators may have found it unseemly that women raised so much of the food, their colonial policies capitalized on this fact--and "used women's labor in subsistence agriculture to subsi-

dize the export economies" (UN A/33/238, 1978:21). Men were recruited to work in the mines, plantations and other "modern sector" large scale export enterprises. Because women were able to do almost all the operations of the agricultural cycle unaided by men, it was possible to pay those men wages manifestly insufficient to provide for the family. It was the women who supported the children and the old people, and thus, who absorbed the costs of sustaining and reproducing the labor force from one generation to the next.

Colonial policy also encouraged male involvement in village-grown export cash crops. Over time, men came to predominate in the money economy, controlling most of the earnings from such local export crops even though their womenfolk provided most of the labor. For women, this burden was assumed in addition to their responsibilities for growing, processing, storing and distributing the local food crops. In short, a pattern emerged whereby woman's work load tended to increase while her control over the means of production tended to decrease. This pattern has persisted to the present day. Let us examine in turn the causes and consequences of both the increased labor and the diminished economic power.

Other factors above and beyond women's added work on a new series of cash crops augment their labors. Those most likely to migrate in search of wage labor are the young males who previously had provided the labor for clearing and tree-felling. An increasing proportion of the children attend school rather than attend to the routine, repetitive drudgework involved in supplying wood, water and sibling and small animal care to their already hard-working mothers. The land on which women grow food crops has become increasingly marginal, since the better acreage almost invariably becomes devoted to cash crops. Thus women have had to

raise the food on land that is either farther and farther from their homes (the closer fertile lands having been switched to male-controlled cash crop use), or worn out from over-cropping with insufficient fallow time (Chaney, Simmons and Staudt 1979). Also food has had to be raised on not just less productive, but also less land. Feeding a family on less land usually means more work.

But even more serious for women is the widespread erosion of relative control over the means of production. Traditionally, most horticultural Sub-Saharan African groups have a patri-oriented corporate kinship system. Land was considered to belong to the corporate kinship unit, and it was parcelled out to those who cultivated it. Women thus had use rights to a particular plot. During this pre-colonial period, individual rights of alienation of land were rare for either sex.

When colonial policy and the rising tide of commercialization of agriculture brought individualization of land rights to the countryside, women lost out in a number of ways. Increasingly, their rights to use and administer a piece of land and/or certain of its specific resources were swept aside as legal title (defined in terms of rights of alienation) became vested in individuals--who were disproportionately men. Even in matrilineal societies, women were the losers in competition with male kin when land tenure rights became individualized: losing out on land ownership, however, has not relieved women of the burden of labor.

Some of the most unjust applications of colonial individual land rights policies occurred in areas of heavy male outmigration. The men might be away for years at a time, and even form new families in their new place of residence. But if the new individual land titles were slated to go to males, it mattered not if the men were away while their wives sup-



ported their children on its output. In a number of instances, the men, as absentee owners, sold the land out from under the rural wives.

The practice of awarding men title to land worked by women has continued to the present day: in many agrarian reform, resettlement and/or communal farming schemes, the participating party, that is, the legal beneficiary, is held to be the male head of household. Under these circumstances, it is perhaps appropriate (and certainly provocative) to consider the woman as a sort of tenant farmer (Chaney, Simmons and Staudt 1979). What incentives does such a woman have to improve productivity?

With respect to productivity, the typical woman African farmer has done quite well, considering all her burdens. In fact, there is evidence that women may be better agriculturalists than men. Studies by Mook (1976) and by Staudt (1975-76, 1978) document better female than male output, methods and/or innovation practices under conditions where greater male access to education and extension was controlled. Mook found that in an administrative division of Kenya where 38 percent of the farms were managed by women, women's output exceeded men's when factors such as access to education and extension were controlled (women's access was drastically lower than that of men). In Staudt's area of research, also in Kenya, women managed 40 percent of the farms. In an area with minimal agricultural input services such as extension and credit (by far the most prevalent situation facing the world's small farmers), the women managers proved to be earlier adopters of maize and grew a more diversified set of crops. But in another area where the level of agricultural input services was much higher and long-standing--and aimed largely at men--the women had fallen behind: their speed of adoption and crop diversification lagged behind men's.

Once again, it should be stressed that it is not women's farming competence that lags behind. For example, Fortmann's study of Tanzanian Ujamaa villages found that women were using improved farming techniques. In fact, there proved to be no significant sex differences in scores indicating "good maize practices" within groups of purchasers and of non-purchasers of improved inputs (seeds, fertilizers, insecticides, and herbicides). The relative sex composition of the purchasers and non-purchasers of the improved inputs is not given. However, considering women's much lower access to cash income, it would not be surprising if the males considerably outspent them.

The men would seem to have wide latitude to outspend women, since, in addition to their own higher cash incomes they typically have much, much greater access to credit. Concerning loan information, for example, Staudt found that households with a male present were fourteen times (!) more likely than those headed by a female to have received detailed data. And men are likely to receive more information about new improved farming practices of all kinds. This is because, as Table 1 shows, they receive the overwhelming share of agricultural extension and training services.

Moreover, men's privileged access dates from colonial days, when the original extension and training services were set up along Western models. Thus, although colonial administrators were presumably aware of women's central role in most African farming, it was men who were offered agricultural assistance. Women were given home economics training (embroidery, table decoration, etc.) instead. And today, now that the tide is turning and women are being considered for more agricultural services, the result is often that the female extension agents, primarily home economists, have to add agricultural duties to schedules already filled with responsi-

bilities for nutrition, family planning, etc.

Nutrition has frequently been a casualty of women's increasing marginalization. Eide, et al. discuss this issue, and provide examples:

In Ghana, the introduction of cocoa increased women's workloads because men left the yam crop to cultivate the new crop in order to raise cash. As yams require a high labour input and as women's time for growing food was limited due to their many other responsibilities, they replaced the yam with cassava, which can be planted at almost any time during the year and needs little weeding. But cassava has less nutritional value than yam and cannot be intercropped with vegetables and legumes because it depletes soil nutrients more rapidly than yams. (Eide, et al. 1977:41-42)

Other studies, while less detailed, also cite the decreasing variety, quality and/or quantity of the foodstuffs available to African women to feed themselves and their families (S.A.E.D. 1978; Cloud 1978; Simmons 1975). Yet too many programs continue to reflect the assumption that it is "traditionalism, or passivity or ignorance" that keeps women from enhancing the nutritional content of their diet, rather than the income, time and other resource constraints usually to blame.

The "ignorance" argument implies that the latest fashion in Western nutritional gospel should replace the allegedly "backward" and low-nutrition crop currently in disfavor. Yet further study may indicate that the women's food practices make good nutritional sense when viewed as part of a total system. For example,

In some countries, efforts are still going on to make women stop planting manioc and replace it with more "protein-rich" crops even though the most recent studies indicate that manioc is the best crop for many poor soils, that the replacement crops often serve nutritional needs poorly, and that traditional cooking practices make manioc more protein-rich than urban nutritionists realized. (April, et al. 1974, cited in Boulding 1978:32)

In fact, the total system approach to agriculture may be the missing key to providing meaningful food crop assistance to African women. Cur-

rently, it appears, most programs attempting to promote new food crops to women tend to "blame the victim" if they fail. However, these programs themselves usually fail to take into account the many subtleties behind women farmers' decisions to adopt food crop innovations. The questions of concern to women include:

- Does the new crop provide the possibility of additional income as well as food? And if so, at what price--in money inputs but also in labor inputs? It may be the best idea to come by in years, but if its seasonality conflicts with women's other, relatively inelastic, cultivation responsibilities, and/or if it requires a great expenditure of labor at various points in its cycle, women's time/labor constraints may not permit them to grow it successfully.
- What about its variance of yield? It cannot be high, because cultivators living near the subsistence level cannot afford to take chances.
- Is it easy to harvest? For example, shorter, thicker stalks are a minus.
- How well does it store? Women are usually responsible for processing for storage and for storage itself, and are rarely provided with any technical or material assistance, despite the fact that under the tropical high-pest conditions of African horticulture, high post-harvest losses could eliminate any alleged potential gains for a new crop. (See McDowell 1976 for some remedies.)
- How about processing and cooking? Does it mean more work for less taste? Traditional cooking and food combination techniques are only now being recognized for their often unique contribution to increased nutrition. Would this new food upset such a complexly balanced system?
- Finally, does it lend itself to easy marketing? If it has to be bundled in sizes awkward for the woman to transport, or if it does not have any local demand, women may be less eager to adopt it. Although the new crop may add some protein to her family's diet, it may be aimed at replacing a crop that also provided extra income from sale of surplus.

These questions are not meant to discourage efforts to introduce new, higher-protein food crops for both village and urban consumption, but rather to emphasize that such efforts will require not only adequate extension/inputs aid, but also examination of the performance of the proposed

new crop in the entire agricultural/food system.

Female marketing activities, estimated to be 60 percent of all African marketing, also deserve close attention (ECA 1974). Since Boserup wrote in 1970 about how female own-account local-level foodstuff traders' position was being eroded by the intrusion of male-dominated larger-scale patterns of wholesaling, distribution and retail trade, a number of studies have provided further corroboration (for example, Human Resources Development Division, INECA 1972). Given the 1974 ECA estimate that 60 percent of marketing is done by women, consequences of a further erosion of their position will be widespread. For the most part, declining participation in trade will mean fewer income sources and less cash for women, and will accentuate the outflow of agriculturally-generated surplus from the local areas to the urban centers. This presumably will further limit the local market, and advance the process of rural impoverishment vis-à-vis the city. Worse still, if women cannot expect to market surplus food for extra income, they may not produce that surplus in the first place, thus further exacerbating their country's food shortfall woes.

If the food crisis gets worse, it is likely that more attention and aid will be directed at African female farmers; new evidence of their importance in cultivation is mounting too rapidly for development experts to ignore. But will it be only their role as producers that will be strengthened? What about their position with respect to control over property? What about the quality of their lives as people? If these concerns continue to be ignored or undermined, it is unrealistic to expect any great and sustained increase in women's agricultural position.

The protection of rural women's resource base with regard to property is urgent. This means a concern for women's rights to land, not

only in the existing villages, but also in new cooperative or agrarian reform settlements. Where women's property rights already have been eroded by the shift to individual title largely in the hands of males, the most realistic short-term policies might aim at protecting women's rights to a return from the lands they farm, including their rights to market surplus produce. This goal will, in turn, be much enhanced if women's position as market traders is also buttressed. A different strategy is called for in new agricultural ventures: the laws concerning membership and beneficiary status in agrarian reform schemes should permit women to participate in their own right, on an equal basis. In most instances, this will require a change in existing statutes.

Legal change will not suffice to ameliorate women's lot in two of the more pressing "women as people" issues. These are women's invisible drudgery (omitted from national accounts) in grain processing for consumption and/or storage, and supplying the needed water and fuel for both household production and consumption needs; and women's special difficulties as head of household. Both issues are associated with needless hardship, yet neither receives a high priority from most development planners who fail to see them as critical in boosting agricultural productivity. It appears that aid viewed as humanitarian rarely is provided before disaster strikes. This may explain why most of the "appropriate technology" projects aimed at lightening women's daily drudgework are recommended because the women can thereafter devote the time saved to production:

Vail estimates that traditional head portage of family water in Tanzania typically requires a labor-time input of 312 hours per year. The introduction of a \$10 wheelbarrow, which can carry a much larger quantity of water, results in the reduction of labor

time of 208 hours per year. If the time saved were transferred to farm tasks, the resulting net increase in agricultural production of perhaps \$20 would more than cover the cost of the wheelbarrow. (Lele 1975:27, citing Vail 1974).

One wonders if those \$10 wheelbarrows can carry that "much larger quantity of water" more easily. In any case, few "\$10 wheelbarrow projects" are being funded. Nor, for that matter, are many projects to provide closer water and more efficient, less-fuel-consuming cooking arrangements, or grinders or other grain processors, unless they too are tied in with more "economic" goals. Reducing women's work for its own sake is rarely deemed fundable.

So too with helping female-headed families. Although female-headed units are currently increasing rapidly for contemporary economic reasons, they long have been an important feature of social organization in many parts of Africa. This is because under the system of general polygyny and residence with the husband's male kin (the majority pattern among African horticulture/herding groups) each co-wife is provided with a separate dwelling unit and storage facility.<sup>11</sup> A newer cause of female-headed units--male outmigration--has gained steadily in importance. But regardless of how they form, female-headed units are typically much poorer than their male counterparts.

Unfortunately, international responses to disasters tend to prove equally inattentive to women's economic role, with effects harmful both to women and to their communities. Cloud's account of official response to the devastating Sahelian drought of the early 1970s is illustrative of the growing list of development "horror stories," of the sort initially chronicled by Boserup (1970) and Tinker (1976). All of these reveal how the blindness of male development planners to women's productivity, position in

the local group, and problems ultimately harms not only the women themselves but also the developers' larger projects.

Cloud encountered a thicket of misconceptions and misguided programs orienting drought relief efforts. "The general assumption of development planners repeated to us all over the Sahel was that men owned the cattle; women might own goats and sheep" (1978:73-74). Cloud found that "an examination of the literature, including the AID-sponsored Rupp report shows this to be a misconception": animals are owned by individuals (although herded as a group responsibility) and women may acquire goats, donkeys and other animals in various ways. Indeed among the largest group, the Tuareg, almost everyone is a stock owner (per Nicolaisen 1963). This misconception had serious results:

In Madame Rupp's seminars with both Fulani and Tuareg herders, one of the major concerns expressed was that the government's program to reconstitute herds lost in the drought was replacing cattle only for the men. Women's stock was not being replaced. This was crippling the social system--animals were unavailable for dowry and bridewealth payments (because) women had lost their independent property. This was apparently the unintentional result of the government program that issued a card to the head of each family, and replaced animals only to the family head. (Cloud 1978:74, emphasis added.)

Thus "program administrators' lack of understanding of sex role control of resources seriously damaged nomadic women's economic and social positions" (Cloud 1978:74). But that's not all. There is one final potential consequence (not discussed in the study) which might have been inadvertently set in motion by these same program administrators: loss of the group's "insurance" and viability in future droughts.<sup>12</sup> This is because:

Most pastoralists breed a wide variety of animals and maintain diversified herds as an adaptation to the environment. Camels, cattle, sheep and goats each have characteristics that provide different benefits. Goats breed quickly and recover quickly from drought. They can exist on browse when grasses are not available. Both their milk and meat are palatable. (Cloud 1978:72)



Thus, "[a]s a result, they have great value as a food source in difficult times" (1978:70). And yet apparently only the men's cattle are being replaced.

### Asia

Most of Asia is agrarian, and more stratified and commercialized than Africa:

In contrast with Africa, where women are primarily engaged in subsistence agriculture as self-employed farmers and family workers, a large number of women engaged in agriculture in Asia work as wage earners in commercial farms and on plantations. Thus, in Sri Lanka 72 percent of the female workforce in agriculture are salaried workers, comprising almost 40 percent of the total number of wage earners. In the tea estates, women workers outnumber men and in the rubber estates they make up about 43 percent of the labour force. In the tea plantation industry of India, where around two thirds of the total plantation labour force is engaged, women constitute approximately 50 percent of this labour force. In the coffee and rubber estates, their proportion is somewhat lower, but they still form a significant proportion--44 percent in the coffee estates and 30 percent in the rubber estates. In Malaysia, about 45 percent of the hired labourers for all types of crops were women. (UN A/33/238, 1978:25)

While large proportions of the female agricultural labor force are engaged as hired workers throughout Asia, there are subregional differences in sex division of labor patterns by both social class and type of cultivation.

Where irrigated intensive agriculture is not prevalent (as, for example, in Northern India), it is usually only the poorest, the landless rural women, who work as hired labor. For peasant class women, confinement in or near the house (except perhaps during peak periods) becomes a symbol of class differentiation. In contrast, under the more labor-intensive conditions of irrigated cultivation, women at all levels of the peasantry tend to do considerable agricultural work. In general, in areas characterized by extensive irrigation systems and paddy rice, women will

weed, transplant, harvest, and probably sow. Men usually dig irrigation ditches, construct and repair terraces, and lift water from canals. With paddy rice, each hard working pair of hands can usually produce a bit more than the person's subsistence costs. And the pressures caused by the prevalent patterns of unequal land tenure, landlordism and parcelization typically require that the entire family pitch in for mutual survival. This has had a profound effect on the large-scale export crop sector:

The plantations and the large commercial estates in Asia have had to adapt to a situation where the predominant type of cultivation in the food production sector lends itself to full familial participation. Male labour cannot, therefore, be recruited without providing for the women and the children, in contrast with Africa, where subsistence agriculture is predominantly women's work. . . . The most expedient means of keeping the effective wage rate low, then, is to employ the entire family. (UN A/33/238, 1978:25)

As the United Nations report then points out, the plantation is thus able to avoid paying male workers a "family wage" in both Africa and Asia because of the agricultural work of the females. In the former continent, women's activities as food producers in the subsistence sector permit the maintenance and reproduction of the labor force. In the latter, rural female wage earners are available as a dividend of the family hiring system. As we shall see, still another pattern prevails in Latin America, but it too precludes the necessity of paying male workers a wage sufficient to maintain their families.

The employment situation in the plantation sector in Asia (as in much of the developing world) is affected by a worsening "price/cost squeeze." Revenues from sale of their commodities tend to be declining and/or unstable while production costs continue to rise. The response has been widespread attempts to minimize the resident, permanent labor force. For the most part, this has hurt women along with men. However,

the widespread sex differential in wages may increase employer preference for female labor. A United Nations report, citing a study of plantations by the ILO (1970), notes:

In Sri Lanka, for example, the average minimum wages of females on both the rubber and tea plantations was about 80 percent of the male wage for the period 1960-66, in spite of the fact that women tended to work longer and produce more than men in certain tasks. . . . During the same period, the price of rubber and tea exports declined steadily. The participation of women on the rubber and tea plantations then increased from 46 to 49 percent and from 40 to 43 percent, respectively (UN A/33/238, 1978:26).

Labor displacement in export crop plantation agriculture often has been paralleled by labor displacement in food crops, when these are grown by larger owners using the new Green Revolution high yield varieties (HYVs).

The amount of labor displacement accompanying mechanization and/or introduction of Green Revolution "packages" appears to vary greatly by crop and specific techniques introduced, and, moreover, to vary in ways that may differentially affect one sex or the other. The result has been more marginalization of female than male labor (UN 1973:13). Billings and Singh's study of the Punjab, India documents the reduction of women's labor caused by mechanization. In other studies, the differential impact of mechanization on males and females is implicit, although rarely spelled out. In Thailand, the traditional combination of broadcast rice with buffalo farming involved 8.8 "man days" per rai (Inukai 1970, cited in Stokes, et al. 1979). If mechanization introduced tractors and continued the broadcast method, labor use dropped to 5.5 "man days." If, however, the tractors were combined with the more labor-intensive technique of transplanted rice, labor use rose to 10.5. Transplanting is a usually female task, so women would probably participate disproportionately in that labor rise. Also suggestive is Ambercrombie's study detailing

labor reductions of 6-19 percent from increasing mechanization in potatoes (a horticultural crop), as against 50-90 percent labor reductions for wheat (an agrarian field crop) (1972).

Unfortunately, few of the landless and near landless will be in a position to influence the form agricultural modernization and mechanization takes in their localities. In non-socialist countries, the often-recommended remedy, a thoroughgoing agrarian reform, thus far seems to have occurred almost exclusively when one elite was displacing another. Taiwan, rarely thought of as a bastion of radical social reform, is an example (Griffin 1974:250-251). When Chiang Kai-Shek arrived, he had to break the power of those elements of the local land-based ruling elite still entrenched after the Japanese occupation. A comprehensive program gave the peasants viable family-sized plots and "packages" of improved seed, credit and small and medium technology. The government became the landlord, until the peasants paid for their plots over 10 years. Also, rents were often lowered. Today, land concentration and official unemployment rates remain quite low in Taiwan. And the country enjoys the highest per hectare productivity of any nation examined by Hayami and Ruttan: 10.24, as against 7.47 for Japan, the country in second place. (The United States, with its capital- rather than labor-intensive agriculture, lags far behind with a per hectare productivity rate of 0.80.) Concomitantly, it is interesting to note, it appears that reproductive pressure on Taiwanese women has eased considerably: the average number of children born per woman declined from 7.5 in 1951 to 3.4 in 1972 (Ravenhold and Chao 1974: J-28).

The grim impact of agricultural mechanization and other Green Revolution miracles on those who are both landless (or near-landless) and female,

in the absence of major ameliorating structural change, may be seen in Java today (Stoler 1977; Milone 1978). Women have long been crucial to Javanese wet-rice cultivation and moreover enjoy considerable economic autonomy. Over the course of the last century, land scarcity and concentration in Java both rose steadily because of (1) the leasing of peasant land for such estate crops as sugar and (2) the (probably resultant) increase in population pressure (Milone 1978:84; Geertz 1963). By the 1970s, surveys showed that "over 75 percent of the villagers were without enough rice land to sustain themselves and had to seek off-farm sources of income" (Milone 1978:86). For women, particularly poor ones, the most common source of such income came from harvesting rice.

Then the Green Revolution varieties of rice and the mechanical rice huller came to Java. The H1V rice has a heavier stalk, making it difficult to harvest with the traditional bamboo knife used by generations of women. It is more efficiently cut with steel scythes, too heavy for women to use easily. Almost overnight, much of the harvesting has been turned over to crews of scythe-wielding males brought in by the middlemen who buy the crop. This devastating blow to landless and near-landless women was followed by the introduction of the mechanical rice huller. Previously, the in-kind shares earned through rice-pounding supplied an important source of subsistence to poor women, as did transporting small amounts of rice to local markets. But the mechanical rice huller, a much less labor-intensive operation using male workers, is rapidly displacing women. Poor women are losing a direct food source: "by 1973 less than 50 percent [of rice] was hand-pounded, and some observers suggest as little as 10 percent" (Milone 1978:153). Also, with the new harvesting methods, rice began to be bulked into large sacks, too heavy for women to carry, right in the

fields.

What has happened to the women of other classes? We have hypothesized above that women's position and autonomy rest on the proportion of the means of production they control, and have proposed that, in class societies, this hypothesis be tested by comparing resource control by sex within classes. The preceding discussion of Asian women supports this hypothesis, to the detriment of women. The expected relationship also appears in certain parts of Indonesia, where women, controlling the bulk of the means of production, have been beneficiaries, not victims, of mechanization:

In West Sumatra, the women's clans still own the land, and the effect of the introduction of the HYVs was entirely different than in Java. In fact, women buy the costly inputs, own the rice hullers, and employ men with knives and scythes to help in the harvest. Before these developments, Minangkabau women kept control of earlier technological innovations, such as mechanized spice grinders and the water driven mills which they still own and use to grind flour. In Aceh, as well, where women can own the rice fields, they have kept control of earlier labor-saving devices, such as mortar and pestle for rice pounding, and now use hullers to reduce losses and produce a better quality of rice. (Milone 1978:156-157, emphasis added)

Because this case is clearly an exception to the general trend, it offers little grounds for optimism. The situations in today's world where women control a substantial or majority share of the group's means of production appear to be both sharply limited and shrinking.

### Latin America

This region offers no apparent exception to the patterns observed elsewhere. For the region as a whole, the relative weight of the agricultural sector has been declining in recent decades and the rate of labor absorption in agriculture also has been decreasing steadily (UN A/33/238, 1978:28). But statistical examinations of the region are

plagued by gross but idiosyncratic underenumeration of female involvement in agriculture (Deere 1977; Buvinic 1978; Garrett 1976; UN A/33/238, 1978). This underenumeration makes it difficult to assess what has been happening to women, especially in the less industrialized areas of Latin America. In such places as Bolivia, Ecuador, Mexico, Peru, and north and north-east Brazil, actual rates of female participation in agriculture--as distinct from government census statistics--are estimated to be above 50 percent to 60 percent (UN A/33/238, 1978:28).

Land distribution in rural Latin America is historically and currently "dominated by an extraordinary degree of concentration through the latifundia-minifundia pattern" (Stokes, et al. 1979:40). Even where land reform has been attempted, its effects have not significantly altered the prevailing pattern (or, have not done so for long, as in Chile and Peru). Thus, according to the most recent FAO study, "85 million people constituting 70 percent of the farm population in Latin America live at the subsistence level" (1979:3). About half of these are small farmers; the other half are agricultural wage-labor.

How have women fared in all this? The key lies in understanding the changing composition of the rural labor force as Latin American agriculture has moved relentlessly toward commercialization in recent decades. New, fully capitalist agribusiness ventures raising plantation crops and/or cattle for export have been started; more and more of the traditionally underproductive latifundia (large estates) have been moving in this direction. Within the overall pattern of proletarianization of the labor force, several trends emerge. First, the resident, permanent workforce on the large holdings has been declining in both relative and absolute terms. Second, temporary, seasonal wage-workers have substantially increased.

Third, proprietors and unpaid family workers on the minifundia (small farmers) have increased as well.

Regarding the sex division of labor, women have been disproportionately displaced from permanent employment on the large estates. (In Chile's Central Valley, elimination neared 100% by 1965 [Garrett 1976].) Where women stay in agriculture, they have become more and more concentrated in the category of unremunerated family helpers (invisible in national accounts). The poorer they are, the greater is their role in family farm work and decision making. One study in Peru finds that women provide 35 percent of the labor among the landless/near-landless as against only 21 percent among the middle peasantry; the poorest women also tend to have the largest say in decisions made jointly among the middle peasantry (Deere 1977:14). But it appears that women are taking on an increasingly important role in a decreasingly significant source of family livelihood: the minifundias are becoming smaller, poorer and more marginal. In Cajamarca, Peru, 71.3 percent of the total land units in the province were parcels of less than 3.50 hectares; on such farms the labor requirements do not exceed two months a year (Deere 1977:13, 19). Under such circumstances, the key to survival is held by men who supply off-farm income through temporary wage labor, in a process of seasonal migration to the large estates and plantations. Such patterns have been documented for large regions of highland Peru, north-east Brazil, and elsewhere. Deere argues that such patterns reduce labor costs in the large commercial farms since they do not have to pay a full family wage. In this way, she proposes, capitalist and non-capitalist modes of production dovetail neatly to the profit of the former.

These new labor patterns have left many women with no place at all



in the rural economy. Many of them follow the path of "Hermalinda," the Peruvian domestic whose story is movingly recounted by Chaney, and migrate to marginal opportunities in urban areas as domestic servants, ambulatory vendors, prostitutes, and the like (Chaney 1978). Thus, as noted above, Latin America is unique in having a primarily female rural-urban migration stream (Youssef, et al. 1979). These women rarely return to the countryside even as visitors (Chaney 1978).

Poor women remaining in the rural sector follow several work patterns. Aside from unpaid family work on subsistence minifundia and a very small proportion of permanent work in agribusiness, poor women are without work or fill the lowest paid, least secure, temporary jobs. For example, some work on plantations, especially in crops such as coffee, but it is overwhelmingly as seasonal, temporary labor. Moreover:

Whether working as permanent or temporary labourers, women in different countries of South and Central America appear to receive lower pay than men. In Colombia, for example, the basic wage for the permanent adult female workers was 40 percent lower than that of males and, for the temporary workers, the basic wage was 32 percent lower for the women. Similar sex-based differentials were found to be the usual practice on the sugar cane and coffee plantations in Costa Rica, Guatemala, Nicaragua and Peru, as well as in the cotton estates in the various countries. (UN A/33/238, 1978: 29, citing the ILO 1970 plantation study)

Another pattern emerged as capitalist agriculture came to the Cauca Valley of Colombia (Rubbo 1974). The region had long had a subsistence sector in which women frequently headed their own families and farmed horticultural smallholdings with income-producing tree crops (coffee and cocoa), intercropped with a variety of food crops requiring little weeding in the well-shaded biosystem. Something ripened every couple of weeks and the crop mix was such that labor inputs were fairly constant (and low) the year round. That landscape has given way to monoculture of sugar-

cane, rice and other annual cash crops. Many of the women have been forced off their holdings by the voracious land-hunger of the expanding plantations. Others have cut down their trees and cleared their gardens at the urging of sons, who, encouraged by male extension agents, have introduced annual commercial crops. Families are then deprived of a steady food supply and exposed to the vicissitudes of the world market, with the result that many small holders go under. The women then become increasingly dependent on male access to wage labor, and/or are recruited into labor gangs of temporary female workers who live in the towns and work on subcontract at the lowest of wages. In sum, women are again losing both absolutely and relative to men as they lose control over their means of production.

The patterns described above have tended to attenuate family ties between male and female, and have helped swell the ranks of female heads of household. One frequent scenario is when the male fails to return from a stint of seasonal migration. But regardless of its genesis, the rural female-headed family is likely to be the most marginal of all, with the least adequate access to the means of production.

What then of agrarian reform? How have women--especially female family heads--fared under the redistribution and resettlement schemes aimed at reversing the trend of rural pauperization? First, it appears that land reforms accomplished to date have been largely ineffective in changing unequal patterns of access to the means of production. Second, it also appears that land reform has been either neutral or actually detrimental with respect to women's position. A woman is extremely unlikely to be named as the legal beneficiary of agrarian reform or the officially-recognized "member" of any resulting cooperative control structure.

(Even a female head of household with no male present, although theoretically equal to men, is rarely so named in practice; such women are disproportionately underrepresented in the reformed sector.) And without such recognition, she is unable to receive credit and many other forms of assistance.

Resettlement schemes often have been particularly hard on women, since emphasis tends to be given to cash crops for the men. If the women are remembered at all, it is typically via allocation of a minute "kitchen garden" outside the house, in which they are supposed to grow nutritious vegetables for the family. Sometimes (as in Honduras) it is legally impossible, under the terms of the agrarian reform/resettlement law, for the women to be allocated land for women's cooperative production. This leaves the women completely dependent on their men in a strange and difficult environment.

Clearly neither poor men nor poor women have increased their access to land or employment under Latin America's still-dominant latifundia-minifundia pattern. But the impact of commercialization has apparently had a more negative impact on women. These increasingly marginalized rural females seem to suffer from a combination of the negative consequences of both the African pattern (where women work harder with less help to grow more of the food crops in the subsistence sector) and the Asian pattern (where women work for wages in the cash crop sector, but at the lowest-paid and least stable jobs). And their plight is distinctive in its extreme invisibility: more than elsewhere, their labor contribution is in categories that "fall between the cracks" of national statistics.

Middle East

The stereotype of rural Middle Eastern women is that they play at best a very marginal role in agriculture, have low skills and participate little, aside, perhaps, from the peak seasons of the yearly cycle. This view is consonant with the national statistics for most of the area, which show the lowest rates of female economic activity in the developing world.

Yet, here too, detailed village studies are providing evidence that women are much more active than previously thought, both in crop production and (particularly in North Africa) in animal husbandry. Van Dusen reports:

For instance, against the Tunisian estimate that 13.2 percent of rural Tunisian women were economically active in 1972, Nassif found that approximately 40 percent of the adult women in a small Tunisian village she was studying had economic roles, from which they derived some income. (Van Dusen 1977:23, citing Nassif 1976)

Van Dusen does not regard the discrepancy as the result of a "willful disregard or deemphasis of women's employment by the government"; rather, she argues, it stems from a problem of definition: traditionally, in specifying 'economic activities,' the entire informal market system is excluded" (Van Dusen 1977:23-24). However, underreporting is due to more than official definitions: "the pressure of cultural norms would explain, in part, the underenumeration of working women in agriculture, since farmers are generally reluctant to report that their wives and daughters have a gainful occupation" (UN A/33/238, 1978:27, citing Youssef 1977).

Moreover, trends in the region seem to indicate that women's participation in agriculture and other economic activity is increasing and likely to rise further in the future. A major cause is international migration, which (except in Turkey) is heavily male. For example, in Yemen, approxi-

mately half the male labor force is out of the country at any given time, employed in the oil-producing countries of the Persian Gulf. Rising rural male outmigration may prove linked to the rising proportion of female-headed households and rising divorce rate in Morocco. Even where male migration may not be to destinations outside of the country, it can have a profound effect. In one oil-producing country, Algeria, the government "reported that female participation in agriculture more than doubled between 1966 and 1973, primarily owing to male migration, which resulted in an increased importance of female labour in self-managed farms" (UN A/33/238, 1978:22).

In sum, under the impact of internationally-generated economic trends, customs change and traditions accommodate to new and urgent survival necessities. There is no evidence of any group choosing economic ruin rather than permit a change in the traditional economic role of its womenfolk. If the survival necessities are urgent enough, women may move almost overnight into tasks considered both "inappropriate" and "incompatible." But increases in women's agricultural activities may not positively affect their autonomy or well-being. The less women control the means of production, the less they can control the conditions of their participation in production. Progress toward full development with equity is thus unlikely to be measured by even improved statistics of female economic activity rates, but rather by the still largely uncollected data on relative female economic resource rates. Thus, it is to the profile of women's work and women's resources presented by official statistics that we now turn.

#### IV. Sex Division of Labor and of Resources in Rural Life: Data Problems

##### Sex Division of Labor in the Countryside: Shortchanging Women's Work by Statistics and Stereotypes

If we had to rely solely on the national and international statistics about "women's labor force participation," we would have very little idea of what women actually are doing in agriculture. But recognition is slowly growing that rural women's work is undercounted by an unknown but clearly enormous margin in most of the world.

To begin with, census definitions of who is economically active reflect the labor force characteristics and fully monetized economies of the developed countries. Forcing the reality of a given developing country into an extremely ill-fitting standardized definition may result in categories which are of limited usefulness, idiosyncratic in content, and/or subject to change in unpredictable ways. Also subject to change is census methodology in asking the questions from which the statistics are derived.

Carmen Diana Deere (1977a:6-12) refused to accept Latin American census data that showed that (1) women's role in agriculture is minor or even negligible compared to men's, and (2) furthermore, it had declined steeply relative to men's in recent years (Deere 1977a:6-7). Instead, she conducted her own field research in Peru and critiqued the biases underlying government figures. She summarizes three sources of error:

(1) errors in the categorization of occupation; (2) errors in the criteria employed to distinguish between the economically active and inactive agricultural participants; and (3) errors due to the measurement of self-perceptions rather than actual participation based on the labor time dedicated to the activity. (Deere 1977a:7)

Deere found participation levels and trends that clearly contradicted the official portrait, but she also found how important it was to get beyond the respondent's initial self-definition. Given cultural pressures in Latin

America, "[i]f the first question asked in a census questionnaire is that of the person's principal occupation, peasant women uniformly reply 'their home'" (Deere 1977a:7). This is the typical questionnaire format. However, the data are very different if the interviewer opens with questions on a woman's economic activities, Deere ascertained in comparing two Peruvian censuses which used these contrasting formats.

In the Middle East, strong cultural norms circumscribe women's appropriate domestic role, and thus farmers are generally reluctant to report that their wives or daughters have a gainful occupation (Youssef 1977). Such men apparently feel that their self-image and family honor is compromised by admission that their womenfolk are economically active. Here and elsewhere the standardized questions of demographers unattuned to local circumstances may elicit cultural prescriptions rather than practices. The mechanism creating a cloak of official near-invisibility is then set in motion.

The official definitions of economic activities contribute to the incomplete visibility of women's agricultural roles in other ways as well. Strongly oriented toward the monetized sector, they tend to ignore or grossly underrepresent both the informal market sector and the non-market, subsistence sector. In most of the Third World, rural women are disproportionately concentrated in the latter two sectors. A related definitional problem that affects mainly rural women--especially poor ones--concerns "unpaid family workers." This category is subject to frequent redefinition. Also the official definition often includes a minimum time requirement for farm workers, while making no comparable restrictions defining other occupational categories. In other instances, "unremunerated family workers" may be partially or wholly eliminated from the economically active population.

The typical dual stress on both (1) monetized and (2) non-familial economic activities often means a concentration on narrowly defined agricultural production activities, virtually ignoring other aspects of the complete agricultural system. Storage, processing and local marketing are also invisible in national accounts. Because women overwhelmingly dominate the storage and processing realms, and (in much of Africa, Southeast Asia and Latin America) also dominate part of local marketing systems, narrow definitions of the agricultural system once again obscure women's roles.

Historically women have been more involved with horticultural (hoe) than agrarian (plow) cultivation; more with small animal husbandry than large animal herding; and more with gathering than hunting. These concentrations, continuing to the present day, make for still another form of statistical underenumeration: that based on land-use. Cloud makes this point forcefully:

Another factor contributing to neglect of women's role in food production is the fact that much of it takes place on uncultivated land--in gathering, small animal production and milk production. Alternatively it takes place in very small plots, in vegetable gardening. It is one of the characteristics of gardening [horticulture] that a great deal of food can be produced in a small space, but this very characteristic tends to work against women. For example, consider this quote, "Cereals are the major crop; many varieties are grown on about 65 percent of the cultivated land....Peanuts and cotton occupied about 25 percent of the cultivated area. Small amounts of manioc, yams, sugar cane and tobacco were produced on the remaining 10 percent of the cultivated land" (Matlock and Cockrum 1976). Women's crops are invisible in this account of land use. This invisibility may also contribute to the lack of development resources available for some kinds of food production. (Cloud 1978:15, emphasis added)

In addition, the seasonality of female participation in agriculture may work against an accurate picture of women's involvement. This is particularly likely if the female work calendar differs from the male work calen-



dar and if the census falls in a period of lower female activity.

But a far more important problem is that of sex stereotyping. Stereotypes depicting women as agriculturally unproductive may be so strong that contrary evidence is repressed under most circumstances. I experienced a striking example: In a country best left unnamed, the man who directed agricultural planning greeted with great enthusiasm my questions about enhancing female participation in planned agricultural development. "Oh yes, I'm in favor of that--a woman should be made more aware of these things; she should know in which month her husband plants." Yet this very same official was equally enthusiastic in corroborating data from a new field study which I brought to his attention. Once we began discussing the empirical findings detailing that women made up one-half or more of the paid labor force in the principal cash crops of a major region of the country, he was able to change his mental set. He agreed that in those particular crops in that particular region women were indeed important--and (due to lower female wages) were becoming more so. The contradiction is easily explained. His generalized image of rural women was as housebound helpmates. When confronted with specific data that deviated from this picture, he shifted mental gears. His overall approach to agricultural planning, however, relied much more heavily on the generalized image than on the deviating data. Perspectives such as his will persist: given the strength of the stereotypes and the ubiquity of standardized statistics, deviating data are still sparse and poorly disseminated.

Unfortunately, a new problem may arise from initial efforts to fill the data gap on women's agricultural roles. Rapidly collected rough estimates may acquire unwarranted "hardness" through widespread indiscriminating use. An example is Fagley's effort to gather data on rural women as food

producers for his church-related organization. His informants were "concerned people in several intergovernmental and non-governmental agencies . . . those familiar with rural conditions in Asia, Africa and Latin America" (Fagley 1975:1). Fagley is very aware of the limitations of his data base. However, in response to pressure for data on female agricultural participation other than what are becoming recognized as limited and/or distorted government statistics, reports such as Fagley's are entering the "women in development" information network. Such estimates end up being used (with or without explicit citation) in a variety of reports and publications. To the extent that his original sources were not as knowledgeable as he hoped and, to the extent that his unsystematically collected data obscure important sources of variation such as region and (in particular) class,<sup>13</sup> this widespread citing could provide a comfortable, but false, impression that women's agricultural roles are now appropriately recognized.

Sex Division of Resources in the Countryside:  
Questions, Not Answers, about Women's  
Relative Economic Power

There are not even rough estimates of women's control of resources. This is a regrettable lack. In my paradigm of sex stratification, I argued that women's participation in production seems to be necessary, but not sufficient, to achieving a fair degree of equality in status and life opportunities. Work, in and of itself, is not a significant predictor of such equality. (After all, slaves work too--and workers and peasants have not yet inherited the earth.) Rather, I proposed, the most important determinant of women's relative equality on a wide variety of

dimensions is their relative economic power, as compared to that of the men of their group or class. The findings of a pilot study on a sample of 61 pre-industrial societies strongly supported my hypothesis (Blumberg 1974, 1978, 1979).

Given the almost total lack of information about what appears to be the crucial determinant of women's position in their community, i.e. control of resources, it is not surprising that this factor is almost invariably ignored in development planning. Yet where women do not stand to gain from a program--or even find that it undermines the resources traditionally under their control--they will be at best unwilling, and at worst obstructive, participants in the project. Reading between the lines of much of the literature on the failure of development projects, one is impressed by how often the negative results seem tied to an insensitivity to the basic question, "who benefits?" And all too rarely are the beneficiaries the class and/or sex most in need.

Clearly, research on the relative distribution of resources is needed. But, as the social science cliché insists, "all research starts with a question." Here we present two overlapping sets of questions as a preliminary framework for baseline evaluation of women's resources relative to men's.

First, in my own sex stratification research, I constructed a scale of women's relative economic power as compared to the men of their class/group. Although I used the ethnographic data of the Human Relations Area Files for the study, some version of these questions may prove heuristic in contemporary Third World research:

1. what is the relative proportion of the means of production (Involving both real and movable property, such as animals) controlled by women vs. their menfolk?

2. What is the relative proportion of the fruits of production, distinguishing surplus vs. subsistence production, controlled or allocated by women?
3. How did they get their hands on the above via inheritance, i.e., what are their relative inheritance rights for different types of property, as actually practiced in the group?
4. What are women's actual rights to accumulate property of different types on their own behalf by routes other than inheritance?

This list bears a number of points of similarity with that proposed by Chaney, Simmons and Staudt (1979). They explicitly address the issue of women's access to land and water and suggest that information be gathered about the following questions:

1. Do women have legal rights to own and inherit land as individuals?
2. Does a redistribution of land in a proposed land reform take into account women's traditional access to land as well as their access in the modern legal code?
3. Are there grounds for women participating in land redistribution schemes in their own right?
4. Under what conditions does the introduction of cash crops spur competition for the land used for food crops?
5. What proportion of good agricultural land is held or controlled by women?

Broadening this scheme to include factors of agricultural production other than land (for example, animals, access to water, crop-producing trees or other perennials) provides a framework for collecting data. This framework addresses a data lack which ultimately may prove more relevant than the lack of detailed statistics on women's labor in agriculture.<sup>14</sup>

Let us conclude this section with a summary of the data base that seems needed, as distinct from that which actually exists, concerning women's (1) participation in production, and (2) their relative degree of control of the means and fruits of production.

With respect to data on participation, full recognition of women's role should include the following (this list is not definitive or complete):

- by crop/agricultural activity (e.g., poultry-raising)
- by time input over the day, week and complete one-year agricultural cycle
- by class within the site of study
- by village, region or other significant source of variation in cultivation pattern
- by not only production, but also by storage, processing and marketing (i.e., by the various components of the entire agricultural system)
- by productivity (i.e., amount of output in absolute terms as well as in relative terms, measured against that of males)
- by percent of land use (if only to provide a basis for indicating that women's contribution to agriculture may not be reflected by such a measure vs. others indicated in this list)
- for comparison, existing national statistics (to assess error margins in past planning)
- for comparison, data on relevant groups, especially the men of the same data base group, or groups of women in other times and places

With respect to relative resource control, we should know (relative to the men of the data base group) women's proportionate control of the major means of agricultural production, defined broadly enough to include:

- the major sources of input assistance, e.g., extension, credit, training
- the major outputs of agricultural production, both for use and for exchange
- the property acquired by inheritance
- the property acquired by routes other than inheritance
- decision-making with respect to the major issues of the agricultural cycle

Data collection along these lines will permit scholars to test more conclusively the relationships between women, production and property that we have underlined throughout this survey. These relationships are now summarized and formalized in a set of hypotheses drawn from my cross-societal paradigm of sex stratification (see especially Blumberg 1979). These hypotheses should help us to explain and understand trends in contemporary developing societies. As indicated above, the central hypothesis of the theory is:

- H<sub>1</sub>: Women's level of economic power (based on their degree of control of the means and fruits of production), relative to the men of their class/group, is the most important determinant of their relative equality in a wide variety of "life options."<sup>15</sup>

Moreover, this notion of women's economic power stresses their control over productive resources:

- H<sub>2</sub>: The greater women's relative control over the means of production, the greater their relative control over the fruits of production.

Additionally, concerning sex division of labor, a number of hypotheses are relevant for this article:

- H<sub>3</sub>: Women's participation in production seems to be a necessary but insufficient precondition to their achieving a relatively high level of economic power.
- H<sub>4</sub>: Women's participation in production, independent of their relative economic power, is not predictive of their relative equality in "life options."
- H<sub>5</sub>: Women's participation in production in pre-industrial societies is primarily a function of (a) the degree of compatibility of the activities with simultaneous childcare responsibilities (especially breast-feeding), and (b) the demand for labor relative to the available male supply.
- H<sub>6</sub>: The less egalitarian the class stratification system in the society (i.e., its "social relations of production"), the more important labor demand (see Hypothesis 5(b) above) for the prediction of the sex division of labor.

Furthermore, when we consider present-day developing and industrial societies:

H<sub>7</sub>: Sex division of labor is additionally conditioned by (c) the stratification system within the society, and (d) its position within the world economy.

Finally, at the most general level, it is suggested that:

H<sub>8</sub>: The greater the control over the means of production, the greater the control over the impact of development.

#### V. Brief Evolutionary Overview of Women's Power, Production and Place

The preceding hypotheses can be used as reference points during a very brief summary of women's varying position in human history. As a baseline for interpreting present trends, let us review the three major pre-industrial techno-economic bases.

##### Foraging Societies

Present evidence indicates that we have lived as foragers, better known as hunters and gatherers, for perhaps 99+% of human life on earth. Foraging groups tend to be small, flexible, nomadic and egalitarian. Their egalitarianism is buttressed by sharing, a survival enhancing universal found in all known functioning foraging groups. In virtually none of them does an elite of either sex dominate control of the means of production, so that women's degree of economic power and control tends to approximate that of men in many of these classless societies. Moreover, since women tend to do more of the gathering and men more of the hunting (see, e.g., Murdock 1967; Murdock and Provost 1973), and 60-80% of the diet of most foraging bands living at non-Arctic latitudes seems to be gathered, not hunted (see, e.g., Lee and DeVore 1968), women tend to be the primary producers. Women's producing role apparently was not interrupted by frequent childbearing: evidence on contemporary groups indicates an average of over four years between a woman's births and 2.0-

children completed family size (see, e.g., Birdsell 1968; Whiting 1968). This was achieved by factors including long lactation, low body fat ratios associated with the high-protein-diet and nomadic lifestyle (Kolata 1974), abortion, infanticide, and/or use of plants with contraceptive properties. Interestingly, women's production activities (gathering) rank as quite compatible with childcare responsibilities (e.g., nursing) according to the similar criteria of Brown (1970), Whiting (1973) and Blumberg (1979a). Even so, leisure overshadows production for both sexes: Lee's input-output study of the Kung Bushmen of Namibia (1968) revealed an average workweek of well under 20 hours. Overall, "women's place," or equality in basic life opportunities, ranges from the apparently complete equality found among the recently-discovered Tasaday of the Philippines, and the near-equality among the Mbuti pygmies of Zaire and the Kung, to the decidedly "junior partner" status among the Australian Aboriginals--in general the least egalitarian of known foraging groups. Extant evidence indicates the average is closer to the Mbuti and Kung than the Aboriginals: just short of full equality.

#### Horticultural Societies

The latest evidence indicates that cultivation gradually emerged about 18,000 years ago in Africa, 10-12,000 years ago in the Middle East, and 7-8,000 years ago in Meso-America. Newer hypotheses stress local population pressure as the reason people began planting what they already harvested, and most authorities credit "Woman the Gatherer" (harvester) as the developer of cultivation. Even today, men are the dominant labor force in only about a fifth of contemporary horticultural societies included in the Ethnographic Atlas. But though women remained equal or



primary producers in most horticultural societies, their economic power (relative control over the means of production) proved much more variable. It ranged from groups where women controlled virtually all the economy (e.g., the Iroquois of colonial North America) to those where women worked, but patri-oriented kinship groups controlled, the economic base. Hoe horticulture greatly reduced nomadism and facilitated not only deliberate surplus accumulation but also "the world's first population explosion," as the birth interval narrowed (perhaps to 3+ years). Women's relative freedom, and relative equality in basic life options, continued to reflect not the extent of their labors, but rather, the extent of their economic power vis-à-vis their menfolk.

#### Agrarian Societies

In the transition from foraging to horticultural to agrarian (plow-based) societies, the trends are toward increasing surplus accumulation, stratification, political centralization, warfare, and fertility. Conversely, leisure and quality of diet tend to fall. Agrarian societies emerged in the Middle East perhaps 5-6,000 years ago, but their increased level of stratification may have contributed more to women's drastically reduced position than the change in technology. With the main exception of those irrigated rice societies where women are active in both production and trade (located primarily in Southeast Asia), female status drops to a historic lowpoint in agrarian societies. First, women tend to be pushed out of the principal production activities involving plow cultivation. Why? In brief, they are needed less, while more, and more desirable, labor is available. Specifically, plow cultivation is less labor-intensive per unit of ground area than hoe cultivation (see Lenski

and Lenski 1974). Moreover, a much larger population, including considerable surplus labor, is available. Finally, male upper body strength may be advantageous with animal-drawn plows. The source of the excess population is relevant. Most agrarian societies are class-stratified, and peasants may rent averaging around half the crop to those in control of the basic means of production. Children are especially useful in "staying ahead of the landlord," but the ruling class tends to have mechanisms to prevent all a peasant family's numerous children from taking up land as adults (this could soon consume all surplus). On the one hand, this results in pro-natalist pressure: women's reproduction (now averaging a spacing interval of 2+ years) is more valuable than their production. On the other hand, this creates a class of surplus labor, both rural and urban (by migration) which further erodes the position of peasants as a class. The women continue to work in and around the home, but their production (including kitchen gardens, small animals, food processing) has become largely invisible. Second, and more important, with control of larger means of production in the hands of a narrow male elite, and household level resources controlled by their menfolk, women's political, legal, religious, ideological, and marital position plummets (a picture of near-universal subjugation emerges from Michaelson and Goldschmidt's 1971 study of 46 peasant societies). The resource gap is largest among the elite, where the absolute lowpoint of female status tends to be found: veiling, purdah, foot-binding and suttee (widow burning, formerly practiced among certain propertied castes of Hindus) are institutions of the affluent in agrarian groups.

All of today's industrial societies, both capitalist and socialist, spring from an agrarian past. Yet both horticultural and agrarian bases

remain in much of the Third World and their patterns of female economic power, production and position are composites of these historical tendencies and subsequent politico-economic processes.

## VI. Conclusions and Policy Recommendations

As stated in the Introduction, policy recommendations stemming from our analysis focus on how women's contribution to farming and food systems may be (a) recognized, (b) preserved, and (c) enhanced, so as to promote more equitable development and food availability in the Third World. These recommendations show appreciable overlap with those in other recent documents on the role of "women in development" (see, for example, Chaney, Simmons and Staudt 1979). This indicates that a number of independent observers are reaching similar conclusions concerning action needed better to incorporate poor Third World women into the development process.

### Recognizing Rural Women's Economic Roles and Resources

1. A set of research guidelines should be prepared that would permit a better assessment of women's activities and resources and how these might be affected by a given development assistance project. Funding for such an effort should come from the donor agencies (such as the Agency for International Development); these agencies should then insist that such baseline data be collected for virtually all development assistance projects and be considered a routine component of such projects. These research guidelines should, as a minimum, encompass sex division of labor and sex division of resources. The latter, it has been stressed, is at least as important as the former. If a project will end up demanding more labor from women while allocating the benefits to men, its chances for technical success would seem clouded, and its impact on "development-with-equity" would be clearly negative.

2. In addition to the somewhat skeletal data collection undertaken in fulfillment of the research guidelines proposed above, a series of more detailed studies should be undertaken, guided by the emerging experience and theory concerning the "incorporation of women in development." As this paper has indicated, there already exists a body of knowledge and some preliminary generalizations about women's contributions to food-getting activities in different eras, regions, classes and crop systems which could greatly enhance the generalizability and potentially cumulative nature of these studies. It is thus recommended that several strategic examinations be undertaken of the full scope of women's involvements in all aspects of the agricultural system, ranging from the time devoted to each major activity to relative female access to the means of production. It is also relevant to study sex-specific spending patterns of increased income under the control of the man versus the woman, since available evidence indicates strong sex differences in such spending. This latter information could be quite useful to a "basic needs"-oriented development program.

3. Many "development with equity" objectives would be facilitated if the contributions of the poor majority, and particularly of poor rural women, were made more visible in national statistics and accounts. In future censuses, it might be possible to develop and disseminate a sample module better to measure participation in the informal sector of the economy, and to phrase the questions in ways that promote objective, rather than socioculturally desirable, answers. The oft-quoted example of the male census enumerator asking the peasant woman hoeing her fields for her occupation, and dutifully writing down the answer her culture constrains her to give--"housewife"--describes a situation that is still widely prevalent.

Preserving and/or Enhancing Rural Women's  
Economic Roles and Resources

Because of considerable overlap, policy recommendations for the "preserving" and "enhancing" goals will be considered under a single heading.

1. We start with those aspects of women's agricultural involvement with the input programs that traditionally have given women short shrift. This means increased attention to training, extension and credit. It also means the incorporation of women at all staffing levels of such programs, from short-course-trained village workers to decision-making professionals. This in turn means that any remaining legal obstacles prejudicing female participation in these programs must be eliminated.

2. Possibly the most important precondition to women being able to use the resources in the preceding recommendation is the reduction of their unnecessary drudgework. Appropriate technology for women is not something that is likely to be transferred to rural areas by large agribusiness corporations. Rather, what is needed is the assessment by local women of the problems that can benefit from appropriate technology: perhaps a wheelbarrow for bringing in water and crops, or a simple stove that reduces the consumption of (and hence the work of obtaining) fuel, or a hand pump that women are taught to maintain and repair as well as use. Once such priorities have been identified by relevant subgroups of women (i.e., women in the various village classes and ethnic groups--their priorities will not overlap but should have some points of convergence), local women should be enlisted to help solve these problems. Thus, village women could work with (and, ideally, as part of) small teams of "itinerant innovators" which would attempt to develop low-cost indigenous solutions of

broad local applicability, using largely local inputs. An example of the successful application of such an approach can be found in the "puree of mango" project undertaken by a women's cooperative in the drought-prone Pespire region of Honduras. An "itinerant innovator" helped the local women design low-cost equipment for their cottage industry. In the first year of the project's operation, the men's corn crop was lost to drought, and the proceeds of the successful mango puree venture saved the day.

3. Moreover, for both the development-with-equity and food goals around which this paper is organized, it seems necessary to urge a major increase in "research and development" of new and/or improved food crops. But this research must permit examination of the complete state of the local food chain, from soils to social relations of production (especially land tenure patterns); from cultivation techniques (including, of course, sex division of labor therein) to cooking techniques, food patterns and nutrition. And the first application of those results should be aimed at enhancing local, regional and national food consumption, rather than encouraging the benefits to be exported under what will quite probably be terms of unequal exchange.

4. The previous point highlights the necessity of an expanded focus on the entire agricultural/food system. Presently, what is most visible is cultivation of specific crops (usually cash crops) by a paid labor force. But this leaves out what may be the most important parts of the story: storage (up to one-third of the world's food harvests may be lost to pests, and much of this loss occurs post-harvest), processing, marketing and preparation all must be considered in their relationship to production. So too must one consider the informal, non-cash sector of the

agricultural system, and its unpaid labor force. In all of the above, the relationships of production may rival or exceed the techniques of production as explanations of the extant system and levels of productivity.

5. The need for "participatory research" is much stressed these days in discussions of Third World development. This often means that the locals, that is, the intended beneficiaries, be involved in delineation of the problems to be solved. But "participation" must go behind that to include local monitoring and evaluation of ongoing projects as well as assessment of project impact at least one year after the end of the implementation phase. Such monitors might best consist of little subgroups representing each relevant local interest affected (for example, sex, social class, ethnic group), lest only the concerns of the (predominantly male) local elites be taken into account. It should also be possible to develop a version of the research module on the sex division of labor and resources discussed above that could be utilized by the local women themselves. In this way, they would be made partners, rather than mere passive "subjects," in the search for knowledge that might help them in their lives.

6. The disadvantaged legal position of women in agrarian reform schemes is sufficiently widespread to justify special mention. If enhancing development-with-equity is now considered a major goal, and if agrarian reform schemes continue to be pushed as a major vehicle in achieving more equitable growth, then care must be taken that the welfare of half the population is not hindered--rather than helped--by the provisions of the reform programs themselves. In the typical land reform or resettlement scheme, it is impossible for a woman to be a beneficiary in

her own right, with the possible exception of husbandless women who have children. In the typical case, also, there is rarely a provision for fields that the women can cultivate communally via cooperative arrangements for income-producing purposes.

7. A special word also must be said about female-headed households, usually the poorest and the hungriest sector of the rural population and the most in need of income-producing projects. Macro trends almost guarantee that rates of de facto and de jure female headship will (continue) to rise. These are women who, in general, must have access to income or face starvation. Directing special programs to them need not be considered a special humanitarian boon to the suffering, but a productivity-enhancing method of promoting income redistribution. How well they fare, and how well they eat, may serve as the ultimate indicator of a country's progress toward development with equity.

8. At the other end of the social scale is the problem of professional personnel. Given the fact that the knowledge base of the "women in development" field has been expanding so rapidly, it would seem appropriate that more people with demonstrated expertise in this area be hired, both within Third World government ministries and within the various donor agencies (AID, UN, etc.). Within AID, for example, such input is needed at both the Mission and the Bureau level. This is vastly preferable to adding a "women in development" hat to those many hats already worn by program officers whose main job assignment lies in other areas. The gradual specialization and proliferation of population officers provides a recent historical example (and possible model) of the institutionalization of new program priorities within AID.



9. Finally, if the lives of the poor rural women are to be enhanced, we must simultaneously act to insure the enhanced roles of poor rural girls. In those parts of the Third World where female primary school enrollment rates lag behind male ratios, a special effort should be made to provide incentives for parents to send their daughters to school. Income-producing school gardens might not do more than teach development-relevant knowledge to local girls. But, if successful, such projects could provide a return to parents that would make it easier for them to justify giving up a daughter's labor at home for the sometimes dubious benefits of rural schooling. Providing a small nucleus of local females with skills via short-course training (for example, in horticultural crops, small livestock, paramedical services, cooperatives and credit, etc.) and then hiring them as development workers could result in a dynamic demonstration effect for girls' education.<sup>16</sup> Both daughters and their parents could see local females who had received local training and were now making it pay off, both for themselves and the village. If these young women were housed together, along with the female primary school teacher(s), this could overcome local objections concerning sex-appropriate "respectability." And such a nucleus could also serve as a catalyst for traditional forms of women's organizations. Neither these indigenous institutions nor women past their childbearing years should be rejected as "traditional" and/or "unreachable." If the new knowledge could be better integrated with the culturally-tested subsistence base, then the chances for promoting both greater productivity and better lives for all the rural poor would be substantially enhanced.

In sum, it is perhaps a step forward that the expression, "women hold up half the sky" is coming into vogue in development circles. But

programs must be formulated right here on earth to provide women with an appropriate foundation for their burden. Half the world's food and possibly all of its prospects for achieving development with equity are at stake.

## FOOTNOTES

<sup>1</sup>Originally conceived in my sex stratification paradigm as opportunities/issues existing in all known societies, the "life options" include women's relative freedom to decide marriage and divorce, control sexuality pre- and extra-maritally, regulate fertility patterns, enjoy freedom of movement, have access to available educational/training opportunities, and exercise household power and decision-making.

<sup>2</sup>A National Academy of Science study notes that of roughly 100,000 edible cultigens, only some 30 are emphasized as commercially viable (Irene Tinker, personal communication, 1979).

<sup>3</sup>With the rise of capitalism, surplus was not dissipated in consumption as among the ruling class in agrarian societies, but rather reinvested, which produced an astonishingly rapid and enormous multiplication of the economic pie totally unprecedented in human evolutionary history. By the early part of the sixteenth century, the conquest of the New World (and perhaps the stimulus to the terms of trade provided by several strategic technological innovations such as the long-range naval cannon and large sailing ships) catapulted European expansion to global dimensions (see, e.g., Griffin 1973:70).

<sup>4</sup>The result often has been described as "dual economies," with the implication that beyond the confines of the export-oriented "modern" sector, a totally traditional system remained largely untouched by "modernization." The evidence, however, does not support such a conception of "dualism."

<sup>5</sup>See Geertz' classic, Agricultural Involution (1963), for a case study of how the so-called "traditional" sector in Java actually underwrote the export-sector profits largely repatriated to Holland.

<sup>6</sup>For example, to the present day, Honduras lacks a railroad connecting the two principal cities (Tegucigalpa and San Pedro Sula), but it has a network of rail connections from the banana-producing plantation areas to the ports.

<sup>7</sup>This generalization holds for "open" as well as "closed" economies (the latter having attempted to limit incursions of core countries and/or their multinational corporations) (Seers 1970).

<sup>8</sup>In the Morgan, et al. studies (1973), it is provocative that household composition proved to be one of the most important variables affecting family economic well-being--and the only one of the five major determinants (the others were sex, age, race, and education before age 25 of household head) at least partially under the voluntary control of those involved.

<sup>9</sup>For example, Michaelson (1975) discusses the importance to the family's annual cash needs of the small remittances sent a couple of times a year by a young teenager who had migrated to Bombay and found work as a houseboy.

<sup>10</sup>There are indications that both many Third World governments and international development assistance agencies are starting to devote critical resources to the previously much-neglected area of food crops. For example, Lele notes:

According to figures compiled by the Organization for Economic Cooperation and Development, 81 percent of agricultural research expenditures in Africa went to export crops and only 14 percent to food crops in 1961. By 1971 the proportions had become approximately equal with 45 percent of research expenditures on export crops and 47 percent on food products. (Lele 1975:28)

<sup>11</sup>This discouraged obvious sources of stress and friction between co-wives, which might emerge if the women would have to share the same residence. More importantly, I have suggested (Blumberg with Garcia 1977), it reduces the chance of a strong producers' alliance that might threaten male dominance of the group's "political economy": generally, each co-wife runs her own basically autonomous production unit, selling her own surplus, and maintains her own children, rather than engaging in a communal enterprise with the other co-wives of the compound.

<sup>12</sup>Aside from the worsening contemporary problem of desertification, the region long has been marked by major droughts occurring about every 40 to 60 years.

<sup>13</sup>Often, female participation in even a single village will vary enormously by social class where the local stratification system is complex. This is perhaps best recognized in the works of Stoler (1977) and Milone (1978) on Indonesia and Deere (1977, 1979) on highland Peru. Another widely cited overview study never claimed to provide rigorous, well-disaggregated findings deserves mention at this point. In 1974, a fast, AID-contracted assessment, A Seven-Country Survey on the Roles of Women in Rural Development, appeared. Its authors note that they worked under tremendous time pressure and used the reports of on-the-scene observers--whose information was often "region-within-country-specific"--to put together some generalized national information on the scope of female participation. The information is not disaggregated on the basis of class, region, or other relevant dimensions. But it seems to indicate really substantial female participation in the major decisions of the agricultural cycle in most of the countries. In particular, the summary table to this effect, "Male/female decision-making and participation in agriculture" (1974:48), has acquired a life of its own. In the absence of better data, it is frequently cited in support of a wide and often conflicting series of points concerning the role of women in development.

<sup>14</sup>This is because I have hypothesized (and found, in preliminary investigation) women's decision-making discretion in a wide variety of areas--from agriculture to fertility, and perhaps also for allocating resources for family welfare items (food, school fees) vs. individual consumption items (liquor, imported consumer or capital goods)--to be a function of their relative economic power.

<sup>15</sup>These "life options" are briefly described in footnote 1.

<sup>16</sup>One of the most spectacular and least expected benefits of a protein-supplement program for schoolchildren in Guatemala was the increase in female educational involvement. The little girls imitated the young women protein-supplement distribution workers, but more important, their parents were able to see a practical outcome to sending their daughters to school. The young women workers were themselves of rural origin, with only a moderate level of education. Thus, they provided a vision of a realizable and attractive payoff for staying in school (see Birdsall and McGreevey 1979; Engle 1979).

## REFERENCES

- Abercrombie, K. C. "Agricultural Mechanization and Employment in Latin America," International Labor Review, 105-106 (1972), 11-45.
- Ahmed, Zahir. Land Reforms in South-East Asia. Delhi: Longman, 1975.
- American Association for the Advancement of Science. Culture and Population. Washington, D.C.: American Association for the Advancement of Science, 1974.
- Amin, S. Accumulation on a World Scale. New York: Monthly Review Press, 1974.
- April, J. E., et al. "Cassava's Role As a Food Staple." Preliminary Report for the Office of Nutrition, Bureau for Technical Assistance, Agency for International Development, University of Colorado, 1974.
- Badran, Hoda. "The 'Cost' of a Child," CERES, 7, 4 (July-August 1974), 25-30.
- Billings, Martin P. and Arjan Singh. "Mechanization and the Wheat Revolution: Effects on Female Labour in Punjab," Economic and Political Weekly, 5, 52 (1970), A-169-A-172.
- Birdsall, Nancy and William P. McGreevey. "The Second Sex in the Third World: Is Female Poverty a Development Issue?" Paper presented at the International Center for Research on Women Policy Roundtable, Washington, D.C., 1978.
- Birdsell, Joseph B. "Some Predictions for the Pleistocene," in Richard G. Lee and Irven DeVore (eds.) Man the Hunter. Chicago: Aldine, 1968.
- Blumberg, Rae Lesser. "Structural Factors Affecting Women's Status. A Cross-Societal Paradigm." Paper presented at the International Sociological Association, Toronto, 1974. (mimeo)
- \_\_\_\_\_. "Kibbutz Women: From the Fields of Revolution to the Laundries of Discontent," in Lynne Iglitizin and Ruth Ross (eds.) Women in the World: A Comparative Study. Oxford: ABC Clio, 1976.
- \_\_\_\_\_. "Economy, Family, Fertility and the Female: Fairy Tales and Facts," in Irene Tinker and Michele Bo Bramsen (eds.) Women in World Development. Washington, D.C.: Overseas Development Council/American Association for the Advancement of Science, 1976.
- \_\_\_\_\_. "Women and Work Around the World: A Cross-Cultural Examination of Sex Division of Labor and Sex Status," in Alice Sargent (ed.) Beyond Sex Roles. St. Paul: West Publishing, 1976.
- \_\_\_\_\_. Stratification: Socioeconomic and Sexual Stratification. Dubuque: William C. Brown, 1978.

- \_\_\_\_\_. "A Paradigm Predicting the Position of Women: Policy Implications and Problems," in Jean Lipman-Blumen and Jessie Bernard (eds.) Sex Roles and Social Policy. London: Sage, 1979.
- \_\_\_\_\_, with Maria Pilar Garcia. "The Political Economy of the Mother-Child Family: A Cross-Societal View," in Luis Lenero-Otero (ed.) Beyond the Nuclear Family. London: Sage, 1977.
- \_\_\_\_\_, Robert F. Winch, and Hazel H. Reinhardt. "Family Structure As Adaptive Strategy." Paper read at the meeting of the American Sociological Association, Montreal, 1974. (mimeo)
- Boserup, Ester. The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure. Chicago: Aldine, 1965.
- \_\_\_\_\_. Women's Role in Economic Development. New York: St. Martin's Press, 1970.
- \_\_\_\_\_, and Christina Liljincrantz. Integration of Women in Development: Why When How. United Nation's Development Programme, New York, 1975.
- Boulding, Elise. "Women, Peripheries and Food Production." Proceedings and Papers of the International Conference on Women and Food, University of Arizona, 1978. (mimeo)
- Bourque, Susan and Kay B. Warren. "Compesinas and Comuneras: Subordination in the Sierra," Journal of Marriage and the Family, 38 (1976), 781-788.
- Brown, Judith K. "A Note on the Division of Labor by Sex," American Anthropologist, 72 (1970), 1074-1078.
- Buvinic, Mayra. "La mujer en el proyecto de desarrollo integral de la region occidente de Honduras." Paper for the Program of Rural-Urban Development, Organization of American States, 1978.
- \_\_\_\_\_, Nadia H. Youssef and Barbara Von Elm. "Women Headed Households: The Ignored Factor in Development Planning." Report submitted to the Women in Development Office, AID, Washington, D.C., 1978.
- Chaney, Elsa. Testimony before the House International Relations Committee, March 1978, Washington, D.C., 1978.
- \_\_\_\_\_, Emmy B. Simmons, and Kathleen A. Staudt. "Women in Development." Office of Women in Development, AID, Washington, D.C., 1979.
- Chinchilla, Norma S. "Industrialization, Monopoly Capitalism, and Women's Work in Guatemala," in Wellesley Editorial Committee (ed.) Women and National Development: The Complexities of Change. Chicago: University of Chicago Press, 1977.
- Clark, Barbara A. "The Work Done by Rural Women in Malawi," Eastern African Journal of Rural Development, 8, 1 & 2 (1975).



