

**AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT**



**PHILIPPINES**

**COUNTRY DEVELOPMENT  
STRATEGY STATEMENT**

**FY 83**

BEST AVAILABLE

January 1981

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY  
WASHINGTON, D.C. 20523

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EMBASSY OF THE  
UNITED STATES OF AMERICA  
MANILA, PHILIPPINES

January 28, 1981

Mr. Frederick W. Schieck  
Acting Assistant Administrator  
Bureau for Asia  
Agency for International Development  
Washington, D. C. 20523

Dear Fred:

I am pleased to transmit the FY 1983 Country Development Strategy Statement. This year's CDSS is an extension and refinement of the new direction charted last year toward a rural employment assistance strategy for the 1980s.

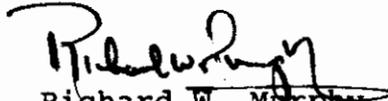
The CDSS reflects our commitment to the alleviation of poverty, a major challenge confronting Philippine society today. How successfully the challenge is met will shape the country's future. Given the multiplicity of our interests here, particularly the military and economic ones, we have an important stake in the outcome.

I strongly endorse the proposal for a more focussed and flexible programming style that would direct assistance resources in a few key program areas for an extended period of time. This approach appears to offer the advantages of greater program consistency, efficiency, and impact on long-term development.

The nature of activities being proposed in this CDSS will require a substantial grant funding component, at least in the early years of the strategy. I hope that this implication of USAID's innovative strategy will be sympathetically considered, despite the tight budget picture for the next couple of years.

Finally, the strategy outlined in this CDSS raises challenging policy questions and opens opportunities for a closer relationship between Economic Support and Development Assistance funding sources. The country team will be working to develop a set of recommendations in the next few months dealing with these questions.

Sincerely,

  
Richard W. Murphy  
Ambassador

Enclosure:  
FY 1983 CDSS



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## INTRODUCTION

The Mission views the CDSS exercise as an iterative process of deepening our understanding of poverty in the Philippines and refining a strategy as well as identifying tailored programs for its alleviation. As such the CDSS document for a given year represents only a recording of our progression in this process at that point in time. It is especially important to respect the integrity of the process rather than simply respond to the particular documentary requirements if we are to engage the GOP in a strategic dialogue and reach consensus along the way.

The FY 1982 CDSS synthesized a large body of Philippine poverty research and sketched the broad outlines of an evolving strategy for the 1980's. It pointed the AID program in a new direction: rural employment generation targeted on the major poverty groups--the landless, the rainfed farmers, and the artisanal fishermen. Recognizing the magnitude as well as the diverse, locally-specific nature of poverty in the Philippines in relation to our assistance resource availabilities, it proposed a regional focus.

Following approval of the CDSS in AID/W, we held detailed discussions with senior NEDA representatives and obtained their endorsement of the basic strategy framework. Designated NEDA and USAID staff members then proceeded to identify appropriate regions for concentrated assistance based on relative poverty levels, security considerations and other donor plans and activities. From these deliberations, Region V-Bicol, VI-Western Visayas, and VIII-Eastern Visayas were recommended and accepted as the core regions of USAID's immediate focus. Regions I and II were identified for assistance efforts in later years of the planning period.

The rationale for selecting these regions is straightforward. In last year's CDSS we examined regional disparities and independently ranked all 13 regions in terms of socio-economic status and level of development (see Table 3, page 22). Region VIII-Eastern Visayas and Region V-Bicol ranked highest in terms of need along with Region IX-Western Mindanao. These rankings coincided with NEDA's own identification of the most depressed or lagging regions. Given travel restrictions and security concerns, Region IX was eliminated.

The next neediest group of regions in USAID's ranking included: II-Cagayan Valley, XII-Central Mindanao, VI-Western Visayas, and X-Northern Mindanao. Region II was also very high on NEDA's list and includes half of the Cordillera Range which has a heavy concentration of ethnic mountain tribes. Having agreed on this region, it became evident that Region I-Ilocos should also be included in our focus since the Cordillera Range straddles both regions. Recognizing our limited knowledge of these regions and inexperience in working with upland farmers and ethnic minorities, we agreed that assistance efforts in these two regions would necessarily take time to plan. We then looked at the remaining regions in the medium high need group to identify a third core region. Region XII fell out, again, because of security considerations. We were left with a choice between Regions VI and X. NEDA argued against Northern Mindanao (where security is not a major issue) on the grounds that the Asian Development Bank and the Japanese plan major investments there. Region VI remained and seemed a good choice given the heavy concentration of landless workers and rainfed farmers.<sup>1/</sup>

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<sup>1/</sup> The IBRD in its recent report on "Aspects of Poverty in the Philippines: A Review and Assessment, Report No. 2984-PH (December 5, 1980), Page 5 also identifies Bicol, Cagayan Valley, and Eastern Visayas among the five regions with the highest incidence of poverty.

The only point of divergence in the regional selection process was the matter of how many regions to include in the AID focus. AID programming and management considerations seemed to argue for fewer and political considerations argued for more. The three-core region formula with two regions phased in gradually depending on resource availabilities and more detailed knowledge provided a realistic compromise. (The map on the next page delineates the regions selected.)