- Cleave, John H. African Farmers: Labor Use in the Development of Smallholder Agriculture. New York: Praeger, 1974.
- Cloud, Kathleen. "Sex Roles in Food Production and Distribution Systems in the Sahel." Paper presented at the International Conference on Women and Food, University of Arizona, Tucson, 1978. (mimeo)
- Cox, Milo L. "A Simplified Approach to Agricultural Systems." Paper presented at the International Conference on Women and Food, University of Arizona, Tucson, 1978. (mimeo)
- Cox, Paul. "Who Controls the World Food System?" University of Wisconsin, Food/Climate Research Institute, 1974.
- de Alcantara, Cynthia Hewitt. Modernizing Mexican Agriculture: Socio-economic Implications of Technological Change, 1940-1970. Geneva: UNISRD, 1976.
- Deere, Carmen Diana. "Rural Women's Subsistence Production in the Capitalist Periphery," Review of Radical Politics, 8 (Spring, 1976), 9-17.
- \_\_\_\_\_. "The Agricultural Division of Labor by Sex: Myths, Facts & Contradictions in the Northern Peruvian Sierra." Paper presented at the Joint National Meeting of the Latin American Studies Association and the African Studies Association, Houston, 1977. (mimeo)
- \_\_\_\_\_. "Changing Social Relations of Production and Peruvian Peasant Women's Work," Latin American Perspectives, 4, 1 & 2 (Winter/Spring 1977).
- \_\_\_\_\_, Jane Humphries and Magdalena Leon de Leal. "Class and Historical Analysis for the Study of Women and Economic Change." Paper presented for The Role of Women and Demographic Change Research Program, I.L.O., Geneva, 1979. (mimeo)
- De Janvry, Alain and Carlos Garramon. "The Dynamics of Rural Poverty in Latin America," Journal of Peasant Studies (1977), 206-216.
- De Wilde, John. Experiences with Agricultural Development in Tropical Africa. Baltimore: Johns Hopkins University Press, 1967.
- Diamond, Norma. "Collectivization, Kinship, and the Status of Women in Rural China," in Rayna Reiter (ed.) Toward an Anthropology of Women. New York: Monthly Review Press, 1975.
- Dixon, Ruth. Rural Women at Work. Baltimore: Johns Hopkins University Press, 1978.
- Eide, Wenche Barth, Elsa Skjonsberg, Achola Pala, and Abdoulaye Bathily. "Women in Food Production, Food Handling and Nutrition with Special Emphasis on Africa," PAG Bulletin, 17, 3-4 (September-December 1977), published by the Protein-Calorie Advisory Group, United Nations, New York.



- Emmanuel, Arghiri. Unequal Exchange: A Study of the Imperialism of Trade. New York: Modern Reader, 1972.
- Engle, Patricia. "Sex Differences in Growth and Mental Development in Rural Guatemala." Paper presented at the International Center for Research on Women Policy Roundtable, Washington, D.C., 1978.
- Enke, Stephen. "The Gains to India from Population Control: Some Money Measures and Incentive Schemes," Review of Economics and Statistics, 42 (May 1960), 175-180.
- Esman, Milton. "Landlessness and Near-Landlessness in Developing Countries." New York: Rural Development Committee for International Studies, Cornell University, 1978.
- Fagley, Richard M. "Rural Women as Food Producers." Commission of the Churches on International Affairs, New York, June 9, 1975.
- FAO. Review & Analysis of Agrarian Reform & Rural Development in the Developing Countries Since the Mid-Sixties. Reference Document for World Conference on Agrarian Reform & Rural Development, Rome, July (12-20) 1979. WCARRD/INF. 3.
- Fischer, John L. "The World Food Crisis and the New Look in Agricultural Sector Development Strategies." Paper presented at the International Conference on Women and Food, University of Arizona, Tucson, 1978. (mimeo)
- Fortmann, Louise. "Women and Tanzanian Agricultural Development." Economic Research Bureau Paper 77.4, 1978. University of Dar es Salaam. (mimeo)
- Frankel, Francine R. India's Green Revolution: Economic Gains and Political Costs. New Jersey: Princeton University Press, 1971.
- Garrett, Patricia M. "Some Structural Constraints on the Agricultural Activities of Women: The Chilean Hacienda." Land Tenure Center, University of Wisconsin, 1976.
- Geertz, Clifford. Agricultural Involution: The Processes of Ecological Change in Indonesia. Berkeley: University of California Press, 1963.
- Goldberg, Marilyn Power. "Women in the Soviet Economy," The Review of Radical Political Economics, 4, 3 (1972).
- Gotsch, C. H. "Tractor Mechanization and Rural Development in Pakistan," International Labour Review, CVII, 2 (1973), 133-166.
- Griffin, Keith. "Underdevelopment in History," in Charles K. Wilber (ed.) The Political Economy of Development and Underdevelopment. New York: Random House, 1973.

- \_\_\_\_\_. The Political Economy of Agrarian Change. Boston: Harvard University Press, 1974.
- \_\_\_\_\_ and A. R. Khan (eds.). Growth and Inequality in Pakistan. London: Macmillan, 1972.
- Griffith, Janet. "The Impact of Rural Development on the Status of Women and Its Consequences for Fertility." Paper submitted to the Research Triangle Institute and the South East Consortium for International Development as part of the Rural Development Project, AID/ta-Ca-1, 1979.
- Haswell, Margaret R. The Changing Pattern of Economic Activity in a Gambia Village. London: Her Majesty's Stationery Office, 1963.
- Hayami, Yujiro and N. R. Ruttan. Agricultural Development: An International Perspective. Baltimore: Johns Hopkins University Press, 1971.
- Hill, Frances. "Women in Agriculture: American Farm Women in Global Perspective." Paper presented to the Office of Women in Development, AID, Washington, D.C., 1979.
- Huggard, Marianne. "The Rural Woman As Food Producer: An Assessment of the Resolution on Women and Food from the World Food Conference in Rome, 1974." Paper presented at the International Conference on Women and Food, University of Arizona, Tucson, 1978. (mimeo)
- Human Resources Development Division, UNECA. "Women: The Neglected Human Resource for African Development," Canadian Journal of African Studies, VI, ii (1972), 359-370.
- International Labor Office. "Conditions of Work of Women and Young Workers on Plantations." Report III of the Sixth Session of the Committee on Work on Plantations, Geneva, 1970. (mimeo)
- Inukai, I. "Farm Mechanization, Output and Labour Input: A Case Study in Thailand," International Labour Review, CI, 5 (1970), 453-473.
- Javillonner, Gloria. "The Impact of Rural Development on the Status of Women and Its Consequences for Fertility: In Asia." Paper submitted to the Research Triangle Institute and the South East Consortium for International Development as part of the Rural Development Project, AID/ta-Ca-1, 1979.
- Jones, Cristina Chlora. "Women's Legal Access to Agrarian Resources." Paper presented to the Office of Women in Development, AID, Washington, D.C., 1979.
- Kandiyoti, Deniz. "Sex Roles and Social Change: A Comparative Appraisal of Turkey's Women," in Wellesley Editorial Committee (ed.) Women and National Development: The Complexities of Change. Chicago: University of Chicago Press, 1977.

- Kolata, Gina Bari. "Kung Hunter-Gatherers: Feminism, Diet, and Birth Control," Science, 185 (1974), 932-934.
- Lee, Richard G. and Irven Devore (eds.). Man the Hunter. Chicago: Aldine, 1968.
- Leeper, Donald S. "Assistance, Hunger and Malnutrition: The Commodity Systems Approach." Paper presented at the International Conference on Women and Food, University of Arizona, Tucson, 1978. (mimeo)
- Lele, Uma. The Design of Rural Development: Lessons from Africa. Baltimore: Johns Hopkins University Press, 1975.
- Lenski, Gerhard E. Power and Privilege. New York: McGraw-Hill, 1966.
- \_\_\_\_\_ and Jean Lenski. Human Societies, 2nd ed. New York: McGraw-Hill, 1974.
- Los Angeles Times, June 15, Section B-1, 1979, p. 1.
- Mamdani, Mahmood. The Myth of Population Control: Family, Caste, and Class in an Indian Village. New York: Monthly Review Press, 1972.
- Martin, Kay M. and Barbara Voorhies. Female of the Species. New York: Columbia University Press, 1975.
- Matlock, W. Gerald and E. Lendell Cockrum. "Agrarian Production Systems in the Sahel," in The Politics of Natural Disaster. New York: Praeger, 1976.
- McDowell, Jim (ed.). "Village Technology in Eastern Africa." Nairobi: UNICEF, Eastern Africa Regional Office, 1976.
- Michaelson, Evalyn Jacobson and Walter Goldschmidt. "Female Roles and Male Dominance Among Peasants," Southwestern Journal of Anthropology, 27 (1971), 330-352.
- Michaelson, Karen L. "Family Size: The Reproduction of the Labor Force: The Case of Bombay." Paper presented at the annual meeting of the American Anthropological Association, San Francisco, 1975.
- Milone, Pauline. A Preliminary Study in Three Countries: Indonesia Report. Prepared for the Office of Women in Development, Agency for International Development, Washington, D.C., 1978.
- Moock, Peter. "The Efficiency of Women As Farm Managers: Kenya," American Journal of Agricultural Economics, 58, 5 (1976).
- Morgan, James N., et al. "Five-Thousand American Families: Patterns of Economic Progress." Institute for Social Research, University of Michigan, Ann Arbor, 1974.

- Murdock, George P. World Ethnographic Atlas. Pittsburgh: University of Pittsburgh Press, 1967.
- \_\_\_\_\_ and Caterina Provost. "Factors in the Division of Labor by Sex: A Cross-Cultural Analysis," Ethnology, 12 (1973), 203-225.
- \_\_\_\_\_ and Douglas R. White. "Standard Cross-Cultural Sample," Ethnology, 8 (1969), 329-369.
- Nag, Moni, Benjamin White and Robert Peet. "Economic Value of Children in Two Peasant Societies." International Population Conference, Mexico. Belgium IUSSP, 1977.
- Nassif, Hind. "Women's Economic Roles in Developing Tunisia." Paper read at meetings of Association of Arab-American University Grads/ Middle East Studies Association, 1976.
- Newland, Kathleen. The Sisterhood of Man. New York: W. W. Norton & Company, 1979.
- Nicholaisen, Johannes. Ecology and Culture of the Pastoral Tuareg. Copenhagen: National Museum of Copenhagen, 1963.
- Omvedt, Gail. The Political Economy of Starvation: Imperialism and the World Food Crisis. Bombay: Scientific Socialist Education Trust Publication, No. 2, 1975.
- Rald, J. Land Use in a Buhaya Village. Dar es Salaam: BRALUP, University of Dar es Salaam, 1969.
- Ravenholt, R. T. and John Chao. "World Fertility Trends, 1974," Family Planning Programs: Population Report, J-2 (August 1974): J-21-J-40. Department of Medical and Public Affairs, The George Washington University Medical Center, Washington, D.C.
- Rubbo, Anna. "The Spread of Capitalism in Rural Colombia: Effects of Poor Women," in Rayna Reiter (ed.) Toward an Anthropology of Women. New York: Monthly Review Press, 1974.
- Safilios-Rothschild, Constantina. "Access of Rural Girls to Primary Education in the Third World." Paper presented to the Office of Women in Development, Agency for International Development, Washington, D.C., 1979.
- Sanday, Peggy. "Toward a Theory of the Status of Women," American Anthropology, 75 (1973), 1682-1700.
- Schnaiberg, Allan and David Reed. "Risk, Uncertainty and Family Formation: The Social Context of Poverty Groups," Population Studies, 29, 1974.
- Scott, James. "Exploitation in Rural Class Relations," Comparative Politics (July 1975).

- Seers, Dudley. "The Meaning of Development," in Charles K. Wilber (ed.) The Political Economy of Development and Underdevelopment. New York: Random House, 1973.
- Simmons, Emma B. "The Small-Scale Rural Food Processing Industry in Northern Nigeria," Food Research Institute Studies, 14, 2 (1975), 147-161.
- Société Africaine d'Etudes et de Développement (S.A.E.D.). "Social and Economic Development in Upper Volta: Woman's Perspective." U.S. Agency for International Development, Regional Economic Development Services Office, West Africa, 1978.
- Stack, Carol B. All Our Kin: Strategies for Survival in a Black Community. New York: Harper & Row, 1974.
- Staudt, Kathleen A. "Women Farmers and Inequities in Agricultural Services," Rural Africana, 29 (Winter 1975-76).
- \_\_\_\_\_. "Agricultural Productivity Gaps: A Case Study of Male Preference in Government Policy Implementation," Development and Change, 9 (1978), 439-457.
- \_\_\_\_\_. "Class and Sex in the Politics of Women Farmers," Journal of Politics (May 1979).
- Stavrakis, Olga and Marion Louise Marshall. "Women, Agriculture, and Development in the Maya Lowlands: Profit or Progress." Paper presented at the International Conference on Women and Food, University of Arizona, Tucson, 1978. (mimeo)
- Stokes, C. Shannon, Wayne A. Schutjer, Terry McCoy, and Charles H. Wood. "Rural Development, Land and Human Fertility." Paper prepared for the South-East Consortium on International Development, 1979.
- Stoler, Ann. "Class Structure and Female Autonomy in Rural Java," in Wellesley Editorial Committee (ed.) Women and National Development: The Complexities of Change. Chicago: University of Chicago Press, 1977.
- Thiesenhusen, William C. "Latin America's Employment Problem," Science, 17 (March 1971), 868-874.
- Thompson, Susan. "The Impact of Rural Development on the Status of Women and Its Consequences for Fertility: In Latin America " Paper submitted to the Research Triangle Institute and the South-East Consortium for International Development, 1979.
- Tinker, Irene. "The Adverse Impact of Development on Women," in Irene Tinker and Michele Bo Bramsen (eds.) Women and World Development. Washington, D.C.: Overseas Development Council/American Association for the Advancement of Science, 1976.

- United Nations, Economic Commission for Africa. "The Changing and Contemporary Role of Women in African Development," Economic Bulletin for Africa, 1977.
- \_\_\_\_\_. "Country Reports on Vocational and Technical Training for Girls and Women." 1974.
- \_\_\_\_\_. "The Data Base for Discussion on the Interrelations between Women in Development, Their Situation, and Population Factors in Africa." Paper presented to the Regional Seminar on the Integration of Women in Development with Special Reference to Population Factors. Addis Ababa, 1974.
- United Nations, Food and Agricultural Organization. "Review and Analysis of Agrarian Reform and Rural Development in the Developing Countries Since the Mid-Sixties." Paper prepared for the World Conference on Agrarian Reform and Rural Development (WCARRD/Inf. 3), Rome, 1979. (mimeo)
- United Nations, Report of the Secretary General. "Effective Mobilization of Women in Development." UN/A/33/238, 1978.
- United States, Agency for International Development. "A Seven-Country Survey on the Roles of Women in Rural Development." Agency for International Development, Washington, D.C., 1974.
- Van Dusen, Roxann A. "Integrating Women into National Economies: Programming Considerations with Special Reference to the Near East." Paper submitted to the Agency for International Development, Office of Technical Support, Near East Bureau, 1977.
- Vail, David J. "Technology for Socialist Development in Rural Tanzania." Paper presented at the meeting of the African Studies Association, Chicago, 1974.
- Wallerstein, Immanuel. The Modern World-System. New York: Academic Press, 1974.
- Weil, Peter. "Wet Rice, Women and Adaptation in the Gambia," Rural Africana, 19 (Winter 1973).
- White, Benjamin. "The Economic Importance of Children in a Javanese Village," in M. Nag (ed.) Population and Social Organization. The Hague: Mouton, 1975.
- Whiting, Beatrice. "Work and the Family: Cross Cultural Perspectives." Paper presented at the Conference on Women: Resource for a Changing World, Cambridge, 1972.
- Whiting, John M. "Pleistocene Family Planning," in Richard G. Lee and Irven Devore (eds.) Man the Hunter. Chicago: Aldine, 1968.

Wolf, Eric. Peasants. Englewood Cliffs, N.J.: Prentice-Hall, 1966.

Youssef, Nadia. "Rural Development Activities, Fertility and the Cost and Value of Children: Review of the Paper's Consideration of Women." Paper submitted to the Research Triangle Institute and the South-East Consortium for International Development, 1979.

\_\_\_\_\_. "Women and Agricultural Production in Muslim Societies," Studies in Comparative International Development, XII, 1 (1977).

Zivetz, Laurie. "The Impact of Rural Development on the Status of Women and Its Consequences for Fertility: In Africa." Paper submitted to the Research Triangle Institute and the South-East Consortium for International Development, 1979.

Chapter Two

WOMEN IN AGRICULTURE:

AMERICAN FARM WOMEN IN GLOBAL PERSPECTIVE

by

Frances Hill, Ph.D.



Women's roles in agriculture vary over an almost limitless range, as do the conditions in which they live and work. Yet, despite this diversity, some important commonalities shaping women's roles as farmers link American farm women with women in vary different circumstances in other areas of the world. These commonalities grow out of their common femaleness. Two factors shape the implications of that femaleness. First, the social relations of production in agriculture are currently undergoing a transformation from relations determined by kinship to relations determined by contract. Secondly, women's roles and conditions are affected by general changes in the structure of agricultural production, especially the expansion of scale, the trend toward capital-intensive operations, and the increasing separation between ownership (or other forms of control) of land and the operation of agricultural enterprises.

These changes are global in two senses. First, similar processes are underway to varying degrees throughout the world. Second, these patterns of change are shaped by shared assumptions about modernity, productivity, and the most appropriate roles of labor, capital and land. These assumptions have been derived primarily from U.S. agriculture since World War II. Thus one can speak accurately of the Americanization of world agriculture. Most of these technological and economic assumptions have been applied to, not tested in, the ecological, economic, and cultural conditions of other countries. American farm women are affected as profoundly by these processes as are women in the so-called "modernizing" countries. In examining women's cross-cultural experiences in agriculture, it soon becomes clear that American farm women do not represent a desirable model for women in the rest of the world. American farm women are as

vulnerable to marginality within their occupation as are women elsewhere. Only the forms of this vulnerability, not the vulnerability itself, vary. It is always a shock for Americans to realize that they are not necessarily a model for the world. Nonetheless, a critical look at American farm women shows that they face many of the same problems as do farm women in the developing countries.<sup>1</sup> This essay focuses on American women to show that farm women's special problems are inherent in agriculture's virtually unique blend of kinship and business.

## I. Women's Access to Agriculture

### Kinship and Contract

Agriculture is one of the few remaining occupations to which access is monitored by kinship rather than by individual qualifications. This is not to say that most farmers--male or female--are unqualified for their work. Rather, it is to point out that agriculture enmeshes individuals in kin-defined groups while most urban occupations provide access to individuals. This essential difference is crucial to understanding women's roles in agriculture. Many questions of equality under law are made immeasurably more difficult by the kin-group basis of agricultural enterprises. The problem of equity for women is far more complex than simply guaranteeing them the same rights that are held by men. Some aspects of farm women's current roles could be remedied by this expedient. However, other problems require a new approach to defining individual roles in an enterprise previously assuming collective activity. The area of individual rights in kin-based enterprises is a virtually uncharted area of law.

Women have historically in most cultures been the least likely to

have their individual rights recognized within these property-controlling, occupation-defining kin groups. This has been as true of the American "family farms" as of African clan villages. Even when the land passed through the female kinship line, it passed to men or men were soon recognized as the "farmer-operator" of the farm.

The general process left women with indirect access to land and thus to the occupation of agriculture. They could protect this indirect access only through informal influence operating through kinship links. There may have been a time when these kinship obligations were regarded as so binding and had such legitimacy in the larger social unit that informal influence did in fact protect women. That is no longer true. Two processes have reduced the efficacy of informal influence. First has been the legal-administrative thrust to regularize title to land. This does not always mean private ownership but it does involve designating an individual as the responsible "operator." In this way the sphere within which informal influence can operate effectively has been reduced by the tendency to make the internal operation of the agricultural unit conform to the legal-administrative modes and expectations of the larger society. Secondly, land has been commercialized. This has been a powerful incentive to individual gain, even at the expense of the kin group that has been associated with a particular agricultural unit (Popkin 1979). These strains are most intense in an inflationary economy when land usually appreciates more rapidly than the inflation rate and thus serves as a "safe" real asset. Thus struggles among kin for control of the "family farm" have become even more intense during the recent inflation-based appreciation of land values.

These two changes explain why kinship and the public realm have

become increasingly incompatible ways of managing access to land and of managing the operation of a business. They do not explain why women should be particularly disadvantaged relative to men during this process of change. Women's position in the agricultural economy and in the legal-administrative matrix of the larger society is conditioned not by their actual roles in labor or management nor by their kinship statuses but by general cultural assumptions about the role of women. These assumptions have, in most cultures, including those shaped by Judaic-Christian ethics, placed women in a subservient position. A consideration of the roles of American women in "family farms" makes this clear.

The idea of a "family farm" suggests a simple correspondence between one farm and one nuclear family. This is rarely an accurate description of actual conditions. The farm family is not always the simple nuclear unit portrayed in *American Gothic*. It may be the nuclear family, the stem family, or the extended family. Each form of the family defines a particular phase of the farm-family cycle. The nuclear family consists of a husband, wife and possibly children. The stem family consists of the parents and an adult child and his or her nuclear family joined together as a mechanism of property transfer. The extended family refers to the parents, their adult children and their children's families. The nuclear family is a component of the stem family, which becomes embedded in the extended family. The problem of determining which child should become the member of the stem family and thus inherit the farm is the essential problem of separating the stem family from the extended family. This in turn involves problems of separating the nuclear family from the stem family in ways that reconcile the needs of business

and the ties of family affection (LePlay 1870; Berkner 1973).

These phases of the farm-family cycle reflect the changing blend of labor and capital characteristic of agriculture. At various phases in the farm-family cycle, particular components of the relevant form of the family tend to act either as labor or capital. In these various phases, the two generations involved will be distinguished by their degree of control over the property and their roles in actual production. In some phases, a family functions as capital and at other phases it functions as labor. The stem family thus encompasses two different functions performed by people linked together in complex kinship relations. Kinship does not prevent the expression of capital-labor hostilities related to control of property, allocation of labor contributions, and the share of the rewards. Stem families try to resolve the difficult question of whether property, the expression of past labor and investment, should be rewarded more or less or equally with current labor. Only when the nuclear family both controls the property and provides the labor is this issue resolved. Only then is the farm that blend of capital and labor implied by the idea of the family farm.

Linking of property transfers to kinship means that the two generations of the stem family are operating with incongruent nuclear family phases. Inter-generational strains are unavoidable. The younger couple will be ready to take over long before the older couple is ready to retire. Biological reproduction will put the business partners only twenty-five years apart when smooth business relations may well require a difference of at least thirty-five years.

These relationships between kinship and capitalism have a clear impact on women's roles in the farm. There is still a marked tendency

for property to pass down to sons rather than to daughters. Therefore, a woman becomes the one member of a stem family that is linked only by contract (marriage) and not by kinship. This puts women in a peripheral position in the kinship nexus. Cultural biases that obscure perception of the important labor and management roles of women mean that their contributions to the farm will not necessarily overcome this marginality based in the lack of a kinship link. When the property is passed down through the wife, the husband will be in a stronger position because he will be seen as a "farmer" whose labor is necessary to the operation of the farm. His lack of kinship status will be offset by his actual role and by the cultural evaluation of that role.

Strains arising out of the blend of kinship and capitalism often lead to poor business arrangements. People cannot stop being relatives. They can only try to avoid the problems of relating kinship to capitalism. There is tendency to rely on kinship to organize capitalism, to rely on verbal understandings rather than on written agreements. The problems that arise by seeking to avoid problems in this manner are legend in farm communities. Unfortunately, they are legends based on a hard reality: kinship is no substitute for capitalism in making arrangements for property transfers.

The strains growing out of the link between kinship and capitalism do not simply divide the two nuclear families along generational and capital-labor lines. They also cause problems within each nuclear family, especially the younger one. In a stem family of four people three of whom constitute a previous family--a residual kin group binding the individuals by special ties of affection and shared experience--one person is included in the stem family only on the basis of contract, i.e., marriage. This

is usually the young wife. At critical points in business negotiations or during the never-ending informal conversations over coffee, this contractual member of the stem family is made to feel marginal. Patterns of kinship-based property transfers vary greatly, but sons are more commonly heirs to property than are daughters. This makes the young wife marginal to decision-making within the stem family. She is probably an "equal" partner in her own nuclear family and may well be a co-laborer on the farm with her husband. In such a situation, resentments over her decision-making marginality focused on her in-laws may also be directed toward the husband who seems reluctant to transgress the unwritten codes of the residual kinship unit to demand both a more equal role for his wife and to pursue more vigorously the business arrangements needed to protect the rights of his own nuclear family.

At the same time, a young wife may feel that she is competing with her mother-in-law for the respect and affection of her husband. Many women, even those on the verge of retirement themselves, speak bitterly of their young husband's tendency to "visit" in his mother's house on the farm rather than coming "home" for supper or to help put the children to bed or even to do his fair share of the chores. A wife who asserts the primacy of the conjugal bond risks seeming to attack the bond between parents and child. There young wives are equal in work but not in family status, family affection or decision-making.

When the property is transferred through the wife's family, similar strains become a feature of family life. The husband feels he is "the farmer" but his labor contribution does not give him control over property, the control that the culture leads him to expect on the basis of both labor and gender. Yet, the husband will not be as peripheral as the wife



in the in-law role. The reasons for this difference are related to both family sex role and to farm sex role. The man is always presumed to be the head of his household. The wife's tendency to put her parents in a competitive position with her husband finds less social-cultural legitimacy than the tendency for analogous behavior by the husband. Patriarchal nuclear family norms separate women from their kin-group to a greater degree than they separate the husband from his. Even though a wife is expected to follow Biblical injunctions to put her husband before her parents, she is still expected to be the peacemaker in the larger kin group.

As if the inter-generational strains involved in stem family were not enough, property transfers are made more complex and kinship-based tensions exacerbated by problems of detaching the stem family from the extended family in which it is enmeshed. Most farmers have more than one child. That child who stays on the farm and becomes part of the stem family has to define his/her relations with his/her brothers and sisters and their nuclear families, all of whom can reasonably expect to be the parents'/grandparents' heirs to some extent. Parents feel a responsibility to all of their children and even grandchildren and seek to establish "equivalency" in the estate settlement. This is particularly difficult for farm families. The land is the major asset and this is an indivisible, non-liquid asset. The land does not earn enough in annual profits to permit farmers to make cash settlements for those children who do not inherit the land. The child who takes over the farm must usually take it all, if he is to have an economically viable enterprise under current factor costs and commodity prices. The problem of compensating the other children is especially difficult. They feel they have a claim



to a part of the estate due both to kinship and to their labor contributions as children. The children of these members of the extended family may also be considered to have a claim equal to that of those children actually living on the farm.

These problems were never particularly easy to resolve. But, when urban occupations could provide more lucrative alternatives to agriculture, those children who left the farm did not look upon the farm as an economic resource or asset. This has changed with the dramatic inflation in land values during the past fifteen years. Now, agricultural land is valuable and control of such land can be an economic asset to any family. As inflation has reduced real income for most Americans, land becomes especially valuable. This only intensifies strains over the transfer of farm land. The nuclear family on the land resents and feels threatened by pressure to sell the farm to the highest bidder and divide the proceeds equally among the members of the extended family. They are equally bitter about demands that they purchase the farm at full market value. The family on the farm may counter with demands that they be compensated for their labor. Feelings about the illegitimacy of the claims made by the extended family are more freely expressed than feelings about the strained relations with parents. A person's relations with brothers and sisters does not fall into the same realm of duty and fealty as does that between parents and children. Indeed, feelings against the extended family are so strong that indignation is expressed even by those with no siblings with whom they may one day compete for control of the farm property. A young woman who, with her husband, was assured of inheriting her mother's farm since there were no other children spoke passionately about people she had known who were impoverished by their

brothers and sisters who had left the farm.

A farm woman has the greatest potential for a meaningful career as a farmer once the farm is linked with a nuclear family. The constraints of the stem family have been resolved and business relations with the extended family have been defined. The husband, wife and children are now free to farm as they decide. The wife may find that she does even more farm work than she did when other relatives were there to help, but she will probably feel that she plays a larger role in farm decision-making. She may also try to reduce patriarchal control within her own nuclear family, but this is usually less stressful than dealing with stem and extended families.

The nuclear family phase is likely to be brief if a farm couple has a child who wants to farm. They will form a new stem family. This new phase combines, for the hypothetical farm family, the first two. The woman will no longer be marginal in the new stem family; she may be perhaps the emotional core of the residual kin group within the stem and extended families. The woman who began her life as a daughter-in-law in a stem family will end it, or that portion of it linked to the farm, as a mother and mother-in-law. Given the longer life expectancy of women, the farm wife may not have the business and emotional support of her husband in this phase. Whether as wife or widow, she will again experience, but from a different perspective, the strains of doing business with relatives. If anything, the emotional strains may be intensified by negotiating with her own children. When she was a daughter-in-law, she feared being left destitute, of having her family labor exploited with no guarantee of the property transfer. As a mother-in-law, she is less concerned about being left destitute because she controls the property.

But the emotional strains may now be even greater, for, in the earlier phase, her kin-based marginality was also an emotional buffer.

Women's longer life expectancy means many farm women will be widowed during this second stem family phase. If she can pay the "widow's tax" and retain control of the farm, her heir will again have to pay inheritance tax at her death, unless the mother has sold the farm during her lifetime to her heir. Few farms are so profitable that they can support such a tax burden. Families have begun to circumvent these costs by transferring the property directly from the father to the next generation, leaving the mother in the position of never having owned the farm. The land contract in such cases usually specifies the type and level of support due each parent for life. "Businesslike" as this sounds in the abstract, it leaves some women concerned about their old age. They are forced to trust in kinship in a world run on the assumptions of capitalism. What, they ask, will be their recourse if their children do not take care of them? Could a seventy-year-old woman sue her child? Why should she have to be dependent until her dying day? The cruel dilemma of farm families is that each generation feels that it should trust the other implicitly, but each knows that there are limits to family duty and trust.

The increasing size and increasing capital costs of even a modest commercial farm mean that the pure nuclear family farm is becoming increasingly less common. These larger land units are not necessarily more efficient or more profitable. They exist primarily to support the increased costs of production--especially machinery and the petro-chemical herbicides, fertilizers, and fuels that are the basis of contemporary production techniques. In the Middle West, most partnerships seem to be

among brothers. In such arrangements, the extended family replaces the stem family and thus one nuclear family will never control the farm. Even if the wife is very interested in agriculture, she will be marginal to the farm's operation. She cannot interfere in relations among the partners even though she is married to one of them. As a partner's wife, she will be expected to show the same involvement in the farm as her sisters-in-law so that other components of the extended family do not begin to fear that one nuclear family is trying to increase its relative role. An "overly interested" wife would disequilibrate a partnership based on kinship.

The American "family farm" is a kinship unit through which women have had only indirect access to land. Women have been forced to rely on kinship and on informal influence. This relationship to property does not necessarily reflect women's contributions to their farms.

#### Women and Farm Work

Women's roles as food producers have been hidden from history by a screen of cultural myths about male gallantry and female delicacy. Even when it is acknowledged that women have roles in agriculture, it is usual to say that men farm and women only help. This "help" has been estimated to produce 44 percent of the world's food (Arnoff and Crane 1975). A report by the Secretary General of the United Nations estimates that women provide 60-80 percent of the agricultural labor in Africa and Asia, and 40 percent in Latin America (UN 1975: 5). Such an estimate can be suggestive only. But, given the current lack of reliable research on women's roles, such estimates are valuable. They are beginning to replace the certainty that women do not farm with, at the very least, uncertainty.

There are several reasons for the failure to recognize women's

contributions to food production as work. Women have farmed within kin groups, not as individuals. Within these kin groups, there was no perceived need to document, or even to recognize, contributions of particular individuals. Secondly, women have not been paid as individuals for their labor, so there was little impetus to think in terms of their individual contributions. Third, the farm and the house are usually close together. In such circumstances, it is difficult to distinguish farm work from housework. There is little reason to make this distinction. Much of what women do, such as caring for young animals or cleaning milking utensils or growing food for the family, can be seen as extensions of their nurturing roles as wives and mothers. Fourth, there is not always a rigid sexual division of labor associated with farm work.

All of these factors intensify the women's problems in achieving recognition for their work. The cultural assumptions about women's sphere persist despite empirical evidence of women's central role in agricultural production. A study of northern Peru shows that stereotypes shape data collection to a greater degree than data modify stereotypes (Deere 1977; see also Bourque and Warren n.d.).

The consequences of the non-recognition of women's work are grave. Because women traditionally have not been property owners and have not been included among the farm "operators," the problem of having their contributions recognized intensifies the difficulties in asserting their rights as farm operators. Men do not have to buttress their claim to being farmers with proof of their actual labor contribution. Women must do so because of the prevailing cultural assumptions that they contribute little or nothing to production and to the actual operation of the farm themselves. Work is likely to be women's main claim to legal recognition

as a farmer outside of the sphere of kinship and informal influence.

The experience of American farm women suggests that the cultural barriers to the recognition of women's work are difficult to overcome. These barriers do not arise from the actual situation on farms. The non-recognition of women's work in agriculture persists contrary to fact and is likely to persist unless the larger cultural setting of these myths is recognized and confronted.

Pioneer women were expected to work simply because the work needed to be done. The labors they routinely performed excited comments only from visitors. Tales of male indolence and female drudgery are the common fare of travellers' tales of the early Middle West (Sprague 1942). Eliza Farnham's encounter with a newly married couple is typical of these accounts. The author, a teacher from New England going West to visit her sister, chided the groom for his failure to help his bride move a heavy trunk. The new husband replied: "I don't think a woman's of much account anyhow, if she can't help herself a little and me too" (Farnham 1846: 41). In the portrait of farm life that emerges from the travellers' tales, this might be taken as the credo of the male farmer. Specifications for such a wife were summed up by the same man, who entered the marriage market guided by the idea that "women are some like horses and oxen, the biggest can do the most work, and that's what I want one for" (Farnham 1846: 38). No one knows whether most pioneer men would have expressed themselves quite so candidly, but it is clear that farm women were expected to work.

At one time such toil conferred a certain dignity upon farm women. In both home and fields, they were valuable and valued artisans. Their husbands exercised absolute control over property and the return from

women's labor, but the women themselves were, at the very least, awarded status and respect for conforming to a social ideal. The same was true of women in towns whose household responsibilities were similar to those of their sisters on the farms. Farm and city women alike were conforming to the role defined in the "cult of domesticity" (Cott 1977). This was an ideal of useful work performed within the home on behalf of the family. As both farmers and housekeepers, farm women conformed to this larger social ideal.

This began to change as America industrialized, urbanized, and commercialized. All of these changes led to increased differentiation among Americans. These differences related not simply to how people made their living nor even to the amount of money they accumulated, but to their way of life and attitudes toward work. These attitudes toward work began to separate home and workplace, male and female. The cult of domesticity gave way to the cult of the lady. Women were no longer supposed to work and were no longer respected for doing so (Veblen 1934: 138-154).

Farm women could not adjust their lives to fit the new ideal of the "lady." As hired men moved to the cities for jobs in factories, women worked even harder on the farms. Yet, women's work was devalued. It became a source of shame to farm families.

One of the first serious attempts to study women's roles in farming came in a 1919 survey of approximately 10,000 farms in 33 Northern and Western states. The data reflected "conditions rather above the average" and the period itself was one of general agricultural prosperity compared to the agricultural depression of the 1920s and 1930s (Ward 1920: 4). Yet, even for this relatively prosperous strata during a period of reasonable farm prices, the study concluded:



In industries, where love and service are not the ruling motives, a walkout might be foreshadowed by conditions brought out in Table I, which shows that the average working day, summer and winter, for over 9,000 farm women is 11.3 hours, and that 87% of 8,773 women report no regular vacation during the year, although a large percentage tell of scattered "days off" in the family automobile. (Ward 1920: 38)

This long work day involved women in farm production. The survey found that 36 percent of all the women responding helped milk, 81 percent cared for chickens, 25 percent helped in other ways with livestock, and 24 percent worked in the fields an average of 6.7 weeks per year (Ward 1920: 10). Middle Western women equalled or exceeded these aggregate figures. Forty-five percent of Middle Western women helped milk, 93 percent of the Middle Western respondents washed the milking utensils, 89 percent of the Middle Western respondents reported that they regularly cared for poultry (Ward 1920: 11).

This high level of participation did not give women a commensurate share in the economic rewards of their labors. In the Middle West, 66 percent of the women made butter, 33 percent sold butter, 30 percent kept records of the butter money, but only 9 percent kept the money that they had earned (Ward 1920: 11). The same was true of the egg money. While 89 percent of the Middle Western women kept an average flock of 102 hens and 51 percent kept records of the egg money, only 16 percent controlled the egg money (Ward 1920: 11). Women's labor did not provide "luxuries" for themselves but was an integral part of the farm enterprise and the family economy. A Minnesota woman said of her egg money:

When we were married, five years ago, it was distinctly understood I was to have all the income from the eggs if I took care of the chickens, and, as a result, my husband hardly knows that there is such a thing as a grocery bill, or that he has a wife and baby to dress. (Lundquist 1923: 5)

The scarcity of data on women's actual roles in farm production is



matched by the paucity of data on women's assessments of their roles. Few people thought of asking farm women what they felt about their lives since the pioneer pattern of family-oriented toil seemed such a natural part of the rural American landscape. One of the first sources of questions was, surprisingly enough, the Department of Agriculture. In 1913, when the prospect of increased funds for the Department under the Smith Lever Act stimulated an interest in farm women, the Department sent a letter to the wives of USDA's 55,000 crop correspondents. The letter to these women, wives of farmers considered to rank "among the most progressive farmers in their communities," asked women to comment on all aspects of their lives and their feelings about them, what they would change if they could, and how the Department could assist them (USDA #103, 1915: 5). The letter elicited 2,241 replies, which formed the basis of four reports on farm women's perception of their own lives (USDA #103-106, 1915). The replies shocked the Department and the agricultural press. Farm women were not content with overwork and low rewards. However much they might enjoy farming, the joy was diminished by the loneliness and isolation, lack of understanding and appreciation by their husbands as well as by the larger society. Farm women were fed up with unrewarded goodness.

Most women wanted respect for the vital work that they performed. An Iowa woman wrote that "Women have an innate longing for appreciation and a feeling that they are partners in fact with their husbands and not looked upon as subordinates" (USDA #103, 1915: 17). From the USDA reports, few farm women felt that their husbands appreciated, or even really noticed, their contributions. A Missouri woman suggested that "The men needed to be educated up, as so many men think women's work does not

amount to much and consequently has no commercial valuation" (USDA #103, 1915: 17). A New York farm wife wrote that "Most farmers' wives have no share in anything on the farm but the labor. They are expected to do their own work and as much of the out-of-door work as they can, but none of the income is theirs" (USDA #104, 1915: 45). Another New York woman concluded that "The men don't care how hard the women work to do their tasks if only they themselves are provided with food regularly and their own comfort is looked after" (USDA #104, 1915: 9).

Women noticed that in many cases they were not treated as well as the hired men. As an Oregon woman observed, "The hired man gets paid for his work, but the tired housewife on the farm merely gets her board and clothing, the same as the farmer's work animals" (USDA #104, 1915: 8).

The presence of hired men did not relieve women of farm work in addition to their housework. Hired men were hired to help the farmer, not the farm wife, even with her farm chores.

This situation was seen by several women as not simply burdensome but as inequitable. Women complained that this male callousness did not simply make their work more burdensome but actually denied women and children essentials. A Massachusetts farm woman declared:

I would work to have a law passed whereby no man should be allowed to own a farm unless he would provide for his wife as well as he did for his stock--plenty of water, and easy to get, good drainage, and other sanitary conditions about the farmhouse which go to make life healthy and comfortable. (USDA #106, 1915: 8)

A Kansas woman urged USDA to "Make it illegal for a man to make his wife work like a slave to cook for from two to ten regular workmen" (USDA #106, 1915: 15). A Missouri farm wife urged USDA to "Put a bill before Congress to allow the farmer's wife \$1 per day for her own money, to be used by her for her own expenses" (USDA #106, 1915: 18).

No similar record of farm women's views of their work has been made for the current era. My research among Middle Western farm women suggests that a larger percentage of women is doing more actual farm work now than during the early twentieth century.

Census data on contemporary women's labor roles are almost as scarce as data on the roles of their ancestresses. The 1964 Census included a sample survey of farm women's labor contributions to their farms (US Dept. of Commerce 1964: Table 5). The almost two million women surveyed nationally contributed 16 percent of the total hours worked by all members of farm-operator households. While husbands in this sample averaged forty-one hours of farm work per week, wives averaged twenty hours, excluding housework. Virtually all of this was unpaid labor.

The survey suggested that most farm women were not simply "helpers," but through steady work, made crucial contributions to the operation of family farms. As one analyst of these 1964 data concluded: "farm work by farm wives contributes significantly to farm output" (Hoffman 1976: 836).

A 1948 study in Wisconsin presents much the same picture (Long and Parsons 1950). The farms were primarily diversified dairy farms with year-round work with animals plus a heavy season of field work. The study found that these farms operated more efficiently when husband and wife worked together. The wife's work decreased if the husband were disabled because the scale and/or intensity of the farm operation would be reduced. Likewise, a husband's work decreased if his wife held a job off the farm. The author concluded that the wife's labor was not likely to be either episodic or peripheral; the work performed by farm women

was an integral part of the farm operation.

My own 1977 survey data give the same picture of farm women's devoting much of their time to farm work and making significant contributions to the farm by doing so.<sup>2</sup> It is impossible to determine how the work done by contemporary farm women compares with that done by their ancestresses. Nonetheless, many of the women interviewed felt that they did more actual farm work than had their mothers. They also tended to feel that their overall burdens were less because of smaller families, more conveniences in the home, and mechanization of many aspects of farm production. An analysis of the data from the 1964 Census of Agriculture similarly concludes:

Data on the participation of farm wives in farm work for other years are unavailable. Thus, a trend cannot be established. But one could hypothesize that the long-term trend in wives' participation in farm work has been upward, although not as rapid as the labor force participation for all women, with cycles about the trend caused by disturbances--major wars, business cycles, and cycles in farm profits--in the farm and non-farm labor markets. The increasing mechanization of agriculture--especially size, versatility, and power accessories of tractors--and mechanization of livestock feeding have made physical strength less important for many farming activities. Tractors with radios and air-conditioned cabs have improved the quality of working conditions, especially in crop production. The steadily falling number of hired workers and teenage children in farm households leaves only wives on many farms to provide human assistance with two person farming activities. (Hoffman 1976: 837; see also Long and Parsons 1950).

For contemporary farm women, the satisfaction of farm work is linked with the opportunity for individual accomplishment within the family enterprise. Women have responded with overwhelming interest and enthusiasm to opportunities to increase their technical knowledge of farming. The University of Wisconsin's dairy production seminars for women and the University of Missouri's hog production seminars always have more applicants than places. Women also report that they read the

farm magazines and mark relevant articles for their husbands. For most women, equality means not just equality in work but equal recognition and respect for it.

#### Women and Farm Management

Women's roles as farm managers are, if anything, even less well-perceived than their roles in farm labor. Decision-making is a less observable activity than weeding or harvesting. Again, women's contributions are obscured by the family-group nature of agricultural enterprises.

It has been estimated that one-third of the world's rural households are headed by women (Tinker 1976). It is difficult to estimate the number of viable agricultural enterprises headed by women, given the tendency of most censuses to give information for urban and rural inhabitants without separating rural farmer from other rural inhabitants. Nevertheless, women certainly head significant numbers of farms throughout the world. Many of these seem to be widows or women whose husbands have moved to the urban areas for their entire working lives. In most cultures, including the United States, divorce seems to deprive women of their occupations in agriculture. Single women also seem to have difficulty gaining access to land and capital on their own to begin their own farms. Inheritance patterns in most cultures seem to leave the land to a son rather than to a daughter.

Available data suggest that farms operated by women tend to be smaller, on average, than those "operated" by men. There is also evidence that women's farms are as well-run and as economically successful as comparable male "operated" units. Data from Kenya show that women

farmers had farms as successful as those operated by men even without the same level of aid from the national extension service or similar levels of credit (Staudt 1975-76 and Mook 1976).

The lack of information about women who operate their own farms arises from the culturally-based assumption that such farms are few in number or insignificant in their contribution to overall agricultural production. It also reflects the urban bias of much research on women and the concomitant assumption that agriculture is an occupation that offers women only a drudgery that they seek to flee at the first opportunity.

These same assumptions help explain why women's role in managing "family farms" is so little studied or recognized. Farming is assumed to be a burden imposed by men upon their families. The idea that women see themselves as professional farmers and their self-images are linked to this occupational identification is new. It is emerging only slowly for the United States and even more slowly for women in other parts of the world. Certainly, not all women who farm see agriculture as a meaningful occupation. Yet, many probably do. In the United States, the tendency to identify as a "farmer" and to find self-gratification through this occupational identification are linked with the opportunity to play a role in farm decision-making. American farm women now tend to be the farm bookkeepers. This control of information gives them a role in decision-making not enjoyed by their mothers and grandmothers. However, access to information and actual influence over decisions are two different things.

Survey research can give data only on articulated perceptions of respondents. Any study of male-female decision-making roles confronts

the difficulty of determining who makes decisions when roles are as undifferentiated and as enmeshed in family relations as they are on farms. The more important point may be that women want to be considered both wives and farmers. In response to a question about how they list their occupation, 19 percent said they write "farmer," 47 percent list themselves as "housewife," but 30 percent checked both or wrote in something like "farm housewife." Four percent checked "other" and listed non-farm occupation--like teacher. Even among more active farm women, those sufficiently interested in agriculture to attend a meeting of a farm women's organization, both the family role and the occupational designation are important. This blend of work and family attracts people to farming and is an aspect of life they wish to preserve.

Contemporary farm women have much greater access to the economic rewards of their labor than did earlier generations of farm women. Joint checking accounts are the norm. Yet, the income, in the form of checks for the farm commodities, are made out to the husband only in 62 percent of cases surveyed. Women who have arranged for joint payment have done so to gain recognition of their contribution by both their husbands and the legal system. One wife told her husband if he did not agree to having both their names on the milk checks she would stop doing chores. Her husband decided she had a valid point.

Farm women emphasize the family focus of agriculture but it is clear that they are not referring to an unreformed patriarchal family. Women want a consensual decision-making process about their families and farms. Responses to survey questions show that women claim that they already play such a role. Sixty-one percent of the respondents said that major farm decisions like the purchase of machinery or land were

made jointly, 81 percent characterized decisions about major investments for the house as consensual, and 78 percent said decisions about raising the children were consensual. It is impossible to tell if the responses represent actuality or aspirations. In either case, patriarchal rule is neither seen as a norm nor simply accepted as fact.

Responses to attitudinal questions reveal a similar propensity to non-patriarchal, or perhaps modified patriarchal, families. Sixty-nine percent agreed with the proposition that "A farm husband should help with the housework if his wife helps with the farm work." Fifty-three percent agreed and 45 percent disagreed with the idea that "If a wife is going to be away at a meeting, she should fix meals for her family before she goes." Sixty-three percent disagreed with the idea that "A farm husband active in farm organizations should feel entitled to leave the chores for his wife whenever he feels it is necessary." Contemporary American farm women see themselves as managers and decision-makers, not as "unpaid family labor."

#### Access to Agricultural Organizations

In every region of the world most agricultural organizations are men's clubs. This has an adverse effect on women's position as food producers since these organizations shape government policies and are often the mechanism through which farmers gain access to national markets and to government credit.

Women realize the importance of these organizations and often seek to join but are denied membership. For example, a dairy co-operative in Peru admitted women only if they were single heads of households even though Peruvian women do most of the work in dairying (Deere 1977).



Women often have their own associations through which they exchange agricultural information. However, these informal groups do not give women access to government programs.

North American women have become so frustrated at being ignored by government and denied meaningful roles in agricultural organizations that they have formed their own groups focused on policy issues. Instead of staying home and doing the work as the husband decides, 94 percent of the respondents agreed that "Women should play a more active role in farm organizations." Seventy-three percent disagreed with the assertion that "Woman's place is in the home."<sup>3</sup>

These attitudes have found concrete expression in increased activism in farm organizations. Women are demanding an equal role in the established farm organizations. Sixty percent of the women surveyed agreed that current voting rules in farm organizations are unfair to women. Rather than concentrating exclusively on a long-term strategy of reforming these organizations, farm women are revitalizing auxiliaries or founding new organizations. American Agri-women and Women Involved in Farm Economics are the leading examples of the new, policy-focused organizations.

## II. Farm Women and Public Policies

The cultural biases against recognizing women as farmers, especially as farmers with their own distinctive problems and needs, have repercussions in public policies that affect agriculture. These cultural biases shape public policies that, in turn, intensify women's marginality in agriculture. Public policies with the most direct impact on women include the provision of agricultural credit, the availability of tech-

nical advice from the extension service, and discriminatory tax policies.

Credit available through public agencies goes to the recognized owner or operator of the farm. Women's ambiguous positions in kin-defined enterprises often disqualifies them from applying for such credit. In the United States the myriad forms of property ownership compounded by the different laws in each of the fifty states on women's individual rights associated with each form of property ownership mean that no one is sure when women are or are not eligible under law for participation in various public programs that provide credit for agricultural production. There is little evidence that the intricacies of the property laws are the major factor in determining access to such credit. Although there has never been a study of women's participation in agricultural credit programs, numerous reports of individual situations suggest that such agencies as Farmers' Home Administration prefer to deal with men and that they make this preference abundantly clear to women who seek to apply for credit. Even some single women farmers report that they are told to bring their fathers along to sign the application forms. In Kenya, women with large, successful farms are less likely than men with smaller farms to receive credit (Staudt 1975-76; see also Mook 1976).

Women are not the only food producers poorly served by the extension services they pay for: extension services need improvement in both information and techniques they deliver and their mode of delivery to all poor farmers. But they also function to put women at a significant relative disadvantage. There is considerable evidence that women are denied access to extension assistance primarily because they are women. In Kenya, even the

large and successful women farmers had less contact with the extension agents than did men with smaller and less productive farms (Staudt 1975-76). In Liberia, the government paid men to attend a demonstration of new techniques of rice production. Unemployed, landless men came, but the women rice producers remained at work in their fields (Tinker 1976). At a 1974 Regional Seminar on Women in Development, African women complained about the lack of adequate agricultural training for women (Cloud 1974; see also UNECA 1974).

Denial of access to extension service to women also impoverishes the quality of the advice that extension agents can offer. Women have rich practical experiences in various techniques of food production. This practical experience could usefully be incorporated into national research and extension efforts. Since women have been denied access to credit, their techniques are more likely to be efficient in terms of capital and energy. They are also likely to be techniques that manage risks so that food is almost always available even if this means foregoing the high-cost, high-risk strategies for maximum production.

When women are not consulted about their experiences and their needs, much research and extension effort may be wasted. One West African country devoted time and resources to developing a maize sheller that worked more slowly than women could shell maize by hand (Carr 1978).

Women may be more highly motivated to participate in programs than are men. For example, women responsible for collecting household water would be interested in maintaining water pumps. With some 80 percent of the water pumps in Less Developed Countries (LDC's) out of order, it would seem to be in the general interest to train women to maintain them (Carr 1978). Currently, men are given such training. But, if the

pumps break down, the man will not have to walk for water.<sup>4</sup>

Discrimination against women in agricultural programs is a global phenomenon (Boserup 1970). Development programs operate through administrative procedures that register only one owner or operator for each producing kin group. This registered owner or operator is usually a man. After the Sahelian drought, governments and external donors listed only men as cattle owners eligible for having their herds replaced. Women were ignored and thus made economically dependent on men (Cloud 1974). The study concludes that, in the Sahel:

But if the first principle of development is the Hypocratic principle "to do no harm," then there is a problem. At the same time that some programs are being developed to be responsive to women's needs, other programs are undercutting women's traditional roles by ignoring them. Most of the larger programs seem structured on the assumption that all farmers and pastoralists are men, that all decision-making is done by men, that all resources are controlled by men and therefore, a development project staffed completely by men, with male extension workers dispensing training credit and resources to men is an appropriate program structure. Exceptions to this pattern are far too few.

Kathy Staudt comes to similar conclusions about USAID programs. Despite the requirement that every USAID project include a women's impact statement, AID's "agricultural programs appear to undermine women's agricultural activities relative to men" (Staudt 1979: 24). Staudt sees AID as refusing to consider either the roles of women or the impact of AID programs on women. If they are noticed at all, "women are subsumed within the family." As a result, Staudt observes:

Reluctant to "Interfere" in private family matters, project designers shun any analysis of intra-household maldistribution factors that have in themselves been created or aggravated by the infusion of new resources, or newly commoditized reserves, such as land. It would appear that the agency has an implicit family strengthening policy, one which enhances male control over resources while simultaneously undermining women's options. (Staudt 1979: 31)

When extension services do hire female officers or design programs for women, it is usually in the unproductive field of home economics (Lele 1975: 77). These programs put women at an even greater disadvantage relative to men.

The experiences of American farm women with home economics should caution women in countries just beginning to fund a home economics "establishment." Through the home economists, Taylorism invaded American farm homes. Farm women were told that good management would solve their problems. Undoubtedly, there was a great deal to be learned from home economists about better methods of housekeeping. However, the home economics movement offered not so much technical assistance as an ideology. Women were taught that human fulfillment lay in making lace curtains for the home of the nuclear family presided over by a wise and beneficent patriarch. Home economics taught women to serve their husbands and families within the home. It did not even tell women to serve their husbands and families by doing economically productive farm work or supplementing the meager cash earning of most farms through off-farm jobs. Women were to be separated from both the larger economy and from their own businesses by the new duties of full-time domestic busy work.

This home economics ideology was, of course, curious. It came at a time when women's work in the homes was becoming increasingly trivial, when the cash economy was supplying many of the services previously performed by the homemaking artisan. In the face of this fundamental change, the women's larger socio-economic and political subservience could only be maintained by an ideology of the womanliness of domestic triviality. At the same time that more and more women were entering the cash economy as factory workers, office workers, teachers, the home

economists were perpetuating the patriarchal family by offering a vision of housekeeping as a career.

This did not, of course, mean that women should be left to do their housework either as they had done it in the past or as they preferred to do it in light of their own values. Rather, housework was to become domestic science. Home economists built an ideology of their own indispensability in guiding women into this new age of scientific servitude. The home economists quickly moved into the agricultural extension service and helped segregate women's issues from agriculture. In the process they perpetuated the myths that women did not farm and should be shielded from the physical burdens and managerial strains of farming.

One of the first products of these publicly-supported devotees of Taylorism in the home was a series of time-use studies designed to show that better management of time was a critical need of farm women. These studies were funded under the 1925 Purnell Act, which provided federal support for research on a number of topics, including home economics. With this money, the home economists organized a National Committee on Rural Home Management Studies. The study in Idaho showed a marked hostility to women who worked outside the home and who sought alternatives to the "career" of housekeeping. The report argued:

The statement is often heard that women keep house not from choice, but because they can do nothing else. The answers obtained in this investigation do not confirm such a statement....On the other hand, there are a few women who would prefer going back to their old positions, leaving a maid to take care of and cook for the family. These women have not been trained to look upon homemaking as a profession. One of the main objectives in the present methods of teaching Home Economics is to instill into the minds of girls that idea that no nobler profession exists than that of the homemaker. There are the chosen few who have a special talent but are not gifted or trained in the art of homemaking, who prefer to leave the household responsibilities to servants and render their services to the family by continuing in their former professions. (Crawford 1927: 11-12)

Any idea of working for self-fulfillment would have been unthinkable within the ideology of domestic science. Anything but home economics indicated a fundamental failure of womanhood and wifeliness.

The emphasis on management in the house never transferred to helping women assume a role in managing the farm. The time spent on farm work was glossed over in these studies or treated as an unfortunate diversion from housekeeping. The Oregon time-use study noted that women generally tended to do more farm work as their household and family responsibilities decreased. This study even noted that

Most farm women find outdoor work interesting. It is likely that the time which they give to farm work will increase as homemaking time is set free by the extension of community utilities and commercial services into rural districts. (Wilson 1927: 19)

Women were given no ideology of their role as farmers. Farm work was tolerated because it was, in a sense, within the home. This same study said of the trade-off between farm work and housework:

The increase in living standards enjoyed by members of other occupations had had the effect of increasing the desired standard among farm people. The width of the gap is in a sense a measure of the farm homemaker's problem. She cannot usually have the full benefit of modern facilities for cutting time costs in the household. She is more apt to give part of her working time to adding to family income. (Wilson 1927: 15)

The domestic science ideology spread through the farms of America partly through the farm press. The Country Gentleman carried a regular column between 1912 and 1916 from Nellie Kedzie Jones, founder of the domestic economy department at Kansas State University, and later a resident of Wisconsin. "Aunt Nellie's" letters to her "niece" Janet, a young wife on a Wisconsin farm, were at least leavened by common sense and humor. Her Taylorism was restrained by the understanding that she was writing about human beings in homes, not about extensions of machines in factories.

Nevertheless, hers was a message of planning for greater efficiency on behalf of the patriarchal family (Delgado 1973: 3-27).

The problem posed for farm women by the ideology of domestic economy was that it imposed new burdens without providing realistic means of coping with them. The betterment of farm women's lot as both farmers and as housekeepers came not through the home economists but through advantageous farm prices, the extension of rural electrification, and the rebellion of urban middle class women against the feminine mystique. The ideology of domestic science was another product of the land grant colleges and the extension service. Women's tax money was used to try to convince them that they were homemakers, not farmers. The colleges of agriculture were giving men professional training in agriculture, while the women were segregated into home economics courses. The logic of the ideology of domestic science contained a central flaw: if homemaking were indeed such a challenging, fulfilling career, why did women have to be warned against and excluded from management in other fields, even their own farms, the farms on which their houses were located? The ideology of domestic science prescribed women in the house and men in charge of the farm. This meant that women were to be cut off from the larger worlds of politics and economics. They could understand economics only when that related to the home. They could manage kitchens but not farms.

The problem with domestic science was not that it tried to provide useful methods of housekeeping but that it raised this advice to the level of an ideology that denied women's capacity for work and management in any setting other than the home. Women were not encouraged to learn about and participate in that business which supported their home. This



was unfair to both men and women. It was inconsistent with the realities of family farms. On these counts, one can paraphrase John Kenneth Galbraith's remark about agricultural economists: "If all domestic scientists were laid end to end, it would be a good thing."

One problem, apparently particular to United States women, is discriminatory taxation. The current controversy over the estate tax, or widow's tax, has shown women the grave economic consequences of the prevailing cultural assumptions that men farm and women merely help. Under current state and federal laws, women's labor on the farm does not constitute a claim to ownership. When the husband dies, the wife has to pay inheritance tax on the farm even if she can prove that she operated the farm while her husband held an off-farm job. Women whose husbands were invalids have been similarly confronted with the law that says they have no claim to the farms they have run. This issue became critical in the early 1970s as the rapid appreciation in land values due to speculative pressures meant that many more farms now exceeded the exemption limits. A number of widows have been forced to sell their farms in order to pay the estate taxes; women now say that men pay for a farm once, but a widow has to pay for it twice.

This issue has mobilized farm women to political action. It is a perfect issue for farm women because it was seen as family maintaining. Women can show that discrimination against women was a threat to the entire family.

#### Women and Rural Development

Changes in the structure of agricultural production together with the increasingly marginal position of women in agriculture make women

seekers of non-farm employment. This is as true of the United States as of the less developed countries. In this quest women are a disadvantaged group of job seekers for several reasons. First, they are less likely than men to have had any previous work experience. Second, they are less likely than men to have had any vocational training or as much relevant formal education. Third, few women have any arrangements for child care. The need for a job away from the home does not guarantee that either the employer or the kin group will help in this area. Fourth, rural women, like rural men, are a captive labor force. Their ownership of small amounts of property limits their mobility without at the same time providing an adequate standard of living. The rural labor force is constrained from being a class-conscious proletariat by its character as a marginal petit bourgeoisie. These rural workers will be less inclined to demand the minimum wage or to organize labor unions. They rely on their small amounts of property to grow food to support themselves and to supplement their meager wages. These rural laborers are marginal in both sectors of the economy.

Examples of women in this situation of dual marginality are legion. Women do most of the work in the food processing industry in the United States. Since this is seasonal work, they receive no health or retirement benefits and rarely earn the minimum wage. Unionization is out of the question. Women sort and pack cranberries in Wisconsin and Massachusetts, they pluck turkeys and pack vegetables in Minnesota. Women rarely fill the much better paying jobs in packing houses in the United States. These are reserved for men.

The main issue is not simply one of equal access for women to jobs in slaughter houses. It is rather the set of market and policy constraints

that force women to seek such jobs in addition to their work on their own farms. This is a question of the structure of agricultural production and the meaning of "rural development." In many areas of the world, including the United States, it is also a question of a private sector that takes advantage of this situation of the rural labor force, particularly women. The Sunbelt success story in the United States is built on this combination of public financing of a private sector that operates through the subemployment of a large part of the rural work force.

This is a virtually neglected area of inquiry. It raises questions about the adequacy of equal access as a framework for the analysis of women's positions as well as for the preparation of policy recommendations. It is not clear that anything but a demand for equal access is politically possible. On the other hand, there is always the risk that demands for equal access will retard the emergence of more fundamental change of even greater benefit to women.

### III. Policy Recommendations

Women's roles in agriculture, like those of men, are increasingly determined by public policies. These policies have had an adverse impact on many farmers during the past thirty years. Small farmers have been put at an increasing disadvantage relative to large farmers in many regions of the world. Women have suffered from the additional burdens of cultural assumptions and explicit policies that have indirectly or directly discriminated against them as women and intensified their marginality as farmers. Even if all the problems of the small and medium sized farmer were to be solved, farm women would still face problems as women.

The following policy recommendations address this special position of women in agriculture. These recommendations reflect the conviction that equal access is insufficient.

1. Women's individual rights within kinship-linked enterprises must be clarified in law and administrative procedure if women are to derive benefits from the incorporation of agriculture into the legal-bureaucratic realm represented by agricultural policies and development programs around the world. Without explicit recognition of this issue, the present tendency to exclude women from access to land and thus to all other associated rights will be intensified. There is no reason that the delimitation of individual rights should exclude any member of a kin group. The present situation results from a lack of insight, not from any inherent or necessary rigidity in law or administrative practice.
2. All publicly funded programs, whether from national government resources or from external sources, should be examined for their direct or indirect impact on women. Efforts to include women as project co-operators and project staff should be intensified.
3. Educational opportunities in agriculture should be extended to women. The current tendency to train men in agriculture and women in home economics should be stopped. The entire role of home economics training in developing countries should be re-evaluated to ensure that home economics programs do not separate women from meaningful roles in agriculture.
4. Policies that encourage large-scale, capital-intensive agriculture should be carefully examined for their impact on both farmers and consumers. Women are likely to be even more adversely affected than

men by a change from agricultural systems based on small-holders to an agriculture based on government or corporate control of land.

Women might well be at a disadvantage in seeking jobs as agricultural workers. Separating women from even a marginal role in the production of their own food might well increase hunger for themselves and their children.

5. Policies that link "rural development" to a publicly-financed private sector that depends on sub-employment, especially of women, for maximum profits should be carefully studied. At the very least if such policies are to continue, they might be endorsed less enthusiastically and less uncritically as a positive benefit to rural people, including women.
6. Governments and agricultural organizations should facilitate contact among farm women from all parts of the world. New policy options might well be generated by a sharing of experiences, successes, problems, failures, and aspirations. In such sharing, American farm women have much to contribute and much to gain.

## FOOTNOTES

<sup>1</sup>Unless otherwise cited, data on American farm women are based on my research in the Middle West during 1976-78. This research involved tape recorded, semi-structured interviews with 103 diverse farm women. Support was provided by the Rockefeller Foundation and the National Endowment for the Humanities.

<sup>2</sup>A pilot survey conducted among members of American Agri-Women at their National Convention in Green Bay, Wisconsin, in November 1977 and the members of the Mid-States Regional AMPI Auxillary Convention in June 1977 gives strong evidence for women's work on farms. All subsequent references to survey data refer to this survey.

<sup>3</sup>See footnote 2 above.

<sup>4</sup>Tanzanian women I met at Village Development Committee meetings in July 1978 told me the same thing and recommended that women be given such training.

## REFERENCES

- Arnoff, Joel and William D. Crane. "A Re-examination of the Cross-Cultural Principles of Task Segregation and Sex-Role Differentiation in the Family," American Sociological Review, 40 (1975).
- Berkner, Lutz K. "The Stem Family and the Developmental Cycle of the Peasant Household: An 18th-Century Austrian Example," in Michael Gordon (ed.) The American Family in Socio-Historical Perspective. New York: St. Martin's Press, 1973.
- Boserup, Ester. Woman's Role in Economic Development. London: George Allen & Unwin, Ltd., 1970.
- Bourque, Susan C. and Kay B. Warren. "Perceiving the Sexual Division of Work: Economics and Subordination in Two Andean Communities," n.d. (mimeo)
- Carr, Maralyn. Appropriate Technology for African Women. ECA/SDD/ATRCW/VTGEN/78.
- Cloud, Kathleen. "Sex Roles in Food Production and Distribution Systems in the Sahel." Paper presented at the International Conference on Women and Food, University of Arizona, Tucson, 1978.
- Cott, Nancy. The Bonds of Womanhood. New Haven: Yale University Press, 1977.
- Crawford, Ina Z. "The Use of Time by Farm Women." University of Idaho Agricultural Experiment Station Bulletin No. 146, January 1927.
- Deere, Carmen Diana. "The Agricultural Division of Labor by Sex: Myths, Facts, and Contradictions in the Northern Peruvian Sierra." Paper presented at the Joint Meetings of the Latin American Studies Association and the African Studies Association, Houston, November 1977.
- Delgado, Jeanne Hunnicutt. "Nellie Kedzie Jones's Advice to Farm Women: Letters from Wisconsin, 1912-16," Wisconsin Magazine of History, 57, 1 (Autumn 1973), 3-27.
- Farnham, Eliza W. Life in Prairie Land. New York: Harper and Brothers, 1846.
- Hoffman, Wallace. "The Value of the Productive Time of Farm Wives: Iowa, North Carolina, and Oklahoma," Journal of Agricultural Economics, 58, 5 (December 1976).
- Lele, Uma. The Design of Rural Development: Lessons from Africa. Baltimore: Johns Hopkins University Press, 1975.
- Long, Ervin J. and Kenneth Parsons. "How Family Labor Affects Wisconsin Farming," University of Wisconsin Agricultural Experiment Station Research Bulletin 167 (1950).

- Lundquist, G. A. "What Farm Women Are Thinking," University of Minnesota Agriculture Extension Division Special Bulletin No. 7 (May 1923).
- Moock, Peter. "The Efficiency of Women as Farm Managers: Kenya," American Journal of Agricultural Economics, 58, 5 (1976).
- Popkin, Samuel L. The Rational Peasant. Berkeley: University of California Press, 1979.
- Sprague, William. Women in the West: A Short Social History. Boston: The Christopher Publishing House, 1942.
- Staudt, Kathleen A. "Tracing Sex Differentiation in Donor Agricultural Programs." Paper presented at American Political Science Association, Washington, D.C., 1979.
- \_\_\_\_\_. "Women Farmers and Inequities in Agricultural Services," Rural Africana, No. 2 (Winter 1975-76).
- Tinker, Irene. "The Adverse Impact of Development on Women," in Irene Tinker and Michele Bo Bramsen (eds.) Women and World Development. Washington, D.C.: Overseas Development Council, 1976.
- United Nations, Report of the Secretary General. "Effective Mobilization of Women in Development." UN, A/33/238. 1975.
- United Nations Economic Commission for Africa. "Plan of Action for the Integration of Women in Development of Africa," 1974.
- United States Department of Agriculture. Social and Labor Needs of Farm Women (Report No. 103); Domestic Needs of Farm Women (Report No. 104); Educational Needs of Farm Women (Report No. 105); Economic Needs of Farm Women (Report No. 106). Washington, D.C.: Government Printing Office, 1915.
- U.S. Department of Commerce, Census Bureau. 1964 Census of Agriculture.
- Veblen, Thorstein. The Theory of the Leisure Class: An Economic Study of Institutions. New York: The Modern Library, 1934.
- Ward, Florence. The Farm Woman's Problems. United States Department of Agriculture, Department Circular 148, November 1920.
- Wilson, Maud. "Use of Time by Oregon Farm Homemakers," Oregon State Agricultural College, Agricultural Experiment Station Bulletin 256 (November 1927).



Chapter Three

NEW MODELS FOR AGRICULTURAL RESEARCH AND EXTENSION:  
THE NEED TO INTEGRATE WOMEN

by

Jacqueline A. Ashby, Ph.D.

Investments in agricultural research and extension systems are currently seen as crucial to the success of the new agriculture-led growth strategies of development (Mellor 1976). A central objective is to redress the inequities arising both from the transfer of technology which has proved inappropriate to the needs of many low-income farmers, and from agricultural extension strategies which have concentrated delivery of technical innovations to an elite of "progressive farmers."

Equitable distribution of increased agricultural productivity requires new adaptive research to develop technologies appropriate to the agro-socioeconomic conditions facing low-income farmers. In addition, new organizational strategies of extension are essential if the majority of low-income farmers are to utilize new technologies rapidly. The success of these new strategies depends fundamentally on the increased participation of farmers at all stages of the technology development and extension process (Whyte 1977; Hildebrand 1978; Kere 1978).

This paper argues that new agricultural research and extension strategies need explicitly to encompass women as participants, if objectives of increased agricultural productivity and of equity are to be attained. This paper is a cross-national survey of the current needs, problems and policy measures associated with developing agricultural extension services which benefit women as well as men.

Rural women constitute the majority (70 to 90 percent) of women in developing countries; to varying degrees they are currently significant, if often unrecognized, participants in agricultural production. In this paper the participation of women connotes full access to decision-making, institutional services and resources involved in improving all aspects of agricultural production, so that women benefit from the labor and skills

they contribute.

Agricultural extension services are necessarily oriented primarily to a clientele with control over the productive resources required for agriculture--in particular, land. Agricultural technologies and the organization of extension delivery systems usually affect those who contribute only labor to agricultural production by increasing or diminishing their employment opportunities in agriculture. But such laborers, lacking control over other resources such as land and capital, are de facto excluded from direct participation as clients of agricultural extension services. The problems of the landless can be addressed only indirectly by technical improvements in existing modes of agricultural production; other policy measures relevant to the problems of the landless fall outside the mandate of this paper. Our discussion of women as clients of agricultural extension services is necessarily limited to those women in households with access to land.

Agricultural extension conventionally means primarily the communication of technical information and training of farmers in new agricultural practices. In actuality, the effectiveness of any agricultural extension strategy depends fundamentally on the usefulness to farmers of the technologies which it extends (Rice 1971). New intervention strategies to improve the flow of appropriate technologies to low income farmers require a blurring of conventional distinctions between research and extension. A first step is the development of improved information systems linking research, extension and agricultural producers. The design of agricultural extension strategies therefore includes a two-way communication system, in which the delivery of information and training to farmers is complemented by feedback on farmer uses of new technologies.

The paper first reviews the major features of women's participation in agricultural production and in existing extension services. Second, women's effective participation in extension services serves as evaluation criterion regarding new directions in the design of agricultural research-extension systems. Finally, in the light of these findings and of the nature of women's contribution to agricultural production, factors influencing the efficacy of alternative policy strategies are discussed.

#### I. Women and Agricultural Extension: A Review of the Current Situation

We must first briefly review why the delivery of agricultural extension services specifically to women merits attention given current rural development objectives. Also considered is how extension service design has both neglected women's agricultural activities and militated against women's access to practices increasing production.

##### Why Women Must Be a Target Group for Delivery of Agricultural Extension Services

In order to understand why and in what social contexts the access of women to agricultural extension services is an issue, it is first necessary to identify their roles in agricultural production. In any given country or region of the world a classification of women's economic contribution to agricultural production has to be made with reference to cross-cutting distinctions of social class, marital status, ethnic or religious identity. Some of the main features of such a classification outlined here provide a framework for exploring some fundamental policy questions later in the paper.

One basic consideration is the extent of agricultural work done by women. In Sub-Saharan Africa, women undertake 60 to 80 percent of culti-

vation in more than half of all societies and more than 50 percent in another quarter of these societies (UN 1972). Only in one-fifth of these societies do men play the major role (Goody and Buckley 1973). In agricultural systems outside Africa, where men are more active in cultivation, women are still significant contributors to field labor. In Asian agriculture, female labor is estimated to account for about one-fifth of family labor, and as much as one-third of wage labor (Boserup 1970). However, case studies of rural women in India suggest that women contribute at least 50 percent of all agricultural labor, and that this estimate would be much higher if women's work in animal husbandry and farm support activities at home were taken into account (Chakravorty 1975).

Even in cultures where there are norms of female seclusion, women and children are not prohibited from field labor and may be recruited for planting, weeding and harvesting activities: one study estimates that agriculture employs more than a third of economically active women in Moslem countries (Mernissi 1976). For example, a field survey in Egypt indicates that 44 percent of rural women are engaged in agricultural production; in the Sudan 78 percent of the female labor force is estimated as working in agriculture, forestry and fishing; in India census data show 80 percent of the female labor force engaged in agriculture (Ahdab-Yehia 1977; Chahil 1977). Whether or not women contribute extensively to field labor, in almost all farming systems women are engaged in unpaid "household" labor (ignored in statistical estimates) contributing to agricultural production: for example, post harvest processing, food preservation and storage, water carrying, fuel and fodder collection, vegetable gardening and care of livestock.

Aggregate statistics tend to obscure the variations in female labor participation in agriculture dependent on patterns of socio-economic stratification. Women from low-income households are found working full-time in field labor (particularly as hired labor) in societies where socio-economically advantaged women may withdraw seasonally or completely from such work (Boserup 1970; Hull 1977; Stoler 1976; Hart 1978). Boserup (1970) identifies four types of rural female work patterns which may be correlated with social class position:

- (1) socio-economically advantaged women who may be purely domestic, sometimes secluded;
- (2) primarily domestic women, who participate in agricultural labor to a limited extent on family small-holdings;
- (3) active women farm workers, who contribute to a larger proportion of family agricultural production and income in poor families, and may work as hired labor for others;
- (4) independent women farm workers or farm managers, who cannot expect to be supported by a husband, and are responsible for almost all aspects of production.

Although such generalizations are abstracted from a complex reality, they indicate the kinds of cultural and class-related variations in the sexual division of labor to be considered in designing extension strategies.

The sexual division of labor does not necessarily indicate where authority over production processes within the farm household resides. Women are now widely recognized as important contributors to decision-making and farm management in traditional agriculture. Again the extent of women's decision-making powers with respect to different aspects of production processes, types of crop or inputs, varies enormously across farming systems and across social classes within a farming system. The impact of the sexual division of labor on decision-making responsibilities

is clearest in those African societies where each wife in the polygamous family economy constitutes a separate unit of production (Levine 1970). However one survey of farm decision-making in seven African and Latin American countries finds women's influence to be significant in all aspects of agricultural production. This survey finds that even where women's active participation in farming appears to be relatively low women may have the decisive influence over farming matters (Riegelman, et al. 1976). Similarly in Asian households where males traditionally mediate between the household and the outside world, women may manage family finances and dominate decision-making processes (Stoler 1976 [Indonesia]; Reining 1977 [Philippines]; Misch 1975 [Korea]; Jayasat 1977 [Thailand]).

Moreover, the declining viability of small-scale agriculture in many low income countries means that women increasingly bear primary responsibility for farm production decisions. Population pressure on the land and outmigration of male labor in search of off-farm employment result in increasing numbers of actual or de facto female-headed households in rural areas. Recent estimates of the number of "potential" female household heads (i.e., widowed, divorced, separated or single mothers who are not de facto female household heads) for 74 developing countries range from 10 to 48 percent of all households, and suggest that this phenomenon is widespread with no distinct geographical or cultural clusterings (Buvinic and Youssef 1978). For selected African countries, estimates of rural female headed households are as high as one-third to 40 percent of all households. Studies in Asia and Latin America suggest that the emergence of large scale commercial agriculture, seasonal agricultural wage labor, opportunities for male non-farm employment and population

pressure on subsistence small holdings are all related to the breakdown of the traditional division of labor, leaving women responsible for almost all agricultural tasks. These pressures toward the outmigration of male family members tend to concentrate and increase the incidence of female-headed households among the lowest income rural groups. Finally, there is some evidence that extensive male outmigration may be selective, leaving the less educated, less skilled and less able men in the agricultural sector, so that skill and knowledge may be concentrated among women farmers (Moock 1976). A rising proportion of female farm managers among the rural poor makes it all the more imperative that agricultural extension services reach women; otherwise the benefits of improved agricultural practices will not reach many low-income farm families.

Not only the extent of women's participation in agricultural production, but the types of production for which they have primary responsibility are important. Increased production of basic food crops and technical improvements in crop storage and food processing are two areas critical to the solution of the world food problem (Wortman 1978). In Sub-Saharan Africa, increased production of cash/export crops has progressively relegated subsistence food crop production almost exclusively to women (Boserup 1970; Reining 1975). The shift of men to large-scale commercial agriculture and non-agricultural employment (as discussed above) has the same effect (Deere 1976; Bourque and Warren n.d.). But this pattern is by no means universal. In Asian wet rice cultivation male and female labor are required for subsistence production, and female labor accounts for a significant proportion of that involved in commercial export production (Buchanan 1968; Boserup 1970). However in Asian dry land farming systems,



women are often primarily responsible for food crops other than rice.

The failure to recognize that women dominate post-harvest production processes in the vast majority of farming systems can negate efforts to increase available food supplies. For example, in Nepal women, responsible for milling and storage, rejected high-yielding varieties of maize because of inferior milling and storage qualities (IADS 1976). This was initially viewed as irrational behavior to be overcome by greater extension efforts; the failure to consider technology related to women's work caused this erroneous analysis. Clearly, agricultural extension service design must take into account the extent of women's labor participation in agricultural production, their influence in decision-making and farm-management, particularly their responsibility for basic food crop production and post-harvest production processes.

#### Extension Services for Rural Women

Historically, the failure to recognize women's extensive involvement in agricultural production and management has resulted in extension strategies designed for women as a clientele distinct from men. These strategies have focused primarily on women's reproductive, child care and homemaker activities.

The persistence of sex-segregated models of extension programs is shown by UNESCO surveys of the access of rural women to education. A 1964 survey found that in out-of-school programs for women in low-income countries, home economics subject matter predominated, with health education second, and rural economy, accounting, and cooperative management as subsidiary activities. The only specific agricultural content identified was kitchen gardening (UNESCO 1964). A subsequent survey in 1973

found similarly that home economics, hygiene, nutrition, child care and sewing were most often offered by extension programs for women (UNESCO 1973).<sup>1</sup>

Pervasive concentration on women's domestic role to the detriment of agricultural training is evidenced by numerous country case studies of extension programs (Ahmed and Coombs 1975; Lele 1975; Sheffield 1972). One study argues that in Africa "the goal of extension services has frequently been not the increase in farm level productivity of women but rather finding ways to reduce their participation in agriculture through promotion of more homebound activities" (Lele 1975: 77). However, the exclusion of women from agricultural training is not necessarily because women are excluded from the target population, but because program design militates against women's attendance at training courses. In East Africa, for example, most farmer training centres have a general policy of offering training to the whole farm family, including wives, but find that women are seldom able to leave the responsibilities of household work and child care to attend residential courses (Barwell 1975). A recent survey of farm training centres in Asia shows that out of nine countries which provided for female enrollment only one, Sri Lanka, had successfully recruited women for farmer training (UNESCO 1975).

In general extension training for women tends to relegate them to non-agricultural activities. In Sub-Saharan Africa, where, as we have seen, female farming is of major importance, extension programs for rural women have historically concentrated almost exclusively on women's home-making activities (Heasman 1966). A more recent estimate reveals the same tendency (see Table 1).

The perception in Botswana that agricultural training is important

Table 1. Estimated Access of Women to Non-formal Education in Africa

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<u>Area of Training</u>	<u>Units of Participation<sup>a</sup></u>
Agriculture	0.15
Animal husbandry	0.20
Cooperatives	0.10
Arts and crafts	0.50
Nutrition	0.90
Home economics	1.00

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<sup>a</sup>Percentage of training time allocated to women

Source: "Women, population and rural development - Africa" ECA/FAO, 1976.

primarily to males (in a farming system where women do over 70 percent of all crop work) is illustrated by Table 2.

In rural training centers 70 percent of all courses offered were agriculture-related; in all but one (the 4H course for young people), women participants were a significant minority. Moreover only 50 percent of women trainees were in agriculture-related courses compared with 88 percent of men trainees. A similar example is the farmer training course in Kenya, in which approximately one-third of the trainees have been women. However, lessons for women concentrate on a wide range of

Table 2. Male and Female Enrollment at Rural Training Centre Courses  
(Botswana, 1973)

A. <u>Type of Course</u>	B. <u>(A) as percent of all courses</u> (N=75) %	C. <u>Percent of Participants:</u>	
		<u>Male</u> (N=1149) %	<u>Female</u> (N=752) %
Farmer Courses	35	68	32
Family Welfare	9	0	100
Home Economics	9	0	100
Co-ops	25	82	18
4-B (youth)	5	29	73
Agriculture in- service	5	100	0
School teachers	4	85	15
Other	6	32	68
Total	100	60	40

Source: adapted from C. A. Bond (1974).

home economics topics, and agricultural aspects comprise at most 30 percent of the course (Staudt 1975).

It might appear that where purdah (female seclusion) is practiced, "domestic science" training is most appropriate. However, conceptions of this domestic role derive largely from western notions and ignore how much of women's time in the home is occupied by agriculture production processes. For example, a study of Muslim village women in Comilla district, Bangladesh found that in seven out of twelve months the major proportion of women's time was devoted to threshing, drying, cleaning and husking of rice, jute processing, care of poultry and livestock, fruit and vegetable gardening, fishing, and food preservation (Sattar 1975). Yet extension programs for such women include almost no training related to these activities. Table 3 shows the percent of courses and course participants by type of course offered from 1966-1973 for rural women in Comilla district by the Women's Education and Home Development pilot project. The gap between the agriculture-related activities occupying women's time and the training offered is apparent.

The sex-segregated model for extension programs has relegated "women's programs" to low status. Often token programs with low budgets are little encouraged by government bureaucracies, donor agencies and, as a result, by community level leadership. These programs are poorly adapted to the economic needs of rural women and to the constraints on their time. This in turn has limited extension programs' effectiveness in reaching the mass of low-income rural women even in the home economics sphere (UNICEF 1975; see also Hull 1977 [Java]).

Conventional extension programs for rural women have in the past tended to serve primarily an elite clientele. Nonetheless, there are

Table 3. Women's Education and Home Development Pilot Project,  
Comilla, Bangladesh

<u>Type of Course</u>	<u>Years:</u>					
	1. 1966-1969		2. 1969-1970		3. 1971-1973	
	(a) percent courses (N=244)  %	(b) percent partici- pants (N=674)  %	(a) percent courses (N=305)  %	(b) percent partici- pants (N=646)  %	(a) percent courses (N=190)  %	(b) percent partici- pants (N=665)  %
1. Health and family related	48	31	34	49	86	64
2. Handicrafts	5	10	5	15	12	30
3. Poultry/kitchen gardening	1	5	0	0	2	6
4. Other-adult education (including literacy)	46	54	61	36	0	0
Total	100	100	100	100	100	100

Source: Annual Reports 1966-1973, Academy for Rural Development, Comilla.

programs for women which, despite emphasis on women's domestic role, have experimented with extension strategies: these can serve as valuable models regarding agricultural services to women (see concluding section below).

Women's Access to Agricultural Extension Services: Case Studies from Sub-Saharan Africa

We have seen that extension services for rural women do not typically involve any substantive recognition of their role in agriculture. There are, however, other ways in which agricultural extension is oriented toward a primarily male clientele. First, traditional norms of male-female interaction in many societies inhibit women's contacts with unrelated members of the opposite sex, including male extension agents. Second, where women's work is largely in the subsistence food crop sector, they are less "visible" to agricultural extension services concerned with commercial crop production. Third, female farm managers whose husbands emigrate to seek work are most likely to be low-income, and thus least likely to be sought out by extension services following a "progressive farmer" strategy. Fourth, extension staff, even if cognizant of women's agricultural activities, often have the western view of male farmer systems, and thus do not actively seek out contacts with women farmers.

The extent of systematic sex-biased access to agricultural services where agricultural extension is oriented toward a male clientele is sparsely documented. Studies of agricultural extension impact typically do not distinguish clients by sex. The assumption is that women's needs in relation to agricultural production--if they are recognized at all--are identified with and served by extension contacts with men. The error of this assumption is demonstrated by data on women agricultural

producers' access to agricultural services in three case studies of farming areas in which a substantial proportion of farms were managed by women or in which women performed the major proportion of agricultural tasks.<sup>2</sup>

Table 4 summarizes the major findings of these case studies on women's access to different types of extension contact. In each case the data show that women enjoy sharply lower levels of contact with and knowledge of extension services. In the Botswana case, most extension contact measured is from a pupil farmer scheme; those women registered in the scheme were frequently widows whose husbands had joined the scheme (Bond 1974: 50). Only a small number of women are registered in the scheme in their own right. The Kenyan case study shows more pronounced inequalities between female managed and joint managed farms. Women farm managers were found to be particularly disadvantaged with respect to more valuable services, training and loans (Staudt 1976).

Not only do independent women farm managers have little real access to agricultural services. Within families, women depend largely on extension contacts with male family members for access to agricultural information, as the data from the Tanzanian case study show. In households which had contacts with extension services, only 0 to 15 percent of all types of contact were directly with the wife. Moreover, the study found that in households where a given recommendation was known, husbands were 1 to 5 times more likely than wives to report this knowledge (Fortmann 1977: 16). Apparently, extension contact with husbands in no way ensures that information is transmitted to wives. This is particularly harmful where, as in this case, women are frequently responsible for applying improved practices (Fortmann 1977: Table 4).



TABLE 4. Agricultural Extension Contacts with Males and Females: Findings From Three African Case Studies

Type of Extension Contact	CASE STUDY							
	Contact Recipient	1. Kenya: <sup>a</sup> Percent each type farm contacted		2. Botswana: <sup>b</sup> Percent of contacts with each type farm		3. Tanzania: <sup>c</sup> Percent of contacts with husband or wife		
		Female Managed Farms %	Joint Managed Farms %	Female Managed Farms %	Male Present Farms %	Husbands only %	Wife only %	Both %
1. Extension agent visit		51	72	41	59	24	0	76
2. Attend demonstration plot or meeting		52	59	44	56	52	7	40
3. Received extension training		5	20	44	55	--	--	--
4. Knew of or applied for credit		1	15	--	--	--	--	--
5. Received credit		0	3	--	--	--	--	--
6. Acquired seed from extension agent		--	--	24	76	--	--	--
7. Knows of extension agent		--	--	48	52	53	2	44
8. Discussed recommendation		--	--	--	--	38	7	55
9. Listens to extension radio program		--	--	42	58	50	15	35

Sources: <sup>a</sup>K.A. Staudt (1976) Tables 1, 2, 3.

<sup>b</sup>C. A. Bond (1974) Tables 23, 24, 26, 29.

<sup>c</sup>L. Fortmann (1977) Table 7.

Possible explanations for sex-related differences in receipt of agricultural extension services are that women farmers lack resources to adopt new practices, are more subsistence-oriented, and are inherently less innovative. However, Staudt (1975, 1976) shows that in the Kenyan sample sex-related differences persist under a number of controls for land size, subsistence orientation and timeliness of adoption of new varieties.

Sex-related differences in extension contact and information transmission often lower productivity. In Tanzania, women were found to be underrepresented by a factor of 5 in a program promoting an improved maize package and women also had significantly lower levels of knowledge of how to utilize the maize package (Fortmann 1976). In the Kenyan case, 27 percent of farms with a man present were early adopters of hybrid maize compared with 19 percent of female managed farms (Staudt 1976: Table 4).

One result of sex-biased extension of new technologies is that men learn to operate new types of equipment so that women lose control over production processes and income derived from them, or experience a decline in employment opportunities as their labor is displaced (Rubbo 1975 [Colombia]; Hoskins 1978 [Upper Volta]; Barres 1977 [Niger]; Tinker 1976 [Kenya, Nigeria, Mexico, Sarawak]; Stoler 1976 [Indonesia]). In other instances new farming practices have led to increase in cash crops, depriving women of land previously farmed by them for food, or diminishing their access to the returns to their own labor when cash-cropping becomes a male-controlled enterprise (Palmer 1977 [Ivory Coast]; Cloud 1977 [Sahel]; Hoskins 1978 [Upper Volta]; Stavrakis 1978 [Belize]).

In addition, increased acreages or labor-intensive practices demanding

more female labor often reduce women's production of other crops or their ability to engage in other income-earning activities (Hanger and Morris 1973 [Kenya]; Stojer 1976 [Indonesia]; Palmer 1977 [Gambia, Sierra Leone]; Boserup 1970; UNICEF 1972 [Central and West Africa]). This may increase hardship among low-income households dependent on female earning capacity for as much as one-third of their income, and for the provision of food staples. In low-income countries, changing conditions of women's work appear to have lowered food availability and nutritional levels in their families and communities (PAG 1977).

Although the evidence is fragmentary, these case studies indicate a trend towards declining productivity of women relative to men in parts of the developing world. There is also evidence that the relegation of women's labor to the subsistence sector is exacerbating inequalities in productivity between the sexes. Such inequalities in productivity between the sexes reinforce the vicious cycle of rural poverty and over-population.

This process is illuminated by a theory of wages postulating that workers must be paid at least a subsistence minimum in order to survive and reproduce. Maintenance of the subsistence sector via the labor of women and children means that wages can be collapsed by an amount equal to the net value of that subsistence production (de Janvry 1975). As women and children become the main productive agents in subsistence agriculture while men work in the cash economy, women's labor provides cheap services which low wage males could not otherwise afford. Purchasing power in the rural population is thus depressed, which in turn undercuts efforts to stimulate aggregate demand in the non-agricultural sector of the rural economy. The need for children's labor in the subsistence

sector and for numerous children to support parents in their old age makes increased family size a rational response to poverty. Thus, marginal subsistence production by women and children perpetuates the cycle of poverty through low purchasing power and population growth, despite development efforts.

## II. Problems of Increasing Women's Participation in Agricultural Research and Extension Service

This section of the paper examines: (1) problems relating to the design of appropriate technology and extension strategies at the farm level; (2) issues related to the integration of women at the institutional level, particularly as extension staff; and (3) problems related to education and training at all levels, or investments in women's human capital.

### New Directions in Agricultural Research and Extension Strategies

To increase the agricultural productivity and welfare of low-income farmers requires immediate short-run improvements in their capacity to produce enough food to support their families. In this context, one definition of "appropriate technology" is improved practices which can be adopted rapidly and under farmers' present agro-socioeconomic conditions (Hildebrand 1978). The enormous diversity of local agro-socioeconomic conditions among traditional farming systems is now recognized as a significant constraint on the transfer of borrowed agricultural technology. As a result, much international agricultural research now emphasizes adaptive research in developing technology suitable for diverse local conditions (Moseman 1970). Identifying adaptive research priorities requires institutionalized information flows between the farm

and the research station. Information about the diversity of farm-level constraints to which technology must be adapted is a precondition for the development of appropriate technology. It is the farmers themselves who test the viability of recommended technologies and also modify and adapt technology to specific conditions (Hildebrand 1978; Evenson 1974). Therefore continuous "feed forward" and "feedback" regarding farm-level constraints and farmers' experience with new technologies is critically important to efforts to deliver appropriate technology rapidly to the majority of farmers.

Adaptive research design of extension strategies requires that research and extension efforts be organized as a continuum (Hildebrand 1978). Extension agents learn from farmers in the sense of identifying farm-level constraints; this is as essential as their traditional role of delivering technical information to producers (Lele 1975).

The characteristics of women's participation in agriculture are an integral component of the location-specific constraints to which technology and extension must be adapted. This requires looking not only at the level of the household unit but at production relations and access to assets between the sexes as well. Male-oriented extension strategies diminishing the agricultural productivity of women ultimately limit productivity in the agricultural sector as a whole.

Design of "Appropriate" Research-Extension Strategies: Special Problems of Women at the Farm Level

Where a significant number of women are autonomous farmers or farm managers, their particular opportunity structures are clearly important. However, within other types of family structure, the sexual division of labor, of income disposal, or of responsibilities for providing certain

types of produce or material goods to the family also materially affect women's incentives and ability to benefit from agricultural services. Significant variations exist not only between societies, but also between classes within societies. In rural Asia and in other peasant societies, the sexual division of labor and control over resources are often a function of class position, with greater autonomy among poorer women. Sex roles appear to be flexible or adaptive depending on the income generating opportunities available to members of either sex (see for example, Moses 1977 [West Indies]; Kandyoti 1977 [Turkey]; Hull 1977; Stoler 1977 [Indonesia]).

The diversity of customary modes of allocating resources and rights between the sexes in agricultural production means that each agricultural production system has unique implications for the resource allocation strategies women are likely to pursue, and the benefits (or costs) they are likely to incur from a particular agricultural innovation or extension strategy. However, there are four general questions which will guide the design of specific extension strategies: (1) who controls strategic resources; (2) who benefits from new practices; (3) who actually implements new practices; and (4) who is penalized by new practices. Each of these will be discussed in turn.

1. In production relations between the sexes, who controls strategic assets--land, labor capital--in the sense of making allocative decisions? What is the relevant unit for communication purposes and decision making--husband and wife, women only, or men only?

For example, in some areas of Africa women may be solely responsible for production on land over which they have usufructory rights but not rights of disposal. Decisions to plant new crops or to purchase agricultural inputs can in some cases be made only with permission of the husband.

In this respect women may face special problems analogous to those of tenants or sharecroppers whose ability to adopt new agricultural practices is constrained by relationships with landowners controlling the allocation of land and other inputs.

Where women contribute labor, they often have only limited rights over produce (Boserup 1970; Barres 1977; Hoskins 1978; Bourque and Warren n.d.). Even where women control personal income from farming or trading, their financial obligations for household support (food, clothing or schooling for children) curtail their possible investments in agriculture. For example, data on farmers' expenditure of income from cattle sales in south-eastern Botswana show that women managers spent almost 100 percent of this income on food or education, and none in agriculture, whereas male respondents spent up to one-third of this income in agriculture. This study also suggests that lack of cash for seed, hiring labor or oxen for ploughing often delayed women managers' planting decisions; other farms were less subject to these constraints (Bond 1974). Women's limited control over income and their obligatory expenditures thus affect their ability to accumulate capital and the kinds of farm investment decisions they can make.

2. Who is likely to receive the benefits--and therefore to have the incentive to adopt new practices? This may not be identical with control over strategic resources or with who actually uses new practices.

Where women have only usufructory rights over land, they may not be motivated to make substantial cash or labor investments in crops which only yield an economic return over a number of years. For example, the Niger Animation Project, women refused to plant fruit trees because these would belong to their husbands. Women's investment decisions were here dictated by concern for security within the context of marital insta-

bility: thus they preferred to invest cash in livestock--which they owned--rather than in field crop production. In contrast women initiated the adoption of improved planting tools, although men use the tools for planting, because women were more motivated to maximize yields on their small food plots (Barres 1976). In this situation, a new technique should be communicated to women--its beneficiaries--although men would in fact use the technique. Where cash crops are controlled by men, women have little incentive to plant them. In this situation, women have proved unwilling to contribute labor to new cash crops because they benefit only peripherally (DeWilde 1967; Apthorpe 1971).

3. Who is likely to implement new practices--i.e., who actually does the work? For whom should the technology be usable in the sense of time and energy constraints? Therefore, for whom should practical training in the use of new farming techniques be designed?

Firstly, patterns of women's time allocation may be a critical constraint. Women from low-income households are most likely to work long hours per day and more days per year in agricultural and domestic tasks; thus they are least able to benefit from labor intensive technologies or to participate in time-consuming extension services. Secondly, where women do not participate in decisions about the adoption of new practices, it may still be women who actually implement them. In this case practical knowledge about the use of new practices should be communicated directly to women.

4. Who is likely to be penalized by the introduction of an innovation? What compensatory adjustments need to be made in the farming system or in production relations between the sexes?

Problems relevant here are illustrated by the introduction of an hydraulic oil press into a Nigerian village. Traditionally women extracted the oil. However, the daily time schedule for using the hydraulic



press did not coincide with women's work routines. Also, the press was designed for use by men, so that women could use it only with an increased labor force. Finally, all the oil extracted belonged to the men. As a result the majority of women did not use the hydraulic press (Janelid 1975). In this case the technology design and the extension procedure were both faulty because the customary division of labor and rights over produce were disregarded.

Labor-saving technologies for women's work--in post-harvest processing, or water carrying for example--are often advocated to free women's time for more productive tasks. However, even such apparently simple tasks as water carrying can involve a hierarchical division of labor among women which is related to social class position. One study describes four types of women involved in fetching water from the village well: (1) the socio-economically advantaged who draw and carry their own water; (2) the advantaged who carry their own, but pay other women to draw it; (3) the socio-economically disadvantaged who are paid for drawing water; and (4) the disadvantaged who are paid for both drawing and carrying water (Barres 1977). In tasks providing income to socio-economically disadvantaged women, new labor-saving technology may benefit the more advantaged at the expense of the least advantaged (see Stoler 1977 for a similar example involving displacement of rice pounding labor of low-income women). In the water-carrying, women would not take concerted action to improve the water supply system. Thus, a viable extension strategy required some compensatory innovation for the women who stood to lose income.

In summary, many of the problems relating to women's control over factors of production in agriculture are not amenable to technical

solutions, nor can they be solved by adjusting communication strategies in accordance with authority over production processes. Unless and until such problems are tackled by legal or political avenues, they remain constraints on women's capacity to participate in and benefit from agricultural services. Moreover, the examples discussed here are illustrative rather than representative. The socio-cultural specificity of such problems underlines the importance of involving women as participants in information "feed forward" and "feedback" processes. This in turn poses a different set of problems regarding effective extension communication with women.

#### The Need for Female Extension Agents

The provision of equal access to agricultural information and of effective communication with women requires that current agricultural extension staffing patterns change to include trained female workers. Female extension field staff are needed for two reasons.

First, because traditional barriers to communication between the sexes prevail in many cultures, men may not be reliable transmitters of information either to or about women. Numerous ethnologies document the distinct communication channels for members of each sex in rural societies. This pattern prevails not only where women are traditionally secluded (Stirling 1965; Fernea 1965) but wherever low female status inhibits interaction between the sexes (Harding 1976; Wolf 1974). We have seen from the Tanzanian case that communication between husband and wife is not always an effective means of disseminating agricultural information to women. The Niger Animation Project provides more striking evidence: "Women may know what men discuss but they may choose to disregard this

knowledge explicitly because it was not directed to them. They do not necessarily regard information reaching them through men as having passed through 'legitimate' channels" (Roberts 1977: 66). In such situations, female extension workers will be able to reach women because they can have access to local women's communication networks.

Research on the dynamics of communication processes shows that "the most effective extension agents are those who are most like their clients in all respects except for technical competence, about the recommended innovation" (Rogers 1973: 58). Particularly when adoption of new practices entails uncertainty and economic risk, individuals tend to seek information from peers or like-individuals. Moreover, the trustworthiness of the information source is greatly enhanced if the potential adopters see the communicator as sharing their situation. Thus women extension agents should clearly be recruited to work with women. Because new agricultural technologies are often high-risk undertakings, it is optimal that women extension staff be rural women with practical farming experience.

There is currently growing recognition of this need to train women for agricultural extension purposes. Recent examples are the Farm Women's Agricultural Extension in the Ministry of Agriculture, Sri Lanka, the training of women as agricultural extension agents by the Ministry of Agriculture, Botswana, and plans for a special women's extension section in the Ministry of Agriculture, Iraq. Several African countries (Kenya, Nigeria, Tanzania, Sierra Leone and Uganda for example) have training programs for women as agricultural extension agents. However, we lack systematic data on different approaches to the integration of women into agricultural extension services; existing information is frag-

mentary. Evaluating the approaches is difficult in the face of regional, cultural and socio-economic variation in women's roles as agricultural producers. Moreover such efforts are often too recent for meaningful evaluation to have occurred, or questions of effectiveness cannot be disentangled from the inadequacy of new practices introduced. Nonetheless, a brief overview of agricultural extension efforts to use women extension staff shows that there is a not inconsiderable history of experimentation with this idea.

Sarawak and Venezuela are instances in which agricultural services have been provided as an integral component of extension for rural women. Over a decade ago, a small project of the Department of Agriculture in Sarawak trained an experimental group of rural women in agriculture and animal husbandry as well as the usual home economics curriculum. After 18 months training, the women worked in teams with a male agricultural extension officer and his wife in villages on rural women's agricultural activities including rice production, rubber processing, fish pond development, small livestock and vegetable gardening (Wallis 1966). A similar, but well established program utilizing women field workers for agricultural extension is the Venezuelan home demonstrator program. Two schools supervised by the Ministry of Agriculture recruit mainly rural women and give them a three year course including special training in agriculture. Approximately 120 students are graduated annually. For over a decade women demonstrators have been active in training village women in improved agricultural techniques, including new varieties of garden and field crops (Ruddle 1974).

The Botswana Ministry of Agriculture has had a program which trained 13 women in agriculture from 1974-77. Despite its very small

scale, this program is of interest because it represents an explicit shift away from the home economics conception of women extension staff roles toward the full integration of women into normal agricultural extension operations. Women and men have been trained in exactly the same courses and posted and assigned duties in the same manner. A recent evaluation of female agricultural field staff concluded that women could do all the agricultural work required by their positions, and that there were no significant differences in job performance between male and female officers. Moreover most women agricultural staff appeared to work with basically the same group of farmers as male staff (although in a conventional "progressive" farmer program). The capacity of these female field staff to work with farmers of both sexes and under the same work conditions as men appears to have been established (Bond 1976).

The training of women animators by the Rural Women's Animation project in Niger, 1966-1975, illustrates a contrasting approach. Staff members were selected among village women by villagers. Specialized training took place as part of their daily work, dealing with actual village problems and women's agricultural activities, supplemented, as needed, with periodic intensive in-service training. A total of 136 village women workers trained in agriculture and livestock worked in 23 districts in the course of the project. Extension activities of women animators were planned on the basis of data from surveys of village women (conducted through informal or formal meetings). Their role was generally to relay technical information and demonstrate the use of new practices. The effectiveness of the extension program appears to have been limited by technical flaws in new inputs, many of which were unsuitable to local agro-socioeconomic conditions (Roberts 1977). However, project evaluation

indicates that women animators were a key factor in arousing interest and disseminating information about new agricultural investments among village women previously hampered by sex-based barriers to communication (Barres 1976).

These examples demonstrate that women have worked effectively as agricultural extension agents in a variety of socio-cultural settings. Although more systematic data is needed on different approaches to integrating women staff into extension services, this is a policy measure which merits not tentative experimentation, but energetic implementation. The major institutional changes required both in staffing patterns and in the organization of extension systems will be discussed in the concluding section on policy implications.

#### Problems of Education and Training

Investment in farmers' human capital--their literacy, schooling and non-formal training--has been shown to be a key factor in effective dissemination of new agricultural technologies. Human capital skills affect farmers' ability to acquire accurate information, to evaluate new production processes, and to learn how to use new techniques efficiently. Particularly in a modernizing agriculture, the complexities of adjusting to new technical possibilities and new market forces make it difficult for farmers to make optimal allocations of resources (Schultz 1975). Theories of the allocative functions of human capital suggest that investments in farmers' human capital skills improve their ability to allocate resources efficiently and contributes to rapid adoption and higher level of productivity (Welch 1970). To the extent that human capital skills such as literacy and schooling influence farmers' capacity to benefit fully

from agricultural extension services (see Lockheed, et al. 1977 for a review of the empirical evidence) women agricultural producers are likely to be severely handicapped.

At the aggregate level, the disparity between male and female illiteracy is increasing (Tinker 1976). Table 5 shows the proportion of women without schooling and illiterate in various countries by world regions. As these data indicate, illiterate women are a significant proportion of the human resources in the agricultural sector of developing countries. This presents a serious obstacle to conventional extension strategies which rely on minimum levels of literacy for communication with farmers. In addition, generally a minimum requirement for admission to farmer training courses is a certain degree of literacy or in addition some level of formal schooling (UNESCO 1975; Barwell 1977; UNESCO 1973). In the short run, women's participation in farmer training must continue to be severely curtailed unless communication and training methods are drastically revised to reach illiterates.

Low rates of literacy and restricted access to schooling at all levels also present an obstacle to the recruitment of rural women as agricultural extension staff. Low rates of enrollment of girls resident in rural areas at all levels of schooling indicate a very restricted pool of potential recruits particularly given most countries' requirement that extension staff complete one or more years of training beyond the secondary level (UNESCO 1975; 1972).

There is moreover an acute shortage of women with agricultural training. Very few countries include girls in secondary level vocational training in agriculture (UNESCO 1973). Women are a small proportion of university level agricultural students and an even smaller propor-

TABLE 5. Percent of Female Population Without Schooling and Illiterate for Selected Countries by Region of the World.

Africa	(A)	(B)	South and Central America	(A)	(B)	Asia	(A)	(B)
	Total Female <sup>a</sup> Population With no Schooling	Rural Female <sup>b</sup> Population Illiterate		Total Female <sup>a</sup> Population With no Schooling	Rural Female <sup>b</sup> Population Illiterate		Total Female <sup>a</sup> Population With no Schooling	Rural Female <sup>b</sup> Population Illiterate
Algeria	(%) 99 <sup>c</sup>	(%) 94	Brazil	(%) 46	(%) 73	Bangladesh	(%) --	(%) 92
Botswana	68	65	Colombia	41 <sup>c</sup>	37	India	92 <sup>c</sup>	87
Egypt	--	88 <sup>d</sup>	Costa Rica	24 <sup>c</sup>	17	Indonesia	70 <sup>c</sup>	60
Kenya	89 <sup>c</sup>	90	Ecuador	43	51	Korea	94 <sup>c</sup>	27
Malawi	79	88	El Salvador	67	71	Malaysia	72 <sup>c</sup>	52
Morocco	--	99	Guatemala	95	78	Pakistan	95	92
Nigeria	--	94 <sup>d</sup>	Honduras	68 <sup>c</sup>	57	Philippines	22	23
Sudan	99	96 <sup>d</sup>	Peru	70	69	Sri Lanka	45 <sup>c</sup>	35
Tanzania	--	85 <sup>d</sup>	Venezuela	56	33	Thailand	43	32
Tunisia	99 <sup>c</sup>	89						
Uganda	86	74 <sup>d</sup>						
Upper Volta	--	99 <sup>d</sup>						
Zaire	99	86 <sup>d</sup>						
Zambia	79	78 <sup>c</sup>						

Source: UNESCO, Statistical Yearbook, 1977, Tables 1.3, 1.4.

Notes: <sup>a</sup>25 years +; <sup>b</sup>15 years +; <sup>c</sup>percent of rural female population; <sup>d</sup>percent of total female population.



tion of graduates (see Table 6). Lastly, women enrolled in agricultural training constitute a negligible proportion of the total female enrollment. These data demonstrate that higher level agricultural training is widely seen as a male pursuit. Ironically, this phenomenon is pronounced in the African countries where the majority of farmers is women. Hence the barriers to training women in agriculture at advanced levels include not only women's low access to schooling at all levels, but also the prevalence of occupational sex-stereotyping.

Another facet of the training problem is that in many countries higher education, and even post-primary education, is strongly associated with upward mobility and mobility out of rural areas. This appears to be especially true for rural women (UNESCO 1973). In most developing countries institutions for secondary vocational and agricultural training are located in urban areas. Urban-trained students tend to lose their familiarity with local farming practices. Often training in western views of agriculture tends to diminish their respect for local farmers and their ability to communicate with them. Moreover, the socio-economically advantaged women most likely to have access to schooling or even to acquire literacy are least likely to have practical experience in or commitment to farming as an occupation. Thus recruitment of women extension staff with advanced training and a commitment to remaining in rural areas is likely to be very difficult.

### III. Policy Implications

The policy measures needed if women are to achieve direct access and full benefits from agricultural research and extension services fall under three broad headings: (1) general principles of organizational

TABLE 6. Female Enrollment in Agricultural Training at the Third Level for Selected Countries by Region of the World

	(A)	(B)	(C)		(A)	(B)	(C)		(A)	(B)	(C)
	Females as Percent of Total Enrollment	Females in Agriculture as Percent of Female Enrollment	Females as Percent of Agriculture Graduates	South and Central America	Females as Percent of Total Enrollment	Females in Agriculture as Percent of Female Enrollment	Females as Percent of Agriculture Graduates	Asia	Females as Percent of Total Enrollment	Females in Agriculture as Percent of Female Enrollment	Females as Percent of Agriculture Graduates
Africa	(%)	(%)	(%) (n)		(%)	(%)	(%) (n)		(%)	(%)	(%) (n)
Algeria(1976)	15.0	1.0	11.0 (5)	Argentina (1976)	22	2.7	8.5 (62)	Afghanistan (1975)	2.3	1.4	0
Egypt(1974)	22.2	8.0	26.0(1639)	Brazil(1974)	12	0.4	9.7(315)	Bangladesh (1970)	19	2.0	0
Ethiopia(1973)	4.2	3.6	3.2(3)	Costa Rica (1970)	3.5	0.2	--	India (1968)	0.7	0.07	5.2(49)
Ghana(1975)	15.0	5.9	5.0(5)	Cuba(1970)	25	7.7	25(115)	Indonesia (1972)	19.8	3.7	13.4(353)
Malawi(1975)	8.4	13.7	7.8(5)	Ecuador(1972)	7.0	1.0	4.0(5)	Korea(1976)	7.6	2.6	5.9(288)
Morocco(1975)	2.3	0.4	--	El Salvador(1975)	5.4	1.1	4.0(5)	Pakistan (1974)	0.8	0.2	0.9(6)
Nigeria(1975)	9.3	5.0	9.6(29)	Guatemala(1970)	3.1	0.8	4.6(2)	Sri Lanka (1974)	30.9	2.5	30.0(19)
Sudan(1975)	11.5	5.5	6.8(20)	Honduras(1975)	3.8	0.8	--	Thailand (1975)	25.7	1.9	28.9(250)
Tunisia(1976)	8.2	1.3	--	Peru(1973)	28.9	4.4	8.9(100)				
Uganda(1975)	13.0	6.6	9.6(12)	Uruguay(1974)	21.7	5.2	--				
Tanzania(1975)	14.6	8.8	--								

Source: UNESCO, Statistical Yearbook, 1977 Tables 5.2, 5.4

design of research-extension systems; (2) training needs; and (3) communication strategies to reach women at the field level.

### General Principles

The heterogeneity of women as a target group is an important consideration in designing policies to effect the delivery of agricultural extension services to women. The cross-cultural and intra-cultural complexity of sexual divisions of labor and decision-making in agricultural production means that no single policy strategy can be applied. Hence any assessment of policy alternatives requires identification of women's specific sex role and class-related situations; these variables define distinct target populations among women, which may in turn necessitate alternate extension strategies. One must first ask (1) what is the nature of women's labor participation; (2) what access and control do women have over strategic resources--land, labor and capital, and what is their role in decision-making; (3) what benefits do they receive. This information must be an integral component of any efforts to design "appropriate" technology or strategies to extend it. In this context it must be recognized that women's farming activities are necessarily related to time allocated to domestic activities. So-called domestic activities, such as carrying water, preparation of feed for livestock, or post-harvest processing done in the home are often integral to the household's agricultural productivity. To enhance women's agricultural productivity, the whole range of activities in which women's labor is engaged needs to be considered. Thus the purview of existing agricultural extension services needs to be expanded into an integrated package including agricultural information, health-related, nutritional and other activities

conventionally the domain of women's programs. A first step in this direction would be to integrate agricultural services into existing extension programs for women.

However, as was noted earlier, women's programs tend to suffer from a low status welfare-orientation while existing agricultural extension services are overwhelmingly male-oriented. In the long run integration of agricultural services with other extension programs in a single organizational entity may be necessary to gain equitable access for women and to avoid costly duplication of agricultural services valuable to both men and women. Cost-effectiveness is particularly relevant to the implementation of field-level research and extension activities. Communication of technical information to farming populations also involves cross-cutting lines of communication between men and women, whether at the decision-making or implementation stage of adoption. Both of these considerations indicate that male and female extension staff need to work in tandem in the field, not in separate programs. One example of this approach is the Integrated Family Life Education project of the Ethiopian Women's Association. Agricultural training concerned with animal health, soil erosion, use of fertilizers, selection of seeds is included with programs for literacy, health and nutrition. The program includes both men and women (Pettit 1977).

### Training

Recruitment of women into agricultural training at all levels is essential. The acute shortage of women in agricultural secondary and university programs reflects sex-stereotyping of agriculture and, more generally, the restricted access of women to higher education. With

respect to the former, an end to stereotyping in admissions as well as in vocational counseling of women students is clearly needed. With respect to women's access to higher levels of agricultural training, a number of measures require serious consideration. Optimally women training for staff positions in agricultural research and extension should come from rural backgrounds, have practical farming experience, and have a commitment to work in rural areas. Yet women from this type of background are least likely to obtain higher education, and, if they do, they are unlikely to remain in rural areas. Need-based scholarships for rural women, sex quotas at training institutions, and expanded training facilities in rural areas are all needed. Nonetheless, upward and outward mobility associated with higher education is likely to persist as long as wage and status differentials between urban employment and rural extension positions continue.

Another question is whether formal education should be a necessary criterion for female agricultural extension staff. Firstly, the evidence that formal education of extension field workers enhances their effectiveness is inconclusive: some studies indicate that more highly educated extension workers are less effective in promoting innovations since the more educated tend to have urban backgrounds and to view farming as an inferior occupation (Leonard 1973). Women with little schooling and even illiterate women have been trained as field aids and found to be effective in a number of large-scale extension programs concerned with family planning, literacy and health care (Rogers 1973 [Indonesia, Philippines, Pakistan]; Ahmed 1977 [Bangladesh]). Mature women with low levels of literacy and schooling but less likely to be mobile out of rural areas can be recruited. This was the staffing approach used in the Rural

Women's Association Project, Niger (Barres 1977). Another strategy is rapidly to increase the supply of women agricultural extension staff through in-service training of women extension agents currently working in health, nutrition, family planning or other "women's" programs. But such short run strategies will not vitiate the need for women at all staffing levels of agricultural extension services; the rapid expansion of women in advanced agricultural training is imperative.

Agricultural training for women at the farmer level presents a different set of needs. First, training courses need to be designed in accordance with women's work schedules; residential courses appear to be impractical in this respect. Some countries (Lesotho, Mali) have begun to experiment with day courses for women. Second, training methods for women need to be designed for the illiterate or semi-literate if they are to reach beyond a very small elite of rural women. This implies that practical field demonstrations rather than classroom centered approaches need emphasis. Third, projects involving training for rural women consistently find that, just as new practices must be profitable for farmers, an explicit income generating component is critical for success.

#### Communication Strategies at the Field Level

Creative communications strategies are needed if large numbers of women are to be reached. Such strategies must compensate for (1) time constraints (particularly among low-income women) limiting ability to participate in group meetings, demonstrations or training courses; (2) low levels of literacy and schooling; and (3) the shortage of women extension staff.

One approach is to graft agricultural extension activities onto existing women's groups. Women's groups have been observed to play an important role in mobilizing local support, disseminating information, legitimizing proposed changes, and in reinforcing participants' motivation and commitment to change (Rogers 1975 [Korea]; Misch 1975 [Colombia]; Crone 1976 [Philippines]). Firstly, women's groups provide a social context for peer-group support in decision making and mobilization for action. This may be particularly important for women because frequently women's participation in local level councils and committees is restricted, participating women are channeled in stereotypical "feminine" concerns, or their deference to men inhibits them. For example, data on women's participation in Tanzania's Ujaama village committees shows that women are the minority of committee members and that the few women on committees focus on education, health and culture. Furthermore, women rarely attend committee meetings and, when they do, they often speak only to agree with their husbands (see also Roberts 1977; Fortmann 1977: 8-10). Secondly, group activities are efficient where extension staff are responsible for contacting a large number of individual clients in the face of manpower and financial constraints. An active women's group can enhance the effectiveness of extension services and may generate local organizational capacity to make demands on central planning agencies and to sustain programs initiated by outside agencies.

Numerous studies of low income countries document the widespread existence of functioning women's groups of varying degrees of formal organization. Although many of these focus on women's "domestic role," several are active in agriculture-related concerns. One prime example is the numerous women's groups in Sub-Saharan Africa. Such groups, with

a long historical tradition, have become powerful institutions in agriculture and commerce. For example, Ibo villages in Southern Nigeria all have women's councils which

...are responsible for everything concerning agriculture.... They fix the time-table for all the important agricultural tasks, look after the protection of crops, and regulate all the ceremonies involved. If anyone, man or woman, contravenes any of their decisions they can take sanctions against them and they have great authority in judicial matters. (Lebeuf 1963: 114)

An example of the integration of extension activities with women's groups is Kenya's Women's Group Program initiated in 1971 by Ministry of Cooperatives and Social Services. This involved the entire network of extension agencies including agriculture, health and nutrition, family planning, home economics, commerce and industry. By 1974 about 500 group members had been involved in the program (Berger and Krystall 1975). Existing women's groups are a dynamic resource for channeling extension services to women.

Formal women's groups may not ensure contact with the full target population, particularly as they tend to recruit elite women. Informal women's groups--such as those forming around common work activities--can provide an alternative resource. One such case, a project in Guatemala, used the pila or laundering group found all over Guatemala, at which rural women usually spent several hours daily drawing water and washing clothes, dishes, and children. The pila provided one of the few opportunities each day to contact women conveniently. A locally recruited assistant distributed small inexpensive audio-cassette equipment at the pilas replaying a 30 minute program four or five times a day. The flexibility of the cassette system meant that contact with women could be adjusted to changes in their schedule due to seasonal labor demands.



Field workers' records show that an average of 200 people listened to the program per day. Evaluation proved that listeners were more accurately informed, and utilized more recommended innovations than non-listeners (Colle 1978).

In addition to informal group activities, information networks among women in rural areas may be a valuable resource for effective communication of agricultural information. The networks communicate vital information rapidly and are a primary means by which women influence opinion and behavior. Based on her finding that women appeared to discuss farming matters with others more often than men (61 percent of women reported doing so and 19 percent of men), Bond suggests that women may diffuse ideas faster than men (Bond 1974).

Establishing direct communication linkages with women may also serve to enlist men's support for innovations in agriculture. Anthropological studies of women's use of gossip to influence community affairs and to affect the decisions of men within and outside their families suggest that women have greater effective informal power than men with regard to information and opinion control (Harding 1976; Wolf 1964; Lamphere 1974). Women also use gossip, insult and mockery to control community behavior. Leis (1974) cites one west African village in which women ridiculed inspectors of a sanitation inspection scheme so that villagers would not cooperate. Ibo women use such sanctions to control individuals of either sex who violate their regulations concerning planting times, crop protection or marketing (Van Allen 1976). The Venezuelan home demonstrators project illustrates explicit use of women's informal communications networks. Demonstrators made initial contacts in informal and casual meetings and often made gifts of new seed varieties, in accordance

with customary visiting practices. Thus demonstrators both gained access and learned about women's role in the traditional food supply system (Ruddle 1974).

In summary, a number of policy measures need to be considered if women are to have access to agricultural information and training and to benefit equitably from agricultural research and extension services.

1. Research-extension information systems must communicate effectively with rural women about their needs in order to design locally appropriate technology or extension strategies.
2. Agricultural services need to be included in existing women's extension programs.
3. National level planning and implementation of an integrated extension "package" should link agriculture, nutrition, health and related concerns at the field level.
4. Women must be recruited into advanced formal agricultural training if agricultural research and extension systems are to incorporate the women staff necessary for effective communication with women.
5. Training of rural women as para-professionals in agricultural extension skills is required to supplement the acute shortage of trained women.
6. Women extension workers in non-agricultural programs should be given in-service supplementary agricultural training.
7. Farmer training needs to be organized on a day-session basis in accord with women's work schedules, to enable rural women to attend.
8. Audio-visual techniques, field demonstrations and other methods for farmer-training need to be designed for little educated and illiterate women.
9. Agricultural extension workers should use existing women's groups in

rural areas; women's groups also provide a resource for integrated extension approaches.

10. Women extension staff need to tap informal women's groups and communication networks at the field level.

### Summary and Conclusions

Appropriate channels of information feedforward and feedback between extension and research systems are needed in order for improved agricultural practices to be rapidly accessible to the majority of small farmers. Communication and direct contact with women in their capacity as important contributors to farm management and production are essential to this strategy. Firstly, the special problems faced by women agricultural producers need to be identified if these women are to benefit from new appropriate technology and agricultural practices. Secondly, women frequently participate in farm family decision-making and manage specific components of production (such as staple food crops); agricultural extension strategies need directly to involve women who allocate resources or implement new techniques.

Existing extension services for rural women have both focused on women's domestic role to the detriment of their training in agriculture and have tended to serve primarily an elite class of women. Agricultural extension services on the other hand have been predominantly male-staffed and oriented towards a male clientele. The resultant sex-bias in access to agricultural services and information is often compounded by new agricultural practices with negative consequences for women's agricultural productivity. A reorganization of staffing patterns, farmer training and field level contact strategies is essential if new agricultural practices

are to be disseminated both equitably and productively.

Several points for action need to be emphasized if the required policy goals are to be realized. Rapidly improved access of women to existing agricultural services could be enhanced by identifying rural extension services, women field staff and women's groups possessing established contacts with a clientele of rural women. Relevant points are: Can available agricultural information be integrated into existing extension services reaching rural women? Can supplementary training and/or liaison between existing women field staff and agricultural extension be institutionalized to effect the transfer of relevant agricultural information to women? Can existing women's groups--formal or informal--be mobilized to include agricultural information in their activities? Can training programs at the farmer level be rescheduled and relocated in an outreach program facilitating women's access?

In the long run the fundamental problems of appropriate technology development and the staffing of agricultural extension with women must be tackled. Research on women's labor participation, access to strategic resources, and roles in decision-making in agricultural production will permit agricultural researchers and policy makers to evaluate the possible effects on both women and men of technological innovations and alternative extension strategies. There is in addition a significant lack of systematic data on different programs currently seeking to integrate women staff into agricultural extension services. Basic principles of training and extension communication strategies involving women may be transferable; needless duplicate experiments can be avoided by their identification.

## FOOTNOTES

<sup>1</sup>Third world countries surveyed included Algeria, Burundi, Cameroon, Dahomey, Gabon, Ghana, Ivory Coast, Kenya, Liberia, Madagascar, Mali, Mauritania, Niger, Nigeria, People's Republic of the Congo, Sierra Leone, Indan, Tanzania, Barbados, Costa Rica, Dominican Republic, Guatemala, Mexico, Trinidad and Tobago; Argentina, Brazil, Colombia, Paraguay, Venezuela; Burria, Sri Lanka, India, Indonesia, Iran, Iraq, Republic of Korea, Thailand, Syria.

<sup>2</sup>The case studies are based on a 1975 sample of farms from Kakamega district in Western Kenya in which 40 percent of the sample are female-managed farms (Staudt 1975, 1976); a 1944 sample of 204 farm households in six areas of South-eastern Botswana, of which 42 percent are female-managed (Bond 1974); and a 1976 sample of 485 farmers in Moroforo and Arusha regions of Tanzania in which 60 percent of farms are female-managed (Fortmann 1977, 1976).

## REFERENCES

- Academy for Rural Development. Women's Education and Home Development Programme. Annual Reports, 1st-5th Report, 1962/63-1968/70. Comilla, Bangladesh.
- Aidab-Yehia, M. "Women, Employment and Fertility Trends in the Arab Middle East and North Africa," 172-183 in S. Krupinsky (ed.) The Fertility of Working Women. New York: Praeger, 1977.
- Ahmed, Manzoor. "Building Human Infrastructures To Serve the Rural Poor." BEAC. Connecticut: ICED, 1977.
- \_\_\_\_\_ and P. Coombs. Attacking Rural Poverty: How Nonformal Education Can Help. Baltimore: Johns Hopkins, 1974.
- Barres, V., et al. "The Participation of Rural Women in Development: A Project of Rural Women's Animation in Niger 1966-75." Paris: IRAM, 1976. (mimeo)
- Barwell, C. Farmer Training in East Central and Southern Africa. Rome: FAO, 1975.
- Berger, I. and A. Krystall. "The Women's Group Program: A Strategy for Education and Rural Development," Kenya Education Review, 2, 2 (December 1975).
- Brown, S. E. "Love Unites Them and Hunger Separates Them: Poor Women in the Dominican Republic," 322-332 in Reiter (ed.) Toward an Anthropology of Women. New York: Monthly Review Press, 1975.
- Bond, C. A. "Women's Involvement in Agriculture in Botswana." November 1974. (mimeo)
- \_\_\_\_\_. "Women's Involvement in Integrated Farming Pilot Project." February 1977. (mimeo)
- Boserup, E. Women's Role in Economic Development. London: Allen and Unwin Ltd., 1970.
- Bourque, S. C. and K. B. Warren. "Perceiving the Sexual Division of Work: Economics and Subordination in Two Andean Communities." n.d., n.p. (mimeo)
- Buvinic, Mayra and N. Youssef. "Women Headed Households: The Ignored Factor in Development Planning." Washington, D.C.: International Center for Research on Women, 1978.
- Chahil, Rena. "The Status of Women, Work and Fertility in India, 146-177 in S. Krupinsky (ed.) The Fertility of Working Women. New York: Praeger, 1977.
- Chakravorty, S. "Farm Woman Labour: Waste and Exploitation," Social Change (March/June 1975).

- Clearinghouse on Development Communication. "Project for Equality of Access to Education for Women and Young Girls, Upper Volta." Washington, D.C., 1978.
- Cloud, K. "Sex Roles in Food Production and Distribution Systems in the Sahael," 62-89 in Proceedings and Papers of the International Conference on Women and Food. Tucson, Arizona: University of Arizona, 1978.
- Colle, R. D. and S. F. de Colle. "The Communication Factor in Health and Nutrition Programmes: A Case Study from Guatemala," Cajanus, 2, 3 (1978), 151-197.
- Crone, Catherine. Research on Innovative Nonformal Education for Rural Women. New York: World Education, 1977.
- Deere, C. D. "Rural Women's Subsistence Production in the Capitalist Periphery," Review of Radical Political Economy, 8, 1 (1976).
- \_\_\_\_\_. "The Differentiation of the Peasantry and Family Structure: A Peruvian Case Study," Journal of Family History, 4, 3 (1978), 422-438.
- de Janvry, A. and C. Garramon. "The Dynamics of Rural Poverty in Latin America," Journal of Peasant Studies, 4, 3 (1977), 206-216.
- DeWilde, John. Experiences with Agricultural Development in Tropical Africa. Baltimore: Johns Hopkins, 1967.
- ECA/FAO. "The Role of Women in Population Dynamics Related to Food and Agriculture." Rome: FAO, 1976.
- Evenson, R. and Y. Kisled. Agricultural Research and Productivity. New Haven: Yale University Press, 1975.
- Fernea, E. W. Guest of the Sheik. Garden City, N.Y.: Doubleday, 1965.
- Fortmann, L. "An Evaluation of the Progress of the National Maize Project." USAID/Tanzania, 1976. (mimeo)
- \_\_\_\_\_. "Women and Tanzanian Agricultural Development." Dar es Salaam: Economic Research Bureau, 1977.
- Garrett, P. M. "Some Structural Constraints on the Agricultural Activities of Women: The Unlean Hacienda." Madison, Wisc.: Land Tenure Center Research Papers, No. 70 (December 1976).
- Goody, J. and J. Buckley. "Inheritance and Women's Labour in Africa," Africa, 43 (1973), 108-121.
- Hafkin, N. J. and E. G. Bay. Women in Africa. Stanford, Calif.: Stanford University Press, 1976.
- Hart, G.P. "Labor Allocation Strategies in Rural Javanese Households". Unpublished Ph.D dissertation, Cornell University, Ithaca, New York.

- Hanger, Jane and J. Moris. "Women and the Household Economy," in Chambers (ed.) MWEA: An Irrigated Rice Settlement in Kenya. Munchen: Weltforum, Vertog, 1973.
- Harsell, F. "Review of Conditions Affecting the Integration of Rural Women in Development." Rome: FAO Working Paper, September 1977.
- Harding, S. "Women and Words in a Spanish Village," 158-182 in D. G. McGuigan (ed.) New Research on Women and Sex Roles. Ann Arbor: University of Michigan Press, 1976.
- Heasman, K. "Women and Community Development in Kenya and Uganda," Community Development Journal, 4 (1966), 16-22.
- Hildebrand, P. "Generating Technology for Traditional Farmers: A Multidisciplinary Methodology." Paper presented at Bellagio Conference on Developing Economies in Agrarian Regions: A Search for Methodology, August 1976.
- Hoskins, M. "Social and Economic Development in Upper Volta Woman's Perspective." USAID/(REDSO/WA), April 1978. (mimeo)
- Hull, Valerie. "Fertility, Women's Work and Economic Class: A Case Study from South-east Asia," 35-80 in S. Kupinsky (ed.) The Fertility of Working Women. New York: Praeger, 1977.
- IADS. "Integrated Cropping Systems Project Proposal, Nepal." 1976. (mimeo)
- Janelid, I. The Role of Women in Nigerian Agriculture. Rome: FAO, 1975.
- Jayasut, N., et al. "Status of Thai Women in Two Rural Areas." Bangkok: National Council of Women of Thailand, 1977. (mimeo)
- Kandiyoti, D. "Sex Roles and Social Change: A Comparative Appraisal of Turkey's Women," 57-73 in Wellesley Editorial Committee (eds.) Women and National Development. Chicago: University of Chicago Press, 1977.
- Kearl, B. E. "An Overview of Communication in Agriculture Projects," Development Communication Report, AED, Washington, D.C., 1978, 1-3.
- Krupinsky, S. (ed.). The Fertility of Working Women. New York: Praeger, 1977.
- Lebeuf, A. M. D. "The Role of Women in the Political Organization of African Societies," 93-120 in D. Paulme Women of Tropical Africa. Berkeley: University of California Press, 1960.
- Leis, N. B. "Women in Groups: Ijaw Women's Associations," 223-242 in Rosaldo and Lamphere (eds.) Women, Culture and Society. Stanford, Calif.: Stanford University Press, 1974.



- Lamphere, L. "Strategies, Cooperation and Conflict Among Women," 97-112 in Rosaldo and Lamphere (eds.) Women, Culture and Society. Stanford, Calif.: Stanford University Press, 1974.
- Lele, Uma. The Design of Rural Development: Lessons from Africa. Baltimore: Johns Hopkins, 1975.
- Leonard, D. K. (ed.). Rural Administration in Kenya. Nairobi: East African Literature Bureau, 1973.
- Levine, R. A. "Sex Roles and Economic Change," Ethnology, 5 (1966), 186-193.
- Lockheed, M. E., D. T. Jamison and C. J. Lau. "Farmer Education and Farm Efficiency: A Review of the Literature." Unpublished paper, Educational Testing Service, Princeton, N.J., 1977.
- Mellor, J. W. The New Economies of Growth: A Strategy for India and the Developing World. Ithaca: Cornell University Press, 1976.
- Merniss, F. "The Moslem World: Women Excluded from Development," 35-45 in Tinker and Bransen (eds.) Women and World Development. Washington, D.C., 1976.
- Ministry of Agriculture, Botswana. "Evaluation of Female Field Staff in the Ministry of Agriculture." 1978. (mimeo)
- Misch, M. R. and J. B. Margolin. "Rural Women's Groups As Potential Change Agents: A Study of Colombia, Korea and the Philippines." Washington: USAID Technical Assistance Bureau, May 1975.
- Moseman, A. H. Building Agricultural Research Systems in the Developing Nations. New York: ADC, 1970.
- Moock, P. R. "The Efficiency of Women As Farm Managers," American Journal of Agricultural Economics, 58, 5 (1976), 831-835.
- Moses, T. "Female Status, the Family and Male Dominance in a West Indian Community," 142-153 in Wellesley Editorial Committee (eds.) Women and National Development. Chicago: University of Chicago Press, 1977.
- PAG (Protein Calorie Advisory Group). "Women in Food Production, Food Handling and Nutrition." Final Report. New York: UN, 1977.
- Palmer, L. "Rural Women and the Basic Needs Approach to Development," International Labor Review, 115, 1 (January-February 1977), 97-107.
- Paulme, D. (ed.). Women of Tropical Africa. Berkeley: University of California, 1960.
- Pectit, John. Integrated Family Life Education Project. New York: World Education, 1977.

- Pescatello, A. (ed.). Female and Male in Latin America: Essays. Pittsburgh: University of Pittsburgh Press, 1973.
- Purcell, K. "Modernizing Women for a Modern Society: The Urban Case," 257-272 in A. Pescatello (ed.) Female and Male in Latin America: Essays. Pittsburgh: University of Pittsburgh Press, 1973.
- Feiter, R. R. (ed.). Toward an Anthropology of Women. New York: Monthly Review Press, 1975.
- Rice, E. B. Extension in the Andes: An Evaluation of Official U.S. Assistance. Washington, D.C.: USAID, 1971.
- Riegelman, M., et al. A Seven Country Survey on the Roles of Women in Rural Development. Washington, D.C.: USAID, 1971.
- Roberts, P. A. "Rural Development in Zinder Department, Niger Republic: An Evaluation." University of Reading, 1977. (mimeo)
- Rogers, E. M. Communication Strategies for Family Planning. New York: The Free Press, 1973.
- Rogers, E. (ed.). Communication and Development: Critical Perspectives. Beverly Hills, Calif.: Sage Publications Inc., 1976.
- \_\_\_\_\_, H. J. Park, and S. Lee. "Mothers' Clubs in the Diffusion of Family Planning Ideas in Korean Villages." Paper presented at the American Association for the Advancement of Science, New York, 1975.
- Roling, N. "Adoptions in Development: A Conceptual Guide for the Study of Non-Innovative Responses of Peasant Farmers." EDCC 19, 1, 1970.
- Reining, P., et al. Village Women, Their Changing Lives and Fertility: Studies in Kenya, Mexico and the Philippines. Washington: American Association for the Advancement of Science, 1977.
- Remy, D. "Underdevelopment and the Experience of Colonialism: A Nigerian Case Study," in Reiter (ed.) Towards an Anthropology of Women. New York: Monthly Review Press, 1975.
- Rosaldo, M. Z. and L. Lamphere (eds.). Women, Culture and Society. Stanford, Calif.: Stanford University Press, 1974.
- Rubbo, A. "The Spread of Capitalism in Rural Colombia: Effects on Poor Women," 333-357 in Reiter (ed.) Toward an Anthropology of Women. New York: Monthly Review Press, 1975.
- Ruddle, K. and R. Chesterfield. "The Venezuelan 'Demonstrador del Hogar'" An Example of Women in Nonformal Rural Education," Community Development Journal, 9, 2 (1974), 140-144.
- Sattar, E. Women in Bangladesh: A Village Study. Dacca: The Ford Foundation, 1974.

- Schultz, T. W. "The Value of the Ability to Deal with Disequilibria," Journal of Economic Literature, 13 (September 1975), 827-846.
- Sheffield, J. R. and V. P. Diejomaoh. Nonformal Education in African Development. New York: African American Institute, 1972.
- Stavrakis, O. and M. L. Marshall. "Women, Agriculture and Development in the Maya Lowlands: Profit or Progress," 157-174 in Proceedings of the International Conference on Women and Food. Tucson, Arizona: University of Arizona, 1978.
- Stirling, P. Turkish Village. London: Weidenfeld and Nicholson, 1965.
- Staudt, K. A. "Women Farmers and Inequities in Agricultural Services," Rural Africana, 2 (Winter 1975).
- \_\_\_\_\_. "Agricultural Productivity Gaps: A Case Study of Male Preference in Government Policy Implementation," Development and Change, 9 (1978), 439-457.
- Stoler, Ann. "Class Structure and Female Autonomy in Rural Java," Signs: Journal of Women in Culture and Society, 3, 1 (Autumn 1977).
- Tinker, Irene and M. Bramsen (eds.). Women and World Development. Washington, D.C.: ODC, 1976.
- UN Economic Commission for Africa. "Women the Neglected Human Resources for African Development," Canadian Journal of African Studies, 6, 2 (1972), 359-370.
- UNESCO. Access of Girls and Women to Education in Rural Areas. Paris: UNESCO, 1964.
- \_\_\_\_\_. Agricultural Education in Asia: A Regional Survey, 1971.
- \_\_\_\_\_. Study in the Equality of Access of Girls and Women to Education in the Context of Rural Development. Paris: UNESCO, 1973.
- \_\_\_\_\_/ECA. Reports on Vocational Training Opportunities for Girls and Women. UNESCO, 1975.
- \_\_\_\_\_. Statistical Yearbook. Paris: UNESCO, 1976.
- UNICEF. "Children, Youth, Women and Development Plans: The Lome Conference." Abidjan: UNICEF/Regional Office for West and Central Africa, 1972.
- UNICEF. Women and Development. New York: United Nations, 1975.
- Van Allen, J. "'Aba Riots' or Igbo 'Women's War'? Ideology, Stratification, and the Invisibility of Women," 59-86 in Hafkin and Bay (eds.) Women in Africa. Stanford, Calif.: Stanford University Press, 1976.

- Wallis, H. "Community Development in Sarawak," Community Development Journal, 1 (January 1966), 12-16.
- Welch, F. "Education in Production," Journal of Political Economy, 78 (January/February 1970), 35-59.
- Wellesley Editorial Committee. Women and National Development. Chicago: University of Chicago Press, 1977.
- Whyte, W. F. "Toward a New Strategy for Research and Development in Agriculture: Helping Small Farmers in Developing Countries," Desarollo Rural en las Americas, 9, 1/2 (1977), 51-61.
- Wolf, M. "Chinese Women: Old Skills in a New Context," 157-172 in Rosaldo and Lamphere (eds.) Women, Culture and Society. Stanford, Calif.: Stanford University Press, 1974.
- Wortman, S. and R. W. Cummings. To Feed This World: The Challenge and the Strategy. Baltimore: Johns Hopkins, 1978.

Chapter Four

WOMEN'S LEGAL ACCESS TO LAND

by

Christina C. Jones, Ph.D.

## I. Principles of Land Reform and Women's Independence

Land reforms symbolize a commitment on the part of governments to distribute agricultural wealth more equitably. Legislation upsetting the status quo in property ownership has been one of the main instruments by which governments have expressed this commitment. Legislators have tended to characterize the reforms broadly, outlining their purposes in terms of improving the economic status or raising the social class of the needy. This paper shows how the resulting laws in some instances have failed, and in other instances have served to make greater economic equity a reality not only among men but also between men and women. The paper's conclusions represent in essence an effort to refine the conceptualization and understanding of new approaches so that policy makers and administrators become sensitive to the needs of the female population.

In her classic study of Persian land reforms, A. S. K. Lambton expressed the purpose of land reforms to be: "the spread of peasant proprietorship, the emergence of an independent peasantry, and a strong cooperative movement" (Lambton 1969: 355). It is now time to apply this general economic and political principle vigorously as the standard for measuring the effect which land reforms are having on women. We can begin by asking whether new land laws are permitting the spread of proprietorship among peasant women as well as men, fostering independence among female as well as male farmers, and encouraging the participation of women and men in vigorous cooperative movements.

There are two great deficiencies in thinking underlying land reforms. One is a failure to appreciate some of the benefits of

traditional laws and practices. This is particularly true with regard to traditional laws protecting the economic independence of women. Legislators enacting land reform for the purposes enumerated above should take care lest undue interference with traditional law increases women's economic dependence and forfeits optimal responsibility of women farmers. In some cases legislators have improved their reform codes by a subsequent partial return to tradition; in others a deleterious notion of modernity has meant increased female dependence.

The Persian reforms are a perfect example of legislators initially reducing women's rights to those of children: women were made dependent upon the rights granted to their guardians. Women's independence was not a principle taken seriously by the reformers. The law stated that a person could hold land in one village only. The definition of a village included the number of families engaged in agricultural operations in a particular geographical area. The family was defined as husband, wife and children under the husband's guardianship. Accordingly a wife and her guardian (husband) could hold land jointly in the same village, but a wife could not hold land anywhere other than the village where her guardian held land. The initial law thus excluded women from holding land in most of the cases in which they would be likely to do so. An amendment to the law grants women legal status and land holding rights independent of their guardians. The initial version of the law compromised the Islamic legal principle that husbands and wives own property as individuals independent of their marital ties, while the amendment, by returning to this traditional Islamic principle, extended the principle of Persian land reform (enunciated by

Lambton) to women.

Likewise, in the Indian state of Kerala, the Law of Land Reforms, 1963, as amended in 1969, was designed to establish ceilings on the amount of land held by any one person or family. It gives monogamously married women no rights in land apart from the rights of their husbands (Gangadharan 1970). Only the divorced woman and the never married woman are recognized as constituting entities eligible to own lands within the ceiling set:

For purposes of this section, an adult unmarried person shall include a divorced husband or a divorced wife who was not remarried, provided that if such divorced husband or wife is the guardian of any unmarried minor child, he or she together with such unmarried child shall be deemed to be a family.  
(Gangadharan, section 82, Expl. 2, 1970: 121-122)

When the male head of a Kerala household is wedded to two or more wives, one of the wives (chosen by the husband) and the husband are regarded as one unit for purposes of the ceiling; each other wife is deemed a separate family unit (Gandadharan, section 82, Expl. 1, 1970: 121-122). Thus a woman in the "modern" situation of monogamy (or that wife so designated by her polygynous husband for the purposes of land law) loses economic rights, while wives in the "traditional" status of polygyny are largely independent with regard to land ownership. As in Iran, in Kerala, traditional principles have the perhaps unexpected potential of being used in the context of land law to enhance women's economic independence.

Thus the introduction of "modern" reformist principles has not always benefited women. The second deficiency in thinking underlying land reform is apparent when the traditional law and practices keep women dependent on men and there is a failure to use the opportunity of



reform to rectify the shortcomings of tradition. Sometimes the modern reform creates a new abuse or dependence. This essay discusses the interplay between traditional legal systems which no longer serve the needs of women or preserve their independence and the new reforms.

In traditional legal systems and under the new reforms women neither have full ownership rights in land or usufructory (use) rights. Usufructory rights, in which land ownership and final decisions of disposition rest with the family or clan (usually represented by a male), make a woman's rights to farm land dependent upon her family's or her spouses' family's wishes or her production of a male heir from whom she may, as guardian, hold (and farm) the land. Women's ownership rights vary, but they are generally more restricted in traditional law than in contemporary law. Both usufructory and ownership rights must be examined to grasp the practical input of legal codification and reform.

#### Nature of Women's Rights in Land

In order to understand to what extent land reforms are encouraging women to be self-confident and to manage land independent of their male guardians or at least on an equal footing with them, one must understand the problems which face women under both traditional systems and the land reform laws. Women's access to land usually takes one of two forms: women are permitted either full ownership rights or usufructuary rights. Yet even when women are permitted to own land in their own names, whatever their marital status, their shares in inheritance are either limited to less than what their brothers or other male relatives receive, as in several Islamic

countries, or their rights are determined by the head of the family or village, who is usually a man. When a woman has only usufructuary rights, as in several African countries, her effective ability to demand that the relevant male authority fulfill his customary duty to provide land for maintenance is necessarily diminishing as land becomes a marketable commodity. How the laws encourage or discourage women regarding full use of their rights is discussed following the section on ownership rights below.

Full ownership rights: The right to own land in one's own name does not necessarily result in full control over the use of the land. For example, in Tunisia daughters and wives have received fractional shares of property held in co-ownership with many other relatives. Under traditional Maliki Islamic law a joint owner could not dissolve the state of co-ownership without the consent of all the other co-owners. Thus, a decision to give the property to one owner could be made only by consensus. Such a rule hampered an enterprising woman who might find it more advantageous to dissolve the joint tenancy, to acquire sole ownership of the unit in question, and to compensate the other joint owners. However, it also protected the woman who was actually working the land and who, because of social or political biases, was not able to own all of the land exclusively by herself. Such a woman enjoyed the right of veto against the sale of the land.

As in many other "modernizing" contexts, in Tunisia the new Code of Property Rights introduced in 1965 changed the traditional law. It has enabled co-owners to petition a court when they cannot agree upon an equitable partition among themselves or disposal of the unit.

The court can force the end of co-ownership in circumstances where the agrarian property in question is a viable economic unit and fragmentation of ownership hampers efficient management of the unit (Jones 1975; Dufour 1967 and 1970). A woman's right to remain in possession of an economic unit has come to depend more on the discretion of the court and its evaluation of whether her social position will or will not hinder good management of the unit than on any well defined legal principles.

A similar situation has existed in Egypt since the enactment of the Agrarian Reform Law of 1962 (Saab 1967: 48). The law leaves succession to the decision of the family or of a government committee established for settling claims. Families are permitted to give full rein to social prejudices against women being entrusted with the operation of agricultural lands. If the family fails to designate a successor, the government committee can designate a responsible person. The legislators did not define circumstances under which a woman must or may be presumed responsible. The system of administrative discretion such as that adopted in Egypt may or may not work to the detriment of women. The outcome depends on whether the decision makers are committed to treating women as economic equals to men. The problem is that there has not been established any way of ensuring that the discretion would be consistently applied.

Even when land reform legislation benefits farmers over landlords by giving full ownership of land to farmers, irrespective of sex, the law makes exceptions for women. Various state laws in India are designed so as not to force, or even to give incentives to, women

to be responsible primarily, rather than secondarily, for farming the land. The reform laws prohibit subletting and abolish intermediary rent collectors (formerly known as zamindars). Exceptions to the rule permit widows and minors and military personnel away from home on assignment to sublet because they cannot cultivate themselves (Malaviya 1955: 112, 169). They can also employ an intermediary to collect the rent. The subtenancy ceases when the owner wants the land and gives proper notice. However, in the northern region (the Punjab) of India, the tenant acquires rights of pre-emption or purchase of the land after having been in continuous possession for four or twelve years, respectively. No protection was given to widows against such rights. The law makers recognized and perpetuated, by way of exception, dependency of the woman who is not confident or able socially to till her land herself. Yet they did not protect her from ending up with nothing--no land, no ability to be independent.

Usufructuary rights in land: Women receiving usufructuary rights are even more dependent on the discretion of the courts when competing with male relatives for land. In one well known suit in Tanzania the court explains the inadequate protection provided for contemporary women by customary use rights.

The case concerned a daughter's challenge to an action in trespass brought against her by her uncle. The uncle asserted that under their customary law daughters were precluded from inheriting clan land, land which was considered essential for the economic survival of the clan. Maintaining the integrity of this economic unit was considered the exclusive province of men. The daughter had lived

on the farm, harvested the coffee, and despite her blindness, insisted on managing the property. She did not wish to be maintained by her uncle, who had been living in the city for several years before his brother (her father) had called him back to the property. The Tanzanian Restatement of Customary Laws had not specified a daughter's rights as far as inheritance of clan land was concerned when her father left no sons.

The Tanzanian court believed that "[t]he time had now come when the rights of daughters in inheritance should be recognized" (James and Fimbo 1973). The court found that the daughter had a legitimate claim to own the land and hence was not guilty of trespass. The court based its decision on the grounds that the traditional custom which discriminated on the basis of sex had "outlived its usefulness" (James and Fimbo 1973: 208). Custom permitted male clan members who had not contributed to the estate to grab the estate of a deceased relative and put the deceased's wives or daughters in fear. The court noted that women are permitted usufructuary rights in clan land and are entitled to be maintained by the male relatives; but the court characterized such rights as getting something ex gratia. In effect, the court was implying that usufructuary rights are not enough to protect women in a social system where their male guardians cease to have moral restraints and abuse the right of ownership to the detriment of the holders of usufructuary rights. The court believed that the best way to preserve the interests of female heirs on agriculturally productive land was to give them rights of possession, especially when the deceased during his lifetime had shared the wealth with the female members of his household

and benefited from their labor. Unscrupulous male relatives who could not be trusted to continue the will of the deceased were undeserving. The court did not deem it worthwhile to seek to formulate a legal principle by which it could force the male guardian to preserve all the rights which the daughter had enjoyed while her father had lived. It chose the principle of individual equality. It stated: "The age of discrimination based on sex is long gone and the world is now in the stage of full equality of all human beings irrespective of their sex, creed, race, or colour" (James and Fimbo 1973: 208). By applying this principle to the dispute between the daughter and uncle, the court in effect was saying that the individuals whose interests would be most impaired by the unscrupulous and greedy are the ones who should be permitted to protect their own interests by being given rights to control access to economic resources.

One of the weaknesses in the case, however, was the final order of the court. The court found that the daughter had a stronger argument than the uncle under another customary principle. She had a son, albeit without a legal father, who could succeed as a male heir to the clan lands of his maternal grandfather. Such a child belonged to the mother's father's family. The court order gave the defendant mother only the right to hold the land as a guardian of her son. Although the court commendably gave a woman instead of a male relative the right to serve as guardian over a male with the consequence that she could direct the use of the land, the woman could still be in a vulnerable position when her son reached majority. As owner, the son could decide not to follow the will of his grandfather and could use

the land to the detriment of his mother. Furthermore, if he died, and she later had a daughter, whether her daughter would have rights in the land could also depend on whether the daughter in turn had a son.

Many land reform programs in which the government is the ultimate owner of the land are sex neutral on paper, but in application their dependence on judicial discretion can prove to be biased against women. The Tanzanian land reform program is illustrative (James and Fimbo 1973: 106). A plot in an ujamaa village or cooperative may be held or rented by female or male. Ultimate disposal of the village settlement rests with a Minister responsible for cooperatives in that if a cooperative society fails to administer a settlement efficiently, the Minister can have the settlement vested in another cooperative society. Succession to the use of the land is to be governed only partially by the statutory, customary, or religious laws governing inheritance to non-settlement lands. To avoid fragmentation of the land among numerous heirs, the legislature permitted only one person to succeed to a holder of settlement land. That person can be named by the holder if the customary, statutory, or religious law of the holder permits disposal of land by will. If an heir has not been or cannot be named, a person who would ordinarily inherit can apply to the local court to be named the successor in right. If several heirs were to apply the court is to base its choice on justice and equality (James and Fimbo 1973: 110-111). If the principle of equality among sexes had been adopted, as in the controversy between the daughter and uncle discussed above, Tanzanian women would stand an equal chance with men,

regardless of whether they had sons or not. But as we have seen, the Tanzania court did not give the daughter full ownership. The principle of equality among sexes remains controversial. Thus, if a woman's right to be sole heir to cooperative lands is to be secure, decisions probably should be based on more than the good discretion of the courts. For example, the land reform law also permits a court to order the sole successor to compensate--when there are no other lands left by the deceased--any other person who, but for the land reform law, would have benefited from the estate of the deceased and desired to be named sole successor. With such a law, a male relative can easily argue that in the interest of commercial efficiency, he should be sole successor and the female relative simply compensated. Clearly, policy makers would do well to promulgate legislative guidelines on how equity and justice should be applied to safeguard wives' or daughters' rights in lands which they were farming or helping to farm during the lifetime of their deceased spouse or father.

In societies where women are given usufructuary rights by way of a maintenance allowance, but are expected only to use revenues from the land rather than farm the land themselves, the women must contend not only with relatives, but also tenants. For example, in Uttar Pradesh in India the U.P. Law of Zamindari Abolition and Land Reform (Act No. 1 of 1951) (Law of Zamindari 1971) disfavors subletting and use of rent collectors. It exempts, however, an unmarried woman and a divorced or separated woman holding land as a maintenance allowance. She was deemed a "disabled person" (section 157). Such a woman can sublet and her tenant, unlike the tenant of an able-bodied man, cannot



claim heritable rights in the land (sections 10 and 11). This exception perpetuates women's dependence on an intermediary rent collector who is usually a male and usually takes over management of the land. The law in effect gives rights of use to women, yet fails to force women to take direct responsibility for exercising these rights. Two court cases illustrate how the law places women in a difficult dilemma and how women are at the mercy of judicial discretion in trying to solve the problem.

In Khema Kunwar v. Harnan Singh et al., [1973] 1 ALL (Indian Law Reports) Allahabad Series 215, the tenant of a widow challenged the settlement officer for failing to register him as a tenant with heritable rights. The tenant argued that the landholder was not a widow, a disabled person, but an able-bodied man, the theka (an intermediary rent collector). He brought forth evidence of a contract between the widow and the theka by which the theka undertook to collect the rents, pay a fraction of them to the widow and manage the land, including eviction and re-letting. The widow claimed in turn to be the true landholder. A landholder in the U.P. Law of Zamindari Abolition and Land Reform is defined as the person to whom rent is or would be payable but for a contract, express or implied (section 2). The High Court finally decided that the right to let out the land vested initially with the widow and secondarily with the theka; therefore, she was the landholder and a disabled person. The court denied the tenant the right to be registered with heritable rights. However, the court admitted that the theka equally could have been the landholder within the strict meaning of the statute. But it argued that the decision in favor of the

widow was more compatible with the parliamentary intent, which was, as seen by the court,

. . . to give relief to such disabled persons who could not have either cultivated their own land or could not get direct benefit as intermediaries and the rights of such feeble persons or disabled person have been preserved by the Legislature so that these persons may not ultimately suffer on account of the drastic legislation which has divested very many rights vested in persons and has conferred rights which were not in existence at all. (Law of Zamindari 1971: 230)

Despite this exposition on the need to protect a woman's rights in land which she cannot or will not till or lease herself, the same court refused to protect another widow who sued for an order to evict tenants because she needed the land for personal cultivation. In Mulayan Singh et al. v. Board of Revenue et al., [1973] 1 ALL (Indian Law Reports) Allahabad Series 341, the defending tenants were found to have been trespassers for several years. Under the U.P. Law of Zamindari Abolition and Land Reform a tenant who was a squatter became a tenant with heritable rights if the landholder failed to evict the tenant within two years after the new law came into effect. The two years had expired by the time the widow had brought the eviction suit. She argued that the two year statute of limitation was immaterial because she was a disabled landholder entitled to protection against tenants claiming heritable rights. The court chastised her for not acting within the two years. She, like anyone else, was capable of protecting her rights and could have sued earlier. The opinion gave no indication of whether the woman was actively independent in managing her lands or was managing them through an intermediary who had failed to apprise her of the trespassers.

While the court rightfully placed ultimate responsibility for

the land on the woman, it should have also taken into account the social restraints which are placed on women and which hinder them from being responsible in reality for their holdings. If the court had found that the widow was very much dependent on an intermediary, it should have urged the legislature to amend the law so that the intermediary would be held to a higher standard of accountability to the woman and required to involve her more actively in management of lands set aside for her use.

## II. Exclusion of Women from Land Ownership or Land Use under Land Reform Laws

In some countries, issuance of interpretative guidelines for safeguarding women's rights would not protect women sufficiently. In these cases, the legislation itself needs re-examination.

The Colombian Agricultural Reform Law of 1961 is a good example of outright denial of direct access to women to agricultural lands (Colombian Agricultural Reform Law 1967, Article 36). The reforms consisted of distribution of lands to the needy. The needy, however, were defined as married males of at least eighteen years of age. They were eligible to receive grants of public land or of family farm units and held responsible for all the duties of ownership. The Colombian Institute for Agrarian Reform was to divide large holdings into family farm units and consolidate small holdings into larger viable family units. The family farm unit was defined as a sufficient area, given climatic and soil conditions, to provide a normal family with adequate income for its maintenance, for paying off debts incurred in buying or conditioning the land and for improvement in housing,

farm equipment and the general standard of living (Colombian Agricultural Reform Law 1967, Article 50). It is not to be so large as to require more labor than that of the owner and his family. During his lifetime, the married male can sell only to persons having the same qualifications as he did when he obtained the original grant. If the married male owner dies, either his heirs can divide the land among themselves, or, if they can not continue exploiting the land, they have to sell it. This provision gives no support to the young widow or daughter who is unable to exploit the land herself either for lack of physical strength or knowledge or by reason of social taboos. There is no provision permitting such women to continue exploitation of the land by hiring willing labor. For the same reason no father can reasonably be expected to pass on the land to an unmarried daughter. Only if there is a danger of fragmentation of the family plot into areas of less than three hectares per heir will a court have authority to intervene. The court can decide whether to divide the land or keep it intact. A decision to keep the land undivided and treat all heirs as co-owners will be permitted only if such would protect the spouse or other heir who has depended on the land for a livelihood (Colombian Agricultural Reform Law 1967, Article 89).

The Colombian land reform scheme was justified in part by the principle that the tiller of the soil should own the land. As in Colombia, legislators' application of this principle to women in many other countries leaves much to be desired. A recent case involving application of the agrarian reform law in the Philippines provides an excellent illustration of the problem. The Code of Agrarian Reforms

abolishes share tenancy except for lands used for such commercial enterprises as fish ponds, salt-beds, citrus groves, cacao, coffee and other permanent trees (Nolledo 1974). The share tenants are converted to leaseholders. They have the right to apply the rental payments towards purchasing the lands which they work. The lands eligible for purchase have to be family sized, that is, capable of sustaining a family and not requiring more than the labor of the household. The leaseholder has to till the land personally. The statute provides for continuance of the leasehold should the original leaseholder die or become incapacitated. The spouse has first priority to succeed, then the eldest child or grandchild, and last, the next eldest child or grandchild. Thus, the statute permits women to become leaseholders and ultimate purchasers of the land which they personally till. However, the landlord is given authority to choose the successor among the spouse and descendants within one month of the death or incapacitation of the original leaseholder. In effect the landlord can prefer an elder son to the mother, but not a younger son to an elder daughter.

The land reform laws of Nepal are similar to those of Colombia, in that landlords also have the right to choose among the successors. However in Nepal, daughters have been denied the right to be considered as potential successor tenants. Nepalese lawmakers could well examine the Philippine experience where daughters are not excluded by such a restriction (Land Acts of 1964; Regml 1976: 204).

With regard to unmarried persons, however, the Philippine legislation has gaps. No provision was made for divorced spouses or

unmarried persons tilling the soil jointly. The absence of this provision has worked to the detriment of women. In Bautista v. Salazar, 18 Court of Appeals Reporter 2d (1973), the complaining landlord sought to end the tenancy relationship with the defendant because of permanent incapacitation. He alleged that the leaseholder had no heir. The defendant admitted that he was unmarried and had no lawful child. He claimed that he was actively tilling the land and that the action was brought to harass him. Landlords were notorious for trying to avoid the new law. During the course of the suit the defendant died. His common law wife substituted and carried on the suit. The lower court ruled in favor of the landlord. The common law wife appealed. She sought to be declared a qualified heir who could become the leaseholder. The Court of Appeal ruled against her on the grounds that the Code of Agrarian Reforms permitted only spouses to succeed and spouses were persons in lawful wedlock. As a common law wife, she was only a partner in tilling the land, not a spouse. This construction of the statute is not sex biased per se since a common law husband presumably would have been equally denied succession to the leasehold held by a female partner. It would be the same had the leaseholder and her or his legal marital partner been divorced even if the divorce had taken place immediately prior to the time the leaseholder became incapacitated. Yet in effect, the court decision--when placed in the context of existing social and economic facts--perpetuates a sociological bias. In the case of Bautista the legal contract of leasehold had been made in the names of the men (the landlord and the leaseholder). Yet the work was clearly being done in

part by the female partner of the leaseholder's household, even though it was not a household sanctioned by wedlock. This would not be an atypical situation. Philippine legislators could find a simple remedy to this anomaly in the experience under the Mexican Federal Land Reform Act of 1971 (Food and Agricultural Org. 1974: 19). Section 85(e) of this Mexican law permits a person who received part of a collective land grant to name as successors in title a spouse, or children, or where there were no children, the common law marriage companion.

In Tanzania women on settlement schemes on government land have been denied proceeds from crop sales, have found themselves empty handed in the event of divorce, and have been excluded from land inheritance in the event of a spouse's death. These are among the outcomes which have led J. L. Brain to conclude that matrilineal women in eastern Tanzania have fared far less well on settlement scheme lands than in their traditional societies (Brain 1976). Thus in their home villages these women would gain a share of proceeds from crops cultivated jointly by spouses as well as all the proceeds from some crops of their own. But on the settlement schemes men have been given the sole right to receive all proceeds from crops produced by both spouses. Under customary law, in the event of divorce both spouses receive a share of proceeds, while on the settlement schemes, women receive nothing upon divorce. Inheritance rules in the matrilineal villages place men and women on similar footing, with women inheriting from their maternal uncles and often their father (Brain 1976: 266). Thus under customary law the husband's death, like divorce, alters the

wife's economic situation very little. In contrast, on the village settlement schemes, no provisions have been made for a surviving wife, although these women settlers are likely to have lost their traditional rights to land in their region of origin (Brain 1976: 278). The core of the problem, Brain observes, has been officials' unwillingness to devise a system of rights based on local matrilineal custom. They sought instead to establish a patrilineal system which greatly curtails women's economic independence and security. Because of deliberate myopia, officials failed to recognize that the women had a serious problem, even in the face of suggestion that the law should give to the women a fixed percentage of the proceeds from the sale of crops or designate fields from them to cultivate collectively and control those proceeds independent of the men (Brain 1976: 275). Thus despite the apparent absence of sex bias in Tanzanian law (as noted above), some women on the settlement schemes find themselves deprived of the rights that they would have enjoyed in their traditional matrilineal villages. Their situation is worsened because, should they leave the settlement scheme to return home, they are likely to discover that their use rights have lapsed in their absence.

### III. Harmonizing Family Law of Maintenance with Land Reform Law

There may be one reasonable justification for the Colombian or Nepalese types of legislation which restrict the benefits of land reform to married males. One can argue that where there is a shortage of land, the person held responsible for maintaining a family must be given fullest possible access to land resources. Under family



law the married male generally bears this responsibility. The law presumes irrebutably that the woman is not capable of bearing such a burden. The male provider is to be protected against competition from a female attempting to fulfill that role. Such a restriction on distribution of the benefits of land reform is not socially just, although it may appear to be logical. However, the premise must be re-examined. When it is, the logic will change. This premise is sufficiently pervasive in various countries that it is worth examining how lawmakers have, in some instances, resisted change and, in other instances, have introduced innovations challenging the traditional premise.

1. Tunisia proposed changes in the law of maintenance have been aborted. The Islamic law of inheritance permits a widow with children only a minor part of an estate. A daughter receives only half as much as her brother. Relatives who receive more are expected to compensate for this inequality by maintaining the widow or daughter. The provisions of the statute on maintenance make sense, given the economically secondary position of women. However, the statute is sufficiently ambiguous to be interpreted either one of two ways. According to one interpretation, the male relative would be principally responsible for maintaining the woman. Under another interpretation the man would be obliged to maintain the woman and the woman liable for contributing to the maintenance of her spouse only if she had property.

A proposed reform would have made explicit that, at least in marriage, each spouse has to maintain the other in proportion to their

wealth or financial capacity (Jones 1975: 555). From the point of view of statistical distributions of wealth, the old land and the draft proposal can be regarded as fair since it took into account the fact that women have levels of fortune generally inferior to those of men. From the point of view of principle and economic effect, however, they both can be considered instruments for perpetuating the material inequality which exists between the sexes with regard to the basic and most traditional source of income: inheritance. If a country were to adopt as national policy the principle of equality between the sexes in inheritance, then not only must their duties be made equal, regardless of financial capacity, but also their capacity to fulfill these duties equalized. Agrarian reforms introduced to assist husbands and wives, daughters and sons equally to make a decent living would then acquire a different meaning.

In Tanzania where proponents of African socialist theory emphasize the dignity of each citizen, the Commissioner for Community Development, nonetheless, was known to state, "Women may demand their new rights, [but] this would disrupt the relationship between husbands and wives" (Brain 1976: 276). This attitude is typical of the almost schizophrenic thinking which plagues policy makers when asked to consider women's rights as an integral part of the pursuit of justice through land reform. On one hand, they believe that political stability can be fostered by giving a sense of economic independence to male tillers of the soil, free of domination from their fellow men. Such freedom is intended to give them a sense of responsibility and maturity. On the other hand, they believe that family stability can be fostered

by giving men domination over the female, whether it be in a marital or sibling or parental relationship. Economic independence of the female is regarded as having a disrupting rather than a maturing influence. Theoretically and practically, this is unjust and socially unsafe. Domination does not produce stability. Mutual submission should be the goal.

Studies in Morocco support this conclusion. In Morocco a divorced woman is entitled under Islamic law to share in her father's estate and a widow is entitled to shares in the estates of her father and husband. In practice the husband has been given control over the wife's shares in her relatives' property and the brother control over his unmarried sister's share (Maher 1974: 126-127 and 158). Marriages among brothers' children have been encouraged so that the wife's share could be inherited eventually by her father (also her uncle's family) in the event she had no children (Maher 1974: 12). Even when the woman knows that marriage is no safe bet in a society where the divorce rate is nearly fifty per cent, she must turn to other males (her brothers) for help in farming, and in return for their help, she is expected to cede control over her property to her brothers upon demand.

The impact of such stressful cross-pressures on marital ties have been empirically documented: V. A. Maher's research reveals a positive correlation between women's relative economic independence and stability of marriage (Maher 1975: 163, 193, 215). The relatively independent woman, who has received a sizable dowry upon marriage, feels secure enough not to feel the necessity of building up

a social network among her female kin or female friends. The economically insecure spend so much time building up such an insurance against future divorce that they cause great tension between themselves and their spouses. The husband tends to become jealous of time his wife spends with female friends and relatives. Despite such evidence, Maher observes that "[t]he idea of reducing the economic and political dependence of women on their husbands, fathers or brothers seems to present an intolerable threat to the status quo" (Maher 1974: 42, 57, 84).

Only after twenty years of experience in land reforms (since the 1950s) have Indian legislators come to see how groundless were their assumptions about males' responsibility for family maintenance which they used to justify discrimination against women in land reform legislation. The 1974 report of a government Committee on the Status of Women examined the new laws enacted in the 1970s to set ceilings on the amount of acreage held by any one individual (Government of India 1974: 35, 169). The Madhya Pradesh Ceiling on Agricultural Holdings (Amendment Ordinance) of 1974, the Land Reform Act of 1974 of Karnataka, and later, the Punjab Ceiling Act of 1977 permit a son to acquire title to holdings beyond the ceiling limit, but do not make a like exception for a daughter, married or unmarried. Yet the social statistics indicate that it is the men who tend to leave the land and leave the women to care for themselves. The only practical choices which the divorced or separated woman usually has are returning to her natal home (if her family can afford her) or becoming affiliated with another man. State governments give her little opportunity to gain independent access

to land. The Committee recognized that legislators have given the son more access to land because he alone has the duty under general family law to maintain his parents or wife and children. It therefore recommended that women and men bear equally the obligation for family maintenance (Government of India 1974: 128-129).

Several decisions made by Kenyan courts are good examples of how judicial discretion can favor as well as hinder women's access to land for their maintenance. In settlement schemes organized as part of land reforms, which consisted largely of surveying and registration of title, a woman's right to maintenance was often secure only if her presence on the land served the interests of the male heirs. Rarely would courts give judgment unless the village elders and relatives had reached a consensus about who could purchase or who could succeed to settlement plots. Statutory law governs the procedure of registration and adjudication, but customary laws and practices govern the disposal and succession. The cases in which courts have given title to women are ones in which the women expressed a wish to remain on the land of a deceased spouse and the elders or children wanted the mother to maintain the land for the children's survival (Jones n.d., District Magistrate, Meru, Succession Cases 1973). However, the widow who receives title in her name often expresses an intention to hold the land in name only. She accepts responsibility for its upkeep and its farming because she wants, in effect, to hold it in trust for her children (Jones n.d., District Magistrate, Meru, Succession Cases 1973). In some instances the sons express a preference that the mother be named sole title holder even though they are adults and are helping the

widow farm the land. Thus the land will be worked as one unit as long as possible, postponing any quarrels that may arise upon the ultimate division of the land among the sons (Jones n.d., District Magistrate, Meru, Succession Cases 1973). Thus, it is not surprising that when a farmer died, leaving a widow and one son with no competing male heirs, the family agreed that the land should be registered in the name of the sole son rather than the widow (Jones n.d., District Magistrate, Meru, Succession Cases 1973). In one case the sons were given title and the widow registered as guardian (Jones n.d., District Magistrate, Nkubu, Succession Cases 1974). Registering the land in the name of the son rather than widow has the effect of protecting the son's rights, until he comes of age, against a man who might remarry the widow and persuade her to pass title to him. It also keeps the widow in a dependent position. She is able to exercise control over the land only for the sake of others. As guardian or trustee, rather than co-owner, she is vulnerable to challenge from male relatives who may disagree with her management and may wish to have her removed.

Widows have also been named by the courts as co-heirs with sons--perhaps because of the clan members' greater confidence in the widow. In some instances the land has been left to the widow and sons to decide whether to demarcate their acreage among themselves; in others the court order specified the acreage allocated to each son and to the widow (Jones n.d., District Magistrate, Meru, Succession Cases 1974).

On balance, a widow needs the protection of legislation which makes her removal from the guardianship of trusteeship difficult or

which makes it difficult for her to transfer land in her name to a man whom she would remarry. She also needs legislation which requires her to seek, or requires the state to give her, access to management skills if necessary. The lack of access to management training in Egypt has long been regarded as having a crippling effect on the success of the land reform programs (Saab 1967: 138-139, 156). The Egyptian Agrarian Reform Law of 1952 enacted an ambitious program of imposed ceilings on ownership, cooperatives and labor unions, and lands reclamation. Yet twelve years later the only vocational centers which had been founded were for teaching women and young girls sewing, knitting, and manufacturing of carpets. This is hardly adequate for training women peasants who spend on the average only forty days less than men per year cultivating the small farms. Requiring vocational training by law (as has been done in the Philippines [Nolledo 1974: section 51]) has been advocated in Egypt because:

Vocational training in agriculture and agricultural co-operation would have fostered entrepreneurship among smallholders and female members [emphasis added] of their families and would also have provided them with basic technical knowledge. It would, moreover, have been the logical corollary to the "liberal" approach to agrarian problems, which allows for the emergence of individual initiative within a cooperative approach. (Saab 1967: 138-139)

Although the right of the widow to use and possess the land is usually protected during her lifetime from distant relatives (assuming that her children do not challenge her right to remain on the land), it is the daughter who ultimately suffers from the distant relative. In Kenya, when distant relatives (for example, nephews who come from other settlement schemes) claim shares, thus competing with the widow, the clan members tend to urge the court to favor the widow. The object

seems to be to protect as long as possible the cohesiveness of a scheme against invasion from outsiders, especially when the outsiders already have land and are of a quarrelsome disposition (Jones n.d., District Magistrate, Meru 1973). In contrast, the unmarried or divorced daughter may be left to depend on male relatives for maintenance; the married daughter has her husband's land to sustain herself (Jones n.d., District Magistrate, Meru 1973). In some instances nephews claiming the land, cattle, and beehives of the deceased have been known to offer to take care of the unmarried daughter (Jones n.d., District Magistrate, Meru 1973; Cotran 1969). Under several customary laws in Kenya the daughter may not formally inherit land (Jones n.d., District Magistrate, Meru 1973; Cotran 1969). A nephew or male cousin can be named sole heir if he can prove that the deceased had no objection to his receiving a plot registered under the land reform schemes and that the deceased has left neither sons nor spouses (Jones n.d., District Magistrate, Meru 1973; Nkubu 1974). The fact that the deceased left a daughter would be immaterial.

Even when a male owner of a registered plot wishes to sell his plot during his lifetime and has only daughters with no hope of ever having a son, the law has not prevented him from disposing of the land prior to his death without taking into account the needs of his daughter(s). In one rather protracted suit a widow having one adult son, four unmarried daughters, and one son in school, challenged the court to protect herself and her daughters from the sons. She foresaw difficulties with her older son whom she accused of wanting to chase her away from the land, which was the main source of livelihood for



the women. The most the law could give her and her daughters was a usufructuary right during her lifetime. After her death her sons--or distant male relatives if the sons predeceased her--could step in and dispose of the land as they wished (Jones n.d., District Magistrate, Meru 1973). The absolute right to cultivate belonged to the mother. The right to be maintained without the right to cultivate belonged to the daughters. Thus, the daughter in general is under much pressure for the sake of economic survival to marry or to give birth to sons who can claim her father's lands or her husband's. The single daughter can hardly be said to be encouraged by the law, or protected by the law, to become as independent as her brother. The land reform programs as administered at the discretion of the courts or bureaucrats do justice to only half of the population. They are unrealistic in the face of the growing divorce rates and leave women little alternative but to go into the town to join the landless and industrial rootless.

In Kenya, outside the settlement schemes, the married woman who divorces or is divorced may arrange her affairs so that her economic lot is somewhat better than it ordinarily might be if she were to return to her status as an unmarried daughter to be maintained ex gratia by male relatives. This is because of the fact that the Kenyan courts have recognized a woman's equitable right to get back at divorce the contributions which she made to her husband's wealth. The case of I. v. I., 1971 E.A. 279 (K), was a judicial bombshell giving her this right. Whether its principle will be applied in respect to settlement lands remains to be seen. If it is, it would be most innovative. The High Court in I. v. I. found the British statute, the Married Women's Property

Act of 1882, applicable in Kenya, and (because it is a statute) gave it precedence over customary laws. The divorced parties in the suit were hardly typical farmers and the property involved was a house in England, but the principle involved was not confined to the facts of the case. The proceeds of the sale of the house in England were used to buy a house in Kenya in the joint names of the spouses. The divorced husband argued that, in Kenyan circumstances, a married woman had no right to property owned by her husband. The court in response established the broad principle that "the circumstances of Kenya and its inhabitants do not generally require that a woman should not be able to own property" (1971 E.A. 279 (K); also Maina 1976). The court did not bother to establish as a fact whether the wife had or had not kept whatever she earned or contributed or not contributed to the matrimonial capital. It simply concluded that even "if she did [keep her earnings], it left her husband with extra money for other purposes" (1971 E.A. 279 (K); also Maina 1976). The court awarded her half of the proceeds of the sale of the house.

About a year after the case of I. v. I. a Resident Magistrate applying Akamba customary law heard on appeal a petition for divorce brought by a prosperous woman who owned cattle and small shops in a rural area (Jones n.d., Resident Magistrate, Kitui, Divorce Cases of 1971). The petitioner was upset about her husband having married a second wife although it was quite valid under their customary law. She sued for divorce on the ground that her husband was allegedly failing to maintain her and her children. Testimony given established that her father had lent her money to start a business. She became so

prosperous that she built several shops--a hotel, a butchery, a bar, a tea room, a warehouse for storing grains. She gave management of these places over to her husband. He began claiming ownership. She prayed in her petition that the court make a marriage settlement by way of an order of division of the properties. The lower court had found that the husband was not guilty of neglecting his duty to maintain the wife. The father of the complaining woman had testified that the loans which he had made were to his daughter and son-in-law jointly. The court concluded that the children were being maintained by the husband by virtue of his participating in the joint business. On appeal the Resident Magistrate bluntly disagreed with the lower court. He found that the husband had nothing of his own with which to maintain the wife and children. The court further found the father's testimony about making loans jointly to the daughter and son-in-law incredulous. The court concluded that the husband was using the proceeds from his wife's business and her cattle to maintain the family and to pay the bridewealth for the second wife. The court made no specific order relating to settlement of property. The judgment of divorce simply implied that all of the property originally belonged to the wife, who was being maintained by virtue of her own wealth and not that of the husband.

Although the Resident Magistrate's decision above was in keeping with the principles laid down in I. v. I. above favoring rights of a married in property jointly managed by herself and her former husband, the appellate decision conflicted with the reasoning of another lower court which expounded a theory of Akamba customary law

which worked against the married woman. The theory is worth examining because it represents a problem which land reformers have not addressed directly. The theory was expounded by a district magistrate court in a semi-arid area southeast of Nairobi, where there seems to be a direct proportional relationship between the rate of divorce and the severity of drought (Jones n.d., District Magistrate, Machakos, Maintenance Cases of 1969, courtesy of P. Waki). The complainant was a woman who sought divorce on the grounds of the husband's alleged desertion and failure to provide maintenance. She sought in addition a monthly allowance for herself and the children. She had moved from the matrimonial farm to her parents and was earning money as a government employee. She had bought a farm where she intended to settle. The parties had married under their customary law. The district magistrate examined their customary law of divorce. He found that she had deserted by going to her parents. She therefore automatically deprived herself of any support from her husband. The court went on to pronounce that

. . . it is a [customary] law that a married woman has got no property of her own which she acquires while in the enjoyment of her matrimonial life. That includes any property acquired by the wife either in the course of employment or in the course of any other work done by her but while she is a legally married wife. That does not include any property given to her by her parents or any other type of present from her friends. (Jones n.d., District Magistrate, Machakos, Maintenance Cases of 1969, courtesy of P. Waki)

In brief, a married woman upon divorce could not expect under customary law to claim any properties which she acquired with her own money earned during her marriage. She could claim only properties bought with money from her family or friends. The court deemed the wife's salary in this

case and the wealth (including the farm) which she accumulated from these earnings as belonging to her husband. Therefore, since he could not be said to be neglecting his duty to maintain, no divorce was granted.

This kind of reasoning would be more appropriate for a situation in which the married woman received from her husband land to cultivate to feed herself and their children. Upon divorce she could not claim the children or a share in the land because the land was reserved for the next wife to cultivate for herself and the children. She returned to natal relatives for support or she remarried and worked on her new husband's land or his family's land. This kind of reasoning not only violates the principle that a woman has the right to the profitable contributions which she made to the matrimonial home; it is also inimical to one of the purposes of land reform, which is to give security of tenure in order to encourage long-term investment in improvements in the land. The legislators may do well to consider legislation which would harmonize the divorce and maintenance laws as they relate to women and the principle of land reform. For example, they could consider requiring the husband upon divorce to turn over to the woman wishing to continue to till that portion of land which would be the equivalent in value of the improvements which she made on the land while farming it during the marriage, provided that her father has no land to give her in her own name.

The law seems inherently unfair when it gives a person (usually a man) the economic use of the labor of another (usually a woman) without any compensation to the latter, under the guise of maintenance.

Lord Denning, a highly respected common law judge, dear to the hearts of many citizens of the formerly colonized developing countries, refused to permit the law this luxury. His thinking is well worth examination by any government seeking to harmonize family law and agrarian reform as a matter of justice. In Wachtel v. Wachtel, (1973) 1 All England Reports 829, he enunciated judicial recognition of the economic value of the labor contributed by a woman to a household. It is as valuable as the earnings which a woman contributes to household expenses or savings. Being of value, it entitles her to a share in the homestead upon divorce or separation ([1973] 1 A.E.R. at 830). The principle could logically and equitably be extended to the Philippine common law wife discussed above. In Wachtel the lower court had divided the value of the family assets equally between the two divorced spouses who had been married for eighteen years. Family assets were defined as "things acquired by one or the other spouse with the intent that they should be continuing provision for themselves and their children during their joint lives and used for the benefit of the family" ([1973] 1 A.E.R. at 836). The husband was ordered to pay one large lump sum of money to the wife who had decided to leave the matrimonial home. The money was sufficient for a deposit on a flat. The husband appealed the decision, contending that the recent statute enacted on the division of property upon divorce had not intended a shift from the old idea of maintenance to one of distribution of assets and purchasing power. He also disliked the court's starting from the presumption that "equal division" was right.

Lord Denning disagreed. He traced the history of division of

assets under common and statutory laws. Twenty-five years before Wachtel, if the home were in the husband's name, as it usually was in fact, it belonged to him in law and equity. Whatever money the wife contributed was regarded as a gift and not recoverable. Some courts, however, were permitting her to recover whatever financial contributions she had made towards paying mortgages or deposits. The Royal Commission on Marriage and Divorce observed that since then that ". . . it is an unwarrantable hardship when in consequence [of devoting herself to caring for her husband and children] she finds herself in the end with nothing she can call her own" ([1973] 1 A.E.R. at 837). In other words, as graphically portrayed by another Justice, "The cock can feather the nest because he does not have to spend most of his time sitting on it" ([1973] 1 A.E.R. at 837). Lord Denning knew that it was time that the courts did justice to the woman. The court decided that Parliament intended that the wife who looks after the home and family is contributing in kind, not to be treated differently from the woman who contributes money from her salaried or commercial earnings. Lord Denning discounted the prospects of remarriage as an important consideration when awarding a lump sum to the woman. In the past a woman who remarried suffered a reduction in what she could claim from her former spouse. Lord Denning in ruthlessly applying the principle of fairness wrote: "After all she has earned it by her contribution in looking after the home and caring for the family. It should not be taken away from her by the prospect of remarriage" ([1973] 1 A.E.R. at 841).

In Peru one of the basic principles of land reform law is

potentially compatible with Lord Denning's notion of equity as described above in Wachtel. The Peruvian agrarian reform law was designed to abolish all relationships that de facto or de jure linked the granting of usufructuary rights in land with the rendering of personal services (article 2) (Peru, Agrarian Reform Law, No. 15037 of 1964). However, it does not seem that the Peruvian legislators were thinking of wives and daughters. If they were, they would have asked themselves why a woman's services rendered to the household in which she lives should be linked only to usufructuary rights in the lands owned by the male head of her household.

It is true that the provisions of the agrarian reform law does not explicitly limit to men eligibility to participate in the distribution of public lands, as in Colombia. Yet the law is written in such a way that men are favored in receiving allotments because of a recurrent presumption that women are incapable of farming. The law created the Institute of Agrarian Reform to make allotments to landless peasants or peasants with insufficient lands. The allotments are to be family sized lots, meaning "area[s] that could be worked directly by the farmer and the members of his family" (article 96). Among the eligibility requirements for a recipient are Peruvian citizenship, capability for farming, and an age of not less than eighteen years or not more than sixty unless one had a seventeen year old son. Apparently, and unfortunately, daughters are not expected to farm, and even if they do farm, they are not to be encouraged to farm on behalf of their fathers. The security of tenure during the lifetime of the owner also depends on the owner having a son. Eject-



ment from the family sized allotment that was the only agrarian property of the farmer in question is not permitted if the owner farms the land directly or has an adult son or sons capable of farming the land (article 148). Again the lawmakers presumed irrebutably that women are not capable of farming. When a farmer who had received an allotment dies, the estate is to stay within the family by way of inheritance. The original owner can designate by will one successor as long as the successor works the land (article 106). Because it was apparently regarded as socially unacceptable for women to work the land primarily rather than secondarily as helpers, the law only perpetuates the status quo: the dependency of women. If the owner leaves no will, the surviving family members can designate a successor. If, in social practice, women do not have decision-making powers in a family, the law does not motivate the family to encourage them to become independent peasants. If women are not chosen as heirs, they can receive only financial compensation equal to a prescribed percentage, rather than the value of their contribution towards improving the land.

#### IV. Conclusions and Recommendations

As indicated in the foregoing case studies, too many legislators have written into land reform laws, explicitly or implicitly, several obstacles which prevent women from becoming independent peasants able or willing to take the initiative regarding the lands they till. Undergirding this legislative behavior are certain basic social assumptions:

1. Social and economic stability in a society depends on men being made primarily responsible for maintenance of their

families. Women are and should be only secondarily responsible.

2. Women, highly respected and admired for their reproductive and productive contributions, especially when married, are adequately protected by their patrilineal or matrilineal ties. Women have no needs beyond the need to help their male guardians to preserve their control over land for the protection of women and children.
3. Family laws creating unequal responsibilities for maintenance and permitting accordingly unequal distribution of family assets among men and women in inheritance pursue goals which are and should be different from the goals of agrarian law reforms. There is no need to reconcile the two or to decide which will take precedence in case of conflict.

Until policy and law makers are willing to perceive the inequity of these assumptions, half of the population will not be contributing their utmost to development and will be sources of instability. To overcome this unjust and counterproductive situation, governments should begin to implement the following policies:

1. In addition to the goal of economic equity, governments should make equality between women and men a principle of their legal systems. This is crucial in countries where rights depend on the discretion of courts or of land reform administrators.
2. Governments should re-examine current legislation with the purpose of providing incentives for women to exercise equal rights of management of land. This is needed particularly in countries which exempt women from prohibitions against subletting the land, but permit male tenants or rent collectors to manage land.
3. The traditional obligation to provide women with land to produce food for their children should be preserved. This is crucial in countries where polygyny is practiced or where men are frequently absent from the farms. Where women are put in control of wealth not for their own welfare and independence but as trustees for their children, the law should make it difficult for a woman to transfer the land or its produce to men who wish to replace her as guardian because of sex bias.
4. In reconciling family laws with agrarian reform laws, governments should preserve a range of rights to property from

which women, not their guardians, can choose. Such choices should depend on the degree of harmony between a woman and her matrilineal family when the patrilineal ties break down. This is important in countries where the divorce or separation rate is high.

5. Governments must educate women in the rights which they can assert regardless of social practices and should include the study of legal rights in agricultural vocational curricula. Where the desire to assert economic independence will depend on a woman's confidence in her ability to till land herself or to overcome traditional taboos, the laws should especially provide for her training in tilling and, at the very least, for greater accountability of male managers to her.

The Ethiopian land reform law--one of the most recently enacted--is a good example with which to conclude. It is a case in which legislators could have implemented the foregoing five policies, but instead attempted to blend modern principles with tradition without a realistic understanding of the choices which are and should be open to women. In Ethiopian communities which are traditionally matrilineal, the divorced or separated woman previously had a right to take part of her former spouse's land or ask to control land inherited from her parents but possessed by a male relative or her former spouse (Bruce 1976: 270-271). Her wishes were fulfilled so long as she was head of a household and paid her share of land taxes. Often in practice her ultimate share was so small that she left it in the possession of the male relative or former spouse and received only a share of the harvest (Bruce 1976: 406ff.). Thus, it would seem that in practice a woman was not expected to be in control of cultivation.

In 1975 the Public Ownership of Rural Lands Proclamation (No. 31/1975 in Food and Agricultural Org. 1975: 11ff.) introduced two principles: one, all lands were the collective property of the

people; two, only tillers of the soil may be allotted land sufficient to sustain themselves and their families [section 4 (1)]. The law states clearly that there was to be no "differentiation of the sexes" [section 4(1)]. A woman head of a household can receive land as in the past. However, a woman who cannot cultivate her land, for whatever (traditional) reasons, is in effect excluded from the allocation program. She cannot hire labor to help her [section 4(5)] as she might have in the past. Only a woman who both cannot personally cultivate and has no other adequate means of livelihood is permitted to hire help. The Proclamation did not define the term "livelihood." A government official allocating lands is left to construe the Proclamation's meaning. Such an official will most probably interpret the term "livelihood" in such a way that a woman has to prove not only that she lacks skills, agricultural and non-agricultural, to sustain herself by her own efforts, and also is not being maintained in the traditional manner, sharing in the harvest of lands tilled and controlled by male relatives. When a head of a household is widowed, is unable to cultivate her land, and is not being maintained by relatives, the peasants' association (mandatorily organized under law) is given the responsibility to till and control the widow's holdings [section 10(7)].

The divorced or separated woman is also inadequately provided for: she is, in effect, excluded. She no longer has the traditional right to her former husband's lands. She has a new right to be allocated ten hectares, but if she cannot cultivate this land herself, she cannot get help from the association. She can hire labor only if she proves that she has no other means of livelihood. In effect,

the new Proclamation forces women either to choose to break all traditional taboos against personal involvement in all the work traditionally done by men or to choose to fall under the maintenance umbrella of a husband or male relative who tills her land. Neither choice would seem to be palatable for many women in the current Ethiopian context. Nor are women and men treated equitably, because a man faces these choices only if he is ill or physically or mentally incapacitated.

The legislators should have devised exemptions for women designed to enable them to start taking advantage of the principle that one who tills shall control the land. A woman, regardless of marital status, should be able to control land as she was under the traditional matrilineal system. And she should be required to prove why she needs help to till her land and to inform the village peasant association of the steps she is taking to improve her ability to till the land herself.

The Ethiopian example underlines the propensity for land reform to increase the dependence of women and how this outcome can be circumvented. The price of land reform should not be and need not be to increase women's dependence.

## REFERENCES

- Brain, J. L. "Less Than Second Class: Women in Rural Settlement Schemes in Tanzania" in N. J. Hafkin and E. G. Bay (eds.) Women in Africa: Studies in Social and Economic Change. Stanford: Stanford University Press, 1976.
- Bruce, J. W. Land Reform Planning and Indigenous Communal Tenures: A Case Study of the Tenure of Chiguraf-gwoses in Tigray, Ethiopia, unpubl. S.J.D. dissertation for the University of Wisconsin Law School, 1976.
- The Colombian Agricultural Reform Law: A Translation of Law 135 of December 31, 1961 of the National Congress of Colombia, January 1967 (available at University of Michigan Law School).
- Cotran, E. Restatement of African Law: Kenya Law of Succession. London: Sweet and Maxwell, 1969.
- Food and Agriculture Organization. Food and Agricultural Legislation 23, 1, March 16, 1971 Diario Oficial No. 41, April 16 (June 1974); also 23, 1, April 29, 1975 (December 1975).
- Gangadharan, A., ed. The Law of Land Reforms in Kerala. Cochin: The Travancore Law House, 1970.
- Government of India. Report on the Status of Women: Towards Equality. New Delhi: Ministry of Education and Social Welfare, December 1974.
- James, R. W. and G. M. Fimbo. Customary Land Law of Tanzania. Dar es Salaam: East African Literature Bureau, 1973.
- Jones, C. C. Law and Development: The Law of Bequests in the Context of Reform of Property Law in Tunisia. Unpubl. Ph.D. thesis, University of London, 1975.
- \_\_\_\_\_. Law of Family and Succession in Kenya. Manuscript, forthcoming book, n.d.
- Lambton, A. S. K. The Persian Land Reform. Oxford: Clarendon Press, 1969.
- Law of Zamindari Abolition and Land Reforms in U.P.: Past and Present with Short Comments by P. C. Gupta. Allahabad: Alia Law Agency, 1971.
- Maher, V. A. Women and Property in Morocco. Cambridge University Press, 1974.

- Maina, R., et al. "The Law and the Status of Women in Kenya,"  
Columbia Human Rights Law Review, 8, 1 (Spring-Summer 1976),  
185-203.
- Malaviya, H. D. Land Reforms in India (n.p.), 1955.
- Nolledo, J. N. The Code of Agrarian Reforms of the Philippines  
Annotated, 2nd and revised edition. Manila, 1974.
- Peru. Agrarian Reform Law, No. 15037 of 1964 (available at University  
of Michigan Law School).
- Regmi, M. C. R. Land Ownership in Nepal. Berkeley: University of  
California Press, 1976.
- Saab, G. S. The Egyptian Agrarian Reform 1952-1962. Oxford University  
Press, 1967.

Chapter Five

ACCESS OF RURAL GIRLS TO PRIMARY EDUCATION  
IN THE THIRD WORLD: STATE OF THE ART, OBSTACLES,  
AND POLICY RECOMMENDATIONS

by

Constantina Safilios-Rothschild, Ph.D.



## I. State of the Art

### The Statistical Picture

In the Third World, women's literacy and access to primary education still lags behind that of men, and the situation is more accentuated for rural than for urban women. The present picture as well as the degree of progress made in increasing women's access to formal education varies considerably from continent to continent and from country to country. In Latin America, for example, women's access to primary education is equal to that of men, and this access has spread quite widely since 1975, when 78% of girls (and boys) 6-11 years old were enrolled in school (UNESCO 1977:53-56). Despite almost universal literacy in many Latin American countries, rural women (and men) still often have less access to formal education than urban women and men. In Asia, although the increase in the number of girls 6-11 years of age attending school is the greatest in the Third World (UN, ECOSOC 1979), the discrepancy between girls and boys of that age enrolled in school is still large (50 percent of girls and 71 percent of boys in 1975) (UNESCO 1977). The greatest discrepancy between boys' and girls' access to primary education is found among low income Asian countries, particularly Afghanistan, Bhutan, and Nepal where girls represent less than 20 percent of primary school students (UNESCO 1977). In Africa where girls are permitted to attend primary school from ages 6-18, the gap between women and men seems to have widened from 1960 to 1975 rather than diminished, especially in the 12-17 age group (UNESCO 1977; UN, ECOSOC 1979). In West Africa, despite increases in total enrollment of girls, female enrollment still lags behind that of boys, and, according to UNESCO projections, these disparities will further increase by 1985 (UNESCO 1977:37). Girls in West and Middle Africa will continue to have

less access to formal education than in other Third World countries.

In general, the overall trends indicate that women's access to primary education continues to be least in the low income nations of Africa, Asia, but not of Latin America, as well as in North Africa and the Middle East. In these areas, about one-third or less of the primary school students are women (UNESCO 1977).

The statistical picture becomes clearer and more meaningful, however, when we come down to the level of specific countries. In 1971, for example, 18.4 percent of Indian women and 39.5 percent of Indian men were literate (Status 1975:155). But the discrepancy between rural and urban Indian women was even larger: 13.2 percent of the rural and 42.3 percent of the urban women were literate (Jacobson 1977:35). Even within Indian states, there is considerable variation from Kerala (where 53.1 percent of rural and 60.6 percent of urban women are literate) to Bihar (with 6.4 percent of the rural women literate) and to Rajasthan (with 4 percent of the rural women literate) (Status 1975:8-9). The situation is even more extreme in Morocco where, in 1971, 14 percent of all women were literate, but among rural women only 2 percent were literate as against 38 percent of the urban women (USAID 1978). Similarly in Yemen, only 2.4 percent of the rural women were literate (Myntti 1978). At the other extreme, Chile approaches universal literacy for both women and men and El Salvador has achieved sex parity in literacy although rural men and women lag behind the urban population. Thailand is the Asian counterpart of this type with female literacy in rural areas now almost universal (Bowman and Anderson 1978).

In general, rural women have consistently lower literacy than rural men but also lower literacy than urban women. It must be underlined, however,

that literacy is not the most important indicator of access to primary education since in some countries literacy does not necessarily imply school enrollment and even less often primary school graduation. For example, about 20 percent of the literate women in the slums of Istanbul acquired literacy without schooling (Karpant 1976). In India 40 percent of women literates have not completed primary school (Status 1975:9). This is significant because primary school graduation is critical for admission to valuable vocational training in agriculture.

We must be aware that enrollment statistics are often not meaningful and accurate unless the cohorts of entering students are traced through graduation because the dropout and grade repeat rates for all students, particularly girls, are quite high. Completion of grade four can be taken as an indication of the level of education needed in order to become and remain literate. Only about half of the children who entered primary education in 1970 attained this level. However, more children in Africa than in Latin America or South Asia were able to finish the fourth grade (Fredriksen 1978). Here again, there is considerable variation between countries, between urban and rural areas, and between males and females. In India, for example, out of 1,000 entrants to primary schools, only 475 boys and 407 girls are still in school after five years. In Cambodia, only 226 girls and 439 boys are still in school after six years and, in Syria, 68 girls and 80 boys (Bowman and Anderson 1978). Data from Algeria show that only 39 percent of the boys and 30 percent of 1,000 entrants completed six years of primary education.

In general, educational wastage is higher in rural areas and for girl students. Thus, in Algeria, the educational wastage of female students was much higher in rural areas (where only 21 percent of the women gradu-

ated) than in urban areas (where 36 percent of the women succeeded in graduating). Also, the discrepancies between Algerian male and female graduates were larger in rural areas where 19 percent more boys than girls graduated than in urban areas where only 7 percent more boys than girls graduated (Brimer and Pauli 1971).

It is of interest to note that, although girl students show greater rates of educational wastage than boys, their wastage is more often due to dropping out while boys' wastage is more often due to repetition of grades (Brimer and Pauli 1971; Dubbeldam 1970). Girls' attrition from primary school seems, therefore, to be less due to failure to be promoted than to withdrawing from school for non-scholastic reasons. Boys, on the other hand, tend to "hang on" regardless of scholastic performance. Some detailed data from rural India reports that boys show greater persistence in school than girls (Asubramanian 1977).

A small but in-depth study of rural school girls in Ghana illustrates clearly the factors responsible for many girls' withdrawal from school. Schoolgirls in the elementary school ranged from 6 to 20 years, with one-fifth 18 or older. Half of the girls dropping out of school were 18 or older and another one-third were 16-17 (Akuffo 1978). The age range of the rural Ghanaian schoolgirls is not unusual for the rural areas of many African countries. It is caused by delayed entry into school as well as by temporary dropping out and re-entry into the same grade after some delay or by grade repetition due to failure. The older the schoolgirls, the greater the possibility that they will drop out because they get married, because they get pregnant, or because they lose interest in school (especially if they can do some kind of work to earn some money.) The Ghanaian case study demonstrates these trends. Thirty-eight percent

of the schoolgirls who dropped out of school did so because they became pregnant. Over 20 percent of the dropouts were engaged in some economic activity to raise some money and about 80 percent of them did some kind of trading, either as helpers to their mothers or guardians or by themselves. These girls are introduced to trading from an early age (6-16 years old) often by keeping the daily accounts of their mothers' sales; they are thus exposed to the possibility of immediate monetary rewards without the benefit of schooling (Akuffo 1978).

The relationship between early marriage and withdrawal from school is self-evident. In Pakistan, for example, only 2 percent of girls aged 15-19 were enrolled in school, while 75 percent were married (Youssef 1976). The overall trend for developing countries is a negative relationship between early marriage and school enrollment. More specifically, where girls 15-19 years old defer marriage, their rates of school enrollment tend to be the same for both sexes, but where they marry young, their enrollment rates are much lower than men's (UN Commission). Because a considerable percentage of the girls enrolled in primary school are over 14 years old, marriage interferes widely with graduation from primary school.

#### The Importance of an Elementary School Education

Rural girls' access to formal education is the key to their integration into the mainstream development efforts of their countries and to better employment and even marital options. Graduation from elementary school is crucial for rural girls because:

1. it firmly established literacy, and it opens up options to participate in types of vocational training such as agriculture and cooperative training;

2. it increases their ability to take part in varied rural development efforts and related non-formal, experimental educational programs;
3. it contributes to more extensive literacy and schooling for subsequent generations;
4. it enhances family nutrition, since mothers' education has been found to improve the nutritional status of children (Cravioto 1966);
5. it tends to make women more receptive to family planning;
6. it helps women to benefit more from different types of non-formal education (Derryck 1978);
7. it is related to increased farm productivity.

The importance of mothers' education for children's education and nutritional status (as well as for their health) is such that the argument for educating Third World women could be made in the interests of future generations alone. The poverty cycle cannot be broken as long as women do not have access to primary education. Iranian data show rural adult male literacy to be more closely associated with the schooling of boys than of girls, while a higher adult female literacy improves schooling of both boys and girls about equally (Fattahipour-Fard 1963). Another study shows that, in Senegal, children's regularity of attendance at primary school as well as their aspirations to more education is influenced by the mothers' literacy and level of education (Eliou 1973).

But equally significant is the accumulating evidence that primary education helps increase farm productivity. In India, for example, literate farmers were found to produce higher yields per acre (McGrath 1979). And a recent survey of 18 studies examining the relationship between farmer education and farm efficiency finds average farm productivity to be 7 percent higher among farmers with four years of schooling than among those with none (Lockheed, Jamison and Lau, forthcoming). We, therefore, expect

that literacy similarly will increase productivity among women farmers because they will then have access to agricultural and cooperative training, seek more contact with agricultural extension workers, are more aware of and more open to existing nonformal programs, facilities (e.g., agricultural credit) and strategies that can increase their productivity, and are better able to implement new ideas and to use existing facilities. Graduation from primary school strengthens rural women's linkage with the "modern" world; it is an important step toward becoming "integrated" into rural development.

Thus far we have examined access to primary education among rural women as a means of improving their options within the rural context; we must also examine its relevance for options outside the rural context. Primary school education will also provide rural women with the option of migration to urban areas since there is considerable evidence that formal education is related to higher rural-to-urban migration rates (Mangum 1977). However, this relationship is stronger in areas where women are less widely and actively in agriculture, as is more often true in some Latin American countries and the Near East than in Africa (Derryck 1978). To the extent that women's increased access to formal education is not accompanied by increased access to agricultural training, rural women's formal education may lead to their migration to the cities. If, however, rural women's primary school graduation were followed up by agricultural training, many women would become productive farmers instead of seeking an uncertain future in the cities.

In some rural areas, however, the available agricultural land is limited and of poor quality and cannot absorb everybody's labor even at a subsistence level, regardless of economically feasible improvements. In

these cases, it is important for rural women to have the option of migration to urban areas instead of having to stay in totally unproductive farms abandoned by men. In these cases, primary school education opens avenues to valuable vocational training programs. Increasing urbanization, especially in Africa, is an inevitable reality and rural women must have formal elementary school education as a basic skill aiding them in their rural-to-urban transition (Boserup 1970).

Finally, primary school education is a basic prerequisite for women's access to higher education and thus to upward social mobility. Even if only a handful of rural girls have the opportunity to continue their education, they should not be denied this option because, for some reason, they were not able to complete primary school.

## II. Obstacles to Rural Women's Attending and Completing Elementary Education

The obstacles to rural women's access to elementary education can be grouped in the following categories: (1) competing household and child-care tasks and responsibilities; (2) competing involvement in productive economic activities; (3) parents', and especially fathers', negative attitudes toward daughters' education; (4) parents' limited financial and educational resources; (5) shortage of schools; (6) shortage of women elementary school teachers combined with male teachers' negative attitudes toward women's education and ability to learn; (7) dropping out of school because of pregnancy or marriage; (8) poor school performance and dropping out of school because of malnutrition and chronic infections; and (9) educational sex-segregation.

Competing household and childcare tasks and responsibilities. In most



developing nations, young girls begin to have household and childcare tasks and responsibilities at a very early age, often when they are 5-6 years old. In the urban slums and the rural areas of the Third World this situation is illustrated by the familiar sight of a six-year-old girl carrying a baby in her arms and another child trailing behind her. The mother role is thrust upon girls from childhood on and it continues throughout life. The absence of alternative roles surely increases prevailing fertility rates.

Time budget studies conducted in rural areas of several developing countries show clearly how young girls have to spend much more time in household and childcare tasks than boys and are, thus, less able than boys to attend school and to do their homework. In rural Java, for example, girls 6-8 years old spend 1.7 hours per day in childcare while boys of the same age spend 1.2 hours. Girls 9-11 years old spend 1.9 hours per day doing household tasks while boys of the same age spend only 0.9 hours and more hours in school than girls (3.5 hours instead of 2.9 hours spent in school by girls). In rural Nepal, girls 6-8 years old spend over eight times more hours in childcare than boys of the same age and one-fifth the number of hours in school (Nag, et al. 1978). In rural Peru daughters are much more likely than sons to help with cooking and washing and, above age 10, to substitute for mothers in the preparation of meals (Deere 1978). The same trend has been found in rural Yemen (Myntti 1978), rural Bangladesh (Cain 1977), and Botswana (Mueller 1978).

The fact that rural girls, especially older daughters, are given more childcare and housework tasks and responsibilities than boys affects their access to education both directly and indirectly. Girls are not sent to school at all or are withdrawn earlier than boys; they are also

made to miss school in order to stay home and take care of younger siblings and do housework. Days and hours of school missed interfere with their ability to follow lessons and to perform satisfactorily. Thus girls receive bad grades, repeat classes and eventually lose interest in school; and male teachers' negative attitudes about girls' ability to learn are further reinforced. Furthermore, because the childcare and household tasks compete with time (particularly precious daylight hours) available for studying, girls have much less time to do their homework and are thus placed at a disadvantage in school--until at last they follow the path of least resistance and drop out of school.

Competing involvement in productive activities. Children's involvement in different types of productive activities varies considerably by cultural area, country and region. In some countries, boys are much more often involved in productive activities than girls, as has been documented for the village of Char Jopalpur in Bangladesh (Cain 1977) and rural Botswana (Mueller 1978). In other areas such as rural Java, it has been found that boys spend more time than girls in agricultural activities, but girls spend more time than boys in handicrafts, while in rural Nepal, girls over 9 years of age spend more time than boys in agricultural activities (Nag, et al. 1978). Water carrying is often girls' responsibility. In rural Yemen, for example, girls begin carrying water in small containers over their heads from the age of 6, and by the time they are 10, they are responsible for providing the household with water. (Myntti 1978). A survey in Kivu Province, Zaire, shows that boys up to the age of 10 were not at all involved in productive activities while girls 5-9 years old helped with weeding and water carrying (Mitchnik 1972). Where girls have responsibility for time-consuming work earlier

than boys, the boys get an important headstart in primary education. In all cases, girls spend a considerably greater total number of hours than boys in household tasks, childcare, and productive activities combined, which seriously interferes with both school attendance and school performance.

In West Africa, girls are heavily involved from an early age in their mothers' trading activities in addition to childcare and housework and, thus, often lose interest in school since they have little time and opportunity to study. Also the more immediate opportunity to gain some money overshadows any potential long-range gains from education. Because West African rural women traders are very often illiterate, they do not value formal education for their daughters and are not always able themselves to see the link between education and more "modern" western-style commerce which might afford greater success.

Parents' negative attitudes toward daughters' education. In many developing countries, parents feel that it is much more important to educate sons than daughters because sons are expected to support old parents, and daughters are expected to marry and be supported by their husbands (Akuffo 1978; Robertson 1974; Huntington 1975). The lower priority given to daughters' education is further justified by the higher cost of such education because girls attending school are not available to help at home. There is an immediate need for girls as household labor, but boys are valuable as social security; therefore time allocated to education interferes with girls' usefulness while, on the contrary, such time enhances boys' value as social security.

In addition to the perceived lesser functionality of education for girls whose labor is needed at home, parents often hesitate to educate

their daughters because they fear that education will make them disobedient, disrespectful and "bad" daughters and wives no longer abiding by the local traditions (Mbolinyi 1972). This resistance becomes extreme in Muslim countries and regions in which marriageability requires women's virginity, sexual purity, and absence of any contact with men. In such societies, parents see early marriage as the best protection of a girl's good reputation and they are anxious to marry their daughters as soon as possible, thus transferring the responsibility for their sexual and moral conduct to their husbands (Youssef 1976; Myntti 1978).

In general, parents' motivation to educate their daughters remains quite low wherever literate and educated wives are not particularly valued and sought after as partners and wherever women are not perceived to be as economically active as men.

Parents' limited financial and educational resources. As we saw earlier, illiterate mothers seem to contribute to all children's, especially to daughters', illiteracy and poor school performance. But an apparently more significant barrier to rural girls' elementary school attendance is poverty; this is particularly powerful when combined with traditional values downplaying women's education and membership in a low status, disdained ethnic or religious group. In fact, poverty and tradition often coincide since rural and poor people usually uphold traditional values much more faithfully than others. Since girls' formal education is defined as a luxury in the rural context, the poorer the parents, the greater the probability that daughters will have less access to formal education than sons. In rural Malaysia, for example, parents' low socio-economic status represents an important barrier to Chinese (but not as

much to Malay) women's access to formal education while it does not constitute a barrier to Chinese men (Dropout Study 1973). In India the daughters of Harijans and other scheduled castes have less access to literacy and primary education than daughters in other rural families, and within each caste category, increases in the size of parental landholding has twice as great an impact on girls' access to schooling as boys' (Choldin 1971; Joshi and Rao 1964). The greater the ability of parents to pay the fees and to buy the books and clothes necessary for the education of all children, the greater the daughters' chances to receive a formal education. The more, however, parents are compelled to set financial priorities, the more likely boys are to be educated at the expense of girls. Parents feel that investing in a son's education will have higher economic returns than investing in a daughter's education (Court and Chai 1974). Furthermore, educated sons are expected to be better able to help with dowry and other expenses connected with daughters. Indeed, a study in Nepal showed that the more numerous the daughters in the family the more schooling the father wanted for his sons; presumably the sons would thus be better able to help with the financial "burden" of many daughters (Lockheed and Jamison 1979).

Shortage of schools. While shortage of schools in developing countries is a definite barrier to all children's school attendance, it constitutes an even greater barrier to poor, rural children and especially, to poor, rural girls. In Afghanistan, for example, where schools are sex-segregated from grades one to 12, only 12.4 percent of village schools (with 3-4 elementary grades) and primary schools are for girls (Hunt 1978). Urban slum areas and rural areas have the greatest shortage of schools

and rural girls suffer the most from this shortage because:

1. when schools are available only in other villages, and attendance requires walking long distances, parents are reluctant to send their daughters to schools, particularly where girls' sexual purity is carefully safeguarded (Bowman and Anderson 1978:69);
2. rural girls whose parents are poor are more handicapped by the shortage of schools than girls whose parents have sufficient resources to send her to school in another village or town;
3. in developing countries with sex-segregated primary schools, the shortage of girls' schools is disproportionately greater, particularly in rural areas. But even where the rural schools are co-educational, male teachers most often accommodate the boys if space is limited.

In addition to the shortage of school buildings and space, the almost complete lack of textbooks and educational material in rural schools affects negatively boys' and girls' interest in school as well as learning (Heyneman and Jamison 1980). At least some of the educational wastage among rural boys and girls is attributable to low motivation created by the lack of textbooks and other written material.

Shortage of women elementary school teachers. Although elementary school teaching is almost universally a "feminine" occupation, women are seldom teachers in the very poorest countries or in the poorest regions of other countries. Thus only 2 percent of primary school teachers are women in Bangladesh, 18 percent in Afghanistan, 21 percent in Morocco and 28 percent in Liberia, but in Jamaica 79 percent of teachers are women, in Nicaragua, 79 percent, in Philippines, 78 percent and in Mexico, 61 percent (Joshi and Rao 1964). Women elementary school teachers are disproportionately concentrated in cities. For example, 50 percent of elementary school teachers in Lagos are women, only 15 percent are women in Muslim North Nigeria and 17 percent in East Nigeria (Calcott). And in Afghanistan,

only 1.4 percent of teachers in village schools are women. Women teachers often prefer to stay unemployed in urban areas rather than accept a job in a rural school because of lack of housing, low salaries and the difficult life for young single women in a rural area. This is particularly true in Muslim societies in which the honor code makes it very difficult for a single woman to live alone in a small rural community. In Pakistan, for example, it has been reported that women teachers' absenteeism is very high and sometimes they remain on the payroll without ever going to the assigned location, so that the school exists only in official records (The Fifth Five Year Plan 1975:para. 11).

The importance of women elementary school teachers is highlighted by UNESCO data showing that the percentage of elementary school children who are female increases proportionately with the percentage of elementary school teachers who are women (UNESCO 1975). It is, of course, possible that this relationship is due to the fact that the same factors are responsible for girls' higher access to primary education and for women's choice of elementary school teaching as a career. But it is more plausible that the presence of women teachers encourages parents to send their daughters to school because it establishes the potential economic usefulness and social status of women's education and that women teachers hold less negative attitudes toward girl pupils than men teachers (Fakhouri 1972; Fattahipour-Fard 1963). In many rural Muslim areas (for example, rural Bangladesh) only women teachers are permitted to teach girls; therefore the very low percentage (2 percent) of women primary school teachers must increase drastically if rural girls are to gain access to primary school education.

The beneficial effect of women primary teachers on girls' educational

chances may be also due to the possibility that they discriminate against girls less than male teachers. Possibly they do not have uniformly low achievement expectations of girl students, and they may not structure the classroom environment so that the odds of girls' success are low. In Senegal, for example, Wolof girls were placed by the (male) teachers at the back of the classroom from where they could not hear well and could not follow class proceedings. Their scholastic performance was poor, reinforcing their teachers' low expectations. Eventually, they became discouraged and dropped out of school or were sent home by the teachers.

Malnutrition and chronic infections. While malnutrition is often widespread among children in the rural areas of many developing countries, some evidence indicates that it is more widespread among pre-adolescent and adolescent girls than boys (Safilios-Rothschild 1971). A study of malnutrition among children in rural Punjab showed that girls were more often malnourished than boys regardless of their caste. Despite variation in the incidence of malnutrition between caste, within each caste there were three or more malnourished girls for each malnourished boy (Interactions 1972). Furthermore, field studies undertaken by the Indian Council of Medical Research showed that in 1971 girls outnumbered boys four to three among children with Kwashiorkor (Martin 1975). In rural Philippines, it was found that families spent more money on food for boys than for girls, especially in the one to six year old age group (400 and 287 pesos respectively). And in rural Guatemala, a protein supplement improved girls' mental development scores of girls from the poorest families more than boys', since boys tend to be treated preferentially when resources (food or money) are scarce (Engle 1978).



It seems, therefore, that the greater the scarcity of food and financial resources in the Third World's rural areas, the greater the probability that girls will be malnourished and that their mental development may be low. There is considerable research evidence from a number of developing countries that malnutrition affects children's mental development and ability to learn (Smart 1972). Children who were treated for malnutrition when they were toddlers were found to perform 25 percent of a standard deviation below the mean in scholastic achievement at the primary school level (Heyneman and Jamison 1980). Malnourished children have shorter attention spans, display lower stamina, are more apathetic, and cannot concentrate; their hearing as well as their memory may be poor and their cognitive abilities may be impaired (Cravito 1966; Smart 1972). Because malnourished children are apathetic and lack motivation, concentration, and responsiveness, teachers are less responsive to them and interact less with them; the serious repercussions for learning and for staying on in school are evident. In fact, studies from Thailand and Nigeria empirically link malnutrition and ill health to irregular attendance, failure in examinations, and dropping out of school (Brimer and Pauli 1971). Since girls are more often malnourished than boys and spend more time than boys in childcare, housework and agricultural activities, they are more likely to be tired when they are in class and may have great difficulty concentrating, performing well and staying in school.

Furthermore, malnutrition lowers resistance to infectious and parasitic diseases, and parasitic diseases contribute to malnutrition (Smart 1972). Light infections with Ascariasis, for example, diminish children's ability to absorb nutrients so that 3 percent of ingested calories are lost and heavy infections can lead to non-utilization of

25 percent of ingested calories (Latham, Latham and Basta 1977). Malnourished children are found to suffer from chronic infections such as ear, eye, skin and upper respiratory diseases (colds, bronchitis, asthma) which further lower their stamina and impair their ability to attend school, to concentrate, and to perform at a satisfactory level.<sup>1</sup>

Educational sex-segregation. The existence of sex-segregation at the primary school level more clearly than at the secondary school level indicates the prevalence of traditional sex role stereotypes and women's inferior status. We could, therefore, hypothesize that sex-segregation represents an additional barrier to women's access to formal education. But insufficient data are available from rural areas of Third World to test this hypothesis.

### III. Factors Facilitating Rural Girls' Access to Formal Education

No brothers in the family. When there are only daughters, parents may often choose the most intelligent girl (as a substitute for the missing son), educate her as much as it is possible and have high aspirations for her. In the absence of sons, parents cannot give priority to their education and daughters have a better probability of attending school (Stein 1975).

Visible disabilities. Girls with visible disabilities, congenital or acquired in childhood, are encouraged, if not obliged, to get educated by their parents. In an epidemiological study of chronic disabilities including the study of attitudes toward the disabled, in rural Orissa and Maharashtra in India, it was found that the visible disability was viewed as a clear obstacle to the girls' ability to marry. They were, therefore, educated in order to obtain the necessary skills for survival. In this

situation, if the school was far away or if the girl could not walk, the girl's father was willing to carry her back and forth to school. It is interesting to note that boys' disabilities did not necessarily increase their chances of schooling; on the contrary, in some cases they became an additional obstacle.<sup>2</sup>

High socio-economic status. As discussed above, the higher the parents' socio-economic status, the greater the probability that rural girls will complete primary school.

Women's literacy and education enhances marriageability. The assertion made by the Indian National Committee on the Status of Women that "the strongest social support for girls' education comes from its increasing demand in the marriage market" is definitely confirmed with regard to primary school education (National Committee, India 1975). Literate women and women with a primary school education are by now more desirable brides than illiterate ones even in the rural areas of most developing countries such as India and Nigeria (the Muslim north) (Jacobson 1976; Peshkin 1973). At levels above elementary education, the evidence becomes mixed because the desirability of more educated wives is tempered by men's fears that well educated women will be unwilling to accept a subordinate position vis-à-vis their husbands.

The presence of female role models. As stated above, the presence of women teachers is usually related with girls' higher access to formal education. A similar but less strong relationship between the presence of women family planning motivators or health auxiliaries and access to schooling is suggested by a nutritional study carried out in several Guatemalan villages. The study reports that girls' mental development scores were improved partly because they were given a protein supplement

and partly because the model provided by the female nurses, nutritionists and program assistants engaged in the study provided girls with occupational role models. Improved mental development scores help the girls do better in school and their chances of staying longer in school improve, since usually only the smart girls are encouraged by teachers and parents alike (Engle 1978; Birdsall and McGreevey 1978).

#### IV. Policy Recommendations

Some of the policies which would help increase rural girls' access to primary school education are those policies increasing access of low income boys and girls to primary education. This is because sex differentials in access to primary education are greatest in lower income strata and in poorer districts. Such policies include:

1. Compulsory primary school education combined with self-help rural development projects to build and maintain schools utilizing local material and know-how. The community should also be responsible for providing housing for teachers, especially women teachers, thus partially subsidizing their expenses in order to attract and keep them. The teacher and the students, with the help of agricultural extension, could develop agricultural projects (such as small gardens) which could help support the school while providing the rural boys and girls with valuable agricultural information.

Compulsory primary school education in a poor country faces barriers of policy adoption and implementation due to prohibitive costs. Involvement and material contributions by local communities increases the probability that a policy of compulsory primary

school education will, in fact, be implemented. Such an approach also provides schools in the students' own villages. Thus students will not have to walk often long distances, a factor increasing girls' rate of withdrawal from school.

No systematic evaluation data are available on whether compulsory primary school education actually improves rural girls' access to primary education.

2. The compulsory primary education should be strengthened by:
  - a. giving teachers and students free textbooks and other educational material; this will dramatically improve the amount of knowledge available to students and increase their motivation to stay in school.
  - b. offering students a food program with breakfast and lunch will reach the most frequently malnourished group, the rural school-age girls.
  - c. providing basic education in hygiene, inoculations against infectious diseases, parasitic treatments, antibiotics, and vitamin supplements. The realistic implementation of this policy requires that teachers (especially those to serve in rural and low-income urban areas) receive some basic education in hygiene and health as well as some practical health skills such as being able to inoculate the students. Alternatively, where auxiliary health workers are already present at the village level, these workers should undertake this role within the schools.
3. Policies and programs helping to decrease the excessive time spent by rural women in household work will reduce the part of

those burdens falling on children, especially daughters. Such assistance includes providing rural communities with accessible water so that girls need not walk long distances to provide the household with water. Other aids would involve the development of appropriate technology which is cheap and easy to use to relieve women's and girl's housework burdens. Also, community development workers and rural mothers should devise rotating systems of childcare in which women exchange childcare services for farm labor, thus freeing their daughters from the constraining "child-mother" role. Such policies would diminish children's (and disproportionately, girls') immediate value as labor at home, making primary education a more viable and rational alternative.<sup>3</sup>

4. The calendar of rural primary schools could be adapted to cropping patterns (with vacations in periods of intensive labor demand) to maximize rural boys' and girls' school attendance.
5. Where the number of trained teachers is insufficient, trained teachers can be supplemented by locally recruited "assistant teachers" who, with less formal qualifications and lower salaries, can make the implementation of universal primary education possible. Some rural mothers or young rural women should be employed as "assistant teachers," to provide female role models in schools until more women teachers are educated and can be persuaded to accept rural posts. Such local "assistant teachers" often have better rapport with students and parents than teachers who have come from other areas, and may also make teachers from urban areas feel more comfortable about coming to

rural areas.

In addition to the general policies directed to all low-income children listed above, some additional policies directed specifically toward rural girls are needed in order to increase the probability that all policies benefit girls equally with boys. Such more direct policies are needed in order to overcome traditional sex role beliefs and resistance toward women's education still prevalent where women have sharply unequal educational chances in comparison to men. Such policies would include:

6. The intensification of women's training as primary school teachers through a variety of governmental and international aid programs providing training fellowships and subsidized housing to low-income (particularly rural) women willing to work for a number of years in rural areas. One such successful experiment took place in Nepal where, in 1968, girls represented 13 percent of the students enrolled in primary schools. The UNESCO project sought to train women primary school teachers, especially women from rural areas. It encouraged and facilitated such training by providing hostel accommodations, and improved the training curricula by including development-related subjects such as health, nutrition, sanitation, family planning, and childcare. The recruiting of eligible rural girls proved to be difficult due to the scarcity of women with the formal educational requirements, so the pool of potential candidates was enlarged by providing upgrading courses to rural girls with insufficient educational qualifications. A mid-term evaluation undertaken in 1973 showed a significant improvement in female enrollment. In

the districts covered by the program, girls constituted 24 percent of all primary school students, which represents a marked improvement (in one district the female proportion increased 19 percent). It is also important to note that rural parents viewed the presence of women teachers favorably and felt that these teachers would do much to encourage more students to enroll (UNESCO 1978).

7. In developing countries with sex-segregated primary schools, governments and international aid programs should build girls' primary schools in rural areas and make adequate provisions to staff them with women teachers. Alternatively, governmental and international organizations could encourage the building of girls' schools in rural areas through community self-help projects by providing incentives such as food-for-work. Efforts should also be made to maintain educational parity between boys' and girls' schools in terms of curricula, standards, teachers' qualifications, financial allocations, etc. In developing countries with co-educational primary schools, it should be made mandatory to enroll boys and girls in equal numbers.
8. Since it is very difficult to change the sex role stereotypes and teachers' biased beliefs so as to equalize their treatment of boys and girls in the classroom, it is desirable to change teachers' motivational structure and classroom behavior by manipulating rewards. In order to motivate primary school teachers to pay equal attention to and take equal interest in girls as in boys, their performance and promotions could include criteria reflecting percentage of girls who stay on and graduate from



primary school. Also, governments as well as national and international women's organizations could establish prizes for the most successful male and female primary school teachers.

9. Compulsory elementary education in rural areas should be accompanied by agricultural training equally accessible to boys and girls, with the admission of equal numbers of boys and girls strictly enforced. In these agricultural training programs, girls should not be tracked to separate, sex-appropriate programs; they should learn exactly the same skills as boys.
10. Governments and international aid programs should intensify the training of rural female paraprofessional workers such as agricultural extension workers, community health auxiliaries, or multi-purpose community workers. The training of such female paraprofessionals should be subsidized by means of training grants and subsidized shelter in exchange for several years of service in rural areas. The presence of these women workers in rural areas in increasing rural girls' access to education is of considerable importance since they establish, in parents' as well as in girls' minds, the economic and social status relevance and pay-off of girls' education.
11. Primary school textbooks should be thoroughly revised (or new ones written) so that they are free of blatantly sexist, demeaning statements about women and so that they render education relevant and meaningful to rural girls. Women should be portrayed as farmers, traders, teachers, nurses, agricultural extension workers, health auxiliaries, etc. Special competitions and awards for the best non-sexist textbooks could increase

authors' motivation and help produce the appropriate textbooks. In providing free textbooks to primary school teachers and students, governments and international aid programs are in a strong position to provide only nonsexist, high quality textbooks.

12. In view of the crucial importance of the mothers' education for their children's, and particularly their daughters', access to primary education as well as nutritional status, where illiteracy rates among adult women are high, literacy programs for illiterate mothers are greatly needed. Through literacy, mothers can become more interested in and more supportive of their daughters' education so that girls are sent to school and permitted to stay in school.

## FOOTNOTES

<sup>1</sup>Unpublished data from an epidemiological study on chronic disability conducted by WHO in Orissa and Maharashtra in India and throughout Indonesia in 1978-79.

<sup>2</sup>Ibid.

<sup>3</sup>The underlying assumption that girls' freed time will be spent in school is, however, untested. In poor households, it is entirely possible that a competing alternative is involvement in income-generating activities.

## REFERENCES

- Akuffo, F. O. "High Wastage in Women's Education: The Case of the Rural Elementary School Girls." Paper presented at the Conference on Women and Development, Legon, Ghana, September 3-8, 1978.
- Asubramanian, K. Venkat. Economic Aspects of Growth in Primary Education in Tamil Nadu. University of Baroda, 1977.
- Birdsall, Nancy and William P. McGreevey. "The Second Sex in the Third World: Is Female Poverty a Developmental Issue." Paper presented at the International Center for Research on Women, Policy Roundtable, Washington, D.C., June 21, 1978.
- Boserup, Ester. Women's Role in Economic Development. New York: St. Martin's Press, 1975.
- Bowman, Mary Jean and C. Arnold Anderson. The Participation of Women in Education in the Third World. Report prepared for the Ford Foundation, October 1978. (mimeo)
- Brimer, M. A. and L. Pauli. Wastage in Education: A World Problem. UNESCO, Studies and Surveys in Comparative Education, 1971.
- Cain, Mead T. "The Economic Activities of Children in a Village in Bangladesh," Population and Development Review, 3, 3 (September 1977).
- Calcott, D. Some Trends and Problems of Education of Women in Nigeria.
- Choldin, Earl R. "Educational and Occupational Mobility of the Scheduled Castes of India." Masters Paper, University of Chicago, 1971.
- Court, David and Dharam Ghai. "Education, Society and Development," 1-26 in D. Court and D. Ghai (eds.) Education, Society and Development. New Perspectives from Kenya. Nairobi: Oxford University Press, 1974.
- Cravioto, J., et al. "Nutrition, Growth and Neuro-Integrative Development: An Experimental and Ecological Study," Pediatrics, 38 (1966, 319-372).
- Deere, Carmen Diana. "Intra-Familial Labor Deployment and the Formation of Peasant Household Income: A Case Study of the Peruvian Sierra." Paper presented at the International Center for Research on Women Conference on "Women in Poverty: What Do We Know?", Washington, D.C., May 1-2, 1978.
- Derryck, Vivian Lowery. "The Comparative Functionality of Formal and Non-Formal Education for Women: Report on Phase II." Washington, D.C. AID/WID, July 17, 1978.

- Dropout Study. Malaysia, Ministry of Education, 1973.
- Dubbeldam, L. F. B. The Primary School and the Community in Mwanza District, Tanzania. Groningen, The Netherlands: Wolters-Noordhoff Publishing, 1970.
- Eliou, Marie. "Scolarisation et promotion feminine en Afrique," International Review of Education, 19, 1 (1973), 30-46.
- Engle, Patricia. "Sex Differences in Growth and Mental Development in Rural Guatemala." Paper presented at the International Center for Research on Women Workshop on "Women in Poverty: What Do We Know?", Washington, D.C., May 1-2, 1978.
- Fakhouri, Hani. Kafr-El-Elow: An Egyptian Village in Transition. New York: Holt, Rinehart, Winston, 1972.
- Fattahipour-Fard, Ahmad. Educational Diffusion and the Modernisation of an Ancient Civilization: Iran. University of Chicago, Ph.D. Dissertation, 1963.
- The Fifth Five-Year Plan, Islamabad, Pakistan, para. 11, 1975.
- Fredricksen, Birger. "Universal Primary Education in Developing Countries: A Statistical Review," Prospects, 8, 3 (1978), 363-374.
- Heller, Peter and William Drake. "Malnutrition, Child Morbidity and the Family Decision Process," Economic Development and Cultural Change.
- Heyneman, Stephen P. and Jean T. Jamison. "Textbook Availability and Other Determinants of Student Learning in Uganda," Comparative Education Review, forthcoming June 1980.
- Hunt, Pamela A. "Women and the Development Process in Afghanistan." Contract AID/NEC-1487 Afghanistan, Project: 298-035, July 1978.
- Huntington, Sullen. "Issues in Woman's Role in Economic Development," Journal of Marriage and the Family, 37, 4 (November 1975), 1001-1012.
- Interactions of Nutrition and Infection, Narangwal, Ludhiana, Punjab: Rural Health Research Centre, Final Report to I.C.M.R., April 1972.
- Jacobson, Doranne. "Indian Women in the Process of Development," Journal of International Affairs, 30, 2 (1976), 211-243.
- \_\_\_\_\_. "The Women of North and Central India: Goddesses and Wives," in D. Jacobson and S. S. Wadley (eds.) Women in India: Two Perspectives. New Delhi: Manohar, 1977.
- Joshi, P. C. and M. R. Rao. "Social and Economic Factors in Literacy and Education in Rural India," Economic Weekly, January 4, 1964.

- Karpart, Kamal H. The Jecikundu: Rural Migration and Urbanisation. Cambridge University Press, 1976.
- Latham, L., M. Latham, and S. S. Basta. The Nutritional and Economic Implications of Ascaris Infection in Kenya. World Bank Staff Working Paper, No. 271, September 1977.
- Lockheed, Marlaine E. and Dean T. Jamison. "Some Determinants of School Participation in the Terai Region of Nepal." The World Bank, September 1979. (mimeo)
- Lockheed, Marlaine E., Dean T. Jamison, and Laurence J. Lau. "Farmer Education and Farm Efficiency: A Survey," Economic Development and Cultural Change. Forthcoming.
- Mangum, Garth L. A Review of the Economic and Social Impacts of Education at the Micro Level Upon the Process of Economic Development. Washington, D.C.: AID, July 30, 1977.
- Martin, Edwin M. "Nutrition Problems of the World." Address to the Johns Hopkins University Centennial Symposium on Nutrition and Public Health, November 11, 1975.
- Mbolinyi, Marjorie J. Barriers, to the Full Participation of Women in Socialist Transformation of Tanzania. 1972. (mimeo)
- McGrath, Patricia L. The Unfinished Assignment: Equal Education for Women. Washington, D.C.: Worldwatch Institute, Worldwatch Paper 7, July 1979.
- Mitchnik, David A. "The Role of Women in Rural Development in the Qaire." OXFAM, July 1972.
- Mueller, Eva. "Determinants of the Intra-Household Allocation of Time: Theory, Conceptualization and Measurement." Paper presented at the Workshop on Women's Roles and Demographic Change Research Program, International Labour Office, Geneva, November 16-18, 1978.
- Myntti, Cynthia. "Women in Rural Yemen." USAID Sana'a, November 1978.
- Nag, Mond, et al. "An Anthropological Approach to the Study of the Economic Value of Children in Java and Nepal," Current Anthropology, 19, 2 (1978), 293-306.
- National Committee on the Status of Women. Status of Women in India. New Delhi: Allied, 1975.
- Navera, Emeline. "Home Investments in Children in Rural Philippines." Paper presented at the International Center for Research on Women Workshop on "Women in Poverty: What Do We Know?", Belmont Conference Center, Elkridge, Md., April 30-May 2, 1978.

- Peshkin, Alan. "Social Change in Northern Nigeria: The Acceptance of Western Education," in M. G. Damachi and H. D. Seibel (eds.) Social Change and Economic Development in Nigeria. New York: Praeger, 1973.
- Robertson, Claire. "Economic Woman in Africa," Journal of Modern African Studies, 21, 4 (1974), 657-664.
- Safilios-Rothschild, Constantina. Children and Adolescents in Slums and Shanty Towns in Developing Countries. UNICEF Executive Board, March 1971 (E/ICEF/L.1277 and E/ICEF/L/Add).
- Smart, K. F. (ed.). Malnutrition and Endemic Diseases: Their Effects on Education in the Developing Countries. Hamburg: UNESCO Institute for Education, 1972.
- Status of Women in India. A Synopsis of the Report of the National Committee on the Status of Women (1971-74), New Delhi: The Indian Council of Social Science Research, 1975, Appendix, p. 155.
- Stein, William W. "Modernization and Inequality in Vicos, Peru: An Examination of the 'Ignorance' of Women." 1975. (mimeo)
- Tirtha, Rajit. "Areal Patterns of Literacy in India," Manpower Journal, 1, 3-4 (1965).
- UN Commission on the Status of Women and Family Planning.
- UN Statistical Yearbook. 1976.
- UN, ICOSOC. Progress Made Towards Achieving the Goals of the World Population Plan of Action. E/CN.9/36, January 5, 1979.
- UNESCO. Development of School Enrollment: World and Regional Statistical Trends and Projections, 1960-2000. International Conference on Education, XXVth Session (Geneva, 1977), Paris: ED/BIE/CONFIDED/36/4 Ref. 2, pp. 53-56.
- UNESCO. "Perspectives of Educational Development in Asia." 1965. (mimeo)
- UNESCO Statistical Yearbook, 1977. Paris: UNESCO, 1978.
- UNESCO. Women, Equality, Education. Paris: UNESCO, 1978.
- U.S. Agency for International Development. Project Paper: Nonformal Education for Women. 608-0139, Morocco, Annex D, Section A, Washington, D.C., non-dated (1978).
- Youssef, Nadia H. "Education and Female Modernism in the Muslim World," Journal of International Affairs, 30, 2 (1976), 191-205.
- Van Allen, Judith. "Aba Riots or Igbo Women's War? Ideology, Stratification and the Invisibility of Women," 59-85 in Nancy J. Hafkin and Edna B. Bay (eds.) Women in Africa. Stanford, Calif.: Stanford University Press, 1976.

Chapter Six

JOB FOR WOMEN IN RURAL INDUSTRY AND SERVICES

by

Ruth B. Dixon, Ph.D.



Conditions intensifying the need in almost every developing country for greatly expanded nonagricultural employment in rural areas are, by now, familiar: increasing landlessness due to loss of tenancy rights, land foreclosures, and other factors; declines in average size of farm holdings; ceilings on the extension of arable land and on its productivity; low agricultural wages and displacement of labor by mechanization; high rates of natural increase in rural populations; limits on the capacity of already overcrowded cities to absorb landless migrants from the countryside, and so on. Although the redistribution of land into smaller, individually owned parcels or larger collective farms offers a partial solution to rural unemployment in areas where land ownership remains highly concentrated, diversification of the rural economy everywhere requires expansion of the nonagricultural sector to provide year-round or seasonal employment for landless workers and small farmers or collectives.

Less familiar, however, are the arguments for expanding nonagricultural employment for rural women. Yet the need is undoubtedly greater. Because women are less likely than men to own land or to have legal rights to its use, they are especially vulnerable to eviction at the time of divorce, desertion, or widowhood. Female agricultural laborers earn less than males and are more likely to be unemployed. As men gain control over new technology and other agricultural inputs, the widening productivity gap between the sexes frequently undermines women's earning capacity. The declining size of holdings increases the pressure on women in farm families to supplement agricultural incomes with nonfarm activities. Higher survival rates of children intensify

household demands for investments in children (food, school fees, marriage exchanges) that are of special concern to women. Opportunities for urban employment for female migrants in many countries are even more limited than they are for males; thus, many remain in the villages without regular remittances from their absent menfolk. Even land redistribution schemes bypass them when title is granted to the male household head. On collective farms, women may not be allowed to perform certain agricultural tasks carrying higher wages or work-points. All of these arguments, and more, point to the need for a policy of rural development and agrarian reform that pays particular attention to expanding income-generating employment for rural women not only within, but outside, the agricultural sector.

Rural women everywhere engage in economic production; the question here is whether their labor generates income in cash, kind, or trade over which they have some control. A growing body of literature attests to the ingenuity and diversity of women's productive activities, particularly in the informal sectors of the economy: making 'ancakes at home for sale in the market, fattening cattle, husking a neighbor's paddy for a share of the rice, weaving rugs or mats, lending out small quantities of grain at interest. The central argument of this paper is that development programs will succeed in reaching the poor more directly if they design support systems to (1) raise the productivity of labor in which rural women currently engage; (2) transform subsistence activities into income-generating activities; and (3) create new employment opportunities, particularly outside of agriculture. A number of primarily grass-roots strategies for doing so, viewed in the context of

more sweeping macroeconomic policies to encourage rural diversification, are suggested in the sections that follow.

### I. The Economically Active Female Population: A Statistical Portrait

A 55-year-old Tamang woman from the Nuwakot District of Nepal, northwest of the Kathmandu Valley, tells her life story to an anthropologist.<sup>1</sup> Having been forced as a young woman into corvée labor for the "Rana Prime Ministers" who required her to carry mangoes on her back from their orchards near her house to the Rana palaces in Kathmandu (a week-long round trip by foot), and having been married off by her parents to a very poor man, she describes how she parlayed a few small coins into enough money to buy land.

I've never gone trading salt as far as Kyirong [in Tibet], but I've gone as far as Sertung [near the Nepal-Tibet border]. I bought thread for one anna [fraction of a rupee] a skein and wove a man's turban. For that turban I got five mohars [ $\frac{1}{2}$  rupee each, or  $2\frac{1}{2}$  rupees]. I left one mohar with my mother, then I took the other two rupees to Sertung. On the way to Sertung I found corn at three pathis [about one gallon] for a mohar. So I bought 12 pathis and came back home within nine days. I loaned out the nine pathis of corn in bidiya [a type of loan on which the interest is paid in grain each year]. Then later I collected on those loans and took the grain to Kathmandu where I sold it for 20 rupees. Then with that money and a little more I accumulated, I bought the [unirrigated] land my middle son is now living on for 25 rupees. . . . From the thread I bought for an anna a skein I made a turban which I sold for  $2\frac{1}{2}$  rupees. Then I turned those  $2\frac{1}{2}$  rupees into 20 with my corn dealings. From that I bought 25 rupees of land. But what a struggle it was for me to put together those 25 rupees.

The difficulty of measuring and classifying economic activity, obvious enough in industrialized economies, is clearly compounded in the rural sectors of developing countries. Even the counting of persons as employed or unemployed, yet alone estimating the degree of

their underemployment, is problematic (Brannon and Jesse 1977; Bruton 1979). When we consider that women are more likely than men to work without pay, to engage in marginal and less viable types of activities in the informal economy, and to shift seasonally or even daily between and among subsistence and market activities, the problems become overwhelming.

The story of the Tamang women is typical of the ingenuity and complexity of economic roles that are so central to women's survival yet so defiant of formal measurement. Weaving a single turban for sale, she would not be defined as economically active; weaving many, she is an "own-account" worker in manufacturing. When she buys corn, lends it out at interest, then sells the grain, she is a sales worker. When she buys land and works it, she is an own-account worker in agriculture or an unpaid family laborer. Perhaps she is not even classified in the labor force if the farm produce is consumed rather than sold, since census takers distinguish between subsistence and market work in defining persons as economically active (Boulding et al. 1976: 295-335). Not only do official definitions of economic activity exclude much of women's production from consideration (their value-added contribution to crop processing or food production, for example), but census takers, male household heads, and women alike tend to underreport and undervalue their productive roles (Deere 1977a).

Censuses, with all their faults, nevertheless remain our primary sources of comparative statistics on labor force participation. Table 1 includes data from 56 developing countries on the percentages of all persons classified as "economically active" who are female, both by

Table 1. Percentage of the Economically Active Population that is Female,  
by Employment Status and Occupation (where known), 56 Countries.

Region/ country/year	Employment status			Occupation (excl. family workers)							
	Total economically active	Employee	Self- employed	Unpaid family worker	Econ. active excluding unpaid family	Agriculture	Nonagric'l production	Sales	Service	Admin/mgr/ clerical	Professional/ technical
<u>Sub-Saharan Africa (10)</u>											
Botswana 64	50	23	55	33	50	52	9	19	57	14	39
Tanzania 67	48	9	53	46	48	52	6	10	18	9	24
Ghana 70	44	12	53	67	41	36	30	88	23	14	24
Sierra Leone 63	36	6	13	65	11	10	6	42	6	14	27
Liberia 62	36	6	18	76	14 <sup>a</sup>	16 <sup>a</sup>	3 <sup>a</sup>	33 <sup>a</sup>	13 <sup>a</sup>	12 <sup>a</sup>	27 <sup>a</sup>
South Africa 70	33	-	-	-	33 <sup>a</sup>	29 <sup>a</sup>	7 <sup>a</sup>	27 <sup>a</sup>	67 <sup>a</sup>	42 <sup>a</sup>	46 <sup>a</sup>
Zambia 69	30	-	-	-	30 <sup>a</sup>	12 <sup>a</sup>	4 <sup>a</sup>	14 <sup>a</sup>	10 <sup>a</sup>	19 <sup>a</sup>	21 <sup>a</sup>
Mozambique 70	26	6	33	63	-	-	-	-	-	-	-
Nigeria 63	24	-	-	-	24 <sup>a</sup>	10 <sup>a</sup>	23 <sup>a</sup>	60 <sup>a</sup>	26 <sup>a</sup>	9 <sup>a</sup>	15 <sup>a</sup>
Mauritius 72	20	21	14	46	20	23	6	13	52	19	37
Median	34	9	43	63	32	23	6	27	23	14	27
<u>North Africa/Middle East (10)</u>											
Turkey 65	38	10	4	73	6	5 <sup>b</sup>	9 <sup>a</sup>	1 <sup>a</sup>	7 <sup>a</sup>	13	21
Tunisia 75	20	13 <sup>c</sup>	20 <sup>c</sup>	55 <sup>c</sup>	16	6 <sup>b</sup>	24 <sup>a</sup>	3 <sup>a</sup>	28 <sup>a</sup>	19 <sup>a</sup>	22 <sup>a</sup>
Morocco 71	15	14 <sup>c</sup>	6 <sup>c</sup>	21 <sup>c</sup>	15 <sup>a</sup>	11 <sup>a</sup>	15 <sup>a</sup>	4 <sup>a</sup>	38 <sup>a</sup>	23 <sup>a</sup>	15 <sup>a</sup>
Kuwait 75	12	13	0	1	12	0 <sup>b</sup>	0	1	20	10	34
Syria 75	11	13	4	62	8	9 <sup>b</sup>	5 <sup>a</sup>	1 <sup>a</sup>	10 <sup>a</sup>	9 <sup>a</sup>	23 <sup>a</sup>
Iran 72	10	11	7	17	9	2 <sup>a</sup>	22 <sup>a</sup>	1 <sup>a</sup>	15 <sup>a</sup>	10 <sup>a</sup>	26 <sup>a</sup>
Libya 73	7	6	1	60	4	2 <sup>b</sup>	1 <sup>a</sup>	1 <sup>a</sup>	10 <sup>a</sup>	4 <sup>a</sup>	19 <sup>a</sup>
Jordan 61	6	6	4	16	5	5 <sup>a</sup>	4 <sup>a</sup>	1 <sup>a</sup>	11 <sup>a</sup>	5 <sup>a</sup>	30 <sup>u</sup>
Egypt 66	6	8	3	11	7	3	3	6	14	9	24
Algeria 66	4	5	2	9	4	1	4	1	1	11	21
Median	10	10	4	37	8	4	4	1	14	10	22
<u>South/Southeast Asia (11)</u>											
Thailand 76	38	32	24	66	27	20	30	31	46	27	44
Rep. Korea 76	38	29	27	69	28	21	29	33	56	21	24
Hong Kong 76	35	37	16	63	34	20	37	20	33	36	41
Philippines 75	34	39	22	45	31	10	32	59	67	42	59
Indonesia 71	33	28 <sup>c</sup>	24 <sup>c</sup>	52 <sup>c</sup>	27	32 <sup>a</sup>	27 <sup>a</sup>	44 <sup>a</sup>	43 <sup>a</sup>	10 <sup>a</sup>	32 <sup>a</sup>
Malaysia 70	32	24 <sup>c</sup>	63 <sup>c</sup>	63 <sup>c</sup>	32	20 <sup>b</sup>	16 <sup>a</sup>	18 <sup>a</sup>	32 <sup>a</sup>	22 <sup>a</sup>	34 <sup>a</sup>

Table 1 (continued)

Region/ country/year	Employment status				Occupation (excl. family workers)						
	Total economically active	Employee	Self- employed	Unpaid family worker	Econ. active excluding unpaid family	Agriculture	Nonagric'l production	Sales	Service	Admin/mgr/ clerical	Professional/ technical
<b>South/Southeast Asia (continued)</b>											
Singapore 76	31	33	14	55	31	12	26	20	45	44	38
Nepal 71	29	11	30	49	28	30	9	1	16	4	8
Sri Lanka 71	26	26	9	47	25	26	15	6	23	30	41
India 71	17	11	10	21	17	20	8	6	17	4	18
Pakistan 61 <sup>d</sup>	12	5	5	35	5	5	6	2	15	1	10
Median	32	28	22	52	28	20	26	20	33	22	34
<b>Central/South America (25)</b>											
Haiti 71	47	43	34	64	-	-	-	-	-	-	-
Jamaica 61	40	39	32	42	39 <sup>a</sup>	15 <sup>a</sup>	28 <sup>a</sup>	65 <sup>a</sup>	86 <sup>a</sup>	40 <sup>a</sup>	64 <sup>a</sup>
Barbados 70	39	-	-	-	39 <sup>a</sup>	37 <sup>a</sup>	17 <sup>a</sup>	58 <sup>a</sup>	65 <sup>a</sup>	52 <sup>a</sup>	40 <sup>a</sup>
Puerto Rico 77	33	35	12	70	32	3	22	25	49	43	51
Trinidad/Tob.74	30	27	25	36	28	25	11	44	50	48	43
Venezuela 75	28	30	21	38	27 <sup>a</sup>	4 <sup>a</sup>	14 <sup>a</sup>	25 <sup>a</sup>	58 <sup>a</sup>	41	50 <sup>a</sup>
Uruguay 75	28	26 <sup>e</sup>	22 <sup>e</sup>	15 <sup>e</sup>	28 <sup>a</sup>	4 <sup>a</sup>	20 <sup>a</sup>	29 <sup>a</sup>	60 <sup>a</sup>	33 <sup>a</sup>	58 <sup>a</sup>
Guyana 65	27	23	27	40	27 <sup>a</sup>	16 <sup>a</sup>	9 <sup>a</sup>	43 <sup>a</sup>	58 <sup>a</sup>	25 <sup>a</sup>	41 <sup>a</sup>
Dominican Rep.70	26	25	15	24	26	17	27	20	62	30	47
Panama 70	26	34	10	26	26	4	11	31	65	50	51
Argentina 70	25	28	16	27	25	6	11	24	60	4	55
Chile 70	23	24	20	15	23	3	14	29	69	29	50
Bolivia 76	23	24	21	-	23	12	15	55	59	35	40
El Salvador 71	22	22	16	10	23	4	19	55	82	35	42
Mexico 75	22	23	18	24	21	6	15	33	50	40	38
Nicaragua 71	22	25	19	9	23	3	16	50	78	32	43 <sup>a</sup>
Brazil 70	21	26	11	23	21	10 <sup>a</sup>	11 <sup>a</sup>	14 <sup>a</sup>	72 <sup>f</sup>	26 <sup>a</sup>	59 <sup>a</sup>
Paraguay 72	21	28	18	15	22	6	27	41	61	25	55
Peru 72	21	23	15	32	20	7	14	30	58	34	26
Colombia 64	20	25	13	13	21	3	18	24	74	20	47
Costa Rica 73	19	24	6	4	20	2	12	21	65	30	46
Cuba 70	18	20	1	3	-	-	-	-	-	-	-
Ecuador 74	17	21	12	13	17	4	16	2	66	31	43
Honduras 74	16	22	12	5	15	1	24	37	73	28	47
Guatemala 73	14	19	10	6	15	2	14	35	60	30	40
Median	23	25	16	23	23	4	15	29	62	33	47

## Table 1 (continued)

Sources: Yearbook of Labour Statistics, 1970, 1974, and 1977,  
Tables 2A and 2B (Geneva: International Labour Office).

Notes:

<sup>a</sup>Includes unpaid family workers.

<sup>b</sup>Estimates, excluding unpaid family workers.

<sup>c</sup>Employment status data are from 1960.

<sup>d</sup>Includes Bangladesh. Although recent data do not show employment status and occupation, women were 25 percent of the total economically active population in Bangladesh in 1974 and 7 percent in Pakistan in 1976.

<sup>e</sup>Employment status data are from 1963.

employment status and by occupation. In calculating the percentages of workers within different employment and occupational categories who are women (an "index of femaleness") we hope to avoid some of the problems of noncomparability across countries in the ways in which workers are distributed across employment or occupational categories (the "distribution index") and in methods of deciding whether or not they are economically active (Boulding et al. 1976: 7).

Women constitute the highest percentages of the overall labor force including unpaid family workers (column 1) in the 10 sub-Saharan and 11 South and Southeast Asia countries for which recent data are available, with medians of 34 and 32 percent, respectively. The 25 Central and South American countries show a lower median--23 percent--with the 12 North African and Middle Eastern countries showing the lowest at 10 percent. There is considerable overlap across regions, however, except that the lowest percentages of women among the economically active population (10 percent or fewer) are all in North Africa or the Middle East (Iran, Libya, Jordan, Egypt, and Algeria), whereas the highest (40 to 50 percent) are in sub-Saharan Africa or the Caribbean (Botswana, Tanzania, Ghana, Haiti, and Jamaica).

Employment status refers to the classification of workers as employees, self-employed, or unpaid family workers, regardless of their occupation. When we compare the extent to which women are represented within these three categories of workers relative to the labor force as a whole, distinct regional patterns emerge.

The status of employee reveals the most about women's direct access to incomes. It includes persons working for private or public



employers who are paid in kind or in wages, commissions, or tips. Among these are agricultural laborers, women doing piece-work at home for employers, and domestic servants. Women constitute the highest percentage of employees on average in Asia and Central/South America with medians of 28 and 25 percent, respectively, and the lowest in North Africa/Middle East and sub-Saharan Africa with medians of 10 and 9 percent. Although women in the first three regions are generally not significantly underrepresented among wage earners relative to their numbers in the total labor force, in sub-Saharan Africa (Tanzania and Ghana in particular) where women concentrate in agriculture or marketing as self-employed or unpaid workers, they are remarkably so.

Self-employed workers are the large and small entrepreneurs--employers who own their own businesses or run a trade that employs at least one paid worker--and workers on their own account, including persons working at home for profit (women who take in laundry or sewing, say, or make handicrafts for sale) and farm owners or renters without paid employees (owner-holders and tenant-holders). Regional differences in the percentage of women among the self-employed are marked. Sub-Saharan Africa shows the highest median at 43 percent; South/Southeast Asia and Central/South America considerably lower at 22 and 16 percent; and North Africa/Middle East the lowest at 4 percent. The extremely low figures are not all in North Africa or the Middle East, however, for 10 percent or fewer of the self-employed are female in Sri Lanka, Pakistan, Panama, Costa Rica, and Cuba. The highest figures for women entrepreneurs (40 to 63 percent) are in Botswana, Tanzania, Ghana, and Malaysia.

The category of unpaid family worker remains the most elusive. Technically it includes persons who work without pay for a specified minimum time (for women, usually one-third of the "normal" work period) in an "economic enterprise" (again, the market economy, not subsistence) operated by any member of the household. In some countries it also includes other unpaid workers such as apprentices, or family members who are paid in cash or kind. The classification is most problematic (and most frequent) in agriculture. The United Nations recommends that the following types of farm work be considered as economic activity: "planting, cultivation, harvesting, preparation of products for sale, care of livestock and repair of farm equipment"; excluded are "household duties such as the preparation of food and the care of chickens and livestock which are used for consumption instead of exchange" (Boulding et al. 1976: 318). Clearly these definitions are difficult to apply in the face of the multiplicity of tasks in which rural women commonly engage, and especially in their frequent mix of exchange and consumption.

Relative to their labor force participation as a whole, women are overrepresented in this category of worker in about two-thirds of the countries for which we have information. Sub-Saharan Africa and Asia once again show the highest percentages of women among all unpaid family workers with medians of 63 and 52 percent; North Africa/Middle East 37 percent; Central/South America 23 percent. In a few countries, however, they constitute 10 percent or fewer of unpaid family workers--Kuwait, Algeria, El Salvador, Nicaragua, Costa Rica, Cuba, Honduras, and Guatemala. Considerable reporting bias may account for their scarcity in the

Latin American countries.

Given these variations in the percentages of women among unpaid family workers and the ambiguity of the category, we would expect the exclusion of unpaid workers from the economically active population to alter considerably the picture of women's participation. Surprisingly, however, column 5 shows dramatic changes in only six countries.<sup>2</sup>

Botswana, Tanzania, Ghana, and Jamaica retain their position at the top of the scale with women making up almost half of the paid labor force, while Libya, Jordan, Algeria, and Pakistan cluster at the bottom with a paid labor force that is only 5 percent female.

These figures conceal important differences between rural and urban conditions in each country, across geographical areas, and among major subgroups of the population (class, ethnicity, age, marital status, etc.). Nevertheless, they do point in a general way to the underrepresentation of women in the paid labor force in almost all countries and to the particular "ecological niche" that economically active women occupy.

Better measures of women's productive roles would undoubtedly change the picture considerably, but less so in the paid than the unpaid categories.<sup>3</sup> From a policy viewpoint, the data are helpful in pointing out where programs are most needed to draw women to shift out of unpaid family work, marginal self-employment, or exploitative agricultural wage labor into employment bearing higher direct returns.

## II. Opportunities for Expanding Nonfarm Employment

Although this paper emphasizes grass-roots designs for expanding

female employment, such an approach is doomed to failure if it must struggle against larger currents that consistently undermine the capacity of the rural sector to employ its workers. Any employment generation scheme for women, therefore, must be framed in the context of overall development policies emphasizing the diversification of rural economics and the elimination of the urban bias of past development efforts (Lipton 1977).

Increasing agricultural production is central to employment-oriented development because of its direct effects in increasing farm employment (under appropriate capital-labor ratios) and its indirect effects in stimulating related industries and services and the demand for consumer goods (Mellor 1976). Massive investments are required not only in yield-increasing technology but also "in the physical infrastructure of rural communication and irrigation systems as well as the institutional infrastructure for servicing agriculture with research, education, credit, input supply, and marketing systems" (Mellor 1976: 16).

Most agrarian reforms intended to expand overall agricultural employment should increase the demand for female as well as male labor, such as the redistribution of underutilized large landholdings into privately owned plots or collective farms, the intensification of farm production through irrigation and other inputs, crop diversification, the imposition of heavy taxation and import duties on labor-displacing farm machinery where appropriate, the abolition of food price controls as an incentive for agricultural production, and the provision of low-interest loans for small farmers. Investments in physical and institutional infrastructure and in decentralized rural industry should have

similar effects.

We cannot assume that such development efforts will inevitably benefit women, however, for experience has revealed a history of negative consequences under a variety of socioeconomic conditions.<sup>4</sup> Development plans will need to devise special measures to ensure that women have equal access with men to resources such as land, credit, and training; that women are not displaced from traditional income-generating economic roles by social or technological changes; and that new employment opportunities for rural women are created in both agricultural and nonagricultural sectors. In this section we suggest policies for expanding female employment in nonagricultural production, sales, service, and clerical/managerial/professional occupations.

#### Nonagricultural Production

This broad category includes persons engaged in small and large-scale manufacturing, transport workers, construction workers, artisans and crafts workers, miners, and unskilled laborers outside of agriculture. The percentages of nonagricultural producers (wage-earners or self-employed) who are female range from zero in Kuwait to 37 in Hong Kong (column 7 of Table 1). The South and Southeast Asian region has the highest median (26 percent) and Central and South American the second highest (15 percent). In both regions, the percentages of women among nonagricultural producers--particularly in the urban-based textile, garment-making, and electronics industries of some Southeast Asian and Latin American countries--typically exceed by a considerable margin their representation among agricultural workers. Sub-Saharan Africa, in contrast, shows a median of only 6 percent of women among nonagricul-

tural producers, far lower than in agriculture, while North Africa and the Middle East is the lowest at only 4 percent.

Rural women classified as nonagricultural producers--aside from those in construction work--typically specialize in small-scale, home-based manufacture of handicrafts or foodstuffs. The activities are usually labor-intensive, poorly remunerated, undercapitalized, individualized, based on traditional skills rather than formal training, and dependent on primitive technology and child labor (see Simmons 1976 for a good example from Northern Nigeria). For these reasons and more, women in most types of rural nonagricultural production are particularly liable to displacement by modernization, including those very infrastructure improvements such as electrification and roads that are generally recommended for rural development.

African women who brew beer in their village, for example, looking forward to the day when a new road will carry their products to the regional center, find to their dismay that the road brings them imported beer instead. Women who smoke and sell fish discover that new refrigerated warehouses and freezer plants undermine their business (Cloud 1978: 72; Robertson 1975-76: 162). Other locally produced foods and condiments give way to factory made products (Milone 1973: 159; Simmons 1975: 159-60). Machine textiles replace handwoven goods, metal and plastic utensils replace earthenware; synthetics replace cotton. The process is intensified by the spread of capital-intensive urban-based industrial technology that threatens a wide range of cottage industries and artisanal activities that have long provided income to women--handweaving, rice pounding, oil pressing, tobacco, foods (Boserup 1970:

106-18; Chinchilla 1977; Committee on the Status of Women in India 1974: 169-71).

Although the processes outlined above affect all workers in small-scale handicraft and related industries, additional forces work specifically against women. The new heavy industries typically demand male labor, while even in light industries--except where women are thought to be uniquely suited to certain skills--men often replace women as techniques are upgraded. While Moroccan women make pottery by hand at home, men use the wheel in shops (Davis 1978: 424); while Indonesian women make batiks by hand, men operate the screen printers and machine rollers (Milone 1978: 160). The policy issue here, as in agriculture, is not to resist the encroachment of new labor-saving techniques simply for the sake of preserving traditional sources of marginal income for women, for these activities are often burdensome and relatively unproductive. Rather, women should be trained to operate the machines in the new rural industries that replace their old techniques, thereby maintaining control over the returns from their labor.

The question of relative efficiency of rural-based, labor-intensive small and medium-sized industries has stimulated considerable debate. Clearly there is little point in recommending the expansion of a sector that cannot compete with large-scale, capital-intensive centralized production. But there is mounting evidence that decentralized firms offer a number of advantages: they are usually "substantially more 'efficient' in terms of the intensive use of scarce capital and the extensive use of abundant labor, as reflected in lower capital-output

and capital-labor ratios" (Ranis 1979: 5); require less foreign exchange; improve income distribution between the landless and landed classes in rural areas and between the countryside and the cities; offer greater opportunities for an uneducated labor force; sometimes occupy a particularly advantageous position in the export market; and create important linkages with agriculture (Meyer and Larson 1978).<sup>6</sup> In China, for example, rural industries specialize in "serving agriculture" by manufacturing farm equipment and fertilizers and by processing non-food crops and fruits and vegetables (American Rural Small-Scale Industry Delegation 1977).<sup>7</sup> By taking advantage of local resources, labor supplies, and markets, they cut down on transportation costs and on the complications of poor roads, scarce vehicles, and expensive fuel.

National measures to promote new rural industries include a strong commitment to the decentralization of industry; trade and taxation policies encouraging labor-intensive production by removing the distortions that artificially lower the cost of capital relative to labor (resulting, among other things, in the import of inappropriate technologies); and the abolition of incentives that currently favor large firms over small in their access to credit, technical assistance, and other supports.<sup>8</sup> Types of industries especially suited to rural decentralizations include those having few economies of scale (ready-made garments), processing a dispersed raw material (such as agricultural products), servicing agriculture (manufacture and repair of farm equipment), producing consumer goods for local markets (wood products, soft drinks), or specializing in simple manufacturing operations such as assembly, mixing, or finishing (Staley and Morse 1965: 112-127).



The small industries described below illustrate a range of activities that could be expanded to employ more rural women, depending on the availability of resources, labor, markets, and so on.<sup>9</sup> Although many activities could be performed by women at home as own-account workers or wage-paid employees in a putting-out system, the emphasis here is on drawing women out of their homes into a centralized workplace to take advantage of improved technologies, opportunities for literacy and skills training, regulation of wages and working conditions, and the potential for social interaction and collective decision-making.

Food processing. Although women everywhere process food for household consumption, in some regions home-based food processing has also become a major source of income.<sup>10</sup> Potential food industries include dairy products such as yoghurt, cheese, butter, and ghee; bottling fruit drinks and carbonated beverages; brewing beer; sun-drying fruit and vegetables; baking bread and snack foods; canning poultry, meat, fruit, and vegetables; smoking and drying fish; preparing confections; grinding spices and mixing herbs; pressing cooking oils; mixing condiments; making noodles or tortillas; and so on. In the vicinity of Bombay, for example, village women's cooperatives totalling about 3,000 members make papads for local consumption and export, a snack food mixed from locally grown pulses, oil and spices (Dixon 1978: 63-69). Rural food processing industries frequently stimulate demand for local agricultural products, encourage diversification of crops, and improve the variety of foods available at local markets throughout the year.

Processing over agricultural products. Much of the processing of crops for export to urban or foreign markets could be performed at the rural site, with the added advantage that byproducts are usually well suited to local use. Women-run centers for milling or drying grains, pressing oils, or grinding spices would enable women to maintain control over this traditional method of earning money; other possibilities include the production of animal feeds, fertilizers, and fuel from a variety of crop byproducts (corn husks, coconut shells, sugar cane stalks, bran, etc.). A women's cooperative in Tonga fires split coconut logs for charcoal from trees cleared for an airport approach from 200 acres, which they leased to plant bananas, pineapples, papaya, and other low-growing cash crops (International Women's Tribune Centre, January 1978: 14). Because women are typically responsible for processing crops in the home as well as for gathering fuel and fodder, these commercial activities serve the important dual purpose of providing employment while simultaneously manufacturing products that reduce domestic drudgery.

Manufacturing. A number of industries produce items for local consumption based on indigenous resources (clay, coir, bamboo, wood, cotton, jute, etc.) such as simple household and agricultural implements, fishnets, ropes, baskets, mats, building materials, pottery, furniture, jute sacks, soap, cotton thread and cloth, cigarettes and cigars. Where transportation systems are good and a steady supply of raw materials from outside the village can be assured, other industries can be established for manufacturing items with a wider market such as bottles, cans, other storage containers or packaging materials, paper, small

consumer items such as umbrellas or dry-cell batteries, plastic and metal products, heavier agricultural equipment, wool and silk cloth, ready-made garments, carpets, and other items. Some of these serve the local market, others are exported to urban or foreign markets.

Most income-generating programs for women have drawn on traditional crafts such as sewing or embroidery (although tailoring and weaving are men's work in many countries), often to the detriment of workers who find themselves unable to make a satisfactory living because of poor quality controls, lack of marketing outlets, unreliable sources of raw materials, and exploitation by employers or agents (Dhamija 1975; ILO 1975; Major 1975; Opondo n.d.). Yet certain handicrafts do offer potential for expansion, even in the face of industrialization, if production can be upgraded through improved techniques and marketing; these include artistic metalworking, basketry, jewelry making, and specialized handweaving (Staley and Morse 1965: 56). In some areas the carpet weaving industry is undergoing a renaissance; in Syria, for example, the government has set up a network of rural carpet-weaving centers throughout the country where young women learn vocational and literary skills while contributing to the family budget on a regular basis (ILO 1973: 21).

Some critics argue that programs building on traditional skills are likely to have only limited appeal to rural women; more attractive would be industries that are "least rural and least womanish"--that is, that offer genuine opportunities for social and economic transformation (Ahmed 1975: 29):

These opportunities are to be found in the decentralized manufacture of processed primary products, consumer goods and light engineering goods--commodities that are labour intensive, resource based, and require simple technology, small investment, cheap or little fuel.

A rural network of medium industry or agro-industry, producing both for export and home consumption, should teach the wearers of galabias, saris and sarongs to get into workmen's overalls and tinker with small machines. They should be absorbed not merely as unskilled or semiskilled operators, but taught repair, maintenance, supervision, management, accountancy, storekeeping, salesmanship and all other accoutrements of industrial enterprise.

One example of this approach is found in Kerala State, India, where the government's crash program to develop 10,000 units in the small-scale industrial sector includes a number of cooperatively owned enterprises reserved for women only (Menon 1976). Shareholders are drawn mainly from the "economically and socially backward groups." Along with more traditional industries for garment-making, surgical cotton and bandages, fruit preservation, cloth dyeing and printing, the program has trained young women to work in a foundry; an electroplating, galvanizing and anodizing unit; a transformer unit; and an ancillary to a battery factory. Heavier rural industries also offer important opportunities for women, either in separate teams or working side by side with men.

Rural construction. In addition to opportunities in industry, the development of rural infrastructure means new jobs in irrigation and drainage projects; land clearance, soil conservation, and reforestation; road, bridge, dam, and levee construction; and village works such as housing, schools, clinics, community centers, wells, and water catchment systems. In some countries these rural works form a prime ingredient of government policies to alleviate rural unemployment and poverty,

e.g. India, Pakistan, Bangladesh, Indonesia, Morocco, Tunisia, Algeria, Brazil, Mexico and Peru (FAO 1979: 60).

Not only have women traditionally participated in the heavy labor of many volunteer community work teams such as the communas in Latin America, Harambee in Kenya, and the Shramadana in Sri Lanka, but the decline of agricultural wage labor in many areas has driven landless women increasingly into road building and construction. In Java, from 15 to 30 percent of workers on certain construction sites are women (Milone 1978: 161). In India, too, women commonly carry earth and bricks on construction projects, while the skilled labor is done exclusively by men (Committee 1974: 172-173).

Large internationally funded projects such as the Food-for-Work schemes have attracted women to build dams, lay water supplies, terrace hills and plant trees, build village roads, and clear land. In Africa and Latin America, in particular, women commonly work alongside men in many of these schemes. Sometimes they do all the work, as in one road-building project in Lesotho and in the forestry development scheme of Maharashtra, India, where tribal women (Adivasis) plant and maintain reforested areas (World Food Programme 1976: 31). Elsewhere they work in special women's teams on large projects. In Bangladesh an average of 20,000 women per day worked on Food-for-Work schemes between January and March of 1978, almost all on women's teams or projects.

Because the work is extremely arduous and generally considered status-degrading, rural works tend to attract only the poorest and most stigmatized groups--the scheduled tribes and castes of South Asia, for example, or destitute wives or widows of higher castes (Chen and Ghuznavi

1978; Sinha 1975). Employers often prefer women because they are cheaper than male workers, "more docile by nature and better disciplined," and will work at jobs that men are "reluctant to accept" (Sinha 1975: 24). Conditions are usually highly exploitative with little or no monitoring of wages, hours of work, housing and sanitation facilities, accident compensation, or child care. Portions of workers' wages are typically withheld to ensure that they do not leave the site before the work is completed; payment is irregular. The work is generally seasonal and often requires workers to migrate considerable distances from their villages.

There is potential for expanding women's opportunities for employment, however, if rural works projects could be redesigned to emphasize female employment on sites in or near their villages that require year-round work such as road repair, local small-scale construction, reforestation, planting animal fodder on banks and cleared areas, terracing, fisheries development, and so on (Chen and Chuznavi 1978: 25). A cooperative housing society in Guyana is training women as well as men in carpentry, masonry, steel bending, plumbing, and other skills to enable them to build and maintain their own housing and other community facilities (International Women's Tribune Centre January 1978: 13). Continuous all-women projects, in conjunction with separate activities (such as seeding or sodding) for women's teams on large mixed projects, would permit separate work norms for women if they are necessary to bring wages up to the level required for reasonable subsistence.<sup>11</sup> In addition, basing work nearer the village permits more effective monitoring of wages and working conditions by official agents and local committees.

### Sales Workers

The differences across countries in the percentages of sales workers who are female are remarkable, ranging from only 1 percent in seven countries of North Africa and the Middle East to 59 percent in the Philippines, 60 percent in Nigeria, 65 percent in Jamaica, and 88 percent in Ghana (Table 1, column 8).

Rural women in sales are overwhelmingly concentrated in the informal sector of local exchange systems. Forming an important link between the subsistence sector and the commercial economy, they frequently operate with sufficient capital for only one day's trading, buying goods in the morning (perhaps on credit), sometimes processing them in a typical mix of economic activities (grinding corn, for example), and selling in the afternoon. The sexual division of market labor is clear. Typically, women sell goods from their homes or in daily or weekly local markets while men engage in long-distance trade;<sup>12</sup> women carry goods on their backs or heads while men used wheeled transport; women work in small family-owned retail shops while men control the large retailing and wholesaling enterprises; women trade in foodstuffs and small household items while men sell equipment, appliances, cash crops, and other major items in local or urban markets and in the export trade.

Once again, modernizing forces displace women from their traditional role in the marketplace as the distance between producer and consumer lengthens, transport becomes a major difficulty and expense, factory production and imported goods undermine local production, and capital requirements increase (Mintz 1971; Mullings 1976; Robertson

1975-76; Stoler 1977; Sudarkasa 1973). The expansion of men's commercial activities, particularly in the import/export business, poses an additional threat to female trading (Mintz 1971: 264-265).

On a national level, measures are needed to protect smaller markets from the encroachment of large wholesalers and retailers, such as the reversal of taxation and pricing policies or access to government services that discriminate against small shops and marketplaces in favor of larger ones. Extension services providing technical assistance to small farmers and industries need to include small businesses and independent traders.

Credit is also crucial. One of the major problems facing the majority of own-account women traders is lack of sufficient capital to invest in greater quantities of merchandise, improved transport, or sales and storage facilities. As a consequence, women cannot expand into larger operations or the lucrative import/export market. Their small profits often go for daily subsistence, children's school fees, or other kinship obligations (marriage exchanges, gifts) rather than for business expansion (Mintz 1971: 253; Stoler 1977: 83-84).

In Indonesia, although wealthy women traders can borrow money at relatively low interest rates from formal lending institutions such as the Bank Pasar (Market Bank) or from one of the women's cooperative unions sponsored by the Indonesian Women's Congress, poor rural women with insufficient collateral rely instead on suppliers, relatives, or moneylenders who charge high rates of interest (Milone 1978: 107-115). Resourceful Haitian market women will sometimes get their trading capital by "buying wholesale on credit, selling retail at reduced prices,



lending their earnings in even smaller amounts at higher rates of interest--5 percent for three days' use is not unusual--and then repaying their suppliers, showing a profit at the end of such a maneuver" (Mintz 1971: 259). Rural development banks specifically serving low-income women borrowers, as individuals or groups could increase their productivity considerably.

Direct access to transport and markets is also crucial if women are to maintain control over the products of their labor. Where women are not permitted in the marketplace, male family members who sell their goods receive the cash or else agents skim off the profit. In a cattle-fattening project in Dosso, Niger, women pay men to sell their cattle because by custom they cannot engage in animal trading.<sup>13</sup> In the silk-weaving industry in Banares, India, cloth produced at home and sold by the husband to intermediaries leaves the women with "no control nor a separate share of the earnings" (Committee 1974: 181).

Women in some areas have adapted to the requirements of female seclusion by trading out of their homes with children as intermediaries (Simmons 1975) or by organizing their own markets. In the north-eastern hill areas of India, for example, women sell various items of dress, furnishings, and food products as well as their own weaving from purchased stalls in the urban women's market and in smaller rural women's markets throughout Manipur district (Committee 1974: 181). The creation of additional women's markets in culturally conservative areas is an effective means of extending more control to women who are currently excluded from the public sphere both as producers and consumers. Markets in which virtually all of the sellers and buyers are women are, of course,

common in African and Caribbean countries as well as in others where men and women mingle freely in public. But even under these conditions, the officials responsible for renting or selling stalls and for setting regulations are almost always men (Committee 1974: 181; Sudarkasa 1973: 60). Policies for expanding women's employment in the sales sector should not only support women's access to markets, but also facilitate their entry into the wage-paid labor force of larger sales enterprises--in part to reduce the competition among self-employed women in the informal sector.

#### Service Workers

If there is a group of occupations that women can claim as their own in most parts of the world, it is personal service--house-keepers, cooks, maids, waiters, hairdressers, dishwashers, laundry workers, seamstresses, child minders. Only a few service jobs, such as police work, fire-fighting, men's tailoring, or barbering, are all but closed to women.

Although countries of sub-Saharan Africa typically show somewhat lower proportions of women among service workers compared with their numbers in the labor force (a median of 23 percent, ranging from 6 percent in Sierra Leone to 67 percent in South Africa), in the other three regions women are significantly overrepresented in service occupations. In North Africa and the Middle East, even though such work usually exposes girls and women to potentially dishonoring contact with men (Youssef 1974: 26-30), females comprise a median of 14 percent of all service workers, ranging from 7 percent in Turkey to 38 percent in Morocco. South and Southeast Asia, with a median of 33 percent of

service workers female, ranges from 15 percent in Pakistan to 67 percent in the Philippines.

It is in Latin America that women's role in service becomes most vivid. Comprising 23 percent of the paid labor force in the region, females hold 62 percent of all paid service jobs. At least half of all service workers are female in every one of the 23 countries listed in Table 1. If there is a typical woman worker in Latin America, she is the domestic servant who--poor and uneducated--leaves her village as a young girl in search for work in town or city (Chaney 1977; Jellin 1977; Smith 1973).

Although live-in domestic work is a major source of employment for women in rural areas throughout the developing world where class distinctions divide wealthy landowner and commercial households from landless workers and marginal subsistence farmers, other service arrangements are also common. Rural women walk from house to house in daily or weekly rounds to clean, do laundry, or wash dishes, or they go to private homes when summoned as seamstresses or hairdressers, or take in washing or other work in their own homes. Municipalities may hire them to sweep roads and public places or clean drains and latrines, work typical of outcast "sweeper" women in India, for example (Committee 1974: 178). They also work as wage-earners in a variety of public and private service establishments.

The availability of cheap female labor enables more prosperous households to achieve an artificially high standard of living; in their absence, "personal services would have to be purchased from established enterprises (restaurants, laundry and drycleaning services, etc.) at

considerably higher prices" (Jellin 1977: 140). This situation suggests three approaches. First, the expansion of women's employment in small industries could draw a significant number out of personal service occupations, resulting in upward pressure on the wages of those who remain and in the substitution of labor-saving devices (simultaneously creating a demand for small industrial output). Second, policies should encourage the organization of service workers into associations to improve their bargaining power over wages and working conditions that are almost invariably oppressive, although household servants are particularly difficult to organize because of their isolation and personal dependency on their employers. A third tactic would be to provide women currently working in the homes of their employers, or taking in work in their own homes, with the means to start group enterprises such as child care centers, laundries, restaurants, catering businesses, or hostels where they could learn business skills, set regular hours, and earn better wages charging reasonable prices for their services.

#### Administrative, Clerical, and Professional Occupations

Although grouped together here for convenience, administrative/managerial/clerical occupations in developing countries typically have lower proportions of women workers than do the professional/technical occupations that include teachers and health workers. In the former category, 18 countries of Africa, the Middle East and Asia show fewer than 15 percent female while only two in Central America (Barbados and Panama) show half or more female. Among professional/technical occupations, however, only six countries show fewer than 15 percent female

(Nigeria, Morocco, Libya, Nepal, Pakistan, India) while ten show half or more female (Philippines, Jamaica, eight Latin American countries). The relatively high participation of women in the professions in North Africa and the Middle East in comparison with their representation in the labor force as a whole is due, paradoxically, to "the restrictions of the purdah system [that] creates new opportunities in the 'contact services,' such as medicine and education, for educated women serving a female clientele" (Papanek 1971: 522; see also Youssef 1974: 34-36).

Higher rates of illiteracy as well as higher dropout rates after the first few years of school form the major obstacles to the integration of village women into professional occupations at the local or district level. Yet the expansion of institutional infrastructures in rural areas creates new jobs in education, health services, agricultural extension, legal services, cooperative management, and other fields for which women need advanced training. Clearly a rural development policy needs to deal with this dilemma.

First, incentives are needed to promote girls' attendance at elementary school and their continuation to secondary and post-secondary vocational training. Second, trained women from urban areas could be induced to serve rural people through incentives such as higher pay for rural postings, the provision of housing, and more rapid advancement to positions of responsibility through rural rather than urban career ladders. These women would simultaneously motivate their rural counterparts to take advanced training. Third, persons with little or no formal schooling can be employed in many technical and managerial capacities. Rural development planners emphasizing the expansion of

primary education and health care are increasingly turning to the Chinese model of training "barefoot doctors" or veterinarians and even "barefoot managers" to provide a wide range of basic services to rural people. The Bangladesh Rural Advancement Committee, for example, trains villagers with very few years of schooling as paramedics who can diagnose and treat the most prevalent forms of illness, referring more serious cases to higher level medical personnel.<sup>14</sup> Reducing the sometimes unnecessarily high educational qualifications for certain government jobs in rural areas could facilitate women's access to this source of employment.

### III. A Strategy for Mobilizing Rural Women for Employment

In Section II we discussed policies for expanding employment for rural women specific to the nonagricultural sectors of production, sales, service, and clerical/technical/professional occupations. In this section we will outline a general strategy for mobilizing rural women for employment both within and outside agriculture. At least six tasks are involved: (1) identifying groups of women who are most in need of income-generating employment; (2) defining the range of economic activities in which these women are currently engaged; with a view to raising their output and income-generating capacity or to shifting them into more productive activities; (3) locating indigenous social networks around which groups of women could be mobilized; (4) establishing sources of credit, technical assistance and training for group enterprises; (5) determining needs for technology to reduce domestic burdens; and (6) identifying and overcoming other cultural or

structural obstacles that deny women control over the products of their labor.

#### Employment for Whom?

The first task is to locate, through analysis of national or district socioeconomic surveys and through local interviews, groups of women who are most in need of income-generating employment. The purpose here is to concentrate benefits among the poorest sectors of the population in areas selected for intensive investment, particularly among the landless and small subsistence farmers. These include households in a diversity of circumstances--laborers, cultivators, pastoralists--who differ in their access to productive resources and in the security of their livelihoods, but share their poverty (Esman 1978: 56-61). Within these landless and near-landless classes, the most destitute are likely to be those who belong to stigmatized racial, religious, or ethnic groups as well as households headed by women (Birdsall and McGreevey 1978; Buvinic and Youssef 1978).

For women in subsistence farm families as well as for the landless, the creation of off-farm employment is crucial in offsetting seasonal fluctuations and limitations on agricultural incomes. Considering that in most countries the average size of farm holdings is declining, the increase in agricultural output slowing, and the real wages of agricultural workers dropping, it is not surprising to find that farm incomes are frequently insufficient to meet household expenses even among land-owning families (FAO 1979: 1-6). In one village of central Java, for example, over three-quarters of all households depended

primarily or totally on income-producing activities outside of the ownership and cultivation of rice land--that is, on "agricultural wage labor, various forms of market trade, handicraft production, and mixed garden cultivation for sale and consumption" (Stoler 1977: 79). In the northern Peruvian Sierra, only 16 percent of the total net income of minifundio households in one survey came from agricultural or animal production; males took additional wage labor as harvesters or construction workers while females engaged in petty commodity production (handicrafts or food processing) or in small scale marketing and commerce (Deere 1977b: 62).

Land tenure systems with highly concentrated ownership appear to offer minimal agricultural employment opportunities for both men and women. In Chile, for example, women have been gradually displaced from directly remunerated agricultural jobs; on the large estates, they (and their children) ". . . represent a reserve labor force available during times of peak demand, but the landowner need employ only one person [the male household head] on a permanent basis . . ." (Garrett 1976: 33). Women on the estates could benefit from additional employment, either in home-based production such as poultry raising or handicrafts that could not be appropriated by the landowner, or in village-based industries producing consumer goods for which there is a steady demand.

#### Building on Current Production

The second task is to identify economic activities in which the "target groups" of women are currently engaged: the time spent on each activity, its output, the level of skill required, source of raw



materials, the type of technology, whether the goods or services are performed for household consumption or are sold or exchanged, whether the level and type of activity fluctuate seasonally, and so on. Good quality data are extremely important. Time-use studies of village women's activities usually point to a remarkable range of skills and local resources upon which to upgrade productivity, transform currently unpaid work into income-generating employment, and, if necessary, introduce entirely new economic activities such as small industries where raw materials and markets can be assured.

A survey of the skills and resources of rural women in several districts of Sri Lanka, hoping to identify opportunities for employment both within and outside agriculture, provides a good example of the type of base-line data that are needed for employment planning (Wijayaratre et al. 1978). The survey was designed:

- (1) To examine the division of labor in the farm households;
- (2) To ascertain the present skills and experiences of rural women which could be utilized in possible income generating activities;
- (3) To examine the opportunities for more intensive employment of rural women in agriculture;
- (4) To identify the infra-structure existing (or) needed for the development of employment opportunities outside agriculture for rural women;
- (5) To ascertain the scope of activities of voluntary and non-voluntary organisations assisting rural women in gainful employment;
- (6) To identify specific income generating activities on or off the farm for rural women for further development by the Farm Women Extension Service of the Department of Agriculture (Wijayaratre et al. 1978: 1-2).

#### Mobilizing Groups of Women Workers

Although some development programs offer direct assistance to individuals or households for home-based production, organized groups

working outside the home have a number of advantages: economies of scale, reduced competition, easier access to credit and technical assistance, experience in collective decision-making, and the creation of a base of social solidarity and political action. The central workplace provides an effective setting for the delivery of services such as functional literacy classes, training in accounting and simple management, health care, family planning, and the communal care of infants and children. In addition, moving employment out of the home permits easier enforcement of minimum wages and working conditions. Although the history of government enforcement of labor laws in most countries is woefully inadequate for public settings such as factories, plantations, or rural work projects, the condition of women employed at home is usually worse, often exploiting child labor as well (Committee 1974: 70-71).<sup>15</sup>

Employment-generating schemes in some areas have evolved quite naturally out of indigenous social networks such as rotating credit and savings associations ("money clubs") or the tradition of voluntary contributions of labor for community building projects or religious activities, while others have been introduced as new organizational structures, sometimes taking root, often not. Appropriate strategies for mobilizing women for employment depends on the social characteristics of the workers themselves (whether they share a history of mutual trust or prior collective work experience, for example), the type of work to be organized, and the nature of other social, economic and political institutions in the community, among other considerations (Nash et al. 1976; Worsley 1971).

Work teams on Chinese collective farms, for example, evolved from traditional peasant customs of exchanging help at harvest time, later formalized in the first liberated areas into permanent mutual-aid or work-exchange teams, many of them exclusively female (Davlin 1975: 264). The Korean Mothers' Clubs--some of whom have undertaken income-generating activities such as fruit and vegetable gardens, small livestock projects, mulberry production for silk worms, ropemaking and noodle factories, and garment making--were frequently based on indigenous rotating credit associations (Park et al. 1976: 278). In Kenya, women in Nakuru and its surrounding hinterlands formed a Farmers Cooperative Society which purchased a large commercial farm growing wheat, barley, pyrethrum, and sheep; a "Machete and Hoe Self-Help Group" to buy a farm from proceeds of group hoeing and weeding; and a "Hoe and Carrying Basket" association recruited from a traditional group to earn money for property by hoeing or brewing beer (Wachtel 1975-76: 71-75; see also Stamp 1975-76: 33).

Most formal cooperatives have been organized along Western universalistic principles rather than on the particularistic norms of non-Western societies. Although many women's associations suffer from problems that have plagued the cooperative movement in general--political interference, mismanagement, membership apathy, domination by the elite--in some areas women's producer cooperatives show considerable promise (International Cooperative Alliance 1974, 1975). The Bangladesh Integrated Rural Development program, for example, is initiating small-scale market gardening, poultry, and fish raising associations to improve women's earnings; throughout Bangladesh, village women's

cooperatives produce jute handicrafts for export (Ahmad 1976; Dixon 1978: 42-74; Zeidenstein 1975).

Along less formal lines, the Colombian Institute of Agrarian Reform has organized women in "the most marginal of rural populations; the migrants, rural labour and small peasant families" into dairy and horticulture projects and a variety of small industries (Cebotarev 1976). Given the opportunity, women appear eager to undertake income-earning projects if they can work together and have access to supports such as credit, training, and production and marketing advice. Agrarian reform programs that create new linkages between households through land redistribution or collective farming provide valuable institutional bases facilitating the organization of agricultural and nonagricultural work teams of women.

#### Credit and Technical Assistance

The fourth task is to establish sources of credit and technical assistance that will funnel benefits directly to the women who need them most (Buvinic et al. 1979). Because these women lack bargaining power, their access to resources will have to be mediated (at least initially) by a strong advocate--an individual or sponsoring institution--who links them with service agencies and represents their interests. A United Nations study of rural cooperatives concluded that the more effective groups had strong ties with outside agencies such as central associations that provided training, credit, accounting, and other services (UNIRSD 1975: 17).

National policies to expand the network of district training

centers for rural research and administration, to tailor curricula to local needs, and to direct rural extension services to small-scale nonfarm as well as farm enterprises will benefit sectors employing women, but special measures will be needed to ensure that women receive training and technical assistance in all fields at every level.<sup>16</sup>

Similarly, national policies to extend credit or loans to low-income rural populations through government or cooperative banks will require flexible and innovative procedures to reach low-income women; without these, women's productivity as farmers, traders, and small entrepreneurs will be depressed. The People's Bank of Indonesia, for example, with branches throughout the country, makes loans against collateral such as land or cash crops (rice, maize, soybeans, sugar, cotton) but not for fruits, vegetables, or household equipment which are typically women's assets (Milone 1978: 107-112). Although the loans are at low rates of interest, most rural women--especially landless labourers--are ineligible.

Programs that attempt to deliver credit and technical assistance to small-scale enterprises and marginal workers differ considerably in their strategies. Some extend services directly to individuals or households, as in a Bangladesh scheme offering loans to nuclear families with annual incomes below 800 taka per capita (about \$56) enabling women to start handicrafts or rice-husking businesses (Amachar 1979: 24). Others extend benefits to individuals through groups. Some of these have a history of collective action, such as the traditional funeral society in Shinualu, Western Kenya, that makes commercial loans to dozens of small businesses (restaurants, bars, maize mills, etc.), many

operated by women (Ramey 1976). Some have no such history. The Self-Employed Women's Association (SEWA) of Ahmedabad, India, included by mid-1975 about 6,000 previously unorganized street vendors, cart pullers, junk-smiths, garment makers, and other independent workers (Bhatt 1976; Jain n.d.). An outgrowth of the Textile Labour Association of Ahmedabad (a large labor union), SEWA operates a savings bank which makes low-cost loans to members, many of whom are in debt to moneylenders charging up to 10 percent per day for operating capital.

A third type of program extends credit, training, and services to organized groups, making the group as a whole responsible for repayment. Ideally, group loans have the advantage of reaching the poorest workers who are otherwise individually ineligible, reducing borrowers' and lenders' costs, cutting loan default through joint liability, and facilitating technical assistance (Adams and Matienzo 1978). These range from informally constituted groups in Upper Volta requesting assistance for small projects with income-earning potential (poultry raising, milling machines, cash crops) (US AID 1976) to large, formal producers' cooperatives. State governments in India, for example, offer a number of advantages to registered cooperatives such as low interest or interest-free loans, tax concessions, subsidies of some staff salaries, government purchase of cooperative shares, technical assistance of various kinds through government agencies such as the All-India Handicraft Board and All-India Handloom Board, and access to cooperative wholesalers and the government itself as buyers of cooperatively made products (Beriwal 1976: 34).<sup>17</sup>

### Labor-Saving Technology

The fifth consideration is to identify the most arduous and time-consuming domestic tasks in order to release women for more productive work. In a village in Pakistan, for instance, women spend an average of almost four hours every day collecting, carrying, and preparing fodder for their animals; almost two hours in animal care; and another hour milking and churning (Anwar and Bilquees 1976: 51). In the Sahel region of Africa, women of sedentary farm families spend two to three hours every day threshing grain and pounding it into flour (Clud 1978: 68). Similar stories are told by women who walk long distances to carry goods to the market, carry farm produce home from the fields, collect water from distant wells or rivers, and search for increasingly scarce firewood (Fagley 1976).

A policy to reduce domestic drudgery would focus both on the social organization of work and on its technology. Collective work groups could undoubtedly organize some tasks more efficiently as well as creating a more congenial working environment. Some activities normally performed at home (e.g. husking, milling, oil pressing, spice grinding) could form the basis for culturally organized small industries. In China, a policy of reducing domestic drudgery in order to free women for remunerative work has resulted in the creation in many communes of small industries such as shoemaking and "sewing stations." Replacing time-consuming home production, the work acquires public value and enters the income-generating workpoint system (Davin 1975: 256). Similarly, nurseries and day-care centers, while freeing women for more productive work outside the home, offer new employment for child minders, permit

daughters who might otherwise be forced to take care of younger siblings at home to stay in school, and allow women to continue breastfeeding infants at their worksite, with important birth-spacing and nutritional consequences.

The literature on "appropriate" or "intermediate" technology points to a variety of innovative labor-saving solutions uniquely suited to rural women's needs and local resources: alternative fuel sources, water supply systems, crop processing and storage techniques, household and farm implements, building construction, transport, and small industries.<sup>18</sup> United Nations agencies in Africa offer excellent examples of research and program possibilities. The Women's Centre of the Economic Commission for Africa, for example, held a series of workshops in 1977 on village technologies for extension workers (Carr 1978: 72). Approximately 30 village projects for testing improved technology were generated. Other African projects include special training programs in village technology, the creation of small research units within universities and government departments, international study tours, demonstration and testing units, and regional research projects to identify technologies that will simultaneously free women from less productive activities and create new possibilities for income-generating employment (Carr 1978: passim).

#### Control Over Earnings

Whereas women who work for wages or on their own account generally receive payment in cash or kind directly, unpaid family laborers are often forced into a state of economic dependency on their male kin even when their own labors contribute a substantial proportion of household



earnings. Efforts at land reform or "green revolutions" often leave women's basic state of dependency untouched: "They remain enclosed within the work cell of the family as unpaid laborers, unrelated to larger systems of interdependence" (Ahmed 1975: 30). Even large-scale reforms such as the ujamaa villages of Tanzania fail to integrate women into cooperative forms of production on an equal basis with men. Women tend to grow food on the small private plots that are registered in their husband's names, while men earn valued collective work points growing cash crops on communally held lands (Storgaard 1975-76; Brain 1976). The traditional sexual division of labor between food and cash crops, as well as between unpaid and paid family labor, remains intact.

Other examples of women's economic dependency despite their productivity can be cited from a variety of settings: women and children in India who weave saris at home commissioned by contractors who deal with the husband; women and children who labor on estates or plantations alongside the male household head who is paid for the whole family's work; women who make handicrafts or foodstuffs at home but depend on their husbands to market the goods. In these situations "the husband is also the employer, and terms of employment are unchangeable" (Ahmed 1975: 30).

Access to moveable property probably permits greater freedom from husbands' control than does working in family enterprises. Where women have rights to moveable property such as an inheritance of money or a dowry of jewelry or small animals, they can show considerable ingenuity in transforming a small portion into a larger one through a combination of trade, production, and lending over the years. In Northern Nigeria,

for example, the women's "chickens, sheep, and goats serve as stores of value, bearing interest in the form of offspring and available for liquidation when cash is required" (Simmons 1975: 158). Earnings of this type are generally considered the woman's own. Similarly women who earn wages may have more autonomy in determining how their money is spent. Of greater importance to development planners, however, is the evidence that the loss of female control over earnings that were traditionally theirs sometimes subverts the goals of an entire program.<sup>19</sup>

An organizational strategy that brings women together in collective work groups can successfully circumvent male control over resources by enabling women to sell goods and services directly. Where women work with men, policies need to be developed to ensure that workers are paid individually for their labors, whether in cash, in kind, or credit (e.g. workpoints). This issue of direct remuneration for work performed, which is tied so closely to collective recognition of the value of the work, was raised in China as early as 1948. Women on the collectives demanded not only that they earn the same number of workpoints as men for the same amount of work (although not necessarily the same work), but also that "points of men and women in the same family should be recorded separately" so that husbands could no longer control their wives' earnings (Devin 1975: 265).

#### IV. Conclusions

Although female employment patterns differ widely from country to country, both in the proportions defined as economically active and in

their employment status and occupational distribution, some common themes emerge. In spite of their heavy labors, rural women are far less likely than men to be considered economically active, and, in most countries, far more likely to be unpaid family workers rather than wage-earners or self-employed. More so than for men, the meager economic returns are highly disproportionate to their labor inputs, a situation defined in one United Nations report as "an extreme case of unequal exchange" (UN General Assembly 1978: 7).

Even in those countries where women have played vital and independent roles in agriculture, cottage industries, or trade, a complex of international and national economic forces has been steadily undermining their productivity and earnings. Rural women's traditional income-generating activities are particularly vulnerable to displacement by imported products, capital-intensive industrialization, the commercialization of agriculture and the expansion of large wholesaling and retailing enterprises. As agricultural and non-agricultural production and sales become more technologically advanced, men increasingly take over jobs that women once performed. New industries (with some exceptions) and agribusinesses frequently prefer male employees over females. For rural women, the disparity between labor and earnings--the pattern of unequal exchange--intensifies.

Given women's special vulnerability to loss of earnings as well as the decline of traditional social and economic protections offered by marriage and extended kinship, it is extremely important that policies of agrarian reform and rural development incorporate specific measures to ensure that women are fully integrated into the entire range

of new employment opportunities. These include not only agricultural and industrial production but also the entire institutional and physical infrastructure on which rural development depends:

. . . the creation of rural development agencies, agricultural research centres, extension and training networks, the setting up of cooperatives, credit systems, food storage facilities, the expansion of food distribution networks, industries to supply farm equipment and agricultural inputs such as fertilizers, and pesticides, watershed management and irrigation systems, rural road building and schools, health and family planning facilities. (FAO 1979: i)

Although the strategies outlined in this paper for generating female employment in both the agricultural and nonagricultural sectors have emphasized grass-roots programs for organizing women into work groups, providing training and access to credit, setting up small industries or agricultural enterprises, and so on, this approach makes sense only in the context of broad national and international policies that eliminate the net flow of capital from rural to urban areas and from developing countries to industrialized ones. Otherwise, agriculture (especially food crops for domestic consumption) and rural industries--large potential employers of additional female labor--will face worsening competition, lower wages, and intensified outmigration. On the national level, policies that reverse past priorities favoring urban-industrial and export sectors in investment, pricing, taxation, and terms of trade are bound to have positive impact on rural women in domestic agriculture and small industries. Similarly, the revision of international terms of trade and private foreign investment to encourage domestic labor-intensive processing of raw materials, manufacturing, and food production should also stimulate greater demand for female labor in

the countryside. In combination with agrarian reform policies to reduce major inequalities in access to material and social resources within rural areas as well, such grass-roots strategies can provide women with essential support systems enabling them to become active agents and beneficiaries of the development process.

## FOOTNOTES

<sup>1</sup>I am indebted to Kathryn March, Cornell University, for this translation of her interview.

<sup>2</sup>The percentages of females among the economically active population in Sierra Leone and Liberia drop from 36 in both to 11 and 14 percent, respectively; in Turkey from 38 to 6 percent; in Thailand and Korea from 38 in both to 27 and 28 percent; and in Pakistan from 12 to 5 percent.

<sup>3</sup>A United Nations report declares that "As long as money is involved, the person is always classified as employed" (Boulding et al. 1976: 297). This statement does not apply to those who did not earn wages or profits in the specified time period, however, so seasonal or sporadic income generation characteristic of women's economic roles might not be included.

<sup>4</sup>The theme of negative impact of development on women is explored in Boserup 1970, Chaney and Schmink 1976, Mullings 1976, Nash 1977, Tinker 1976. For bibliographies see Buvinic 1976, Rihani 1978, Non-Formal Education Information Center 1978b. For policy recommendations see Boserup and Liljencrantz 1975, Food and Agricultural Organization of the United Nations 1975, Germain 1976-77, Papanek 1977, United Nations Department of Economic and Social Affairs 1973, United Nations Economic Commission for Africa 1975, United Nations General Assembly 1978.

<sup>5</sup>Many of these are "offshore industries"--foreign investors taking advantage of cheap female labor and prolonged tax holidays in the host country (United Nations General Assembly 1978: 40-41).

<sup>6</sup>For additional arguments and evidence see Anderson and Leiserson 1978; Kilby 1978; Liedholm and Chuta 1976; Staley and Morse 1965; White 1978.

<sup>7</sup>It should be noted that some of these so-called small industries employ as many as 500 workers, however, and are quite highly mechanized.

<sup>8</sup>In Sierra Leone, for example, local small firms could not qualify for tax exemptions designed to encourage foreign investment in the country (similar tax incentives for large firms are found widely in Africa, Asia, and Latin America) (Liedholm and Chuta 1976: 111-114), and import taxes were prohibitively high on some basic items essential to small-scale industrial production. See also White 1978.

<sup>9</sup>A variety of income-earning projects both within and outside agriculture are discussed in the following publications, among others: American Council of Voluntary Agencies for Foreign Service 1976; International Women's Tribune Newsletter 4 (March-April 1977) and 5 and

6 (January 1978); New Transcentury Foundation (July 1978 and January 1979); Misch and Margolin 1975; Rihani 1978; United Nations Development Programme 1978; United States Agency for International Development 1978.

<sup>10</sup>In Zaria Province of Northern Nigeria, for example, 90 percent of the village women interviewed in one study were currently engaged in at least one food-related activity for economic gain, usually processing grain, legumes, or starchy roots into convenient ready-to-eat foods (Simmons 1975: 156).

<sup>11</sup>In an attempt to equalize men's and women's daily wages on Food-for-Work schemes in Bangladesh, separate women's projects uniformly pay a higher piece rate to women for carrying earth. The differential rates are designed to compensate for women's lesser physical capacity, particularly among nontribal women, and to pay a daily wage that meets subsistence requirements for a family of five. Not only does the differential wage rate raise problems of equality, however, but it acts as an incentive for contractors to hire men instead of women on the women's projects. For this reason, some agencies have been reluctant to undertake women-only construction projects (Judith Tandler, personal communication).

<sup>12</sup>With a few exceptions, such as the legendary long-distance woman traders of West Africa.

<sup>13</sup>Marilyn Hoskins, personal communication.

<sup>14</sup>Based on the author's visit to BRAC projects in Sulla, Bangladesh, February 1976.

<sup>15</sup>A 1948 International Labour Organization study of home industries (garment making, spinning and weaving, and so forth) in Europe and North America, in which workers were mostly women and children, concluded that ". . . industrial homework is one of the least regulated, least supervised, and most hazardous systems of industrial production" (quoted in Staley and Morse 1965: 76).

<sup>16</sup>For a review of nonagricultural training programs, including small industry development assistance, see American Council on Education 1977; American Council of Voluntary Agencies 1976; Coombs 1974; Non-formal Education Information Center 1978a. Most train women in sewing, embroidery, and other traditional female occupations rather than in carpentry, bicycle repair, veterinary services, and so on.

<sup>17</sup>Registration requirements have proved far too complex for the majority of small women's cooperatives, however, the members of whom are mostly illiterate, and managerial and accounting regulations are beyond the experience of most rural organizers (Dixon 1978: 151-154). To be genuinely responsive to women's needs, the cooperative movement and government agencies alike will need to relax registration requirements, hire women registrars and cooperative extension workers, and organize women's classes at cooperative training centers in order to extend benefits directly to this group of workers.

<sup>18</sup>Surveys of the literature include Carr 1976; Eckaus 1977; International Women's Tribune Center July 1978 and April 1979; Jequier 1976; O'Kelley 1978; the journal Appropriate Technology, and the special issue on alleviating women's burdens of Les Carnets de l'Enfance/Assignment Children 36 (Oct.-Dec. 1976).

<sup>19</sup>A classic example comes from the reorganization of a marketing cooperative in the pyrethrum industry in Kenya. Whereas women had been growing the crop and selling the dried flowers directly, the new cooperative paid formal members of the society who were mostly men. Not surprisingly, the women became discouraged with the loss of direct economic returns and, "rationally and realistically in the circumstances, their output fell" (Apthorpe 1971: 73).



## REFERENCES

- Adams, Dale W. and Rodolfo M. Matienzo. "Editorial Comment: Group Lending Among Small Farmers," Newsletter on Rural Financial Market Research and Policy, No. 10 (July-September 1978). (Agricultural Finance Program, The Ohio State University, Columbus, Ohio 43210).
- Ahmad, Perveen. "The Role of Women in Cooperative Development in Bangladesh," 23-27 in International Cooperative Alliance, Regional Conference on the Role of Women in Cooperative Development, Kuala Lumpur, Malaysia, 21-28 July 1975. New Delhi: International Cooperative Alliance, 1976.
- Ahmed, Wajihuddin. "The Husband Is the Employer," Ceres, 8, 2 (March-April 1975), 28-31.
- Amachar, Peter. "IUCW Women's Programmes," ADAB News, 6, 2 (February 1979) 24-25. (Agricultural Development Agencies in Bangladesh, 79 Road 11A, Dhanmondi, Dacca-9, Bangladesh).
- American Council of Voluntary Agencies for Foreign Service, Inc., Technical Assistance Information Clearing House. Small Industry: Development Assistance Abroad December 1976. New York: ACVAFS, December 1976.
- American Council on Education, Overseas Liaison Committee. "Small-Scale Industries," Rural Development Network Bulletin, No. 7 (September 1977). (American Council on Education, 11 Dupont Circle, Washington, D.C. 20036).
- American Rural Small-Scale Industry Delegation. Rural Small-Scale Industry in the People's Republic of China. Berkeley: University of California Press, 1977.
- Anderson, Dennis and Mark W. Leiserson. Rural Enterprise and Nonfarm Employment. Washington, D.C.: World Bank, January 1978.
- Anwar, Seemin and Faiz Bilquees. "The Attitudes, Environment and Activities of Rural Women: A Case Study of Jhok Sayal," Research Report No. 98. Islamabad: Pakistan Institute of Development Economics, April 1976.
- Apthorpe, Raymond. "Some Evaluation Problems for Cooperative Studies, with Special Reference to Primary Cooperatives in Highland Kenya," 67-82 in Peter Worsley (ed.) Two Blades of Grass: Rural Cooperatives in Agricultural Modernization. Manchester: Manchester University Press, 1971.

- Beniwal, Kamla. "Background Paper on Women and the Cooperative Movement in India," 33-38 in International Cooperative Alliance, Regional Conference on the Role of Women in Cooperative Development, Kuala Lumpur, Malaysia, 21-28 July 1975. Delhi: International Cooperative Alliance, 1976.
- Bhatt, Ela. "Organizing the Self-Employed Women Workers into Labour and Cooperatives: An experiment." Paper presented at All India Conference on Women and Cooperatives, New Delhi, 22-23 March 1976. New Delhi: National Cooperative Union of India, 1976.
- Birdsall, Nancy and William P. McGreevey. "The Second Sex in the Third World: Is Female Poverty a Development Issue?" Paper presented for the International Center for Research on Women Policy Round-Table, July 21, 1978. (ICRW, 1010 16th St., N.W., 3rd floor, Washington, D.C. 20036).
- Boserup, Ester. Woman's Role in Economic Development. New York: St. Martin's Press, 1970.
- \_\_\_\_\_ and Christina Liljencrantz. Integration of Women in Development: Why, When, How. New York: United Nations Development Programme, May 1975.
- Boulding, Elise, Shirley A. Nuss, Dorothy Lee Carson, and Michael A. Greenstein. Handbook of International Data on Women. New York: Halstead, 1976.
- Brain, James L. "Less Than Second-Class: Women in Rural Settlement Schemes in Tanzania," 265-282 in Nancy J. Hafkin and Edna Bay (eds.) Women in Africa: Studies in Social and Economic Change. Stanford, Calif.: Stanford University Press, 1976.
- Brannon, Russel H. and David L. Jesse. "Unemployment and Underemployment in the Rural Sectors of the Less Developed Countries." Occasional Paper No. 4. Washington, D.C.: Technical Assistance Bureau, U.S. Agency for International Development, January 1977.
- Bruton, Henry J. "Employment Growth As an Indicator of Poverty Alleviation." Paper presented at the Employment Seminar of the Asia Bureau of the U.S. Agency for International Development, Washington, D.C., July 1979.
- Buvinic, Mayra. Women and World Development: An Annotated Bibliography. Washington, D.C.: Overseas Development Council, 1976.
- \_\_\_\_\_, Jennifer Sebstad and Sondra Zeidenstein. "Credit for Rural Women: Some Facts and Lessons." Paper prepared for the Office of Rural Development of the U.S. Agency for International Development, August 1979.

- \_\_\_\_\_ and Nadia H. Youssef with Barbara Von Elm. Women-Headed Households: The Ignored Factor in Development Planning. Washington, D.C.: International Center for Research on Women, March 1978.
- Carr, Marilyn. Appropriate Technology for African Women. The African Training and Research Centre for Women of the Economic Commission for Africa. ECA/SDD/ATRCW/VTGEN/78. Addis Ababa: United Nations, 1978.
- \_\_\_\_\_. Economically Appropriate Technologies for Developing Countries: An Annotated Bibliography. London: Intermediate Technology Publications, 1976.
- Cebotarev, E. A. "Rural Women in Non-Familial Activities: Credit and Political Action in Latin America (A Colombian Example)." Paper presented at Conference on Women in Development, Wellesley College, Wellesley, Mass., June 2-6, 1976.
- Chaney, Elsa M. "Agridina: Domestic Service and Its Implications for Development." Paper presented at the Primer Simposio Mexicano-Centro-Americano de Investigacion Sobre la Mujer, Mexico D. F. November 7-10, 1977. Washington, D.C.: Office of Women in Development, U.S. Agency for International Development.
- \_\_\_\_\_ and Marianne Schmink. "Women and Modernization: Access to Tools," 160-182 in June Nash and Helen I. Safa (eds.) Sex and Class in Latin America. New York: Praeger, 1976.
- Chen, Marty and Ruby Ghuznavi. "Women in Food-for-Work: The Bangladesh Experience." Paper presented for the World Food Programme, Dacca, 1978.
- Chinchilla, Norma S. "Industrialization, Monopoly Capitalism and Women's Work in Guatemala," Signs: A Journal of Women in Culture and Society, 3, 1 (Autumn 1977), 38-56.
- Cloud, Kathleen. "Sex Roles in Food Production and Food Distribution in the Sahel," 62-68 in Proceedings and Papers of the International Conference on Women and Food, University of Arizona, January 8-11, 1978. Vol. I. Tucson, Ariz.: Consortium for International Development, University of Arizona, 1978.
- Committee on the Status of Women in India. Towards Equality: Report of the Committee on the Status of Women in India. New Delhi: Government of India, Department of Welfare, December 1974.
- Coombs, Philip H. with Manzoor Ahmed. Attacking Rural Poverty: How Non-Formal Education Can Help. Baltimore: Johns Hopkins University Press, 1974.

- Davin, Delia. "Women in the Countryside of China," 243-273 in Margery Wolf and Roxane Witke (eds.) Women in Chinese Society. Stanford, Calif.: Stanford University Press, 1975.
- Davis, Susan Schaefer. "Working Women in a Moroccan Village," 416-433 in Lois Beck and Nikki Keddie (eds.) Women in the Muslim World. Cambridge, Mass.: Harvard University Press, 1978.
- Deere, Carmen Diana. "The Agricultural Division of Labor by Sex: Myths, Facts and Contradictions in the Northern Peruvian Sierra." Paper presented at the Joint National Meeting of the Latin American Studies Association and the African Studies Association, Houston, 1977.
- \_\_\_\_\_. "Changing Social Relations of Production and Peruvian Peasant Women's Work," Latin American Perspectives, 4, 1-2 (Winter-Spring 1977), 48-69.
- Dhamija, Jasleen. "Handicrafts: A Source of Employment for Women in Developing Rural Economies," International Labour Review, 112, 6 (December 1975), 459-465.
- Dixon, Ruth B. Rural Women at Work: Strategies for Development in South Asia. Baltimore: Johns Hopkins University Press for Resources for the Future, 1978.
- Eckaus, Richard S. Appropriate Technologies for Developing Countries. Washington, D.C.: National Academy of Sciences, 1977.
- Esman, Milton J. Landlessness and Near-Landlessness in Developing Countries. Ithaca, N.Y.: Cornell University, Center for International Studies, August 1978.
- Fagley, Richard M. "Easing the Burden of Rural Women: A 16-Hour Workday," Les Carnets de l'Enfance/Assignment Children, 36 (October-December 1976), 9-28.
- Food and Agricultural Organization of the United Nations. "Review and Analysis of Agrarian Reform and Rural Development in the Developing Countries Since the Mid-Sixties." Paper presented for the World Conference on Agrarian Reform and Rural Development, Rome, 12-20 July 1979. WCARRD/INF. 3.
- \_\_\_\_\_. "The Role of Women in Rural Development." Report prepared for the United Nations World Conference of the International Women's Year. E/CONF.66/BP/11, 24 March 1975.
- \_\_\_\_\_. "Themes for World Conference on Agrarian Reform and Rural Development Provisional Agenda," Land, Food and People, No. 3 (December 1978-January 1979).

- Garrett, Patricia M. "Some Structural Constraints on the Agricultural Activities of Women: The Chilean Hacienda." Madison, Wisc.: University of Wisconsin-Madison, Land Tenure Center, December 1976.
- Germain, Adrienne. "Poor Rural Women: A Policy Perspective," Journal of International Affairs, 30, 2 (Fall/Winter 1976-77), 161-172.
- International Cooperative Alliance. Report on the Proceedings of the ICA Regional Women Cooperators Seminar, Kampala, 14-18 January 1974. Moshi, Tanzania: ICA Regional Office for East and Central Africa, 1974.
- \_\_\_\_\_. Regional Conference on the Role of Women in Cooperative Development, Kuala Lumpur, Malaysia, 21-28 July 1975. New Delhi: ICA, 1976.
- International Labour Office. "Report on the Workshop on Participation of Women in Handicrafts and Small Industries, Zambia, December 1974." ILO/TF/AFR/R.19. Geneva: ILO, 1975.
- \_\_\_\_\_. "Status of Rural Women, Especially Agricultural Workers." Report prepared for Economic and Social Council, Commission on the Status of Women, 25 Session. E/CN.6/583/Add.1. New York: United Nations, 17 December 1973.
- International Women's Year Tribune Project. IWY/TP Newsletter 4 (March-April 1977). (345 East 46th St., Room 815, New York, New York 10017).
- International Women's Tribune Center (formerly International Women's Year Tribune Project) Newsletter 5 and 6 (January 1978), 7 (July 1978), 8 (January 1979), 9 (April 1979).
- Jain, Devaki. "From Discussion to Rehabilitation: Report on an Experiment to Promote Self Employment in an Urban Area." Indian Council of Social Science Research, Women in a Developing Economy 1. New Delhi: Allied Publishers, n.d.
- Jellin, Elizabeth. "Migration and Labor Force Participation of Latin American Women: The Domestic Servants in Cities," Signs: Journal of Women in Culture and Society, 3, 1 (Autumn 1977), 129-141.
- Jequier, Nicholas (ed.). Appropriate Technology: Problems and Promises. Paris: Organization for Economic Cooperation and Development, 1976.
- Kilby, Peter and Paul Bangasser, Jr. "Assessing Technical Co-Operation: The Case of Rural Industry," International Labour Review, 117, 3 (May-June 1978), 343-353.

- Liedholm, Carl and Enyinna Chuta. "The Economics of Rural and Urban Small-Scale Industries in Sierra Leone." African Rural Economy Paper No. 14. East Lansing, Mich.: Michigan State University, African Rural Economy Program, 1976.
- Lipton, Michael. Why Poor People Stay Poor: Urban Bias in World Development. Cambridge, Mass.: Harvard University Press, 1977.
- Major, Alan. "Third World Craftswomen and Development: Report of a Seminar Held June 20, 1975 at International Women's Year Tribune, Mexico City." Paper presented for Planning Assistance Inc., 1975 (2067 Broadway, New York, N.Y. 10023).
- Mellor, John W. The New Economics of Growth: A Strategy for India and the Developing World. Ithaca: Cornell University Press, 1976.
- Menon, Leela Damodara. "A Brief Report on Women Industrial Enterprises in Kerala." Unpublished paper, 1976. (Secretariat for Women in Development, New Transcentury Foundation, 1789 Columbia Road N.W., Washington, D.C. 20009).
- Milone, Pauline. "A Preliminary Study in Three Countries: Indonesia Report." Paper prepared for the Office of Women in Development, U.S. Agency for International Development, Washington, D.C., September 1978.
- Mintz, Sidney. "Men, Women, and Trade," Comparative Studies in Society and History, 13, 3 (July 1971), 247-269.
- Misch, Marion Ruth and Joseph B. Margolin. Rural Women's Groups As Potential Change Agents: A Study of Colombia, Korea and the Philippines, PN-AAB-473. Washington, D.C.: U.S. Agency for International Development, 1975.
- Mullings, Leith. "Women and Economic Change in Africa," 239-264 in Nancy J. Hafkin and Edna G. Bay (eds.) Women in Africa: Studies in Social and Economic Change. Stanford, Calif.: Stanford University Press, 1976.
- Nash, June. "Women in Development: Dependency and Exploitation." Development and Change, 8 (1977), 161-182.
- \_\_\_\_\_, Jorge Dandler, and Nicholas S. Hopkins. Popular Participation in Social Change: Cooperatives, Collectives, and Nationalized Industry. The Hague: Mouton, 1976.
- New Transcentury Foundation. Directory of Projects Involving Women, July 1978, January 1979. Secretariat for Women in Development, New Transcentury Foundation (1789 Columbia Rd., N.W., Washington, D.C. 20009).

- Non-Formal Education Information Center. "Skills Training Programs for Adults," The NFE Exchange, Issue No. 11 (1978/1). East Lansing, Mich.: Michigan State University, Institute for International Studies in Education.
- \_\_\_\_\_. "Women in Development," The NFE Exchange, Issue No. 13 (1978/3). East Lansing, Mich.: Michigan State University, Institute for International Studies in Education.
- O'Kelly, Elizabeth. Rural Women: Their Integration in Development Programmes and How Simple Intermediate Technologies Can Help Them. (3 Cumberland Gardens, Lloyd Square, London WC1X 9AF. 1978).
- Opondo, Diana. "Handicraft Industries As a Development Strategy." Paper presented for International Cooperative Alliance, Regional Office for East and Central Africa (P.O. Box 946, Moshi, Tanzania), n.d.
- Papanek, Hanna. "Development Planning for Women," Signs: Journal of Women in Culture and Society, 3, 1 (Autumn 1977), 14-21.
- \_\_\_\_\_. "Purdah in Pakistan: Seclusion and Modern Occupations for Women," Journal of Marriage and the Family, 33, 3 (August 1971), 517-530.
- Park, Hyung Jong, D. Lawrence Kincaid, Kyung Kyoong Chung, Dal Sun Han, and Sea Baick Lee. "The Korean Mother's Club Program," Studies in Family Planning, 7, 10 (October 1976), 275-283.
- Ramey, Richard L. "Shinualu: Credit for Small Rural Businesses," PASITAM Design Notes, No. 9 (September 1976). (Bloomington, Ind.: Indiana University).
- Ranis, Gustav. "Industrial Technology Choice and Employment: A Review of Developing Country Evidence." Paper prepared for the Employment Seminar of the Asia Bureau, U.S. Agency for International Development, Washington, D.C., July 1979.
- Rihani, May. Development As if Women Mattered: An Annotated Bibliography with a Third World Focus. Occasional Paper No. 10. Washington, D.C.: Overseas Development Council, 1978.
- Robertson, Claire. "Ga Women and Change in Marketing Conditions in the Accra Area," Rural Africana, No. 29 (Winter 1975-76), 157-171. (East Lansing, Mich.: Michigan State University, African Studies Center).
- Simaons, Emmy E. "The Small-Scale Rural Food-Processing Industry in Northern Nigeria," Food Research Institute Studies, 14, 2 (1975), 147-161. Stanford, Calif.: Stanford University, Food Research Institute.

- \_\_\_\_\_. "Economic Research on Women in Rural Development in Northern Nigeria." Washington, D.C.: American Council on Education, Overseas Liaison Committee, Paper No. 10 (September 1976).
- Sinha, G. P. "Women Construction Workers--Bihar," 17-71 in G. P. Sinha and S. N. Ranade Women Construction Workers: Reports of Two Surveys. Bombay: Allied Publishers Private Ltd., 1975.
- Smith, Margo L. "Domestic Service As a Channel of Upward Mobility for the Lower-Class Woman: The l'ma Case," 191-207 in Ann Pescatello (ed.) Female and Male in Latin America: Essays. Pittsburgh, Pa.: University of Pittsburgh Press, 1973.
- Staley, Eugene and Richard Morse. Modern Small Industry for Developing Countries. New York: McGraw Hill, 1965.
- Stamp, Patricia. "Perceptions of Change and Economic Strategy Among Kukuyu Women of Mitero, Kenya," Rural Africana, No. 29 (Winter 1975-76), 19-43. East Lansing, Mich.: Michigan State University, African Studies Center.
- Stoler, Ann. "Class Structure and Female Autonomy in Rural Java," Signs: Journal of Women in Culture and Society, 3, 1 (Autumn 1977), 74-89.
- Storgaard, Birgit. "Women in Ujamaa Villages," Rural Africana, No. 29 (Winter 1975-76), 135-155. East Lansing, Mich.: Michigan State University, African Studies Center.
- Sudarkasa, Niara. Where Women Work: A Study of Yoruba Women in the Marketplace and in the Home. Anthropological Papers, Museum of Anthropology, No. 53. Ann Arbor: University of Michigan, 1973.
- Tinker, Irene. "The Adverse Impact of Development on Women," 22-34 in Irene Tinker and Michele Bo Bramsen (eds.) Women and World Development. Washington, D.C.: Overseas Development Council, 1976.
- United Nations Department of Economic and Social Affairs. Report of the Inter-regional Meeting of Experts on the Integration of Women in Development. Sales No. E.73.IV.12. New York: United Nations, 1973.
- United Nations Development Programme. Building Leadership from the Grass Roots: Report of a Seminar on Women's Participation in Development, Islamabad, Pakistan, 10-15 November 1975. DP/UN/PAK-75-059/4.
- United Nations, Economic Commission for Africa. "The Role of Women in African Development." Paper presented for the United Nations World Conference of the International Women's Year. E/CONF.66/BP/8. 10 April 1975.



- United Nations, General Assembly. "Development and International Economic Co-operation: Effective Mobilization of Women in Development. Report of the Secretary-General." A/33/238. 26 October 1978.
- United Nations, Research Institute for Social Development. Rural Cooperatives As Agents of Change: A Research Report and a Debate. Report No. 74, 3. Geneva: United Nations Research Institute for Social Development, 1975.
- United States Agency for International Development. "Strengthening Women's Roles in Development." Project Paper, Upper Volta, 1976.
- \_\_\_\_\_, Office of Women in Development. Report on Women in Development. Washington, D.C., August 1978.
- Wachtel, Eleanor. "A Farm of One's Own: The Rural Orientation of Women's Group Enterprises in Nakuru, Kenya," Rural Africana, No. 29 (Winter 1975-76), 69-80. East Lansing, Mich.: Michigan State University, African Studies Center.
- White, Lawrence J. "The Evidence on Appropriate Factor Proportions for Manufacturing in Less Developed Countries: A Survey," Economic Development and Cultural Change, 27, 1 (October 1978), 27-59.
- Wijayaratne, C. M., A. M. f. Gunawardana, and Samir Asmar. Study of Income Generating Activities for Farm Women. Colombo, Sri Lanka: Agrarian Research and Training Institute, February 1978.
- World Food Programme. Food Aid and the Role of Women in Development. Rome: World Food Programme, 1976.
- Worsley, Peter (ed.). Two Blades of Grass: Rural Cooperatives in Agricultural Modernization. Manchester, England: Manchester University Press, 1971.
- Youssef, Nadia Haggag. Women and Work in Developing Societies. Population Monograph Series No. 15. Berkeley, Calif.: University of California, Institute of International Relations, 1974.
- Zeidenstein, Sondra. "IRDP Pilot Project on Population Planning and Rural Women's Cooperatives: Report and Commentary on the First Year." Paper prepared for Integrated Rural Development Programme, Dacca, October 1975.

Chapter Seven

WOMEN'S ORGANIZATIONS IN RURAL DEVELOPMENT

by

Kathleen A. Staudt, Ph.D.

If people are to be able to develop they must have power. They must be able to control their own activities within the framework of their village communities. And they must be able to mount effective political pressure nationally also.

--Julius Nyerere, July 13, 1979, UN/FAO WCARRD

## I. Introduction

In his address to the UN/FAO World Conference on Agrarian Reform and Rural Development on July 13, 1979, the President of Tanzania reminds people of the highly political nature of rural development.\* Political power tends to overlap with economic power, thus favoring those with access to land, livestock, capital, and other productive resources. In virtually all societies, women have fewer of those productive resources than men, which reflects and explains their limited political power. Thus Nyerere's point applies to women: if they are to control their own activities and to mount effective political pressure in national and local political arenas, they, too, must have power.

The most fundamental of all resources and the basis for acquiring other resources, political empowerment is recognized as essential for development and change by writers from all ideological spectrums.<sup>1</sup> Increasing numbers of studies also demonstrate that people's participation optimizes the success of development efforts (Cohen and Uphoff 1977; DAI 1976; Korten 1980). Despite this growing consensus about

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\*Sections of this paper have been drawn from my Women and Participation in Rural Development: A Framework for Project Design and Policy-Oriented Research (Ithaca, N.Y.: Cornell University, Center for International Studies, Rural Development Committee, 1979). I am grateful to Norman Uphoff and John Cohen for their comments and suggestions on that monograph, and to Jane Jaquette for her comments on this paper.

participation, the point is not always applied to women and to the expression of women's interests in local and national political settings. Instead, it is often assumed that men represent women's interests, or that male heads of household represent the interests of all family members, including women.

Growing documentation indicates that men disproportionately benefit from rural development programs, such as educational and training opportunities, job placement, capital and technology transfers, and land commoditization. Despite these preferential patterns, women continue to engage in productive activity, including farming, trading, and income generation, to provide water and firewood which enables productive activity and household maintenance, and to manage households in significant proportions. In many parts of the world, women's labor is untouched by labor-saving technology (Boserup 1970; Tinker 1976; Palmer 1977; Mintz 1971). The differential and unequal distribution of development benefits suggests that men are not effectively representing women's interests. Not only are women disadvantaged by these processes, but overall development goals are compromised with this misuse of human resources.

Until women participate more extensively in politics at all levels, they will continue to be marginalized in the development process. Utilizing women's organizations is a strategy which offers unique advantages for responding positively to marginalization. The three part argument that follows is drawn primarily from the scholarly and development practitioner literature. The first section reviews literature on women's participation in elite and mass politics and emphasizes rural

women's organizational participation. The second section analyzes constraints on the organizational participation of women. The final section draws the policy implications from the previous sections. First, however, the underlying argument will be developed: that political empowerment and women's organizational participation are fundamental.

#### Political Empowerment: The Essential Resource

Many types of governments recognize people's right to participate in decision-making about policies and programs which affect them and which require their contributions. The rationale for this is quite clear. First, greater participation contributes wider perspectives, expertise, and information to the decision-making process, and is thus expected to improve that process. Second, participation creates a stake in the outcome of development programs which helps them to become self-sustaining. Finally, and most importantly, it is through participation that people are able to influence and control decision-making and to represent their interests and needs.

It is in political institutions that decisions are made which confer status, resources, rewards, and related responsibilities. Participation in those institutions, as well as direct access to those institutions through both individual contacts and organizational mediation, are crucial determinants of the resources, choices, and opportunities available to a society's members. In virtually all societies, relatively high socio-economic status groups tend to participate politically more than those of lower status (Verba, Nie and Kim 1978; Cohen and Uphoff 1977; Huntington and Nelson 1976). Men also tend to

participate more than women (Cohen and Uphoff 1977; Staudt 1979; Whyte 1978).

Reviews of anthropological literature indicate that women are universally subordinate to men, although this subordination varies in degrees (Lamphere 1977; Rosaldo and Lamphere 1974; Giele and Smock 1977).<sup>2</sup> And, as much of this volume shows, resource disparities between men and women tend to be aggravated with the development strategies now taking place.

Greater balance in the distribution of economic opportunities and resources will begin to redress subordination. Yet unless women participate in institutions which determine the value of labor and redirect the allocation of resources, they will continue to be disadvantaged relative to men. In other words, it is inadequate political power, not inadequate economic resources alone, which explains subordination. Political power permits the acquisition of economic resources and/or facilitates the continuing control of economic resources. The quality of participation is vital as well. Participation must involve a conscious recognition of shared interests and the collective will to act on those interests.<sup>3</sup>

## II. Women's Participation: The Literature

In this section, conventional measures of political participation, such as voting, party membership and public officeholding are examined. Also analyzed are less conventional measures for which data are available, including access to government and organizational participation. More difficult to assess are those indirect or unconventional

indicators such as sporadic violence, behind-the-scenes bargaining or "political social work," which operate more diffusely to support, influence, or make demands from a regime (Schmidt 1976: 243; Jaquette 1976: 66). Although this paper is focused on rural development, data broken down by urban-rural residence are unavailable across national boundaries. Thus much of the material pertains to whole national populations. The discussion of mass participation is followed by material on elite participation.

### Mass Participation

Voting. Virtually everywhere around the world, women were legally excluded from direct political participation in elections and office-holding of modern representative governments until the turn of the twentieth century. Now women may vote and stand for election equally with men in nearly all societies. Women do not vote at the same rate as men (Newland 1975: 4-11; Duverger 1955). Late entry into this part of the political mainstream partially explains the lag in voting participation rates relative to men. Nevertheless, other factors, such as level of education, labor force participation, stake in political decisions, and control over one's life are compelling explanations as well (Amundsen 1977; Jaquette 1974).

Cross-national information on women's voting participation is limited. Basic information available on the year suffrage was granted to women (Boulding 1976: 250-251), tells us nothing about whether women exercise their right to vote or whether their voting patterns differ from men's. More important, the mere act of voting tells little about the degree to which candidates are responsive to voters and thus, the

effect of voting on government performance. When women perceive themselves as a group and vote to advance the interests of their sex group, they are more likely to ensure politicians' responsiveness. Whether voting is meaningful or not, winning the right to vote focuses women's attention on the political process (Chaney 1979: 83).

Contacting. A second participatory mode is that of initiating contacts with government personnel and/or political representatives. Initial contact may also be made by government personnel; once the norm of interaction is established, citizens may initiate further interaction. Thus an important process of communication and responsiveness can be created between government and citizen.

Rural extension services exemplify the exclusion of women from this type of political process. Agricultural extension staff tend overwhelmingly to be men and to communicate with men (Staudt 1975-76; Bond 1974; Fortmann 1979). For female heads of households, access problems are particularly acute. Both male staff and female clientele may avoid such contacts due to cultural constraints against interaction between unrelated men and women. Extension workers assume that information transmitted to husbands will diffuse to wives, although one study shows this transmission to be uneven and irregular (Fortmann 1979).

In many instances, women are the most appropriate group with which staff should interact, given agricultural work and decision-making patterns. Yet governments are unable to reach this key group due both to insufficient female staff and to inadequate incentives promoting male staff interaction with women. In such cases, women's



groups provide effective alternative vehicles for the dissemination of information and services. One study, focusing on Latin America, argues that technology transfer via democratically organized small groups best overcomes subsistence farmers' aversion to risk taking and permits extension workers to increase their case loads without loss of efficiency (Jedlicka 1977). Were women's groups to interact with extension staff, the bias problem would begin to be addressed. Interaction between organized women and extension staff can institutionalize economic change in long-term ways as well as enhance the quality of administration. Just as important, a stepping off point for other or more vigorous demands is created.

Classic studies of the U.S. agricultural extension and credit systems illustrate how organized clientele are able to secure more responsive administration (McConnell 1966; Lowi 1979; for a Kenyan example, see Leonard 1977). The Cornell Center for International Studies monograph series on the effects of local organization on various measures of development in Asia Countries confirms this as well (Cohen and Uphoff 1977). Indeed, Esman argues that nonroutine services cannot be effectively provided to marginal publics unless they are organized (1978). This is illustrated well with women, who often form a marginal public. In a study among the Wolof of Senegal, where crops are grown in joint household plots and in men's plots and women's plots, the newly introduced mechanical sowers and weeders were systematically made available for the women's plots two and one weeks after the joint and men's plots, respectively. Not surprisingly, women's yields were lower than those of the joint and men's plots. Only after women

organized to complain to the government development agency (CNRA), was the technology made available during the appropriate times for sowing and weeding (Venema 1978: 112).

Organization. It is in voluntary organizations that mediation between the individual and government occurs. For the disadvantaged, organization provides either direct access to political power or access to the economic means of power acquisition (Huntington and Nelson 1976). Studies indicate that while high socio-economic status (and the attitudes associated with that status) predispose people to be politically active, organizational involvement and group consciousness can substitute as alternative routes to participation and can stimulate further political action (Verba, Nie and Kim 1978; Ambrecht 1976).

Anthropological research supports this as well. A comparison of four African preindustrial societies suggests that women's collective utilization of their economic and labor resources is a prerequisite to public participation. Among the Mbuti and Lovedu, where women's productive activities are collective and extend beyond the household, women are relatively equal to men. Women represent themselves in legal proceedings, participate in socializing opportunities, and hold political office. In contrast, Pondo and Ganda women, who work individually and produce for the household alone, face active discrimination in a variety of spheres (Sacks 1974).

Data on comparative male-female organizational participation are limited, although an early study of five countries (U.S., U.K., West Germany, Italy, and Mexico) indicates that men participate two to three times more frequently in organizations compared with women,

with the exception of the U.S. (Almond and Verba 1963). A more recent seven-country study, designating four levels of organizational affiliation, indicates that women comprise more of the "nonpoliticized" group in each country, and men more of the strongly affiliated, "politicized" group. These differences were particularly aggravated in India, Yugoslavia, and Austria where men were, respectively, twenty-one, three, and two times as likely to be "politicized" as women (Verba, Nie and Kim 1978: 247).

People may have common problems and interests, but they do not automatically share the perception of these commonalities which is necessary for organized action. The conditions associated with group awareness include:

- the opportunity to interact and communicate with one another,
- the absence of strong competing loyalties, and
- actual shared values or deprivations.

Studies of women's organizations find that they appear to flourish under certain conditions: the absence of men, the sense of relative deprivation, sex segregated work settings, and reciprocally-based female coping strategies in marginal economic settings (Leis 1974; Stack 1974; Freeman 1975; Brana-Shute 1976; Sanday 1974).

Organizations are uniquely able to address disparities between men and women, both economic and political. Through organization, women can pool common resources and utilize the benefits of scale to develop income-earning activities, reduce labor burdens, and commercialize labor production and thereby acquire public value for that labor. The Cameroon corn mill societies are classic examples of this process. A

community development officer introduced hand-operated corn mills which women owned and operated as a group. Mills were loaned rather than donated and each group collected fees to repay the loan. With profits and by-products, activities expanded to include tree planting for fuel and poultry schemes using bran from the milling process (Bryson 1979: 93). In societies where women are secluded within households, organizational activity provides a setting to break isolation and share common interests. One study of income-generating activities in South Asia advocates central workplaces for women rather than home-based cottage industry for exactly this reason (Dixon 1978).

Support from and involvement in organizations provide access to information and contacts. In groups, women gain experience in leadership, management, and other skills translatable to other spheres. Indeed, voluntary organizational involvement is an important recruitment channel to elite political participation. In one study, over three-fourths of the female state legislative representatives interviewed gained experience and support via this route (Kirkpatrick 1974). Only when groups regularly make demands and control resources over which they can bargain will governments be responsive to members' needs. Such mobilization will spur the creation of structures within government to respond regularly to women and channel resources in their direction. In this way, governments will begin to serve female as well as male political constituencies and administrative clientele.

In a U.S. AID-supported project example, women's groups in two Tanzanian villages, which were local branches of the women's party wing, identified, prioritized, and developed solutions to local com-

munity problems. An important thrust of this project was to develop women's organizational capacity to make demands on and secure resources from their political environment. This goal was attained when a local party official who owned the only shop in town and was hostile to women starting another shop with more competitive prices was overruled by a high-level party office (Stanley 1979).

Colonial officials and early ethnographers were sometimes blind to women's authority structures, organizational activities, and solidarity networks outside the home. However, more recent studies provide a sense of the wide scope of women's organizational activity in those excolonies. Women's organizations tend to reflect (1) the sex division of labor (Caplan and Eujra 1978), (2) community needs which women perceive as their responsibility, and (3) the focus of national and international program intervention, as illustrated below.

Sex division of labor. Women's solidarity patterns are often based on a sex division of labor in which women work on similar tasks, labor separately from men, and consequently, share related interests. Among the Bamileke in Cameroon, where women's involvement in food production is long-standing, female farmers may be admitted into the Mensu, a women's society composed of the best cultivators. Among the same people, the Mandjon was a group of important women who administered village work done by women, such as clearing paths (Delaziere, cited in Bryson 1979: 25, 114). Several analyses of southeast Nigeria describe women's authority structures which parallel men's and functioned as women's courts, market authorities, and community developers (Okonjo 1976; Leis 1974). Organizations among low-income neighborhood

women in parts of the Caribbean and Lebanon provide mutual aid, disseminate information, and distribute food during times of shortage (Joseph 1976; Sutton and Makiesky-Barrow 1977). A study of Surinam women's clubs describes how entertainment is regularly organized for profit. Halls were rented, bands commissioned, and tickets sold, with returns redistributed through group services (Brana-Shute 1976). In Ghana, women organize to advance the economic interests of their occupational group. Such groups include traders, breadbaker cooperatives, fishmonger's associations, and butcher unions (Klingshirn 1971).

Common organizational forms are rotating credit and savings societies found among communal agricultural groups, and contract laborers all over the world (Misch 1975; Bryson 1979; Epstein 1961; Staudt 1980; Dixon 1978; Pala 1976; Hull 1976; Lewis 1976). Typically, members contribute a fixed sum on a regular basis, the lump sum of which is provided to one member at a time. These groups range from arisans in Java, friendly societies in Jamaica, mabati groups in Kenya, susu in West Africa, mushti in Bangladesh, dhikuri in Nepal, kutu in Malaysia, and gamayas in Egypt.

Community and group needs. Some women's organizations are also a response to community needs which women perceive as their responsibility or to their efforts to support or advance women. The largest category of this type of women's organization is concerned with social welfare; these provide hospital services, orphanages, vocational education, and child care. Often they are sponsored by urban, elite women (Bruce 1976: 293). Also included in this category are organiza-

tions which advance the interests of women and reduce discrimination (more of which are described in Section II). For example, affiliates of the YWCA lobby for legal equality between the sexes and provide safe shelter to women in urban areas.

External promotions. The availability of resources and thrust of program interventions influence the form and substance of women's organizational activity. In central Kenya, a women's organization successfully sought available government resources for productive ventures. With these funds, members acquired loans to purchase land, shares in business, and agricultural inputs (Watchel 1975-76). A U.S. AID project in Upper Volta makes loans available to women's groups for productive ventures in grain milling, collective agricultural plots, shops, and other activities (1976). Other interventions, described more fully in Part II, promote a domestic, housewifely orientation to the virtual exclusion of all other women's roles. Such efforts also affect women's organizations, and may have detrimental consequences on equality.

Cross national indicators of women's organizational activity are only beginning to develop. One available indicator is the number of international nongovernmental organizations (INGOs) in a country. At least one INGO is found in virtually every country (for exceptions, see Boulding 1976). Although the presence of an INGO indicates little about the extent of women's influence within national political settings, it does imply the existence of communication channels, resource availability, and enhanced leadership experience. The greater the number of INGOs, the larger the potential for networks, resource flows, and coalition prospects to enhance representativeness. A study of the

Brazilian suffrage movement notes the importance of international networking for catalyzing action and sharing action strategies (Hahner 1980: 98-99).

The frequency of INGOs is instructive. Virtually all Western European and North American countries have more than ten INGO national sections. One-third of Near East countries, around a quarter of African and Asia countries, and three-fourths of Latin American Caribbean countries have over ten sections. It is primarily in African and Asian countries that there are less than ten national sections and thus INGOs are underrepresented (adapted from Boulding 1976). Although, according to ethnographic materials, Africa has the largest number of rural women's organizations, it is paradoxically the area with the fewest national sections of INGOs. The International Directory of Women's Development Organizations (U.S. AID 1977) lists almost five hundred organizations, about two-thirds of which are located in developing countries.

Although much analytical writing concentrates on conventional participation mechanisms such as voting, other forms of mass participation such as contacting government officials and participating in formal organizations, appear to tap the larger political reality of development. Yet such mass participation will little increase government responsiveness to women unless it is linked to political elites. Representation is thus as crucial an issue as mass participation (Jaquette 1976: 60).

#### Elite Participation

Women have occupied prominent positions around the world as heads



of state in Argentina, India, Sri Lanka, Bolivia, Israel, Portugal, and the U.K., and as mayors in Freetown, Lome, Nairobi, Gabarone, and other capital cities. Nevertheless, compared to men, women in positions of authority have been exceedingly rare. A comparative elite theorist concluded that "women are the most underrepresented group in the political elites of the world" (Putnam 1976: 32). Political stratification is a universal feature of societies, and women are virtually excluded from top strata. The consequences of this imbalance are most certainly detrimental for the majority of women. The ineffectiveness of mass participation at the individual voting, contacting, and/or organizational level will persist without linkage and reinforcement at the elite level. Further, female exclusion is indicative of continuing cultural devaluation of women.

Will women in power represent the larger population of women, having an impact on the disparities between men and women? There are few examples in which a sufficiently larger number of women participate to determine whether there is a "critical mass" at which elite women form an effective and cohesive group. One rare piece of evidence, comparing two nineteenth-century charity organizations in Massachusetts, supports the argument that women policy-makers do make a difference regarding service to poor women. In one of the cities, male elites controlled charity policy despite the predominance of female members in elite charity organizations: here policy was to ferret out the "unworthy." In the other city, women gradually took control of charity policy and reoriented the organization into one of advocacy for poor women. Various reforms were initiated, such as nutrition educa-

tion, vocational training programs, female police matrons, and nurseries. Moreover, decreasingly smaller percentages of the poor were deemed "unworthy" and removed from welfare, as women took control (Crumbler 1980). Another case illustrates the effects of male-controlled decision making. Following the drought in the West African Sahel, government programs replaced Tuareg men's cattle, but not the livestock women had owned. The exclusion of women from decision-making explains the allocation of these resources (Cloud 1977).

Elected public officials. Women's participation in elective office varies little around the world. In most parliamentary democracies, women are approximately 5-10% of the national legislature. Strikingly similar is the current de facto ceiling of ten percent for women's participation in the central committees of Communist parties in China and the Soviet Union. Only in Scandinavian countries and the national assemblies of selected one-party socialist systems, such as the USSR, Eastern Europe, China, and Guinea is women's participation higher, typically around 20%<sup>4</sup>. Women's participation in public office at the regional and local levels is slightly higher, although women never number more than half, even in one-party socialist systems (Newland 1975: 6-9, 13-15, Appendix B; Putnam 1976: 33). According to the Law of Increasing Disproportion, the "disproportionate advantage of male educated, high-status elite recruits increases as we move up the political stratification system" (Putnam 1976: 33).

In some countries, seats in national parliaments are reserved for women in groups ranging from national assemblies to village committees. Seats are set aside for women in Kenya, Bangladesh, Guinea-

Bissau, and the Sudan and other countries. The proportion of seats for women is typically five percent or less, but some village committees have provided that two-fifths of all seats be held for women. Reserving places is a common technique utilized to increase the participation of disadvantaged groups in representative and bureaucratic institutions. For decades, India has had preferential policies for scheduled castes, tribes, and other "backward classes" and Anglo-Indians (Newland 1975: 15; Katzenstein 1978).

But getting a foot in the door, however desirable, is not enough. The proportion of female representatives is a critical determinant of the ability to advance women's interests as a group. Without a minimal critical mass, prospects for bargaining, leverage, and coalition building are dim. Even when women represent a significant proportion, they are not likely to have identical interests. No research exists on the minimal threshold for achieving group outcomes, but a study of proportions in a large bureaucratic institution indicates rough guidelines. A "skewed group" containing up to twenty percent women (or other disadvantaged group) tends to be treated as tokens; twenty to forty percent presence, called a "tilted group," provides for a minority group in which alliances and coalitions can be made; forty to sixty percent presence represents a "balanced group" (Kanter 1977: 209).

#### Appointed, Career Positions

Both the advent of complex, technologically advanced society, drawing heavily on bureaucratic expertise, and the decline of representative politics, increase the significance of bureaucratic

involvement in policymaking. It is in government bureaucracies that key decisions are made about implementation processes that ultimately affect who has access to resources. The access of disadvantaged groups will increase when their advocates gain positions influencing or controlling resource allocation, decision making, and other policymaking. Furthermore, representation within the bureaucracy favors permanent, institutionalized, and routine responsiveness to the special circumstances of particular clientele. One study estimates that women represent only six percent of all mid to top-level policymakers around the world (Boulding 1976: 36).

Women-sensitive policymaking entails a setting in which appropriate tone and coordination exist to meet women's needs. Strategically placed people at key access points in the bureaucracy appear to be a minimal prerequisite to the redistribution of resource flows. It is often argued that appointing members of disadvantaged groups will redirect resources to those groups. The concept "representative bureaucracy" refers to the recruitment of a more socially representative bureaucracy in order to offset political power disparities in representative institutions outside the bureaucracy.

The recruitment of representative bureaucracy can be based on physical attributes or origins, as well as on attitudes. Staff who are recruited according to the color, sex, or caste attributes of those groups poorly served by the administration are presumed to be willing to protect group interests. They also provide role models for group members (in this case, women), resulting in improved self-image and increased expectations. Also female staff can interact with women in

sexually segregated societies where men cannot. But representative bureaucracy, recruited by external attributes, may not ensure these results. People seek jobs for a variety of reasons, the least of which may be to advance the interests of their group. Furthermore, appointees from subordinate groups may embrace the ideology rationalizing inequality, interpreting their own advancement as a sign of personal superiority. Probably most important staff members, whatever their attributes, operate within a bureaucratic framework which constrains independent and discretionary action.

One possible remedy for these uncertainties about representative bureaucracy, with recruitment by physical attributes, is to specify knowledge and commitment as selection criteria. Thus women appointed to represent their group should both understand how sex bias occurs in the field in question and be committed to its elimination. One workable approach is to include the responsibility of explicit advocacy on behalf of women into the job description.

The proportion of women or of any other disadvantaged group within a structure is a major determinant of the group's impact on bureaucratic activity. Studies of lone, token women (and members of racial minorities) in large institutions document the high visibility, performance pressures, and limited support such employees face. A minimum level of proportional participation is necessary before power balances are altered (Kanter 1977). The precise threshold is likely to vary according to institutional history, function, and style. A study of women in politics in Peru and Chile dramatically illustrates the performance pressure women feel. Moreover, women's use of power

differs from men's, and women tend to be excluded (often by choice) from internal politicking (Chaney 1979: 132-133).

If "representative women" are scattered within and across bureaucratic institutions and their impact somewhat dissipated as a result, it may be useful to focus on women in a committee, bureau, or ministry. A structure (or substructure) with the mandate of promoting women's integration or eliminating sex discrimination has the advantage of concentrated staff and monetary resources. It can also catalyze action within a larger structure and stimulate or reinforce interest group activity outside the bureaucracy.

In 1963, the U.N. Economic and Social Council recommended that member states appoint national committees on the status of women to plan and recommend ways to improve women's position. The International Women's Year Plan of Action also recommended that machinery be created to review, evaluate, and recommend measures to ensure women's equality with men and to integrate women into all sectors (Boulding 1976: 248-249, 404-410).

A U.N. study which analyzes the effectiveness of "national machinery" for women, based on questionnaire responses from 79 countries, found a wide range of structural options. Some national machinery was formally affiliated with the state, such as a women's bureau, a ministry, or advisory committees. Others were women's wings of the party and extra-governmental autonomous women's organizations. Despite the now widespread existence of national machinery for women, they are constrained by limited financing and staffing, social and religious attitudes which legitimize women's subordinate status, and

mandates which limit their operations to welfare issues of low priority. Although such machinery has contributed to increased data collection and advocacy, women are "still a marginal consideration in development strategies." Indeed, in some cases the establishment of national machinery has pre-empted efforts to improve women's status by bureaucratizing initiative and neutralizing grass-roots efforts (Ooko-Ombaka 1980).

The strategy of building separate women's machinery runs the risk of becoming isolated and marginalized, and being charged with more responsibilities and with higher expectations than its resources allow. Yet without a structure and resources, efforts to integrate women will be unfocused and dissipated. Optimally, each functional ministry would have such machinery, providing multiple access points to integrate women into the structure. To further optimize internal monitoring efforts, groups outside the bureaucracy can act as supplementary monitors and supports. The Ghanaian Council of Women and Development plays such a role, advising and monitoring government activity for sex bias, conducting policy-oriented research, and promoting income-earning projects for women (Nantogmah, 1979, also personal communication). Only when outside organizations support those structures within government, and women's equality generally, will the issues be persistently addressed.

### Political Parties

The significance of parties varies across political systems, as do party membership rates. In some one-party states, party membership is the primary vehicle for political and economic mobility, ideological education, and political appointments. In multi-party

systems, party significance ranges from that of dormancy between election times, to that of active project work, educational activity, and ideological guidance, influencing voter choices in between and during elections. Elsewhere, parties are skeletal structures, functioning to legitimize military regimes or to provide contained, within-system focus for opposition. Whether periodic or continuous, party participation can be the key for recruitment to elective office and establish a framework within which to measure government performance, make political appointments, and provide other patronage activities. Through party participation members make contacts and acquire experience.

Women's party membership is highest in the one-party socialist states, although even in these states women rarely number more than a quarter of the total membership (Jancaz 1974; with the exception of East Germany; Newland 1975: 17). Studies of women's party participation in the U.S. indicate that women generally provide behind-the-scene support which enables more effective male campaigning (Kirkpatrick 1974).

Women's party participation is often separated into women's divisions or committees which focus on culturally acceptable women's concerns, such as social services. A study of Latin American politics finds this separation to be resented by women leaders who perceive that they are excluded from party policy-making (Chaney 1973). On the other hand, it may be strategically appropriate to capitalize upon such female roles. Women can build on areas in which they are considered to have an expertise not threatening to men (such as concerns derived from the nurturant mother role) (Jaquette 1976: 192). Further-



more, there exist numerous women's party wings which overtly seek to advance the status of women, such as those in Tanzania, Cameroon, Zambia, Congo-Brazzaville, Togo, Sudan, and Mali, among others. What is meant by "advancing the status of women," of course, varies from place to place.

A Colombia study focuses on the token roles women play in party politics. Many women entering through the women's wing have stagnating careers and move laterally only. This is explained through the dynamics of tokenism and the consequences of the uneven sex ratios in "skewed groups" (according to the theories of Kanter, mentioned above) (Harkess 1980). A women's party wing can potentially create a network which disseminates information and responds to grass-roots demands. The balance between top-down and bottom-up flows varies across political systems. The Malian party women's wing disseminated information to women about the Marriage Code (specifically, that a couple had the option of choosing polygamy or monogamy at the time of marriage). These sex-segregated communication networks have been criticized, however, for not informing or building support among men, who ignore the Code's features (McNeil 1979: 115).

The Sudan has machinery in place to reach women in far-flung parts of the country. The structure of the party wing also provides a certain amount of access within government, particularly in government ministries. The Women's Union, a voluntary organization, is linked to the Women's Secretariat of the Sudan Socialist Union, which has political appointees drawn from and overlapping with Women's Union leadership. The combined structure reaches into each village and

farig council, in which a quarter of the 24 seats are reserved for women. Overlap between organizations is matched by interlocking relationships with the Women's Department, located in the Ministry of Information and National Guidance. Of that nine-person staff, five are lent to the SSU Women's Secretariat and Women's Union to provide professional assistance and aid in coordination. The Department budget includes resources for promoting women's activities, such as adult literacy and early children's education (Badran 1979).

The modes and levels of women's political participation are numerous, though underutilized. Efforts toward better utilization, particularly through improved organization, are vital. This is no easy task, as the following section demonstrates.

### III. Obstacles to Increased Women's Organizational Participation

As the previous section points out, women's political participation is more limited than men's, a primary factor explaining their continuing subordination and limited receipt of benefits from government. Women do participate politically, even though their influence on the larger political system does not always advance their interests in optimal ways. In many societies, women are part of networks and/or organizations, providing a general model upon which to build. This discussion of organizational strategies will address several key issues and obstacles: the larger system, organizational development, risks of joining the political mainstream, the utility of sex-separate organizations, elites within groups, and skill development through outside

intervention.

### The Political System.

For governments attempting both to stimulate development and to manage what are often volatile, unstable political environments, organizational development simultaneously offers threats and benefits. Organizations facilitate information collection and improve implementation efforts. When they act on the advice and under the influence of organizations, government decision makers can probably anticipate greater public acceptance of programs as well as active support from some sub-groups. Nevertheless, governments must be willing to share power and to accept potential disagreement and conflict over goal selection and resource allocation. Participatory strategies also make greater demands on administrators' time and can increase coordination problems (U.N. 1975). An open political climate must exist so that participation can occur without repression or other risks to potential participants. The absence of such a climate may be the primary obstacle to organizational strategies in development.

Political systems differ in the degree to which organizational affiliations affect political activity. They range from those where individual high socio-economic status is the prime resource for acquiring political influence to those where organizations are the only acceptable channel for political action. One study classifies political systems into five institutional types, three of which are pertinent here. In the first, "weak institutional," affiliations have no impact on political action. Rather, an individual's socio-economic resource level alone explains political action; at high socio-economic levels, individuals

are involved, and at low levels, uninvolved. In the second type, "additive institutional," organizational activity can complement or substitute for high socio-economic status in promoting political action. Third, in the "dominant institutional" type, organizations are the necessary and sufficient condition for political action; individual status has no effect on political activity (Verba, Nie and Kim 1978: 112). Participatory strategies must take into account the political system type. Because women generally have lower socio-economic status than men, prospects for participation are worst in the first type, better in the second, and optimal in the third (assuming that female organizational participation is considered legitimate).

Representative structure also has an effect on the extent to which women will be able to wield decisive power. Many electoral systems are organized on the basis of geographically-based constituencies. If political loyalties and voting patterns are based on kin ties, co-terminous with residence and constituent boundaries, women as a group will cut across those loyalties and boundaries, and their power will be diluted in the process (Staudt 1978). Women's electoral patterns are unlikely even to parallel those of other political minority groups, such as income, ethnic, and racial groups, who live segregated from the dominant group because social segregation fosters separate political identifications (Hacker 1951; Staudt 1979). In a corporate structure, on the other hand, the state recognizes functional groups and institutionalizes their integration into decision-making structures. For example, "women" might be represented alongside "youth," "peasants," or the "military." Questions, however, must always

be raised about leadership selection processes (and consequent representation) within each category, as well as about government cooptation and control. Moreover, women may well be underrepresented in the other categories to which they belong.

Is national ideology enough? The political programs of one-party socialist societies often contain an ideological commitment to the emancipation of all groups, including women. Moreover, central planning and concentrated state power have the potential capacity to create swifter attitudinal and distributional change than in pluralist societies where opposing interests create stalemates and, at best, only incremental change (Jancar 1974). Such an ideological commitment is a possible contributor to women's political empowerment, although the relation of ideology to practice is not always certain.

In Tanzania, where socialist ideology, along with its emphasis on women's equality, has unevenly penetrated rural areas, women in Ujamaa villages were excluded from controlling significant household assets, such as land and cash proceeds from their agricultural labor (Brain 1976; Fortmann 1979). In China, where women's status has probably changed more dramatically than anywhere else in the world, patrilineal, exogamous marriage patterns tend to exclude women from local-level leadership positions. Women marry into communities as outsiders, and thus lack the social and political base so essential to the acquisition of leadership positions. This lack of political power affects the value accorded different kinds of labor and the level of compensation for that labor. Women's work is accorded fewer work points than men's, and household labor is not accorded any public,

paid value. Cultural restrictions, such as the exclusion of menstruating women from agricultural fields, reduce the number of paid work days open to women (Diamond 1975). Furthermore, the ability of women's organizations to flourish has been dependent on other party factions which control policy-making machinery (Leader 1973).

Ideologies stressing individual and even group emancipation and equality are insufficient. Whether in socialist or nonsocialist societies, women's direct participation and women's autonomous organizational activity appear to be critical to translating numerical strength and economic contributions into effective power.

#### Building and Strengthening Organizations

Creating, building, and strengthening organizations are as problematic for women as for other disadvantaged groups in society. By definition, disadvantaged groups have less access to resources, such as contacts, money, and information, which all support successful organizational action. For those living at or near survival levels, time for group activity may be limited (unless the group activity itself reduces time and labor). Disadvantaged groups also lack experience, skills, leadership, and organizational alliances, in contrast to the edge possessed by longstanding, well integrated groups. Finally, if people are excluded from government and program benefits, they lack the positive reinforcement associated with participation, while those within the distribution network have incentives to continue. As recipients of limited or no benefits, women lack the reinforcement associated with sporadic or continual success from group action.

A more subtle aspect of disadvantaged status is the stigma that

goes along with it; an attitude learned by all, including the disadvantaged. If women, minority, poverty, or caste groups internalize values which denigrate them, the will to act on common interests is inhibited. These factors, unless countered by a positive affirmation of group culture, attenuate collective consciousness among women, as in other subordinate groups.

Although women may share many interests, they face special problems in developing both consciousness and organization. Isolated from one another in some social settings, and residing intimately with the dominant group, women's identification tends to be based on the family or on male interests, which cut across (or compete with) female interests. These factors reinforce the difficulty of expressing and acting on sex-based concerns (Staudt 1980). Strong organizational capacity ultimately requires external support, including both the horizontal ties such as alliances and vertical ties such as **multi-tiered organization**. Horizontal integration can be particularly problematic for women advancing the interests of their sex if male allies see female gains as their losses, or if gains are seen publicly as threats to social institutions such as the family.

Some development programs consciously address that mindset. The Rural Feminine Credit program of INCORA, an agrarian reform institute in Colombia, emphasized how the program would unify families and "ayudara al hombre . . ." (help a man to . . .), reflecting the need for male consent and support (Cebotarev 1976). A women's mobilization effort in western Kenya, initiated by the male chief, developed into a judicial and political representational system. Women elders judged other women

in women's courts, and women formally represented other women in local and distant barazas (community meetings). Women elders infringed on the territory of male judicial elders, and women's mobility was alleged to increase prostitution. One of several reasons for organizational collapse was that male elders withdrew their support: this outcome underlines the ongoing dilemmas of dependence and seeking power (Staudt 1980).

Tapping organizational incentives. Theorists disagree about the preconditions to organizational emergence. In one perspective, differentiation, disruption, and subsequent communication cause organizational growth (Truman 1971). Yet this explanation lacks sufficient precision to predict women's organizational emergence. In virtually all societies, evidence can be found of increasing task differentiation and/or disruption in resource balances between the sexes, as men disproportionately acquire new opportunities, resources, and other benefits.

In another perspective, organizational "entrepreneurs" catalyze organizational emergence (Salisbury 1969). This entrepreneur, or leader, demonstrates the balance of contributions and benefits to potential members. Underlying this perspective is the notion that people enter relationships because they derive some benefit, and entrepreneurs make potential members aware of the benefits to be received. This exchange perspective provides the basis for explaining the various incentives which prompt people to join and participate in organizations. Although disruption may be necessary for "entrepreneurs" to better make their case, the exchange perspective suggests that members must perceive some clear incentive for participation, including: (1) individual



material gain; (2) social benefits (or status) from associating; (3) purposive reasons; that is, satisfaction from contributing to a worthy cause (such as collective group benefits); and (4) compulsion and avoidance of sanctions (Wilson 1973).

A study of over fifty Asian and Latin American peasant communities found material and social incentives to be predominant in societies undergoing integration into the larger political economy. Potential group members commonly asked "what's in it for me, or people close to me?" and of established members, "what has the organization done for me lately?" (Migdal 1974: 9). Even if people recognize common interests, they may not consider participation to be worth their own time and effort if benefits derived ("collective goods") will be conferred upon all members of the group, regardless of whether they participated in the organization. Thus leaders either rely on coercion or develop voluntary incentives accessible to active participants only to induce individual member participation (Olson 1965).

Economic incentives appear to be the critical feature tying together successful groups of nonelite women, as a study in Korea, the Philippines, and Colombia points out (Misch 1975). A study of the Korean Mothers' Clubs, established to facilitate the dissemination of family planning ideas, indicated that the more successful clubs were supplemented with income-earning or consumption-oriented savings activities such as credit unions, cooperative stores, land purchases, agricultural and construction projects (Kincaid, et al. 1973). Interviews with Ghanaian women on cooperatives illustrated the importance of direct economic incentives supplementing informal contacts, to sus-

tain women's interest (Data Beh 1978). Sierra Leonean petty traders expressed self-interested motives for joining the women's party organization, including the prospect of acquiring scholarships for children, securing jobs, loans, and safeguarding husbands' jobs (Steady 1975). The economic advantages of collective action may be more apparent to women who lack monetary resources to provide labor and assistance during needy times. As one observer noted, "Most women express economic needs before others. Why not build on identified self interest?" (Bruce 1977).

Of course, not all women control the fruits of their labor. In such cases, unless authority patterns within the family are changed, women will be less attracted by material incentives. And authority structures do change. A milk cooperative in India set up milk collection points where cash was paid twice daily upon delivery. Although women care for milk cows, men initially took the milk to collect payments. Soon, however, men tired of the trips, and women began making the deliveries and receiving the payments themselves. Gradually, women's authority over that income increased **within families** (Dixon 1978: 54ff.).

Yet there are limits to material incentive strategies. Collective savings and purchases would appear to be beneficial arrangements for traders. But among Abidjan women traders, collective savings organizations are declining in favor of individual banking arrangements and efforts to promote purchasing cooperatives have failed. In this highly competitive market environment, where one woman's gain is seen as another's loss, mutual trust is lacking, and a tendency is developing

to seek individuated means of economic advancement.

This tendency, however, varies with women's ethno-religious affiliation. Ethno-religious affiliation, here discussed in terms of southern or northern origin, is related to differing associational modes outside the market place. Northern women's non-market associations explicitly utilize individual material incentives that are carefully balanced between individual contributions and benefits; the particular norm of fairness, dependent on strict accounting and reinforced by religious cohesion, provides a sturdy associational mode. The northerners' associational pattern is conducive to successful group organization in the competitive market place. In contrast, southern non-market women's associations are group-oriented and less tolerant of self interest orientations and the consequent tensions which arise when collective savings schemes are launched. Southern women have the greater tendency to utilize individual savings strategies. This contrast illustrates how groups functioning with a particular balance of individual and collective incentives may prosper under some conditions, but founder in another setting. Southerners' associational mode cannot be sustained in the face of intense market pressures, but promotes collective action for certain ethnic neighborhood activities in which all enjoy benefits, regardless of individual contributions (Lewis 1976).

In another example, welfare mothers in Massachusetts participated in organized protests to secure special need grants from local welfare departments. Administrators usually capitulated to group demands made in a confrontational manner. Once grants were secured, members tended

to drop out of the organization. Organizers then tried to supplement material incentives with other material incentives, such as selective credit and counseling. Even more significant, when the government eventually withdrew special need grants, the organization declined further. The sole use of material incentives, without supplementary social and purposive incentives to maintain commitment, partially explains the organization's early demise (Wilson 1973: 67ff.).

Social incentives such as companionship, shared outlook and a common life situation, are an important glue which holds members together, above and beyond other incentives. Women unaccustomed to interaction and to pooling resources tend to distrust one another. Recruitment from existing social networks, as examples from South Asia demonstrate, can enhance cohesion (Dixon 1978: 144). Lacking other supplementary incentives, however, the social glue can quickly become undone by personality conflict and disagreement. As examples from U.S. women's organizations indicate, groups which coincide with friendship networks are less easily directed toward productive tasks because so much energy is put into process. Moreover, recruitment of those outside the friendship network is difficult (Freeman 1975: 4).

Economically homogeneous communities may provide the best basis for organizational emergence. A controlled comparison of two village women's groups in Tanzania indicated that group cohesion and attitudinal change was more positive in the poorer, more homogeneous village (Stanley 1979). U.N. RIDS and studies from South Asia support this finding as well (Dixon 1978: 141-142).

The satisfaction of contributing to a collective cause which pro-

vides benefits equally to all members is a second organizational building block which may complement individual incentives. As suggested in the Ivoirian example, the degree to which an imbalance between contribution and individual return is acceptable to members, and the degree to which satisfaction from contributing to a cause overlaps with return, will very well determine the success of group efforts toward collective (rather than solely individual) benefits. One might deduce that imbalance is less acceptable at the margin of survival, and thus among low-income women. One certain dilemma, however, is that basing a group on individual material incentives, although probably easier to organize, may forestall the advancement of collective interests. Nevertheless, it is possible to supplement material incentives with social solidarity and collective consciousness about long-term group goals. Indeed, one study of over fifty peasant societies suggests a sequential pattern, in which positive experience in achieving simple, individual goals leads to the next level of political action--that of seeking group benefits (Migdal 1974: 219).

Compulsory membership, sanctioned by fines, is the basis of some women's organizations (Leis 1974; Okonjo 1976). In an analysis of a west Kenyan women's mobilization, the male chief authorized women leaders to utilize compulsion as a strategy to induce membership participation. Initially compulsion was acceptable to members because it was supplemented by status as well as material benefits. Nevertheless, during conflict over the dispensation of member savings, compulsion heightened suspicion of leaders, producing some estrangement and ultimate organizational collapse (Staudt 1980). Compulsion as an organizational incentive is fraught

with costs, including the potential of mistrust and grave accountability problems. These risks will vary, depending on the legitimacy of that person or organization authorizing compulsion. As studies of peasant societies indicate, compulsion alone is inadequate for gaining the behavioral changes demanded by institutions (Midgal 1974: 241).

Joining the Mainstream: Cooptation, Dependence and Other Risks

Organizations adapt to the surrounding environment, a process which has significant effects on organizational goal transformation, leadership strategies, and leader-member relations. A wide variety of political structures create, legitimate, and sometimes co-opt women's organizations, their motivation ranging from self-seeking manipulation to a genuine ideological commitment to empower a subordinate group (Massell 1974; Calloway 1976; Scott 1974). While organizations are always affected by their political environment, co-opted organizations, or those organizations created and absorbed into a power structure, are likely to become dependent on that structure for survival. Such dependency complicates goal attainment and strains leader-member relations. Indeed, cooptation can result in considerable exploitation of members, as illustrated below.

The National Congress of Sierra Leone Women (Congress), the women's wing of the All Peoples Congress (APC), has been labeled an "autonomous" body, although the general party constitution declares that the Congress shall be under the complete control of the APC's central organization (Steady 1975: 5). Through regular meetings of the Working Committee (composed of regional branch leaders) and the Executive Committee, women's issues are theoretically linked to APC policy formation. Women in the

Congress gain wide support for the party by recruiting members and serving larger party needs. For example, women challenged soldiers during an attempted coup, participated in anti-American demonstrations, and created a women's militia unit to protect the Prime Minister after an assassination attempt. The National Congress of Women's leverage was tested when its leader sought to contest an election under the party symbol. The party forced her to run as an independent, and she lost the election (Steady 1975: postscript). Returns to members are also questionable, although they pay both entry and monthly fees. Most of the members are middle and low-income petty traders who hope to increase their profits with concessions gained from membership. Yet few receive material benefits from participation. The following account of a vegetable seller's views is said to be typical of members.

She feels that she has to appear in favor of the government and join Congress or else they would be thrown out of their one-room apartment and her husband would be thrown out of his job. . . . She finds being a member financially impoverishing. . . . She is a member of Congress because all the people in her yard (compound) are APC supporters. (Steady 1975: 25-26; 69).

In Malaysia, numerous party-affiliated, but independent, women's associations, previously organized along ethnic and geographic lines, were consolidated into one association, the Kaum Ibu, and established as a women's auxiliary in the United Malays National Organization (UMNO) in 1947. An examination of procedural motions in the early 1950s indicates women's dissatisfaction with their limited access to party decision-making arenas. One resolution called for an independent women's league to deal with UMNO, while another called for Kaum Ibu branches to be responsive to the Kaum Ibu division rather than to party

branches. During elections, Kaum Ibu members played active political roles, distributing polling cards and party manifestos and discussing (primarily male) candidates. In between elections, however, Kaum Ibu's activities were similar to those of the apolitical Women's Institutes, which provided classes in literacy, cooking, sewing, and religion. At annual assemblies, concern with advancing the interests of women was evident; motions called for women's education, scholarships, women's participation in religious courts, legal change, social welfare, and increased female participation in civic life. Yet these motions were not promoted in party machinery. Rather, women concentrated on women's participation in government. After Kaum Ibu threatened to boycott elections, women in the Kaum Ibu were permitted to contest elections. The party made some concessions to women, but the Kaum Ibu had limited success in changing traditional attitudes about women (Manderson 1977).

The National Union of Malian Women (UNFM), the women's wing of Mali's only party, is described as a co-opted organization, designed to tie the women's segment of the population, like the youth and worker segments, to the national government. The meaning of cooptation is illustrated by the report of women party officials that the UNFM could not support a women's issue that the party did not support. It is often unclear whether women's party wings in one party states can apply leverage on government leaderships; the question may be precluded by a shared concern with government survival and an awareness of shared vulnerability. The ouster of governments, and of their women's wings with them, is a not uncommon occurrence. In Mali, the demise of the UNFM's predecessor was caused by the fall of Mali's first government in 1968



(McNeil 1979: 113-117). The Afghan Women's Organization, founded in 1946 and affiliated with the Ministry of Education, offers similar evidence. Having established sixteen branches, it was replaced after the 1978 revolution by the decade old Afghan Democratic Women's Organization affiliated with the Ministry of Social Affairs. The Kabul compound of the AWO now contains the new organization, and similar training and educational activities continue (Hunte 1978: 87). Thus massive personnel changes among political elites make political affiliation risky for leaders of women's groups. Even when a government remains in power, policy shifts may leave women's political organizations powerless. In Tunisia, planned change directed at upgrading women's status in the mid-1960s was slowed after internal party strife resulted in consolidation of the conservative wing and a decline in participation generally (Tessler 1976).

There is no sure avenue to political influence for women's associations. In apolitical groups operating outside political institutions, women's collective ability to influence and control their lives is limited. Inside those institutions, influence is still limited, although variable depending on the regime's resources and women's bargaining leverage. In separate organizations, such as women's wings, women can easily become isolated and marginalized. Numerous complications arise in linking and integrating women's issues into the larger political agenda. Moreover, bargains within the elite can be struck which reduce the access and benefits to the larger female membership. It is common for leadership to divorce itself from the membership base and to function as an appendage of the coopting institution.

Regardless of the quality of participation, the political process itself assists in the development of political skills and leadership (Ambrecht 1976: 10). The dilemma is described succinctly, with respect to economically marginalized groups:

Cooptative participation . . . can help the poor develop a set of political interests, increase their political resources and acquire the know how to intervene effectively in the political process. In other words, cooptative participation by the poor can lead to interest-oriented participation and the development of indigenous leadership. (Bachrach and Baratz in Ambrecht 1976: 10)

For women, as for the poor, perhaps some participation is better than none at all.

#### Sex-Separate v. Integrated Organizations

Concern is sometimes expressed that sex-based mobilization will polarize and divide communities, with two significant consequences. First, it is argued that intra-community conflict between men and women will adversely affect the delicate survival balance of those families near the margin of subsistence. Second, divided communities are more susceptible to encroaching state control. Indeed, women's subordination to local patriarchal institutions may be substituted for subordination to the state.

But existing social patterns appear to favor a sex-segregated strategy. There are already women's informal and formal networks in many settings which provide a basis for the development of expanded organization. Moreover, in sexually segregated societies, cultural barriers to interaction between the sexes must be taken into account. In Afghanistan, proposals have been made to establish "women's houses" with nurseries attached, where women would assemble for income-earning activi-

ties such as rug weaving, milk and cheese production (Hunte 1978: 31). It might be argued that sex-based organization reflects rather than challenges existing distinctions and thus perpetuates sex disparities. Yet without organizational experience, women may not develop skills or have their needs taken as a priority. In India, sex-integrated cooperatives rarely permit women to develop leadership and management skills, because men tend to dominate those roles. Only in women's cooperatives do women have such opportunities (Dixon 1978).

Women may view their participation in what outsiders perceive to be community groups as inappropriate involvement in men's groups. In a Tanzanian pilot project which used dialogue to develop a participatory approach to solving grain storage problems, special efforts were made to attract women to discussion groups to little avail. Women viewed these discussions as formal meetings in which they do not customarily participate (Tanzania, Community Development Trust Fund 1977). Separate meetings for women should have been tried. Women's groups can also provide peer support for risk-taking, change, and mobility. The previously cited Mothers' Clubs in Korea provide such support.

When women are prematurely integrated into larger, mixed-sex organizations, women's interests are often given low priority, regardless of the society's ideological persuasion. Without sufficient resources and power to press claims and acquire bargaining leverage, those resources women bring to organizations have often been appropriated by existing leadership. In an example from a Central American peasant communal union, which introduced programs to expand the role of women within the organization and publicize the problems of campesina

women, a membership survey indicated that women comprised only a half percent of the total participants in the organization (Staudt 1979). An increased awareness of women and of their interests among the remaining 99 percent is unlikely, particularly because sex-segregation prevailed in internal structures of the organization.

The danger that sex-segregated organizational strategies divide communities appears to be slight. An analysis of unsuccessful Soviet attempts to polarize Central Asia during the 1920s indicates that sex roles are less susceptible to polarization than are class roles (Massell 1974: 397). Women's intimate relationship and residence with men, and the bond of children, forestall polarization between men and women.

This in turn raises questions about the prospects for redistributing power balances if women are not integrated into organized groups with men. It is certain that until women are integrated into mixed-sex organizations and institutions at all levels, they will remain marginal to the mainstream. In the meantime, however, separation permits the development of organizational capacity, skills, and resources for leverage in mainstream interaction.

#### Competing Loyalties: Elites within Larger Groups

To the extent that women depend on their relationships with men, those attachments will be reflected in women's organizational affiliations, loyalties, and identifications. Women's interests as women will be less clear as long as their resources and life chances are more or less contingent on household relationships. Competing identifications obscure a clear awareness of common interests, thus diminishing actual

or potential organizational strength. Social structures in numerous societies, particularly patrilineal and exogamous societies, bear witness to such competing loyalties, and mechanisms are consciously created to reduce or eliminate divisiveness within communities produced by in-marrying women (Collier 1974: 92; Staudt 1978b).

Women's interests. What interests do all women share? With the exception of reproductive potential, there are few universal, world-wide women's interests, because societies vary in the type of work women do, the context in which women work, and relations between the sexes. As residents in a community, women have general interests in improved health care, more schools, potable water supplies, and farm-to-market roads. Nevertheless, through locating sex disparities in work, opportunities, and resource control, the following women's issues are identifiable.

- special health care needs, as reproducers and as guardians of children's health,
- less access to agricultural and vocational opportunities and to training and support services for those occupations than men,
- less access to education than men, and stereotyping in schools, resulting in differential skills between the sexes and a narrower range of occupational choices than for men,
- imbalance between the sexes in domestic work and compensation, a result of men's work patterns outside the home and a cause for women's more limited options outside the home,
- legitimacy of overt physical abuse toward women or covert abuse continued through a reluctance of public authorities to interfere in "private" matters, and
- underrepresentation and nonparticipation in political and bureaucratic institutions (a dimension that spans and affects other interests).

The rank women assign to these interests will vary across societies

and economic strata. For example, women born in wealthy families face fewer problems in access to education and employment, and even employ domestic help to alleviate household chores.

Representativeness of women's organizations. Those persons who vocalize interests, set agendas, and establish boundaries around women's interests merit close attention. Organizational leaders may foster their own interests, or interests aimed at maintaining the organization, rather than member interests.

Elite dominance is a potential problem affecting virtually all organizations, men's or mixed sex. There is little reason to doubt that elite control does not similarly affect women's organizations. In Latin America, upper and middle class women appear to identify little with lower class women (Chaney 1973; Nash and Safa 1976). A study in an economically stratified community in Bangladesh reports that high status women were selected as officers, even though they were not trusted by organizational members. Members felt constrained to select those women, as their families depended on the elite for other goods and services. It was recommended that cooperative members be from the same class in future projects (Dixon 1978: 142). A study in Indonesia argues that the kind of education women receive (focused on etiquette, embroidery, and domestic specialties) has created an elite unprepared to participate in development. Presumably, some of these women lead women's organizations (Hull 1976: 19-20). An analysis of India indicates that if an elite takes control over new political institutions designed to enhance popular participation, the benefits of rural development will continue to be inequitably shared, further rigidifying the class structure via the

political process (Rosenthal 1977).

Both the strength of competing loyalties and household decision-making patterns vary by economic class. As family income rises, both men and women may aspire to realize the limitations of female family role confined to domestic and child care functions. High family status depends, in part, on the realization of this ideal. Affluence makes women's withdrawal from production possible. In these circumstances, women have sometimes worked to extend household interests and the values and visions of the class in which she resides. Papanek labels this one type of "status-production work" (1979: 778-779). The needed class redistributive vision of female solidarity is limited by this pattern.

Women's situation in wealthier households may be fundamentally different from that of other women. Several studies in Indonesia indicate that women's contribution to subsistence and decision making is lower in middle-income than in low-income homes. Even though middle-income women obtain more schooling than lower-income women, they are more home and family centered. Also middle-income women are more likely to belong to organizations, and these activities match their home and family ties, concentrating on cooking, flower arrangement, and home decoration. Lower-income women's involvement in economic activities precludes participation in such organizations (Stoler 1977; Hull 1976: 10). A study in Peru illustrated how different material levels influence the character of women's agricultural work. Utilizing land as a proxy for class, it was found that among landless households, women contribute about a third of farm labor requirements, among smallholders, a quarter, and middle peasants, a fifth. Even more significant was the

difference in female tasks, where poorer women's work involved the greatest physical exertion. These differences are reflected in household decision-making patterns. Landless women always make or share decisions in product disposition, control over inputs, and organization of production, in contrast to women in the middle strata (Deere 1977: 14-17, 24). These different material realities will influence what issues women perceive as "women's issues." In a west Kenyan case study, wealthy women farmers who articulated women's interests to candidates and bureaucrats had equal access to agricultural services (compared to men), unlike most ordinary women. In addition, wealthy women were five times more likely to be exposed to domestic-focused government programs. These factors accounted for agriculture not being seen as a women's issue, despite the fact that agriculture is women's prime source of livelihood in that region (Staudt 1979a).

Although potential elite domination raises serious questions, on balance it would seem that all women will benefit from elite women's involvement in women's organizations. First, substantial divisions between elite and non-elite women are questionable, because relatively few women independently control productive resources and/or hold high paying positions in the formal economy. Societies differ in the extent to which household resources (particularly income and land ownership) are shared, ranging from separate incomes in some sub-saharan African societies, to formal, legal co-ownership in others. Even in societies where women control spending decisions, these decisions are usually limited to family consumption. In numerous societies, women's status is in part derived from her male relatives. If relationships are



severed, women may lose control of all formerly shared resources. As an analysis of women's INGOs indicates, the existence of separate women's professional and sports organizations makes a significant statement about women's opportunity to participate in the conventional, mainstream organizations and power structure. Members of those separate organizations have been labeled an "elite of the powerless" (Boulding 1975: 12, 19).

Because women's status may be only tenuously linked to family class status, conventional political theorists are beginning to choose surrogate measures instead. One study of seven countries utilizes education level as a surrogate for class status (an indicator which is equally as unsuitable as household income, for educational achievement often bears little relationship to educational utilization). The authors hypothesized that educational resources, like socio-economic resources, could be converted into political activity. The relationship holds for men much more than women. Among "elites" in India, Nigeria, Austria, Japan, and Yugoslavia, participatory gaps between the sexes are as glaring as among "non-elites" (the exceptions were the U.S. and the Netherlands) (Verba, Nie and Kim 1978: 237). Thus female elite status may have a very different meaning for politics than male elite status.

Prospects for the representativeness of women's organizations are greater in two contexts. First, in economically egalitarian societies, elite control over women's organizations will be less problematic than in societies with wide economic disparities. Also traditions may exist which encourage cooperation among women across kin, class, and neighborhood lines. Second, in rigidly segregated societies, differentiation

among women may be more limited than among men. The absence of hierarchy among peasant women in some Arab villages illustrates an enforced solidarity of women. In a dialogue about reciprocal obligations between women, one woman spoke to another of other women, "they are not better than us. It is forbidden" (Rosenfeld 1975). One study of Hausa women agricultural laborers who struck for higher wages from a multinational firm in northern Nigeria describes women as undifferentiated, unlike men in that society. In addition, most Hausa women have three to four marriages before menopause; this absence of solid competing conjugal loyalties fosters the development of solidarity among women (Jackson 1978: 27-30).

Even if these several factors reduce the social distance between elite and non-elite women, the possibility persists that elite women will dominate women's organizations and that their issue agenda will reflect a class bias. But as with any political strategy, trade-offs must be considered: in this case, heterogeneous class membership may be the best strategy. Possible reductions in representativeness can be offset by the greater clout, resources, and leverage which elite members can bring. Elite skills offer the potential of institutionalizing women's issues in government policy making and implementation. Elite women of good standing within a community may be a crucial channel through which to gain support. An analysis of a Soviet female mobilization strategy in central Asia illustrates the weakness of efforts to work through the "disaffected" (such as widows, runaway child brides, and illegitimate children) (Massell 1974: 381). Most importantly, structures can be created within groups to increase accountability and

spread distributional benefits equitably, through leadership rotation, nondivisible benefits, and neutral procedural criteria for benefit distribution. A genuine process of empowerment will provide non-elite members with techniques with which to control elites. The first and fundamental tactical question remains: How can the entrepreneurial talents of elites be tapped to direct their efforts into broadly distributive and beneficial activities?

#### Organizational Skill Development

In most disadvantaged groups, the level of skill development within organizations is likely to be low. Most women's groups, lacking experience and contacts, will be disadvantaged by their slight knowledge of strategies, internal organizational options, and resource-seeking capacity. Late entry into the political process reinforces all this. Unlike some voluntary organizations with paid, professional staff, women's group members are often unpaid volunteers, balancing time investments for organizational activity with work and household chores. Resolving the problem of organizational skill underdevelopment is fraught with both problems and possibilities. The examples below illustrate women's underdeveloped skills.

Women traders in Abidjan have unsuccessfully utilized a variety of strategies to defend their interests, including that of reducing market rental fees. In the past, women traders had supported a mayoral delegate (who had since forgotten them). Faced with increased market fees, these women formed ad hoc delegations, and sought an audience with any influential who would hear them. Funds were even collected to facilitate entree with officials. Travel funds were also raised to

send delegates to see the President in his village; he, it was thought, might remember women's sacrifices during early party days. Yet these attempts were for naught. Internal organization was absent and the collective effort was fragmented (Lewis 1976).

Women beer brewers in Nairobi are also reported to rally against threats to their interests. Some successes are evident, due to women members of KANU (party) committees and Committees of Elders. For example, women have secured for women a proportion of household units in a relocation project, as well as piped water. Delegations, begging for the President's mercy, forestalled City Council bulldozing of slum units. Nevertheless, women have no access to formal jobs and education, and they deny birth control to daughters, consigning them to a life like their own. While female solidarity is present, it attains only ad hoc, short-term solutions in an environment fraught with comprehensive, long-term problems--an environment in which women are stigmatized, subject to police harassment, and condemned to insecurity and survival at the margin (Nelson 1978).

Women's organizations have often been seen as welfare-oriented, amateurish and devoid of real developmental concerns. This view is accurate in some cases. For example, the charitable activities of some middle and upper class, urban-based women's organizations in South Asia increase dependency by promoting handicraft production in a context of limited market demand (Dixon 1978: 155). The past development efforts of Nongovernmental Organizations (NGOs) have sometimes deserved a similar characterization (Sommer 1977). But such characterizations are neither fully accurate nor are the organizations in question fixed and

immutable in nature. NGOs, like women's organizations, can undergo a process in which skills are upgraded and developmental orientations acquired.

As discussed earlier, leaders catalyze organizational emergence and sustain organizational maintenance. The stimulus for organization often comes from outside a community. If political action is to surpass that of individual accommodation and passive resistance to central control, rural people must confront the obstacles to forming organizations and building alliances. Outside initiatives are often required to overcome these obstacles, concludes an examination of over fifty Asian and Latin peasant communities (Migdal 1974: 207ff.). Similarly, organization among welfare mothers in U.S. communities, catalyzed by a national organizer, always involved a combination of outside organizers and indigenous leaders (Wilson 1973: 67ff.). The development of organizational skills and resources enables rural residents to influence and manipulate external control. While some fear organizers manipulate rural residents, studies indicate that local communities have self-protective responses: they view outsiders with caution and skepticism and accept such initiatives only when they are congruent with local values. Without such local support, communities will evade, resist and deflect the efforts of outsiders (Massell 1974: 391; Migdal 1974).

Questions are often raised about the appropriateness of outside development interventions, whether regional, national, INGO, NGO, and/or through foreign assistance. Assistance for women and women's organizations is subjected to ever greater scrutiny. These reservations, common to all external interventions, rest on several arguments. First,

political criteria, which serve national or international interests, rather than rural people's needs, may be the basis for assistance. To the extent that outside intervention is "tainted" with this recognition, organizational effectiveness may be reduced. Second, extensive external control and/or excessive resource infusion can lead to dependency and loss of local initiative and self-reliance. Third, outsiders may mistakenly perceive community organization and needs, or impose their own values upon a community, thereby reducing project effectiveness. Finally, the goals of economic projects may involve trade-offs with the requirements of effective political mobilization.

The most effective resolution to such problems is for local organizations to acquire their own leverage, autonomy, and control. Several case studies below illustrate the problems of outside intervention.

External intervention. Soviet intervention in and control of Russia's Central Asian provinces during the 1920s was in part directed at male-female relations. Women, a "surrogate proletariat," were to be mobilized to polarize the feudal-like, Moslem society and destroy its vitality and resistance to the Soviet regime. In attempts to modernize the area "from above," numerous obstacles were faced, and strategists searched for the "weakest link," a group whose engineered alienation would drain traditional institutions of their vitality. In this setting of extreme, institutionalized female subordination, women's grievances were elicited through party and women's department activities. Freedom for women was never an end in itself, and organizers repeatedly sought to avoid independent voluntary organization among

women or the sole pursuit of "female" activities.

Soviets pursued a sequence of ever-hardening strategies, first legal reform, then administrative incentives, and finally revolutionary assault. These sequences are illustrated by their (1) moves against "crimes based on custom" (such as rape during abduction, bride-wealth, child marriage, and the levirate), (2) vocational social service activities to spur cultural reorientation, political education, economic participation, and party recruitment, and (3) systematic coercive social engineering, such as the forced mass unveilings. The response, however, was massive reaction and backlash, with the development of "waves of terror" against women in the form of public beatings, sexual harassment, murder, and forceable reveillings--all serving to reinforce tradition. In the end, Soviets failed to provide support for women or to satisfy the aspirations they had encouraged (Massell 1974). This case suggests that seeking to impose wholesale social change through external intervention can be counterproductive.

The generation of dependency. The central government in Korea has increasingly focused on local women's groups in order to achieve nutrition, family planning, and other rural development program goals. The development of elaborate top-down guidelines, transmitted through provincial government offices, has tended to undermine local initiative (Misch and Margolin, in AID 1976). Official government registration can often burden organizations with rigid, complex procedural requirements which stifle or inhibit growth. Excessive funding, without consideration of organizational absorptive capacity, can also be detrimental to local initiative, engender dependency, and invite corruption.

Heavy-handed intervention raises the charge of dependency and endangers the prospect of self-sustained, redistributive development. One study, comparing seventeen development projects in Niger and Kenya, concluded that most successful projects were those which supplemented locally led community-funded efforts in a low-profile manner (DAI 1979).

Cultural imposition. Outside intervention may also involve the imposition of inappropriate cultural values. In foreign assistance efforts to work with new migrants residing in a Central American city, organizers were insistent that local men provide leadership. Not it was the women who led efforts to obtain piped water and reduced dairy prices; men had little interest in these community problems. The women leaders were only minimally supported by project organizers (Logan 1975). Ironically, the development practitioners' assumptions about local sex roles were ill grounded and undermined the project.

In India, most training programs for rural women (Mahila Mandals) have not promoted economic self-sufficiency and management. Rather, emphasis is on improving women's status as housewives and informed citizens, thus promoting a particular ideology of women's roles. There are programs in health, nutrition, education, mother and childcare, home improvement, adult literacy, recreation, cultural activities, and family planning (Dixon 1978: 154; Bruce 1976: 297). While those programs address women's domestic roles, they exclude non-domestic roles, and result in the reinforcement of domesticity. Because they overlook the disparate economic problems women face, such programs can fail to increase women's productivity or political par-



ticipation.

- Economic v. political development. The kind of organization described as successful in economic project terms is sometimes very different from that of successful, effective political organizations. Such potentially contradictory goals have been observed in federal resource allocation to low-income communities in the U.S. (Ambrecht 1976).

In an economically focused evaluation of nine AID small farmer group projects (not women's projects) in Latin America, groups achieving project "success" were single-purpose, organized around short-term concrete goals, and were small and insular (Tendler 1976).<sup>5</sup> Successful political organization tends to have multiple goals, which enhances organizational continuity and coalition prospects; insulation can inhibit genuine empowerment (Staudt 1979; Uphoff and Esman 1974). Concrete material goals as an incentive to organization can divert or delay members from seeking long-term collective goals (see the discussion of African women traders and party members above).

Alternatives to governmental intervention. The problems associated with government intervention, whether national or foreign, increase the appeal of alternative organizational strategies operating more independent of official political channels. Moreover, alternative organizational channels such as NGOs provide greater flexibility and speed and reduce procedural red tape and administrative costs.

International Women's Nongovernmental Organizations, established structures through which skill training and resources may be channelled, have become increasingly appropriate vehicles for development initia-

tives.<sup>6</sup> Over the last half century, religious orientations among women's INGOs have declined while there has been a growth in focus on justice and social welfare (Boulding 1975).

All too commonly, decisions in most national and international assistance efforts are based on political criteria, money obligation within rigid budget timeframes, and/or economic criteria without regard for power and distributional effects, both by sex and class. The conditions prevailing when a project is initiated can be totally altered by the time money is allocated, because of extensive paperwork and resulting delays. While social analysis and beneficiary-focused evaluation are beginning to be institutionalized in some of these assistance agencies, they are still underdeveloped with respect to women's economic, organizational, and political activities.

The selection and evaluation criteria of the U.S. InterAmerican Foundation represent a unique approach compared to most official efforts described above. The IAF provides assistance to Latin American organizations and intermediaries, such as churches, independent of official channels. Project selection criteria focus on accountability relationships between leaders and members, dependency consequences, and enhanced distributional justice. The organization's evaluation criteria, not considered "hard" enough by some national and international assistance agencies, focus on power redistribution, gains in access, bargaining ability, choices, status, legitimacy, and reflective capability (IAF 1977). Although difficult to measure objectively, such criteria are the essence of political development.

#### IV. Conclusion

This essay argues that, if the development process as a whole is to be sustained and if women are to benefit along with men from this process, then the "primacy of politics" must be acknowledged. In his background paper for the 1980 World Bank World Development Report, Uphoff argues that an understanding of human development programs "must begin with an appreciation not only of the structure and dynamics of politics generally, but also of the politically weak position of the poorer sectors whom such programs are to serve" (1980: 6).

No definition of development is complete without attention to the growth of political capability. Section I reviewed literature on conventional political participation. From voting to party, executive, and legislative participation, women participate less than men. In government, women comprise a minute percentage of decision makers, a numerical condition which reduces the potential for women's interests to be forcefully articulated. Sociological studies discuss the importance of the presence of a "critical mass" for representing "minority" interests. In government and political organizations, where decisions are made about public resource allocation and the value of work, men are predominant participants, partially explaining the underevaluation of women's work, women's limited access to public resources, and continuing economic disparities between the sexes. But participation also involves communication and contact among women and between women and other groups or government organizations. This broader view of participation can be attained primarily through groups which are

horizontally and vertically linked to other groups and to official decision makers. The review of studies on women's organizational participation has indicated numerous existing models of organizing and networking activity among women, often in a sex-separate form, on which increased participation can be built.

The essay's second section has underlined many constraints on strategies to increase women's power through organizational participation. Before even undertaking an analysis of such constraints, an understanding of the surrounding political context is essential. Moreover, the difficulties typically associated with developing and strengthening organization among disadvantaged and relatively powerless publics, such as poor women, must be recognized. While economic incentives may appear to be the most appropriate vehicle by which to mobilize women, unless they are supplemented by other social incentives and collective purposes, they alleviate immediate needs, only to inhibit the development of long-term collective action enhancing political empowerment. Although sexually integrated organizations are ideal, the need to support a transitional period of sex-separate organizations has been emphasized. First, separateness is a strong tradition in many societies, and second, such separateness provides women with the opportunity to develop leadership skills and to accumulate resources for leverage and coalition building with other groups. Women's issues are often accorded a low priority in integrated groups. Various risks related to joining the political mainstream were noted, but deemed less risky than opting not to participate. The oft-cited tendency of "women elites" to misunderstand or to fail to represent poor women's interests is signifi-

cant, but a consideration of the trade-offs leads to the conclusion that the resources such women hold may nonetheless usefully be tapped to serve all women's interests. Moreover, because women elites have characteristics unlike male elites, they may respond differently than male elites to increased political resources. Finally, women elites, like any others, can be held accountable to non-elites through a variety of organization techniques.

The last constraint examined was the legendary problem of external intervention. If interveners are sensitive to women's activities, the sexual balance of power and the importance of developing economic as well as political capability, those problems can be partially alleviated.

It is appropriate to conclude with the words of third world women on the necessity of power for women. Participants at an international workshop sponsored by the Asian and Pacific Centre for Women and Development in 1979 called for "organized collective strength of women from the grass roots" (i.e. poor and working women) ". . . to stimulate and institutionalize women's power." A mobilization of women, independent of government machinery, can "influence government policy and insure that women receive a fair share of development resources and attention of government" (U.N./APCWD 1979: 6, 8, 12-13).

#### V. Policy Recommendations

In any development strategy, participation is an essential element, and in all participatory strategies, women must be considered equally with men. The following specific policy recommendations are based on the preceding discussions.

### Organizational Strategies

1. Development practitioners sometimes view politics as something to be kept at a distance. Yet the essence of development involves enhanced political capability.

Emphasize political and organizational development strategies in conjunction with individual-oriented economic development strategies.

2. Foreign assistance institutions are often constrained by organizational norms which allocate pre-established amounts of money without regard for organizational absorption capability. Institutionalized minimum amounts can suffocate small rural women's organizations. Conversely, women's projects may be permanently situated in a small-sum, pilot project category and never receive sufficient funds for a larger women's project.

Create mechanisms to transfer a full range of financial sums --from small to large amounts--to women's organizations.

3. Unlike official bureaucratic organizations which have resources and procedures to respond to complex design requirements, organizations may be staffed with volunteers operating with scarce resources.

Establish flexible procedures to meet the diverse capabilities of organizations seeking assistance.

4. Numerous problems associated with intervention by official organizations can be alleviated by channelling assistance through private voluntary organizations.

Increase support for intermediary funding through International Nongovernmental Organizations (INGOs), particularly women's INGOs.

5. Promote policy-oriented research on women's organizations to provide guidance for reaching women. Among significant variables are political context, accountability procedures within organizations, leadership style, alliance and coalition building, interaction with government organizations, goals and goal achievement, internal communication, benefit distribution within organizations, and incentive strategies. Also conduct research on the effects of proportional representation by sex in integrated groups on group goals, style, structure and articulation of women's interests (see Staudt 1979 for fuller statement on research questions).
6. Provide resources based on criteria that promote self-defined economic and political group goals. Limit sex-role stereotyping in resource allocation strategies.

7. Promote sex-separate organizational strategies in contexts where separate sex communication networks exist and where women's priorities and skill development are likely to be subordinated in integrated strategies.
8. Supplement organizational strategies based on material incentives with social and purposive incentives.
9. Develop project selection criteria which include the accountability of organizational leaders to members, leadership representativeness, and maximum distribution of benefits.
10. In projects based on single organizations, consider the effects of class differences among women on representativeness, benefit distribution, and overall political leverage. In areas where women have divergent interests, support several organizations.
11. The success or failure of pilot project models in part depends on the surrounding political context. Yet decisions about replication are often divorced from a consideration of that context.

Consider political system type in applying organizational development strategies and replicating existing pilot project models.

#### Employment/Institutional Strategies

12. Support and provide incentives for employment practices in official bureaucracies which
  - create a more representative bureaucracy, in both the physical and advocacy senses, and
  - increase staff interaction with women's groups outside the bureaucracy in the larger public.
13. Provide incentives for recruiting women so that the bureaucracy, training courses, job programs, or other institutional settings in question have at least one-third females.
14. Provide for a women's monitoring and resource-allocation structure in all ministries. This is important even where a women's bureau exists, as a complement to the efforts of that bureau.

#### Data Collection

15. In pre-project social analyses, provide data on women's organizational networks and participation in decision-making

institutions, both local and national.

16. When conducting evaluations, seek indicators to evaluate political as well as economic impact. Note particularly increases in organizational skills and information, expansion of participation, and extra-organizational linkages, as well as the actual distribution of the valuables generated by the project.



## FOOTNOTES

<sup>1</sup>Pluralists see participation, and especially competition between groups, as a process leading to optimal public policy decisions. Marxists see participation as the motor for the fundamental restructuring of society along more egalitarian lines. Even elitists who generally prefer that the initiative be left with top officials and elite political activists value participation of a select, educated and informed citizenry. The notion that political empowerment is a fundamental resource is drawn in part from public pronouncements of World Bank head Robert McNamara. Various government agencies advocate citizen participation in policy-making, and the U.S. Agency for International Development has endorsed (following U.S. Congressional mandate) the notion of popular participation in development.

<sup>2</sup>Bourque and Warren (1976) define subordination as "differential access to the definition of and control over the valued goods of the community." In societies with class stratification, women are subordinate to men of their class, but class differences may obscure sex stratification (Staudt 1979; Caplan and Rujra 1978).

<sup>3</sup>For an attempt to document the relationship between economic and political resource control (and to address the methodological difficulties in documenting that relationship), see Staudt 1980, also Bourque and Warren 1976.

<sup>4</sup>Some exceptions include the USSR Supreme Soviet with 35 percent women and the Bulgarian Council of People with 37 percent women. Questions may be raised about the extent to which representatives have power in institutions like these and about the equivalence of these institutions with other bodies that meet more frequently and control such significant processes as "the purse."

<sup>5</sup>Other characteristics that Tendler describes mesh well with politically vital organizations, such as that of building on indigenous organization, avoiding unnecessarily sophisticated procedures, and engaging in tasks which could be achieved better cooperatively rather than individually.

<sup>6</sup>INGOs (International non-governmental organizations) are defined as international in character with the intention of operating in at least three countries and with open membership (Boulding 1976: 412).

## REFERENCES

- Almond, Gabriel and Sidney Verba. The Civic Culture. Boston: Little, Brown, 1963.
- Ambrecht, Bilitiana C. S. Politicizing the Poor: The Legacy of the War on Poverty in a Mexican-American Community. New York: Praeger, 1976.
- Amundsen, Kirsten. A New Look at the Silenced Majority. Englewood Cliffs, N.J.: Prentice-Hall, 1977.
- Badran, Margo. "Health Sector Support," Draft, U.S. AID/Sudan, 1979.
- Boles, Janet. The Politics of the Equal Rights Amendment: Conflict and the Decision Process. New York: Longman, 1979.
- Bond, Carol. Women's Involvement in Agriculture in Botswana. Mimeo, 1974.
- Boserup, Ester. Woman's Role in Economic Development. New York: St. Martin's Press, 1970.
- Boulding, Elise. "Alternative Capabilities for World Problem Solving: A Comparison of Religious and Secular Nongovernmental Organizations in the Women's Sector." Paper presented to the International Studies Association Annual Meeting, 1975.
- \_\_\_\_\_. Handbook of International Data on Women. Beverly Hills, Calif.: Sage, 1976.
- Bourque, Susan and Kay Warren. "Campesinas and Comunerias: Subordination in the Sierra," Journal of Marriage and the Family, 38 (November 1976).
- Brain, James. "Less Than Second Class: Women in Rural Settlement Schemes in Tanzania," in Nancy Hafkin and Edna Bay (eds.) Women in Africa: Studies in Social and Economic Change. Stanford: Stanford University Press, 1976.
- Brana-Shute, Rosemary. "Women's Clubs and Politics: The Case of a Lower Class Neighborhood in Paramaribo, Surinam," Urban Anthropology, 5, 2 (1976).
- Bruce, Judith. "Setting the System To Work for Women," Populi, 41 (September 1977).
- \_\_\_\_\_. "Women's Organizations: A Resource for Family Planning and Development," Family Planning Perspectives, 8, 6 (1976).

Bryson, Judith. "Women and Economic Development in Cameroon." Report submitted to U.S. AID, Yaounde, January 1979.

Calloway, Barbara. "Women in Ghana," in Lynn Iglitzen and Ruth Ross (eds.) Women In the World: A Comparative Study. Palo Alto, Calif.: Clio Press, 1976.

Caplan, P. and Janet Bujra. Women United, Women Divided. Bloomington: Indiana University Press, 1978

Cebotarev, Eleanora. "Rural Women in Non-Familial Activities: Credit and Political Action in Latin America." Paper presented to the Conference on Women and Development, Wellesley, 1976.

Chafe, William. The American Woman: Her Changing Social, Economic and Political Roles, 1920-1970. New York: Oxford University Press, 1972.

Chaney, Elsa. Supermadre: Women in Politics in Latin America. Austin: University of Texas Press, 1979.

\_\_\_\_\_. "Women in Latin American Politics: The Case of Peru and Chile," in Anne Pescatello (ed.) Female and Male in Latin America. Pittsburgh: University of Pittsburgh Press, 1973.

Cloud, Kathleen. "Sex Roles in Food Production and Food Distribution Systems in the Sahel." Report submitted to the African Bureau, U.S. AID, 1977.

Cohen, John and Norman Uphoff. Rural Development Participation: Concepts for Project Design, Implementation and Evaluation. Ithaca: Center for International Studies, Cornell University, 1977.

Collier, Jane. "Women in Politics," in Michele Rosaldo and Louise Lamphere (eds.) Woman, Culture and Society. Stanford: Stanford University Press, 1974.

Crumbler, John T. "The Politics of Charity: Gender and Class in Late Nineteenth Century Charity Policy," Journal of Social History, 14, 1 (1980).

Date-Bah, Eugenie. "Ghanaian Women and Cooperatives." Paper presented to the Conference on Women and Development, Accra, 1978.

Deere, Carmen Diana. "The Agricultural Division of Labor by Sex: Myths, Facts, and Contradictions in the Northern Peruvian Sierra." Paper presented at the Latin American Studies and African Studies Associations meeting, Houston, 1977.

Development Alternatives, Inc. (DAI). "The Development Impact of Private Voluntary Organizations: Kenya and Niger." Paper submitted to U.S. AID, 1979.

- \_\_\_\_\_. (Elliot Morse, et al.). Strategies for Small Farmer Development: An Empirical Study of Rural Development Projects. Boulder: Westview, 1976.
- Diamond, Norma. "Collectivization, Kinship and the Status of Women in Rural China," Bulletin of Concerned Asian Scholars (1975).
- Dixon, Ruth. "Jobs for Women in Rural Industries and Services." Paper prepared for WID/U.S. AID, September 1979.
- \_\_\_\_\_. Rural Women at Work. Baltimore: Johns Hopkins Press, 1978.
- Duverger, Maurice. The Political Role of Women. UNESCO, 1955.
- Epstein, T. Scarlett. Economic Development and Social Change in South India. London: Manchester, 1962.
- Esman, Milton. "Development Administration and Constituency Organization," Public Administration Review, 38, 2 (1978).
- Fortmann, Louise. "Women's Work in a Communal Setting: The Tanzania Policy of Ujamaa." Paper presented at the Women and Work in Africa Conference, University of Illinois, Urbana-Champaign, Illinois, April 28-May 1, 1979.
- Freeman, Jo. The Politics of Women's Liberation. New York: David McKay, 1975.
- Giele, J. and Audrey Smock (eds.). Women: Roles and Status in Eight Countries. New York: John Wiley, 1977.
- Hacker, Helen M. "Women As a Minority Group," Social Forces, 30 (1951).
- Hahner, June. "Feminism, Women's Rights and the Suffrage Movement in Brazil," Latin American Research Review, 15, 1 (1980).
- Harkess, Shirley. "Colombian Women in Party Politics: A Token Role," Research in the Interweave of Social Roles: Women and Men. Vol. I, JAI Press, Inc., 1980.
- Hoffer, Carol P. "Mende and Sherbro Women in High Office," Canadian Journal of African Studies, 6, 2 (1972).
- Hull, Valerie. "Women in Java's Rural Middle Class: Progress or Regress?" Paper presented to the Fourth World Congress for Rural Sociology, Poland, August 9-13, 1976.
- Hunte, Pamela. "Women and the Development Process in Afghanistan," Paper presented to the Near East Bureau, U.S. AID, 1978.

- Huntington, Samuel and Joan Nelson. No Easy Choice: Political Participation in Developing Countries. Boston: Harvard University Press, 1976.
- Interamerican Foundation (IAF). They Know How. Washington, F.C.: U.S. Government Printing Office, 1973.
- Jackson, Sam. "Hausa Women on Strike," Review of African Political Economy, 13 (1978).
- Jancar, Barbara. "Women Under Communism" in Jane Jaquette (ed.) Women in Politics. New York: John Wiley, 1974.
- Jaquette, Jane. "Female Political Participation in Latin America," in Lynn Iglitzen and Ruth Ross (eds.) Women in the World: A Comparative Study. Santa Barbara: Clio Press, 1976.
- \_\_\_\_\_. "Politics and Institutions," Signs (Autumn 1977).
- \_\_\_\_\_. "Introduction," in Jane Jaquette (ed.) Women in Politics. New York: John Wiley, 1974.
- Jedlicka, Allen. Organization for Rural Development. New York: Praeger, 1977.
- Joseph, Suad. "Counter Institutions or Institutions: Structural Constraints and Potential for Women's Networks in an Urban Lower Class Lebanese Neighborhood." Paper presented to the Conference on Women and Development, Wellesley, 1976.
- Kanter, Rosabeth. Men and Women of the Corporation. New York: Basic Books, 1977.
- Katzenstein, Mary. "Preferential Treatment in the Public Services: Judicial Attitudes and Politics in India." Paper presented to the American Political Science Association Meetings, 1978.
- Kincaid, D. Lawrence, Hyung-John Park, Kyung-Kyoon Chung, and Chin-Chuan Lee. Mothers' Clubs and Family Planning in Rural Korea: The Case of Oryu Li. Case Study No. 2, East-West Communication Institute, East-West Center, Honolulu, n.d., probably 1973.
- Kirkpatrick, Jeane. Political Woman. New York: Basic Books, 1974.
- Klingshirn, Agnes. "The Changing Position of Women in Ghana." Unpublished doctoral dissertation, Marburg/Lahn, 1971.
- Korten, David. "Community Organization and Rural Development: A Learning Process Approach," Public Administration Review, September-October 1980.

- Lamphere, Louise. "Review Essay: Anthropology," Signs, 2,3 (Spring 1977).
- Leader, S. "The Emancipation of Chinese Women," World Politics, 26 (1973).
- Leis, Nancy. "Women in Groups: Ijaw Women's Associations," in Michele Rosaldo and Louise Lamphere (eds.) Women, Culture and Society. Stanford: Stanford University Press, 1974.
- Leonard, David. Teaching Peasant Farmers. Chicago: University of Chicago Press, 1977.
- Lewis, Barbara. "The Limitations of Group Activity Among Entrepreneurs: The Market Woman of Abidjan, Ivory Coast," in Nancy Hafkin and Edna Bay (eds.) Women in Africa: Studies in Social and Economic Change. Stanford: Stanford University Press, 1976.
- Logan, Kathleen. "Women: Unrecognized Leaders," Journal of the Inter-American Foundation, 4 (Spring-Summer 1978).
- Lowi, Theodore. The End of Liberalism. New York: Norton, 1979.
- Manderson, Lenore. "The Shaping of the Kaum Ibu (Women's Section) of the United Malays National Organization," Signs (Autumn 1977).
- Massell, Gregory. The Surrogate Proletariat: Moslem Women and Revolutionary Strategies in Soviet Central Asia. Princeton: Princeton University Press, 1974.
- McConnell, Grant. Private Power and American Democracy. New York: Vintage, 1966.
- McNeil, Leslie. "Women of Mali: A Study in Sexual Stratification." B.A. thesis, Department of Anthropology, Harvard University, 1979.
- Migdal, Joel. Peasants, Politics, and Revolution. Princeton: Princeton University Press, 1974.
- Mintz, Sidney. "Men, Women and Trade," Comparative Studies in Society and History, 13 (1971).
- Misch, Marion. "Rural Women's Groups As Potential Change Agents: A Study of Colombia, Korea and the Philippines." Report to the Technical Assistance Bureau, U.S. AID, May 1975.
- Nantogmah, Matilda. "Ghanaian Women Workers." Paper presented for the Conference on Women and Work in Africa, University of Illinois, Champaign-Urbana, April 28-May 1, 1979.
- Narh, June and Helen Safa. Sex and Class in Latin America. New York: Praeger, 1976.
- Nelson, Nici. "Women Must Help Each Other: The Operation of Peasant Networks Among Buzaa Beer Brewers in Mathare Valley, Kenya," in P. Caplan and J. Bujra (eds.) Women United, Women Divided. Bloomington: Indiana University Press, 1978.

- Newland, Kathleen. "Women in Politics: A Global Review." Worldwatch Institute No. 3, Washington, D.C., 1975.
- Okonjo, Jamene. "The Dual Sex Political System in Operator: Igbo Women and Community Politics in Midwestern Nigeria," in Nancy Hafkin and Edna Bay (eds.) Women in Africa: Studies in Social and Economic Change. Stanford: Stanford University Press, 1976.
- Olson, Mancur. The Logic of Collective Action. Boston: Harvard, 1965.
- Ooko-Ombaka, Oki. "An Assessment of National Machinery for Women," Assignment Children, 49/50 (Spring 1980).
- Pala, Achola. "African Women in Rural Development: Research Trends and Priorities." Overseas Liaison Committee, American Council on Education, Washington, D.C., No. 12, 1976.
- Palmer, Ingrid. "The Role of Rural Women in a New Economic Order," in Khadija Haq (ed.) Equality of Opportunity within and among Nations New York: Praeger, 1977.
- Papanek, Hanna. "Family Status Production: The 'Work' and 'NonWork' of Women," Signs, 4, 4 (Summer 1979).
- Putnam, Robert. The Comparative Study of Political Elites. Englewood Cliffs, N.J.: Prentice-Hall, 1976.
- Rosaldo, Michele and Louise Lamphere (eds.). "Introduction," in Women, Culture and Society. Stanford: Stanford University Press, 1974.
- Rosenfield, Henry. "Non-Hierarchical, Hierarchical, and Marked Reciprocity in the Arab Village," in D. Raphael (ed.) Being Female. Mouton: The Hague, 1975.
- Rosenthal, Donald. The Expansive Elite: District Politics and State Policy-Making in India. Berkeley: University of California Press, 1977.
- Sacks, Karen. "Engels Revisited: Women, the Organization of Production and Private Property," in Michele Rosaldo and Louise Lamphere (eds.) Woman, Culture and Society. Stanford: Stanford Univ. Press, 1974.
- Sanday, Peggy. "Female Status in the Public Domain," in Michele Rosaldo and Louise Lamphere (eds.) Woman, Culture and Society. Stanford: Stanford University Press, 1974.
- Salisbury, Robert. "An Exchange Theory of Interest Groups," Midwest Journal of Political Science, 13 (1969).
- Schmidt, Steffen. "Women's Changing Roles in Colombia," in Lynn Iglitz and Ruth Ross (eds.) Women in the World: A Comparative Study. Santa Barbara: Clio Press, 1976.
- Scott, Hilda. Does Socialism Liberate Women? Boston: Beacon Press, 1974.

- Sommer, John. Beyond Charity: U.S. Voluntary Aid for a Changing Third World. Washington, D.C.: Overseas Development Council, 1977.
- Stack, Carol. "Sex Roles and Survival Strategies in an Urban Black Community," in Michele Rosaldo and Louise Lamphere (eds.) Woman, Culture and Society. Stanford: Stanford University Press, 1974.
- Stanley, Joyce. "The Audio-Cassette Listening Forum: A Participatory Women's Development Project." U.S. AID, 1979.
- Staudt, Kathleen A. "Administrative Resources, Political Patrons, and Redressing Sex Inequities: A Case Study from Western Kenya," Journal of Developing Areas, 12, 4 (July 1978).
- \_\_\_\_\_. "Class and Sex in the Politics of Women Farmers," Journal of Politics, 41, 2 (May 1979a).
- \_\_\_\_\_. "Organizing Rural Women in the Third World." Paper presented at the Western Political Science Association meetings, March 27-29, 1980.
- \_\_\_\_\_. "Sex, Ethnic and Class Consciousness in Western Kenya." Comparative Politics, 14, 2 January 1982.
- \_\_\_\_\_. "The Umoja Federation: Women's Cooptation into a Local Power Structure," Western Political Quarterly (June 1980).
- \_\_\_\_\_. Women and Participation in Rural Development: A Framework for Project Design and Policy-Oriented Research. Ithaca, N.Y.: Cornell University, Center for International Studies, Rural Development Committee, 1979.
- \_\_\_\_\_. "Women Farmers and Inequities in Agricultural Services," Rural Africana, 29 (Winter 1975-76).
- Steady, Filomina Chioma. Female Power in African Politics: The National Congress of Sierra Leone Women, Munger Africana Library, California Institute of Technology, August 1975.
- Stoler, Ann. "Class Structure and Female Autonomy in Rural Java," Signs, 3, 1 (August 1977).
- Sutton, Constance and Susan Makiesky-Barrow. "Social Inequality and Sexual Status in Barbados," in Alice Schlegel (ed.) Sexual Stratification. New York: Columbia University Press, 1977.
- Tanzania, Government of, Community Development Trust Fund. "Appropriate Technology for Grain Storage," 1977.
- Tendler, Judith. "Inter-Country Evaluation of Small Farmer Organizations." Paper prepared for Latin America Bureau, U.S. AID, 1976.



- Tessler, Mark. "Women's Emancipation in Tunisia," in Lois Beck and Nikki Keddie (eds.) Women in the Muslim World. Boston: Harvard University, 1978.
- Tinker, Irene. "The Adverse Impact of Development on Women," in Irene Tinker and Michele Branssen (eds.) Women and World Development. Washington, D.C.: Overseas Development Council, 1976.
- Truman, David. The Governmental Process, 2nd edition. New York: Alfred A. Knopf, 1971.
- Uphoff, Norman. "Political Considerations in Human Development," in World Bank Implementing Programs in Human Development, #403, July 1980, Washington, D.C.
- \_\_\_\_\_ and Milton Esman. Local Organization for Rural Development: Analysis of Asian Experience. Ithaca: Center for International Studies, Cornell University, 1974.
- U.N. Asian and Pacific Centre for Women and Development (APCWD). "Feminist Ideology and Structure in the First Half of the Decade for Women." Report of the International Workshop 6/24-30, 1979, Bangkok, Thailand.
- United Nations. "The Role of Popular Participation in Development," 1975.
- U.S. Agency for International Development. International Directory of Women's Development Organizations, 1977.
- \_\_\_\_\_. "Women in Development: Relevant Excerpts from Civic Participation Division Reports," March 1974-April 1976, PPC/PDA/CD, 1976.
- Venema, L. B. The Wolof of Saloum: Social Structure and Rural Development in Senegal. Wageningen: Center for Agricultural Publishing and Documentation, 1978.
- Verba, Sidney, Norman Nie and J. Kim. Participation and Political Equality: A Seven-Nation Comparison. London: Cambridge University Press, 1978.
- Wachtel, Eleanor. "A Farm of One's Own," Rural Africana, 29 (Winter 1975-76).
- Whyte, Martin King. The Status of Women in Preindustrial Societies. Princeton: Princeton University Press, 1978.
- Wilson, James O. Political Organization. New York: Basic Books, 1973.

## Chapter Eight

### WOMEN IN FORESTRY FOR LOCAL COMMUNITY DEVELOPMENT A PROGRAMMING GUIDE

by

Marilyn W. Hoskins, M.S., M.A.

EDITOR'S NOTE: We include Hoskin's essay in this volume, although it was not prepared for the 1979 World Conference on Agrarian Reform and Rural Development, because of the importance of forestry to rural women. Hoskins notes that forestry has only recently been approached as an aspect of local community development. Thus attention to the question of local participation--including women--in forestry projects is new, affording little documentation on women and forestry. For this reason Hoskins presents neither a research paper nor an international overview, but rather an exposition, based largely on her observation and experiences, of the necessary complementarity between interest and role in forestry. The essay is, however, more than a persuasive argument for this new approach to forestry; it elaborates the requirements and steps of project design and implementation in a manner particularly valuable to development practitioners.

## I. Forestry for Local Community Development

Until recently forestry efforts have been focused on industrial plantations and on reserve and park-land management.\* Technicians made and enforced land-use decisions and local residents had little or no role as either decision makers or beneficiaries.

Currently, however, the concept of community forestry with local participation and control is gaining center stage. This is partly because the demand for forestry products has risen dramatically with population increases, with industrial development, and with environmental changes that have reduced thousands of acres of bush and forest lands to desert. It is also because the top-down approach used in forestry project design is not working.

The new focus in forestry programming results from the convergence of two separate movements. First, national governments and forestry services are becoming aware that their forestry needs can only be solved with the support of local residents. Second, AID and other donor agencies are putting new emphasis on meeting basic human needs, on local participation in solving local problems, and on benefits reaching the poorest of the poor. Together, these movements have formed a strong new interest in developing forestry programs following the community development model.

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I owe a special debt of gratitude to Fred R. Weber, well known as a superb forester and sensitive humanist. He generously shared his expertise and time with me in discussing many of the ideas in this paper.

Forestry for local community development (often called FLCD) is bringing the previously invisible local resident into focus. This new philosophy calls for new definitions of forestry projects and new roles for local residents as well as for foresters. No longer are forestry projects confined only to dense stands of trees ("forests"). Now they may pertain to any tree or shrub planting, care, or product use, and may be integrated with other agricultural, development, or traditional needs or interests. The greater part of the new forestry agent's time will no longer be confined solely to management, control, and rule enforcement. These activities will shift wherever possible to the local community, leaving the forester free to play a technical advisory and support role. The resident is now to be the central actor. The program seeks to help local people gain control over local problems.

FAO, a leading force in FLDC, defines this approach as including:

. . . any situation which intimately involves local people in a forestry activity. It embraces a spectrum of situations ranging from woodlots in areas which are short of wood and other forest products for local needs, through the growing of trees at the farm level to provide cash crops and the processing of forest products at the household, artisan or small industry level to generate income, to the activities of forest dwelling communities. It excludes large-scale industrial forestry and any other form of forestry which contribute to community development solely through employment and wages, but it does include activities of forest industry enterprises and public forest services which encourage and assist forestry activities at the community level. The activities so encompassed are potentially compatible with all types of land ownership. While it thus provides only a partial view of the impact of forestry on rural development, it does embrace most of the ways in which forestry and the goods and services of forestry directly affect the lives of rural people. (FAO 1978: 1)

There is no doubt that this new approach is more difficult and time-consuming to design and to execute than the former blueprint approach.

Local residents must be informed of the options and encouraged to partici-

pate in deciding what is appropriate and affordable within their economic and social environments. Programs must therefore be area specific.

Some of the first attempts in this approach have failed due to a lack of understanding of the new definition of "forestry" and the meaning of "community participation." A recent FAO study of the potential for FLCD in Senegal is illustrative of foresters' failure to get community participation. The forest service had directed local residents to plant cashew trees as a firebreak around a national forest and to maintain the trees, promising the residents they could harvest the nuts when the trees matured. Foresters described their frustration at finding locals deliberately destroying the trees so they would not have the responsibility of coming to the forest to maintain them. Program managers and foresters in numerous countries exhibit similarly mutilated, burned, or uncared for trees, saying, "Local community participation does not work; look at this failure." But, in fact, the project did not meet FLCD criteria because it was imposed on residents, was not a high priority project for them and provided little or no benefit guarantees. The same Senegalese foresters who remarked that FLCD did not work also report being unable to keep up with the growing demand of residents to purchase fruit tree seedlings from the forestry service nurseries. The fruit trees, planted around the homes to increase shade and food supply, have an almost 100 percent survival rate. These foresters did not realize that, while the first project was not a genuine example of FLCD at all, the second was a real success story because community members were voluntarily using forestry to meet their own needs. In the same vein, foresters in Burundi report that local residents have been stealing seedlings from a government nursery.

From the FLCID perspective, this is positive evidence of local interest. Instead of increasing surveillance over the nurseries, foresters would make more seedlings available, and increase extension and technical support to help residents make the best use of their trees.

Two examples of the failure of the top-down approach to community forestry are documented by a particularly perceptive World Bank report:

In Niger, a Bank-financed rural development project, which included the establishment of 500 hectares of village woodlots, failed because, as fast as the trees were planted, the village people either pulled them out or allowed uncontrolled grazing to take place. The main reason for this, was because they themselves had not been involved in formulating the project and because they perceived the village woodlot area as a traditional grazing ground, access to which was now precluded because of the project. In the Caqueta project in Columbia (a project for settling about 3,000 families in an area of tropical high forest), a project component which aimed to preserve some 20,000 hectares of natural forest in the middle of the project area, as a source of future fuelwood, poles, and building materials for settlers also failed, because the settlers themselves regarded the area as being better suited to agriculture than forestry and they forcibly occupied the protected forest area. (Spears 1978: 4)

With new awareness of the need to include local residents as a major actors in efforts to solve local forestry problems, program designers are more conscientiously talking with community leaders or village councils. However, these leaders are almost invariably men. Unfortunately, this still ignores one group of essential actors--the women. Program after program has failed because participation of women, so essential to the project's success, was overlooked. For example, in regions where men plant and women perform the maintenance tasks, the trees that the men agree to plant will certainly die if the women have no interest, time, or perception of the real benefits accruing from their input. Enthusiastic participation in any project only comes from those who believe they have something at stake and who are committed to the proj-

ect's success. Women will fully support projects only when they are involved in all stages of FLCD, from the design through the benefit sharing.

This paper is written to explore ways in which women can be brought into FLCD. This is not a state of the art paper as there is so little experience or documentation about women's role from this new perspective on forestry. Neither is it a research paper, though it includes a number of observations made by the author in several countries, particularly in the Sahel. Rather, it is an exploratory work to examine many of the problems and issues related to women's participation, and to develop possible useful approaches to project design. It is written in the belief that women can effectively use their expertise and their concern over shortages of forest products to help plan, support and benefit this new approach of FLCD. It is written with the hope that current and future successes and failures will be documented to help strengthen our design capacity so that increasingly effective FLCD programs can be initiated.

## II. Women in Forestry

### Fuel Use

In forestry for fuel use, women's role is direct and highly visible. In most areas where firewood is used as the basic cooking fuel, women are its very visible collectors and transporters. Publications are filled with photos of women bent under heavy piles of wood on their heads or backs. Studies of fuel use offer a familiar scenario of women collecting wood near the house, and, when the supply is depleted, walking greater and greater distances, thus spending more time and wasting greater amounts of energy carrying the heavy loads. When the distances become too great they

have to start buying wood from the men controlling carts and beasts of burden. At this point the women (and thus their families) have lost control of the fuel supply and acquired an added living expense. The growing cost of such fuel has become an urgent problem in many areas: in West Africa, the saying that "it costs as much to cook the rice as to fill the bowl" is common; there is a similar saying in India (Shah 1978: 1).

Descriptions of the genuinely difficult and time consuming task of carrying loads of wood seldom point out that simultaneously women also experiment and innovate, turning to alternate fuels such as local plant stalks, dung, and even imported charcoal. Women are not only victims of changes in firewood supplies; they actively seek everyday solutions to fuel location and conservation and demonstrate expertise regarding burning qualities of various local woods and of firewood alternatives.

When available fuels are scarce, women change their cooking and eating practices. For example, in Nepal, diets reportedly include more and more raw foods due to fuel shortages and, in Guatemala, families are changing their diets due to the lengthy cooking time required for their traditional beans (Tinker 197<sup>c</sup>). In eastern Upper Volta local officials are distressed that, although the soy beans introduced in a large scale development scheme have grown extremely well, women are not accepting them. This is not simply because the women prefer the commonly grown cow peas, but because they find soy beans require much longer cooking time. Throughout the Sahel people are turning to rice instead of millet, especially in urban areas, and women report this is largely because rice cooks much more rapidly. In the peanut basin of Senegal one woman remarked, "One can starve with a full granary if one has no fuel with which to cook the meal."



This woman is probably not starving. She has, however, given up serving two hot meals a day to her family. First she served just one, and then one every other day. She now substitutes cold left overs when they are available, or serves water mixed with raw millet flour.

The actual extent of these changes and their impact on nutrition needs to be evaluated. Also needed is an examination of health hazards resulting from the lack of refrigeration for left-overs and the increased consumption of raw foods and unboiled water. Local women and men and programmers alike must have this information when discussing local priorities and evaluating local needs for forestry in community development.

#### Other Forestry Interests and Expertise

Women's other interests in forestry are often overlooked. In many regions of the world women raise small ruminants around the compound as an important source of household protein and/or personal income. In areas where the protein rich aerial forage supplied by bushes and trees is the basic diet of these animals, the scarcity of forage produces the same pattern traced above in the case of scarce firewood. First, women walk their animals further for forage until the distances take too much time from other essential daily tasks. At this point, women lose out first to local men, and then to herders, who can tend the ruminants further from the household. Again, women lose control of an activity important to the family's well being and a source of personal income.

In many countries a large amount of the family's nutrition comes from leaves or fruits and nuts collected by women. Women are disquieted by forced changes of diet, but they are also aware of the food alternatives for scarce favored foods. When women farm and garden, they are

aware of decreases in the carrying capacity of the land, and often know about tree species that hold or improve the land and others that poison the soil. Women as well as men are keenly interested in ways to improve their yields, such as appropriate species for hedgerows and windbreaks, if these fit within the local cultural and economic framework.

In certain ethnic groups it is the women who use wood in house construction. In many areas they are the herbal medicine experts. Frequently, craft items for household use or for sale are made by women with forest products. In short, beyond the frequently laborious task of carrying firewood, women depend upon forestry products to fulfill their responsibilities for their families' well being and, in some regions, for personal and family income. Though they are seldom formally trained in forestry, women are frequently the local experts on the current and most appropriate uses of forestry products.

This forestry expertise was dramatically demonstrated in a seminar on the effects of development on women in Upper Volta. Though forestry was not on the agenda for discussion, it came up spontaneously and was expressed with great emotion. Participants, who were women social workers, teachers, business women, medical professionals, etc., were quite aware of a wide variety of forestry issues and were very outspoken about forestry practices. They argued that foresters should not clear even old trees and shrubs without taking a close look to see which of these provide food, medicine or other products, both in normal times and in times of shortages. Participants not only knew the local traditional trees but discussed imported exotic species. For example, they spoke authoritatively about a eucalyptus variety then being planted in Voltaic

forestry projects. They knew that the burning leaves kept away mosquitoes and that boiled leaves yield a broth useful in treating colds. They mentioned that, because the tree grows rapidly even with little water and is resistant to animal damage, it might be a necessary temporary solution to emergency fuel problems. But, they felt that many other types of trees are generally preferable. The disadvantages they mentioned are that this eucalyptus is completely inedible for humans and is not good for animal food. The wood is difficult and time consuming to cut and, though it is lightweight, it is sticky and awkward to carry. Also, it burns rapidly and therefore more of it is required. Its oils give it a flame that is very hot and difficult to control for long, slow cooking of the local dishes. The oils in the smoke impart a "vicks-vapo-rub" taste to foods and damage eyes. When planted near gardens or fields they find this tree damages other plants and poisons the soils surrounding it.

This illustration is not intended to open a debate on the qualities of a controversial tree. Rather, it is to show that Voltaic women, both urban and rural, with no formal forestry backgrounds, spontaneously demonstrated an expertise, a concern, and an awareness of forestry issues beyond that of many foreign and local foresters. It is surely wasteful not to tap this knowledge and enthusiasm for potential support of local level forestry projects.

#### Forestry Activities

Not only is women's expertise generally unnoticed, but sometimes their forestry-related activities are invisible even to local village men.

This important realization means that program designers must make an extra effort to inquire beyond the more easily available answers offered by male village leaders. For instance, in response to the request to talk to women, both men and women gathered in a group. When asked questions on fuel problems the men answered while the women stood in what looked like silent agreement. Several spokesmen gave the information that wood was getting more and more expensive, citing figures on the weekly cost of fuel wood per family. Only upon observing no wood and requesting to see a fireplace was it possible to see the wives alone and discover that there had been no wood available for a number of months. Women were, in fact, burning dung which they remarked would have been better used as fertilizer on the fields had there been another alternative fuel. In that area there was no taboo against cooking with dung; the lack of firewood had never been noticed by the men. The women's chores--and choices--had been invisible.

Women's forestry activities are frequently underestimated. In Senegal a regional forestry officer, concerned about starting community forestry programs, was insistent during discussions covering several days that Senegalese women did not, indeed could not, plant trees. In the evening, chatting alone with his wife about sayings or beliefs that might limit women's desire to plant trees, it became evident that her grandmother, her mother, and she had planted trees. In fact, all the trees in the forester's own courtyard had been planted by his wife and she remarked that where there were trees in courtyards, women had probably put them there. At that very time, in the capitol city, women's organizations had hung banners across the major streets in celebration of the

"Day of the Senegalese Woman" proclaiming "For Every Woman a Tree."  
They were officially encouraging women to plant more trees.

Roles women can take in forestry projects differ not only by country and by ethnic group, but sometimes vary from village to village. In some communities only women may put seeds in the earth while men do all the other planting and harvesting chores. In others, they have individual fields and both do all planting tasks. In some communities, men and women do complementary work, and in others their projects are completely separated.

Because women's household activities are generally not noticed, because their forestry activities may be misunderstood, and because their roles may be specific to a village or even specific to a family situation, each project must include local women in the project designing stage.

#### Local Needs

Local needs may also be difficult for outside experts to identify. In one region of Upper Volta land ownership was such that residents could only collect fuel from land owned by their own families. Even if dead wood was on adjoining land it could not be collected. A forestry report spoke of this area as having no fuel problem as there was dead wood visible around the village while a local woman potter discussed having to abandon her craft due to her lack of fuel. Many other villages in the area had the accepted rule that any forestry product from a "God-given" tree (one not specifically planted by someone) was available for the taking. Similarly, women in a Senegalese village complained of a shortage of fuel although there were large wood piles visible. In this

village women collected wood during a two-month period to last for the year due to the inaccessibility of their supply in the rainy season. This village had a different collection pattern from one 20 km away whose supply was more accessible. Finally, some reports from the coastal urban areas assert that African women prefer to cook inside, but fail to note that this is less and less true as one goes into drier climates, especially in rural areas.

The means by which people fulfill their needs are not always chosen along environmental or ethnic lines. In communities where women have always been in charge of collecting firewood, some families consider fuel the responsibility of men when it ceases to be a "free good" but has to be purchased. At other times this becomes a divided responsibility. For instance, when one family moved into the city of Ouagadougou, the man took the responsibility of purchasing firewood for family meals. His wife, freed from this task, started to make shea nut butter for her family and for sale. From the residue of the nuts she made a highly valued fuel. She reported that she almost never cooked with this fuel as it was now the responsibility of her husband to provide fuel for everyday meals. She used her fuel to make more butter, to cook at celebrations in her own home village, to cook meals when her husband was gone for long periods of time, and beyond this, she traded or sold the surplus to purchase family or personal items. This woman's interests in forestry projects lay in obtaining more shea nuts and in the technology to make the butter more simply. Woodlots were no longer a high priority project for her. An outsider has great difficulty knowing which individuals would have something to gain from which types of forestry projects before consulting potential participants.

### Taboos

Local taboos must also be understood. As new projects are presented sometimes women are prevented from participating by taboos which, when understood, may be overcome. For instance, in Kenya women "could not raise bees" because there was a taboo against women climbing. When the hives were lowered women gladly participated. Taboos against specific trees may relate to local knowledge such as snakes being attracted to them.

Other taboos based on local religion may be equally strong. In the Casamance area of Senegal several locals remarked that a proposed project of planting cashew trees around the village was bound to fail as cashew trees were known in that community as the homes of ghosts. A Peace Corps volunteer who had lived there several years predicted the trees would be planted but that before they matured there would be a "bush fire." Had project planners asked what trees the local residents wanted to plant around their village, cashews would never have been chosen.

In conclusion, if forestry with a local community development approach is to include women successfully, informed women must help design the project. No simple "women's programs" can be designed in any capitol city and dropped down fullblown on a community. Not only is the negative true, that failure to include women from the beginning often assures failure of the project, but the positive is true also. Inclusion of women who are knowledgeable and concerned about forestry problems, community priorities, and their own roles, adds a valuable source of information and potentially adds enthusiastic support for program success.

### III. Problems and Issues

This new approach to forestry brings with it problems and issues which are yet to be solved. Many of these are the same for projects where men and women work together, where men's or women's groups work separately, or where individuals alone participate. Land tenure, social structure, political and economic organizations, and capacities of extension and forestry services to support such projects must all be scrutinized.

A number of specific questions are heard over and over from technicians designing and working with forestry projects who wish to encourage community participation. Where land is scarce and being over-utilized just to gain daily subsistence, how is it possible to interest farmers in dedicating a parcel for tree planting? How is it possible to get farmers to plant trees during their busy farming cycle and to maintain them during the long time period of their growth? Can environmental improvement projects without direct economic benefit to participants be done on a communal basis? Can rural people be motivated to see forestry as a potential solution to some of their problems? And on the other hand, can forestry technicians be motivated to support and to become technical assistants to FLCD projects?

These are basic questions for any FLCD project. There are, however, some particular aspects of these questions which have specific application to women. Women frequently lack control over land and are described in some circumstances as tenants on their husband's land (Chaney, Simmons, and Staudt 1979). Women are more apt to be illiterate and the least



served by extension services (especially in non-homemaker subjects). They may have the least flexibility in time use, have the least mobility, and the least financial resources. Women's inputs and needs are very likely to be invisible.

These facts make imperative the inclusion of a finely-tuned examination of issues related to women's potential participation in forestry projects. What specific problems do women have in gaining and retaining access to land or use of tree products? What specific time, financial, or other constraints may have to be overcome to free women to participate? What types of assurances can women have that they will receive the benefits they value from projects? In what way do different social structures allow women to participate as individuals or in groups?

These are all complex questions which have neither simple nor universal answers. Part of the key lies in examining each question within the specific local and national environment and designing the specific programs with the participation of local residents and institutions. There are, however, specific constraints which are of universal importance to the introduction of community forestry projects. Foresters, agriculturalists, and developers from a number of countries have identified four major constraints as being basic in any forestry for local community development programming (FAO 1977). These are: (1) competition for land; (2) time frame of forestry projects; (3) spatial considerations; and (4) unfamiliarity with the nature and goals of forestry. The following discussion of each of these constraints to forestry projects will provide the context needed to understand why women must be integrated into forestry projects and how this can be done.

### Competition for Land

An increasing population using available land more intensely and thereby reducing its carrying capacity has created a well-known vicious cycle. Even when farmers realize that trees are necessary for retaining the productivity of their land, for fuelwood, etc., their immediate need for food may be so great that they hesitate to make a long-term commitment of land to forestry projects. This increasing competition for land underlies three sub-issues: integrated resource planning, integration of forestry and other agricultural and development projects, and land tenure and forestry product use guarantees.

Integrated resource planning. Land-use and resource planning ideally begins on a national or even regional basis. For instance, it has been the experience in the Sahel that where wells are not carefully located in a regional perspective, they may attract so many animals that the resultant overgrazing leads to desertification of the surrounding areas. In another example, commercial charcoal production can succeed in some areas only if resources are allocated to improved transportation networks making possible its distribution.

Some countries have developed land use policies relating to trees. In China, for instance, the famous "all-around trees" project (sometimes called "four-around trees" project) encouraged citizens to plant trees all around fields, all along the roads, and in any unused space. This has also been the approach in India. In Korea the government has encouraged tree planting on steep slopes that were less profitable for crops and that had serious erosion problems (Spears 1978).

Because forestry yields a more slowly maturing crop than other

agricultural projects, comprehensive national and local considerations of land use are especially important. Where regional or national guidelines for land use are available, they should guide local project design whenever possible. When such guidelines are not available local residents should look at current and potential areas for forestry, grazing, and agriculture, at current and potential water sources, and they should evaluate current and future needs for food, animal feed, fuel, income, etc. The World Bank and, in some areas, UNICEF have dedicated funds for support of this type of basic planning.

Integrated programs. Along with integrated land-use and resource planning is the need to integrate forestry with other programs. In the Sudan, a farmers' association demonstrated the value of planting windbreaks reducing wind damage to crops. Farmers who were at first reluctant are now requesting seedlings and technical advice for establishing their own windbreaks (Kunkle and Dye 1979: 12). A number of projects have combined woodlots with between-row planting of food crops for the first few years. This technique, called taungya, has helped solve the problem of weeding and care for the young seedlings and offers a food crop during the period preceding tree maturity. Some trees fix nitrogen in the soil, thus increasing crop yields. Trees can be used to prevent soil erosion in fields, and, used as live fencing, can help protect gardens. All of these uses involve cooperation between forestry and agriculture technicians. The use of trees for fuel, food, building materials, and income producing projects will affect other activities. If animal raising is introduced, shade and forage need to be considered. A new fish-smoking cooperative requires increased use of wood.

When residents put other priorities over forestry, forestry projects will have to work with and support those priorities. And if local priorities do not include forestry in any way, then forestry projects will have to wait until the other needs have been met.

Land tenure and forestry product use guarantees. Land tenure is considered by many to be the most difficult problem in forestry. Tenant farmers will have little interest in planting trees if they are not sure they can retain the land to reap the benefits. Furthermore, land ownership and land use may not be simple and clear cut.

In many regions of Africa land use is given to a family that can retain agricultural use rights as long as the land remains in production. Unused land returns to the community. However, trees and products of trees may be classified differently than crops and may belong to a chief, or to the family of the original settlers. Where tree planting signals ownership of land it is forbidden, to those who do not hold titles even when they have continuous land-use rights for crop production. Also, in some countries, where trees come under the forestry service, farmers fear they will lose control of their land if they plant stands of trees.

Gifts of land to projects by government or by local leaders often produce counterclaims and conflict. Many projects are developed on lands given by the government or by a local chief only to be later claimed by a former tenant who left the land fallow for a few seasons while wage-earning in the city. Community members often understand the real meaning of offers of land for "community" forestry projects by religious or traditional leaders: even when community members participate in planting, the project's benefits will be claimed for that leader and his family.

This is a subject which takes careful study and project design to assure that participants will be guaranteed the benefits of their labor. Development schemes often encourage fixing title to the land. This may have the positive effect of making the owner more willing to improve his land, but it may also have the negative effects of creating an owner class and creating absentee ownership. Title fixing frequently has a negative effect on women, because women are seldom given title to the lands they farm. Thus title fixing makes them less secure tenants because they work on land which can now be sold (see Brokenshaw 1978).

For women, all of these aspects of competition for land are important. Women are frequently responsible for providing many essentials to family well-being; thus it is important to consider women's priorities and concerns in the original land-use plan and in the design of integrated projects. Because they are likely to lack the political influence to request, get, and keep a piece of land, lands they are to use must be carefully chosen and agreed upon by all concerned. For example, in Upper Volta village leaders gave a piece of land to a women's group for a garden. The year after the women had made the land into a profitable garden, the leaders took it back and gave the women a piece of land further away. Forestry projects are ruined by this kind of treatment. It is imperative that sites chosen for forestry planting be adjudicated and that all parties understand that use rights to the land are fixed for the life of the project (see Section IV).

#### Timeframe

The timeframe is a typical problem in forestry because planting

seasons are often short and because two to five years is the minimum time between planting and tree productivity. This timing creates three problems: delay between investment and profit; conflict with the planting season of basic food crops; and problems caused by either seasonal or permanent migration.

Delay between investment and profit. Delay between investment and profit is one of the major differences between forestry and agricultural projects. Because of the longer delay in forestry projects, one must ask whether or not to pay or give incentives to participants to plant their own trees. Similarly, tree protection becomes a problem, especially in the agricultural off-season.

Seldom does the idea of payment as an incentive enter a garden development scheme. Participants are generally highly enough motivated by the potential profit once they see gardening as a viable investment. However, when farmers dedicate their time and land and sometimes money in forestry projects, they may need an alternate source of income for several years. Before deciding whether to pay the participants to plant and care for their trees, both designers and participants need to be clear about who are the beneficiaries of the project. If it is a project imposed by the government for the benefit of the national ecology but without individual economic or product benefit, it must be identified as such. In this instance, it is reasonable to hire workers not only for planting but for any necessary upkeep. If the project is a mixture of both, it is important to include residents in project planning rather than assuming that they will willingly offer land or take on tree maintenance when someone else has identified the beneficiary. In some coun-

tries, such as Tanzania, the nation is identified as the beneficiary of certain projects and all residents are expected to contribute. In every case, the project's chance of success will be greater if residents personally identify with the project goals (Muzava 1977).

If you pay a man to plant his own field he might assume that you now own part or all of his crop. More generally, workers paid to plant trees frequently appear not to personalize their care. An AID study of farmer participation found projects involving local support and follow-through to be more successful when the participants identify the potential benefits as important enough to commit their time and/or money (DAI 1975). When, as with fruit tree seedlings in Senegal, individuals purchase the trees, they generally see that the trees are protected throughout the growing cycle. Once farmers are convinced of the value of a certain tree they will often request it for their fields or yards. In a small church-run woodlot project in Maradi, Niger, and in a windbreak project in Sudan (Kunkle and Dye 1979) farmers, although doubtful at first, witnessed the success of projects. They then requested seedlings and technical support and planted without asking to be paid. As noted above, villagers in Burundi see the benefits of forestry so clearly they reportedly steal seedlings from the government nurseries (personal communication from Fred Weber 1979).

Paying participants also limits the number of acres governments can afford to plant and may have a negative effect on future voluntary efforts. An example of this is a CARE dune stabilization program in Niger. The villagers knew the dune was blowing into their village and covering their garden areas. They knew that this environmentally focused project

was basic to their survival and, according to project organizers, were eager to participate. However, a Nigerian governmental official told the residents they would be paid for the bundles of millet stalks they were saving for the project. When the technicians arrived, the locals would not participate until paid. Though this was not in the budget, CARE felt forced to pay the residents to keep the project alive. Other project designers in the area fear that neighboring villagers will now wait to be paid to stabilize their dunes. There is no way that all the threatening dunes can be stopped if residents wait for financial aid from outside organizations.

But to state simply that paying workers is unwise obscures the issue's complexity. For example, some projects pay workers with food. When food is used to create meals for workers and their families for a community effort, it may fall within the well-known pattern of a host treating workers to a feast. This may have several positive effects. It may free women to participate as they no longer have meals to prepare at home. It may provide the extra calories required for the energy used in project work. It may allow workers from greater distances to remain longer before returning home. It gives a festive air to a communal project. But this approach may not provide adequate motivation for sustained work projects if workers do not see the project as high priority.

Food given in bulk in exchange for work is simply a substitute for money. Though bulk food grants may be economically or politically advantageous to the donor, they are an advantage to workers only when local food is not available for purchase. If a project draws farmers away from their fields during the agricultural season, these workers may need to be



paid in food. But great care should be exercised in this case to ensure that this does not create a risk for the community.

An interesting mode of payment was tried by a peanut production and marketing organization in Senegal (SODEVA). When farmers who were paid to plant Acacia albida seedlings in a project designed to improve their soil, over 70 percent of the seedlings were lost in the first year. The following year the project did not pay farmers to plant but after six months to a year they paid 100 FCFA for each living tree, 50 FCFA the following year and 25 FCFA per living tree the third year. The cost of planting and maintaining each tree until it was three years old came to 175 FCFA or about \$.88. SODEVA agents report that this model yields almost 100 percent living trees. Since the goal was living trees rather than planted trees, the new reward system was more appropriate and effective.

In a community where local participants need money during the interval between planting and harvesting, this type of plan might be modified so that payment is an advance toward the future product. The trees still belong to the farmer but he has sold some of the product in advance just as farmers commonly do with grain. If money sufficient to tide them over would not be a heavy burden to repay in case of a poor harvest, this could fit into the philosophy of community development. Depending on the goals of the project the returned money might go into a revolving fund for project expansion or for another aspect of community development.

Related to the lengthy maturation process for tree crops is the problem of plant protection. The use of barbed wire has become a major

issue. Farmers in developing countries usually protect their crops and their gardens without the aid of barbed wire. It is basically the fact that trees need protection for a longer period of time than many foresters claim no forestry project can succeed without wire fencing. However, if all tree and shrub planting must wait until there is enough barbed wire to protect it, then community development must depend on heavy outside funding and, very probably, there will never be enough money to meet urgent fuelwood and other forestry needs. Nor is it self-evident that wire fencing is always needed or appropriate. The type of protection needed depends upon many factors, including farmer-herder relations and relative harshness of the environment. And even when plantations are surrounded by multiple rows of barbed wire goats still enter unless there is a strong community effort. The community should give serious consideration to the tree protection issue before beginning any project.

For group plantings, the clear demarcation of each project's boundaries is particularly important in areas with migrating herds. In some projects residents plan to pen, tie, or otherwise control their animals; but participant control requires strong institutional backing. This is particularly true with regard to women's projects, as women often lack individual or group political strength to keep animals owned by men from damaging their trees. For area fencing, the type used locally for gardens or fields might be considered. For individual trees, rush baskets or thorn bushes, etc. are often used (see Weber 1977). But no matter what type of fencing is used, the participants will probably have to arrange for someone to act as watchman.

Conflict with planting season of basic crops. The coincidence of

the planting seasons for trees and crops is often described as limiting the ability of farmers to participate in forestry projects and needs to be carefully studied. Where the planting season is very short, farmers hate to take on extra work at that time. This may explain why projects with herders in Senegal have proven successful: herders are not overly busy at planting season. For the same reason, any men, women and young people not regularly involved in planting are good candidates for participation in community forestry efforts. The landless will also be willing participants if community land is made available.

Careful scheduling may also alleviate the planting season labor shortage problem. A good deal of work can be completed before the busy season--seeds collected, nurseries established, and the soil prepared. Some communities choose to pay laborers to do the actual planting. Experience has shown that in one day a man can plant an average of 80 seedlings in plastic bags into prepared holes. The time and labor for actual planting, therefore, are not extensive. Also, the FAO has some technical suggestions on specie selection to ease this time constraint (FAO 1978).

Weeding and caring for the young trees during the rest of the busy agricultural season is another and perhaps greater problem. Some project directors find the taungya system of inter-row planting of trees and crops is greatly appreciated by farmers as it eliminates weeding a second field.

Migration. The length of time required for trees to mature raises a very difficult problem in areas of high mobility. Residents may not want to invest in a forestry project if they expect to leave in several

years. The more frequent complaint, especially in the Sahel, is the seasonal mobility customary in certain areas. For example, in the peanut area in Senegal, the farmers protected their newly planted trees while they had crops in the fields. After harvest, however, both men and women went into urban areas. A number of men stated that they go to the towns for a few weeks of recreation and then seek a job; women, however, claimed they would rather not go to the towns if there were employment near home. This is the exact season when scattered water holes dry up and herders come into the village wells for water. They customarily let their cattle browse in the harvested fields and fertilize them. With no one left to protect the young trees nearly all the trees were destroyed or damaged. This underlines the need for a well considered protection system--perhaps hiring a watchman, or perhaps exploring with village women the idea of a companion money-making project designed providing off-season employment so that some residents could stay to protect the trees. The same problems caused by migration patterns are well described in an evaluation of a tree planting program in Chad (Weber and Dulansey 1978).

#### Spatial Considerations

A number of needed forestry projects are designed to improve ecological conditions away from the planting site--silted river basins, dune stabilization, etc. Many of these desirable projects are of little value to the area in which the trees are planted and may in fact occupy precious land in one area in order to improve a distant area. Once again, the planners should clearly define the beneficiaries. Even if this is

identified as an environmental project not suitable for community development with voluntary action, the residents and employees must understand the value of the project. The examples given earlier from Columbia, Niger, and Senegal show dramatically what may happen when local interests are not considered.

A second common spatial constraint is the distance from the villages or farms to the lands available for forestry projects. This may especially handicap women because they are more likely to lack transportation. In some projects carts are introduced to help women haul wood. Where their control and use is not carefully monitored, men frequently take over the carts for their own purposes as has happened in a number of sites in Upper Volta.

#### Unfamiliarity with Forestry

People who live where trees grow in the wild often feel that trees are "God given" and not something one plants. Herders from one project (Labgar) had to be taken on a field trip to believe that gum arabic trees could replace the wild ones that had died in the drought. There is also an antagonism toward trees in some of the farming communities which have had to clear the land before planting. The Hausa ethnic group in Senegal identifies the oldest and more prestigious people as those who had the "right of the ax" or "the right of fire," meaning they had been the first to clear the land of trees and shrubs.

Individual familiarity with trees and tree planting is important. However, this lack of familiarity with forestry for local community development is exacerbated by relationships between the forestry service

and local residents; national support services' unwillingness to cooperate with each other in FLCD efforts; and lack of local administrative support.

The forestry service and local residents. Forestry education is for the most part intensely professional and includes learning Latin names for local and exotic trees, botanical science, and some military training, but no extension training. Foresters wear uniforms, sometimes carry weapons, enforce rules prohibiting fuelwood collection on certain lands, enforcing gun prohibitions, taxing locals for cutting certain trees or making charcoal, etc. A forester with this background is unlikely to seek to fill, or to be accepted in, a supportive, teacher role. Forestry services might benefit from working through extension services and local grade schools while at the same time strengthening their extension capability and changing their image.

In addition, forestry research has focused on tree growth more than local uses of plants. For example, a research station in north-central Senegal had large stands of a low-growing Australian variety of eucalyptus introduced as a potential forage plant. After several years the foresters could show a number of healthy stands under various growing conditions; but they had never invited in goats and sheep to see how the Australian eucalyptus would be accepted as forage by the local animals and how the plant would react under conditions of actual use.

Success for foresters has been measured by perfectly straight rows of large beautifully green trees. When foresters see a local community effort, they are apt to see the few trees that died rather than the greater number that lived. Given this tradition, foresters will have to

convince potential participants that their interests are now to help villagers solve their forestry problems. Forestry institutions will have to support local efforts focusing on low cost tools and simple technology and procedures to introduce them to villagers. Women will have to be encouraged to enter the field of forestry to facilitate the meaningful involvement of local women. All of this may be difficult when forestry offices are usually understaffed and underfinanced. There are countries moving in this direction, however. For example, the Indian government has now established a school for foresters specifically emphasizing extension work (Shah 1979).

National support services. Other national institutions have not focused on forestry as an important element in development. Several Senegalese extension officials recently remarked that tree planting and forest fires were the business of the forestry service, not of the farmers. There appears to be much competition and little communication or cooperation between institutions responsible for forestry, agriculture, extension, water, transportation, taxation, education, legal, and budgeting and finances (see Spears 1978). Where this is the case forestry officials need to be encouraged to increase contact and information flow between their service and other agencies. Forestry services might introduce seminars and offer educational materials and technical support packages to grade school teachers, agriculture specialists, and extension agents. Because funds for this type of material development and training are currently difficult to obtain, three to five percent of the funding for each project could be dedicated to each of these efforts. If all projects contributed to increasing the forestry service capability it

could greatly strengthen future efforts in FLCD.

Local administrative support. Local administrative skills in integrated resource planning, tree protection, benefit guarantees, etc., are frequently not well developed in relation to forestry projects. This is one variable which should be considered in site selection and project design.

This factor has begun to be recognized by international development agencies. The World Bank has stated the weakness in national and local administrative and support structures to be the most serious handicap to their efforts in establishing FLCD. They are offering some of their financing for institution building and for strengthening local capacity to support rural forestry projects (World Bank 1978).

#### IV. Project Ideas

It is the experience of community developers that projects introduced in a community which build on existing skills and accepted practices have a better chance of success. Therefore, it is sobering that community forestry is uncommon both in the developed and in the developing world. Thus donors, designers, and participants have very little to go on in the way of experience or models. There is no mystery why community participation with locally controlled benefits in forestry projects have been difficult to establish. The very term "forestry" calls to mind either forests controlled by foresters, or industrial lumber, coffee, rubber, etc. plantations employing hired labor. And, in neither instance does one see women designing, controlling, or often even participating. Perhaps this is why it is common to hear foresters at international con-



ferences remark that women do not or cannot participate in forestry projects.

A focus on women is needed in two aspects of project design: their role as active participants, and their control of benefits. Due to the invisibility of women's activities and of their needs, detailed examination of women's potential forestry activities in both of these regards is needed.

### Participation

In order to see projects that are likely to succeed in incorporating women as active project participants, women's traditional activities must first be understood.

In most parts of the world women plant fruit or shade trees in their yards. In many areas women collect tree seeds for food or other uses, and may sell the surplus. In most regions they have an active part in raising agricultural crops, and frequently in gardening. In areas where wood is used as fuel, women usually "harvest," collect, transport, and store their family's fuel supply. Here, too, they may trade or sell any surplus.

Many projects can be introduced to expand women's normal activities or to make them more profitable. Such projects include: to raise seedlings in the courtyard or garden area; to increase the number of courtyard trees; to plant trees in the market for shade; to collect tree seeds for sale to the forestry department or to a local nursery; or improving the mode of harvest, transport, or storage of wood. If trees are approached as just another type of agricultural crop, exceptional only in its longer

maturity period, tree planting by women who already plant crops should not seem startling. Actually, those most startled by this approach to forestry may be the forestry technicians, host country and expatriate alike, who have acquired a mystique of exclusivity and elitism through their rigorous and intensive training.

However, it is unwise to overstress women's participation in the act of planting, transporting, etc., without looking at the total picture. Just as it is unfortunate to plan projects with men, which permit no control by women but require their labor, it would be unfortunate to draw up inflexible rules on women's involvement in projects. In areas where women have already overcharged work schedules, men may be willing and able to physically plant the trees for his family or community. Women may be able to do support activities and may profit from the benefits.

### Benefits

More important than who physically plants the trees is the issue of who needs and will benefit from the product, and who will control use of the product. In a Peace Corps project in Latin America, women purchased fruit tree seedlings and paid men in their community to plant them; it was the women who selected the project so they could profit from the fruit. In areas in the Middle East where women live inside walled compounds, their sons may purchase fruit tree seedlings and later sell the fruit in the market for their mothers; such a project is a legitimate women's program because it is women who are the prime beneficiaries.

There are difficult issues to consider, however, when the work is not under the control of women. For example, in a project in Niger, men

planted trees in a woodlot while women provided food and support for them. The wood was intended for the man who planted the tree, and he was to give the wood to his wife or wives. As designed, the project benefits women, but a woman's share of wood would depend entirely on how many trees the man plants and how many wives he has. A widow or woman with a lazy or an absent husband could not benefit from the project. Such issues of benefit sharing have not been adequately addressed. They must be examined in the design stage of each project and be spelled out clearly in the project management plan.

#### Indicators for Project and Area Selection

Any FLCD project must be based on the technical, administrative, economic, and social information required for any forestry and any community development project. There are, however, indicators which will give program designers evidence whether a specific area holds strong potential for women's active participation in FLCD. There is some general information that can be collected from certain key people and from a brief library search. This can serve as the first step in determining what options are appropriate for different areas, in identifying problems and even in determining which FLCD projects should be delayed. Key resource people will differ by region. However, women grade school teachers, leaders of women's organizations, women social workers or extension agents, wives of male teachers or foresters, Peace Corps volunteers, local representatives of private voluntary organizations, as well as sociologists can be helpful in this first line of questioning. Four general topics to be pursued are: motivation, active participation, benefit control, and

administrative support.

Motivation.

1. What relationships do women have to forestry and forestry products now? Is this currently changing?
2. What is the need for forestry products relative to other basic needs?
3. What major problems could forestry help women solve? Which women would benefit?
4. How would others in the community be affected by a potential project?

Active Participation.

1. Do women have access to land and to forestry products? Can this access be assured for projects of long duration? Are the women mobile?
2. What is the woman's place in the social structure of the family, and in the village? For instance, are there age groups of women who normally work together or do women work by themselves or with other family members? Who organizes this?
3. What is the woman's role in agricultural and other work activities?
4. What are the woman's time constraints on a daily basis and as they relate to seasonal work?

Benefit Control

1. What is the woman's current role in the economy of the family and in the community?
2. How do women handle money and other resources?
3. How would any suggested project affect the economic situation of the women and their control over resources?

Administrative Support

1. Could women get and retain land, water use rights and other needed materials and resources for a project?
2. Could women get information and technical help from extension, agricultural and forestry services, from other agencies, or from Peace Corps volunteers or private voluntary groups?

3. Have the women in a suggested area had any previous experience in forestry or other development projects? In neighboring areas? What happened and why?
4. Would there be community support to help protect trees, etc.? Are there women leaders to help?

The answers to these questions will indicate where problems may lie. For example, if a group of women have participated in previous projects which failed, a carefully presented project demanding little risk may be appropriate. If women usually work separately, a project of individual plantings may be indicated as an alternative to collective activities or as an initial phase. If one cannot count on community support to help protect trees, special protective measures may be indicated. Forestry would probably not be indicated if women felt that other basic needs were higher priority--unless forestry could be integrated into a total program addressing these needs. From this general level information the potential for either the integrated approach or the various separate forestry projects could be examined.

Women who have not been involved in project planning or decision making may have difficulty imagining project ideas for their community or indeed expressing their own needs. One expatriate forester in Niger was told "It is for the men to say," or "It is for the chief to say," when he asked women what they would like or what they needed in the way of forestry products. A Voltaic woman sociologist even had difficulty eliciting project ideas from women in her own home village. One solution might be the presentation of a list of apparently viable options based on the brief information initially gathered. For example, where women are herders and there is not enough forage, they might be interested in the

option of raising forage trees if the community might assign them land and help protect the crop. If women gardeners have problems with animals attacking their gardens, they might want to develop a live fencing project. If women have a garden plot near a well and find it too small to be profitable for vegetables, they might wish to turn a portion into a nursery requiring limited space. The women can be made aware of such options.

After finding projects which interest them, local women can help identify what information they need in order to select among their options. They can identify and provide the information required to design a good project as well as the information needed to write a management plan. This is not to say that professional socio-economic analysis is superfluous. The argument is that a project is strengthened by the input of participants at the information collecting stage. When participants understand why they are being subjected to questioning, they will give more honest answers and cooperate more fully. And even more important, since helping local people learn to identify and solve their own problems, such participation has developmental implications beyond the particular project in question.

#### Two Basic Approaches to Forestry Projects

The two differing approaches to forestry programming are the integrated community development approach (Model I) and the special project design (Model II). In the integrated approach, the designer takes the whole community as his point of departure and designs the various projects to fit the needs of that community. When done properly, this can produce

exceptional results. The second, special project design, offers one of several forestry project packages, such as support for woodlot development. The designer locates a community which could profit from this type of project and then molds it to fit the circumstances of the specific community. This can also be effective when flexibility is built into the design.

Model I. What appears to be a successful integrated community development project exists at Labgar, Senegal. Semi-sedentary Peul pastoralists make up the large majority of this mixed community. These pastoralists have participated on a voluntary basis in planning and carrying out a forestry component of an integrated community development program. This example of Model I has the following elements:

1. An outside funding organization committed to integrated community development approach.
2. A national (in this case, a Senegalese) as project director experienced in extension and government agency functioning who lives in the region.
3. An indepth sociological study of the potential development of the region.
4. Self-selection of the project village through the positive response from residents of the area, many of whom live scattered around Labgar.
5. A woman extension agent, and later a forester, residing in community.
6. Open dialogue between the director, the agent, the forester, and the villagers.
7. Priorities chosen by area residents. Residents offered to provide labor and the donor organization and the government helped provide material and personnel. The projects were: a well with a pump, a dispensary with a nurse, a teacher for the school, and technical and material support for establishing a women's garden.



8. Identification by the villagers of problems that still existed for them, and made them dissatisfied with their current life-style as compared to life before the drought. They reported they had less food, less income from gum arabic, and their small animals were not as healthy.
9. Selection of a project with background provided by field trips to see possibilities of tree planting and with the assurance they would own the trees and would not be punished by the forestry service for accidental animal damage to the trees. They selected the species on the basis of information provided by the forester and of past experience. They selected species to provide fodder, shade, income, building poles, and firewood for future needs of this growing community.
10. Time and labor scheduling with the forester. Villagers prepared soil ahead and, at the appointed time (the first rain), herders came from many miles around. Men planted the trees while women carried water. They planted the area and chose to increase the area planted the following year.
11. Subsequently, many neighboring villages requested similar projects.

In this project, local community residents defined their own goals and priorities and the extension agent and forester acted as facilitators. The woman extension agent took the interests of the women into account, and women participated in the project design and expect to share in the benefits. There was follow-through and flexibility especially with the facilitators living in the community.

Model II. Another example from Senegal illustrates the second, much more common, type of project. A parastatal agency (SODEVA) designed to increase peanut production, discovered that the carrying capacity of the soil was decreasing and that tree planting was necessary to increase soil fertility and to provide fuel for local use. There was, however, a serious shortage of seedlings. SODEVA officials decided to support individually owned backyard nurseries to provide the needed seedlings.



A female extension agent and a male forester contacted various groups, including women's groups in several villages, informing them of the possibility of operating nurseries and presenting the technical and labor requirements and potential risks and benefits. Women in Ngodiba, Senegal, chose to undertake this project, planting small nurseries and selling the seedlings locally. Women have found this profitable and plan to continue it in the following years. Both individual and communal woodlots have been started in the region and women and men participate.

The key to this type of project is that forestry was a felt need in the community and that an appropriate technical package was presented with appropriate extension methods. This particular project also benefited from a female extension agent interested in women's roles, a forester giving technical support, and the necessary material support.

Both model projects were based on the participants selecting the program, setting up the work plan, retaining the benefits, and on continuing support or follow-through. These elements can be built into the original design of any project via a project management plan or agreement.

#### V. Project Management Agreement

Part of the new philosophy of forestry for local community development is that local citizens have responsibilities and duties toward the project just as support agencies do. Good project management therefore includes an agreement signed by all persons touched by the project. This agreement would contain the five following sections: (1) long and short range goals; (2) an integrated resource use plan; (3) a start-up and maintenance plan; (4) a benefit distribution plan; and (5) an evaluation

plan with feed-back and flexibility potential for altering the program. The importance of such a document increases with the size and complexity of the program, but these five elements should be considered even if the project involves individuals using their own land. The format will vary depending upon the country, the agencies involved, the local administrative structure and on the desires of the participants. Most FLCD projects that fail do so because one or several of these elements was not clear to all those involved from the outset of the project. This type of document is important to all parties. But it is crucial for women, for they have frequently been overlooked in identifying goals, have less control over land use, are often not considered when work schedules are designed, have less assurance of receiving benefits, and seldom have a voice in project evaluation or have power to back up their requests that other parties produce their promised inputs.

### Goals

Local participation in setting goals for a project implies that participants are informed of options, of risks and of techniques, labor, and finances required. Participants must have chosen reasoned goals for short term and long term aspects of the project. This is particularly important in forestry projects which are apt to call for lengthy investments of limited resources. Participants should be encouraged to make these goals flexible and realistic and written in such a way that they may be used in mid-term evaluations to see if re-focusing project implementation is necessary. The time necessary for the goal identification and the optimal size and complexity of the project depend upon the women's

experience with extension projects, local administrative support, strength of the extension service, and support from outside agencies whether Peace Corps volunteers or private voluntary organizations. The absence of women foresters or agents working with the local women during this process is a great handicap. Where this is the case project designers may want to locate and request the help of a local woman leader (or leaders).

### Integrated Resource Use Plan

Because most forestry projects require a lengthy commitment of usually limited land and resources, it is particularly essential that forestry projects be coordinated with other activities requiring these same resources. Examples of women being given land one year and having it taken away the next, of being given poor or unsuitable land, or land dedicated by the chief to which the title is not clear, illustrate what women have to gain by careful community planning of land use. Even where personal land is used, the participant should consider site selection and alternative uses. The following points are important considerations.

1. An inventory of land resources and needs including current and projected needs for water, human and animal food, and income crops.
2. An inventory of current and projected needs for energy and for other forestry products, byproducts and tertiary products.
3. An examination of this plan in relation to regional and national plans when this information is available.
4. Using the above information as a base, participants and all those affected by this land use choice should consider available options.

If needed, project funds should be earmarked to help communities or individuals gather this information. After considering this information a site, which can be generally agreed upon by all those affected, should be selected. Complete adjudication of land rights should follow. A village council, the forestry service, regional government officials, village or clan chiefs, and/or individual owners will probably be variously involved in differing areas; no stone should be left unturned to assure that the land use is clearly agreed upon for the life of the project. The loss of planted land or an angry former landuser with a match is a forestry project's quickest ruin.

#### Start-up and Maintenance

A clear understanding by all parties at the project's outset regarding just how much the project will cost in labor, materials, and funds as well as a clear commitment of those involved to play their roles at specific times will remove a major cause of project failure. Nursery plants delivered too late by the forestry service, villagers planting huge fields with banana or other trees without understanding the required maintenance, villagers disputing mid-project over which work is to be done by which family, donors paying for planting and disappointed when upkeep does not continue voluntarily, are all common complaints in projects gone sour. This is especially true of village projects where women were not consulted, although their labor was necessary for the success of the project. Successful management agreement planning requires dialogue between all parties having any responsibilities during the project period. Any agency, agent, government service,

outside group, as well as local participants, expected to have an input in building a road, installing a pump, providing plants or tools, providing labor, etc., during the project's entire life should agree to, and sign, a time scheduled plan. Some structure is needed to bring pressure upon all parties to respect this agreement but at the same time allow for flexibility needed to assure the success of the goals. For instance, a spokesman for a participating local group could be named to contact the forestry service to remind them the delivery date for seedlings, etc. A direct method for participants or local leaders to appeal to the donor agency might be established for use in the event that local communications break down. This would be particularly helpful for women who may have no political power or established communication network with outside groups.

#### Benefit Distribution

From the beginning of the project design, participants should be aware of the potential range of benefits and risks. Keeping these in mind as well as the long and short term goals of the project, participants should arrive at a fair and desirable distribution of benefits. The management document should describe the range of expected benefits with details on when they are to be obtained, in what manner, by whom, and how. Some projects end in great disappointment or anger because project managers planned to re-invest initial profits while participants expected early personal benefits, or because those who worked hard resented sharing benefits with those who have had little input. Such problems may arise if some families leave and new ones come in or local young adults marry and

start new households. Here, too, the management plan should make clear what benefits women will receive for what participation. If the project is a mixed community project, care should be taken to see that participating women find it just.

#### Evaluation and Follow-up

Because community development with local participation is not static, a blueprint model of project design is undesirable. Flexibility must be built into the original design in order to benefit from feedback evaluation. Such flexibility, although important for any type of community development, is especially important for longer term forestry projects. The management plan should describe how the project expects to meet the long and short term goals, when evaluations are to be made, and how all concerned parties are to be represented. Probably this will be done by a committee of representatives of the participant group, technical agents, government, donor, or other interested parties. It outlines channels of communication between appropriate structures or individuals and procedures to follow if the committee feels the schedule is not producing the desired goals and they wish to recommend a change. The evaluation should contain an examination of how benefits affect the community and how they are distributed, noting if the project is developing toward becoming self-sufficient after outside funds have ceased. It could allow for the identification of potential projects generated from the successful implementation of the original plan. Finally, it should determine whether the project is helping the community solve its own problems in a way that it increases its control over its own future.

The appendix contains a suggested format for a Project Management Plan which may be useful in project design.

## VI. Conclusions

Just as it is important to have evaluation with feedback built into a specific project design, it is most important to have feedback evaluations to develop and improve our capacity to design and implement projects. Currently the only certainty is that growing demands for forestry projects are putting an alarming strain on the environment and that forestry projects are having an alarming rate of failure.

The new approach including community participation is an attempt to change the top-down approach in forestry and to enlist local support, that is, to have local residents participate in solving their local problems. The very need to discuss women separately indicates that they have been consistently overlooked. It is simply to make women as visible as any other members of the community in relation to forestry. Because women are knowledgeable about forestry products and community needs, and because they are apt to be the most involved with forestry product use, their inclusion in forestry project planning is essential to FLCD. But the steps to take to obtain this participation are not as obvious.

This paper explores ideas on how to develop programs, while it also recognizes the problems already identified by foresters and designers. It is an attempt to formulate beginning steps for applying this new people-focused approach at the same time being sure women are included in the process. Many questions are raised in this paper. Others will become evident when designers start to examine specific projects, and still

others will surface as designs are implemented.

The next step is for everyone involved in FLCD projects--including AID personnel and consultants, local participants and host country foresters and officials, and other donor and voluntary organizations--to evaluate and document successes and failures. Since there is no central office for this information, AID should make a serious effort to distribute this information broadly. Only from trying these and other ideas on an experimental basis, modifying and developing new techniques, and working together, can developers and participants hope to solve the problems in time.



## APPENDIX

## SUGGESTED FORMAT FOR A

## PROJECT MANAGEMENT PLAN

1. PARTICIPANTS

This includes all participating members, not, for example, family heads only when women and young people are expected to have an input. It might include or limit the possibility of adding others who wish to become participants later because they see the potential benefits more clearly, because they have moved into the area, or because they are young people of the village who have married and established new households. It might establish criteria for participation so that there is a clear understanding of responsibilities and a method of reclassifying those who fail to continue fulfilling their responsibilities.

2. LONG AND IMMEDIATE TERM GOALS

Planners determining projects' goals would not stop, as many planners do, with the number of trees planted, or even the number of trees living, but would consider the desired impact. For instance, the goals might be to make the community, or a defined group of participants, self-sufficient in home cooking fuel wood in X number of years by planting and maintaining X hectares of X (species) trees each year for X years. This way if the goal of self-sufficiency for fuel wood appeared to be in risk of failure because of increased requirements, etc., steps could be taken to increase the area planted, to change species, etc. If, on the other hand, the introduction of modified cooking stoves reduces the demand for fuel, new species could be substituted which produce nuts or fruit, charcoal making could be introduced, extra wood could be sold, or the project modified in other ways. If different groups or agencies have different goals these should also be expressed here.

3. DESCRIPTION OF PROJECT

This will include an elaboration of Step 2 telling how it is to be carried out and establishing a timeframe.

4. PROJECT SITE

This would be a description of the site chosen, how it is to be used, and any time or other limitations on its use. It is to be signed by anyone who is giving up rights to the land, those responsible for distributing land, and those who will participate in its use.

## 5. START-UP AND MAINTENANCE

This section would describe required inputs, identify who is responsible, and establish a time schedule identifying inputs required at specific times and those that are continuing requirements. For example, repair of a water pump may be under the direction of the government water service or a local repair man. If a working pump is necessary for project success then the party who is responsible for its upkeep and repair should be part of the discussion of participant expectations and acknowledge their role if they take on this responsibility.

This part of the plan is usefully written in a schedule format and copied in a large, well displayed schedule to remind participants of steps to be followed. If responsibilities are borne by groups (for example if all male participants are to prepare the soil in April), a representative of the group could sign that part of the plan and be responsible for reminding others when it is time to start. The plan should be signed by any party or representatives of any agency or group with labor, money or material input expected during the life of the project. This includes the forestry service's agreement to supervise planting or to deliver X number of seedlings at a specific time.

Time	Input	Responsible Party
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## 6. BENEFIT DISTRIBUTION

- a. Range of potential benefits (considering possible risks).
- b. Formula for benefit division including the time framework (who, when, what, how).

This will be signed by participants and others responsible for the development of the project and for benefit distribution. It will often be important that the forestry service, chiefs, or others whom participants fear might want to intervene or appropriate some of the benefits should also sign, even though they themselves are not supposed to be involved in the benefit sharing. This may strengthen participants' confidence as well as their actual ability to retain ultimate control over benefits.

## 7. EVALUATION FORMULA

- a. Identification of an evaluation committee.
- b. Scheduling when evaluations are to be made.
- c. Description of how the report is to be made, and by and to whom.

- d. Criteria for how the goals are judged to be reached, for an evaluation of whether all parties are up-to-date on their inputs, and for an evaluation as to whether benefits are being distributed as planned.
- e. Prescribed procedure if there are complaints by participants or others, if the evaluation committee feels the program is missing its goals, or for any reason needs to be changed, or if agencies or participants, etc. are not fulfilling their part of the contract.

## REFERENCES

- Argal, P. "Role of Wood Energy in the Rural Economy of India." Paper presented at the Eighth World Forestry Congress, Jakarta, Indonesia, October 1978.
- Brokensha, David and Bernard Riley. "Forest, Foraging, Fences and Fuel in a Marginal Area of Kenya." Paper for USAID Africa Bureau Firewood Workshop, Washington, D.C., June 1978.
- Benge, Michael D. "School Gardens, Animal Husbandry, and Nursery Projects." Viet Nam: International Voluntary Service, n.d.
- Carr, Marilyn. "Appropriate Technology for African Women." ITDG/UNICEF, 1978.
- C.E.S.A.O. "Projet-Test de Plantations Villageoises d'Arbres dans la Sous-Prefecture de Kombissiri." Bobo Dioulasso, Upper Volta: CESAO, 1977.
- Chaney, Elsa, Emmy Simmons, and Kathleen Staudt. "Women in Development," in Background Papers for the United States Delegation, World Conference on Agrarian Reform and Rural Development, FAO, Rome. Working Group on WCARRD. Washington, D.C.: Agency for International Development, 1979.
- C.I.L.S.S. "Grandes lignes de la Strategie du Programme revise de satisfaction des besoins de la population en produits forestiere et de lutte contre la desertification." Reunion de l'equipe Ecologie et Forets. Niamey, Niger, June 1979.
- Development Alternatives Incorporated. "Strategies for Small Farmer Development: An Empirical Study of Rural Development Projects." Vol. 1. Washington, D.C.: USAID, 1975.
- Dulausey, Maryanne. "Can Technology Help Women Feed Their Families?" Paper for the AAAS Workshop on Women and Development, Washington, D.C., March 1979.
- Eckholm, Erik. "Planting for the Future: Forestry for Human Needs," Worldwatch Paper 26. Washington, D.C.: Worldwatch Institute, 1979.
- Ernst, Elizabeth. "Fuel Consumption Among Rural Families in Upper Volta, West Africa." Paper for Eighth World Forestry Congress, Jakarta, Indonesia, October 1978.
- F.A.O. "Forestry for Local Community Development." FAO Forestry Paper No. 7. Rome: Food and Agriculture Organization of the United Nations, 1978.
- F.A.O. "Report on the Third FAO/SIDA Expert Consultation on Forestry for Local Community Development." Semarang, Indonesia, December 1977.

- Freeman, Peter. "Deforestation and the Use and Conservation of Forests and Woody Vegetation; Policy and Program Considerations." Draft Report, USAID, July 1979.
- Kunkle, S. H. and A. J. Dye. "The Effects of Forest Clearing on Soils and Sedimentation." Paper for the Conference on Agricultural Hydrology and Watershed Management in the Tropics, International Institute of Tropical Agriculture, Ibadon, Nigeria, November 1979.
- Muzava, E. M. "Village Afforestation in Dodoma District" (Tanzania). FAO Second Expert Consultation on Forestry for Community Development, June 1977.
- Peace Corps. "Notes of the 1978 Peace Corps Forestry Conference, Niamey, Niger." Office of Programming and Training Coordination Information Collection and Exchange, Peace Corps: Niamey, Niger, 1979.
- Poulsen, G. "Man and Tree in Tropical Africa." Paper IDRC No. 101e. Ottawa, Canada: International Development Research Centre, 1978.
- Shah, S. A. "People's Participation in Forestry for Community Development in India." Paper for the Eighth World Forestry Congress, Jakarta, Indonesia, October 1978.
- Spears, John S. "The Changing Emphasis in World Bank Lending. A Summary of Recent Experiences and Problem Areas of Relevance to the Eighth World Forestry Congress Sessions Concerned with 'Forestry for Rural Communities.'" Paper for the Eighth World Forestry Congress, Jakarta, Indonesia, October 1978.
- Tinker, Irene. "New Technologies for Food Chain Activities," in Impact of Technology Change on Women. AAAS Symposium Vol. Washington, D.C., 1979.
- Ulinski, Carol and John Earhart. Peace Corps Forestry Policy Paper. Forthcoming.
- USAID. Airgram on Village Firewood Production and Other Cooking Fuels. AFR/DR/SDP, 1979.
- Weber, Fred. "Reforestation in Arid Lands." VITA Publications Manual 37E. Washington, D.C.: VITA, 1977.
- \_\_\_\_\_, and Maryanne Dulansev. "Midpoint Evaluation Chad Reforestation Project." Washington, D.C.: CARE, Inc., 1978.
- World Bank. "Forestry Sector Policy Paper." Washington, D.C.: World Bank, 1978.

## CONTRIBUTORS

Jacqueline A. Ashby

Jacqueline Ashby received her Ph.D. in Development Sociology from Cornell University in 1980. Her dissertation topic is "Rural Education and Agricultural Modernization: Innovation and Social Change in Four Village Communities in Nepal," based on 18 months of field survey research in Nepal. Currently she is in Cali, Colombia working on a rural nutrition project for the Centro Internacional de Agricultura Tropical. She has been the Research Associate at the Center for Economic Development and Administration at Tribhuvan University in Nepal where she did research in rural sociology, and for the Rural Sociology Department at Cornell, where she did statistical analysis of social survey. Ms. Ashby has taught Sociology and Comparative Education at Cornell and lectured in Nepal on the improvement of English language teaching methods at Tribhuvan University for British Voluntary Services Overseas. She has presented papers at various conferences and seminars, including the Agricultural Projects Services Center Research Seminar, Kathmandu, Nepal and the Joint Meetings of the African Studies Association and the Latin American Studies Association.

Rae Lesser Blumberg

Rae Blumberg received her Ph.D. in Sociology from Northwestern University in 1970. She is presently an Associate Professor in the Department of Sociology at the University of California at San Diego, and formerly was Assistant Professor at the University of Wisconsin-Madison. She has had extensive experience as both teacher and researcher in the U.S., Latin America, and elsewhere. Dr. Blumberg's primary professional interests are in the areas of sociology of economic development (including the emerging field of "women in development") and socio-economic and sexual stratification. She has been actively concerned with policy and evaluation research. She has received various research grants and awards and was one of 14 U.S. recipients of a Ford Foundation Faculty Fellowship on the Role of Women in Society (1973-74).

Dr. Blumberg has worked for a number of years in several Latin American nations with local ministries (including education, health, and planning). In her work abroad she has consulted and conducted research on topics including democratic access to education, regional development planning, and the status of women. In addition, she has trained indigenous social scientists in different aspects of sociological research. She has written widely in all of these areas, especially on economic development, stratification, family, fertility and female status. Her publications include a 1978 book, Stratification: Socio-economic and Sexual Inequality, and around 30 articles and chapters in edited books (e.g., "Fairy Tales and Facts: Economy, Family, Fertility and the Female," "A Paradigm for Predicting the Position of Women: Policy Implications and Problems," "Rural Women in Development: A World of Invisibility, World of Work," and "The Political Economy of the Mother-Child Family").

Ruth B. Dixon

Ruth Dixon is an Associate Professor of Sociology at the University of California, Davis. She received her Ph.D. in sociology from the University of California, Berkeley in 1970. Her fields of specialty and interest are rural and urban sociology with a particular emphasis on women, the family, marriage patterns and population policy. During a field trip to India, Bangladesh, Pakistan, and Nepal Dr. Dixon explored the potential for creating income-generating activities for rural women. She has written widely on rural women, family planning patterns and development issues. Some of her publications include "Women's Rights and Fertility," Status of Women and Family Planning, "Measuring Equality between the Sexes," "The Roles of Rural Women: Economic Production and Reproductive Choice," Rural Women at Work: Strategies for Development in South Asia, and "Assessing the Impact of Development Projects on Women," an evaluation study prepared for the Agency for International Development. Her professional activities have included participation in a number of seminars and meetings, including the annual meetings of the Population Association of America, the American Sociological Association, and conferences on women in development. She has served as a consultant to the Branch for the Promotion of Equality of Men and Women and to the World Food Programme of the United Nations.

Frances Hill

Fran Hill received her Ph.D. from Harvard University in Comparative Politics in 1973. Her dissertation was entitled "Mobilization and Participation in Tanzania." Currently she is Assistant Professor of Government, University of Texas at Austin. Dr. Hill is also a Research Associate of the Center for African Studies, Boston University and a Rockefeller Foundation Consultant to the United Nations Food Corps in Tanzania. Her fields of interest include comparative politics with primary emphasis on Asia, Africa, and the U.S., comparative agrarian political economy, and American national institutions. Her articles have appeared in Comparative Studies in Society and History, the Harvard Political Review, Worldview, African Studies Review, and she has authored Ujamaa: Mobilization and Participation in Tanzania. Other works in progress include an examination of "American Women on the Family Farm," and "Food and Agricultural Policies in the Administrative State."

Marilyn W. Hoskins

Marilyn Hoskins is currently a Professor of Sociology at Virginia Polytechnic Institute, Blacksburg, Virginia. She has received both an MS from Ohio State University and an MA from Catholic University. Ms Hoskins has had extensive overseas experience and has lived and worked

in various parts of Southeast Asia and West Africa where she was an independent consultant for USAID, UNESCO, FAO, the African Development Bank and others doing research studies, designing programs responsive to community needs, analyzing social and economic problems and their potential solutions, managing rural and urban community development projects, conducting seminars, and supervising research-design implementation. While in Upper Volta from 1974 to 1978 Marilyn Hoskins served as the Director of the Department of Culture, Tradition, and Environment, a Senior Research Director to the Department of Social Research, and a contributing editor of Développement Voltaïque, a monthly journal on regional community development issues. Among her publications is a recent report "Various Perspectives on Using Women's Organizations in Development Planning."

Christina C. Jones

Christina Jones is an attorney in the International Division of Ford Motor Company, Dearborn, Michigan. She attended Harvard University Law School and also holds a Ph.D. from the University of London in comparative law. Her doctoral dissertation, Law and Development: The Law of Bequests in the Context of Reform of Property Law in Tunisia (1975), dealt with legal aspects of land ownership and agrarian reform. She has also completed a book on family law in Kenya (Law of Family and Succession in Kenya, forthcoming), and written on other issues of land reform and family law.

Barbara C. Lewis

Barbara Lewis is an Associate Professor of Political Science at Rutgers-The State University of New Jersey. She received her Ph.D. in political science from Northwestern University in 1970. Her dissertation was entitled "The Transporters' Association of the Ivory Coast: Ethnicity, Occupational Specialization and National Integration." Her fields of interest and research are, within the context of African development, fertility and female labor force participation; indigenous trade and commercial organization among men and among women; agricultural development policies; and the politics of policy implementation. She has completed five field research projects in the Ivory Coast and in other francophone African states. Her research activities have been funded by the Social Science Research Council, the Population Council, AID/DSB, and the Ministry of Planning of the Ivory Coast. Her published articles include "Urban Stratification and Extra-Urban Ties," "The Limitations of Group Action Among Entrepreneurs: The Abidjar Market Women," and "Economic Activity and Status of Urban Women: Social Being and Well-Being." Her monographs include La fécondité, l'emploi et le Statut de la Femme en Milieu Urbain and Political Variables and Food and Food Price Policy in West Africa.



Constantina Safilios-Rothschild

Constantina Safilios-Rothschild, born in Greece, received her Diploma in Agriculture from The Athens Agricultural College in 1957 and her Ph.D. in Rural Sociology from Ohio State University in 1963. Her fields of specialization and interest include comparative family sociology, sociology of development and social change, rural sociology and rural development, sex role and sex stratification, and the situation of women and girls in less developed countries. Dr. Rothschild has served as a consultant to the United Nations, UNICEF, WHO, AID, ILO and to the United Nations Secretariat, International Women's Year, as well as to the World Bank, and has received research grants from the Ford Foundation, NICHD, NIMH and other foundations. She is presently a Professor of Human Development at the Pennsylvania State University, a Senior Associate at the Population Council, and an Associate Editor of The Journal of Marriage and the Family, Comparative Family Sociology and International Rehabilitation Research. She has written very widely and published a number of articles and monographs on comparative family sociology, the comparative sociology of fertility, the sociology of disability and rehabilitation, psychiatric sociology, cross-cultural methodology, women, sex, and class stratification, sex role socialization and sex discrimination. Her 10 books and monographs include Toward a Sociology of Women, Women and Social Policy, Love, Sex and Sex Roles, Sex Role Socialization and Sex Discrimination, Children and Adolescents in Slums and Shanty-Towns in Developing Countries, and The Dynamics of the Modern Greek Family.

Kathleen A. Staudt

Kathleen Staudt has served as a Peace Corps Volunteer in the Philippines and received a Ph.D. in political science from the University of Wisconsin in 1976. Her dissertation was entitled "Agricultural Policy, Political Power and Women Farmers in Western Kenya." Presently Dr. Staudt is an Assistant Professor of Political Science at the University of Texas, El Paso. During 1979 she was on academic leave under the Intergovernmental Personnel Act with the Agency for International Development's Office of Women in Development as a Social Science Analyst. She has also served as a Research Associate at Cornell University and at the University of Nairobi, Kenya.

Dr. Staudt has written many articles and monographs on agricultural and development issues affecting women farmers, on rural women in Kenya, and on women's participation in development. Some of her more recent publications include "Agricultural Productivity Gaps: A Case Study of Male Preference in Government Policy Implementation," (Development and Change, 1978) and "Women and Participation in Rural Development: A Framework for Project Design and Policy Oriented Research" (Cornell University Rural Development Monograph Series, 1979). Dr. Staudt has presented papers and participated at many national conferences and seminars, including the African Studies Association and the National Women's Studies Conference.