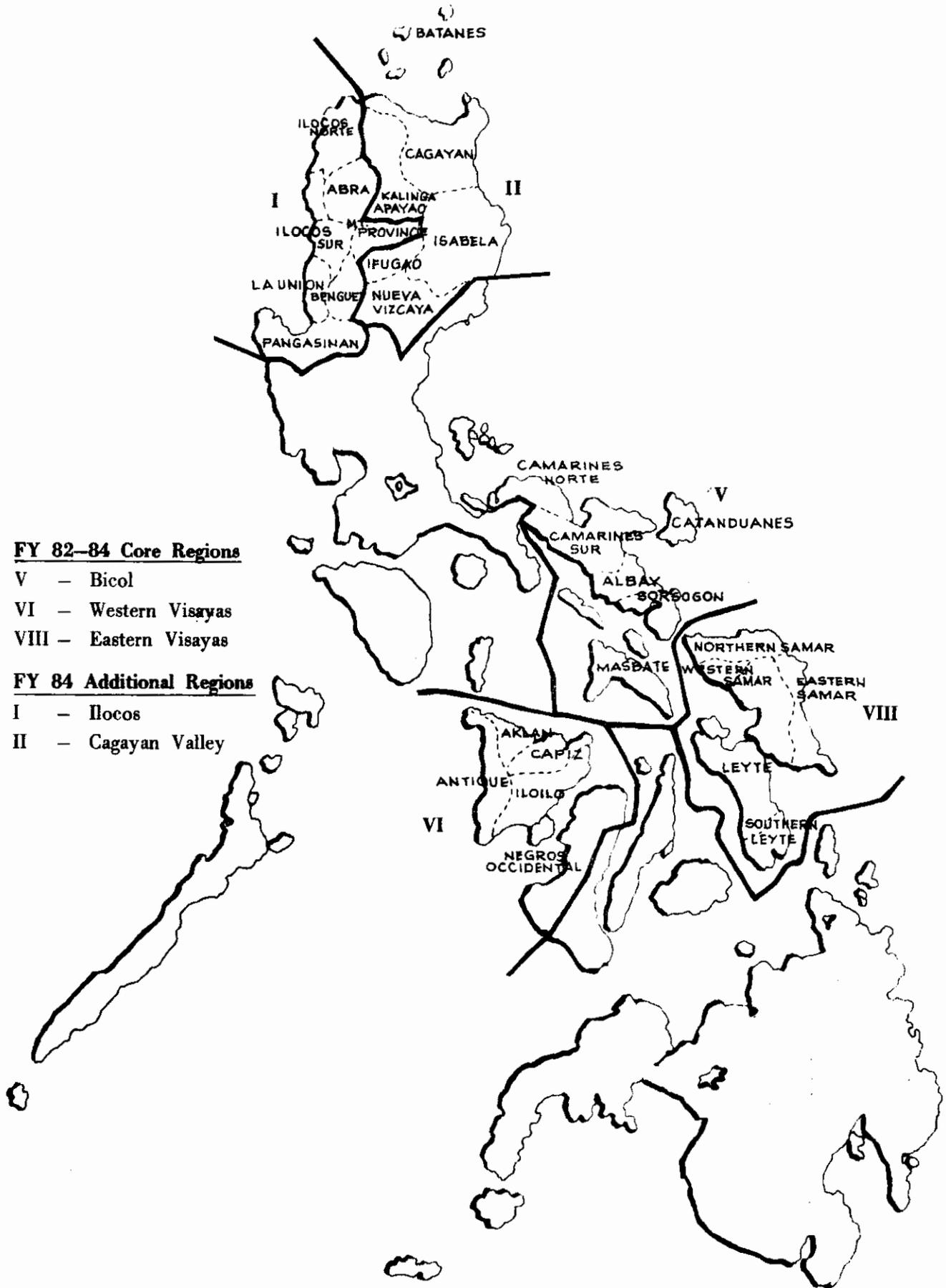
The core regions comprise 23 percent of the total population and 26 percent of all poor households, while the other two regions make up 13 percent of the total population and 13 percent of the poor households. Thus the five regions taken together contain 39 percent of all poor families in the country. Given the topography, the presence of plantation crops and/or prime fishing areas found in these regions, they have a relatively high proportion of landless, rainfed farmers, and fishermen who we have identified as our target groups.

One final point on regional selection is that any explicit regional focus is likely to improve the equity of AID programs. During the 70's our program carried the implicit lowland bias of GOP development programs, which were preponderantly oriented toward Central Luzon and a few other irrigated rice areas. The significance of a regional focus, then, lies more in having decided to adopt one than in the actual regions selected, as long as we move out of Central Luzon (Region III) and the area of Southern Tagalog (Region IV) around Manila.

Last year's CDSS sets forth two objectives to guide our strategy (p. 43).

1. To promote more productive agricultural employment in rainfed areas (upland as well as lowland); and

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USAID REGIONAL FOCUS



2. To create non-farm employment opportunities for those who are not productively employed in agriculture, including women.

As we gave more thought to the strategy during the course of the year we realized that these objectives dealt only with the supply side (i.e., jobs) and that we needed to make explicit our equal concern for the demand side (i.e., the size of the labor force and its productivity). Thus our third objective is:

3. To develop a more productive rural labor force for the future by focusing on the current generation of infants and pre-schoolers.

Asia Bureau guidance for this year's CDSS relieves us of having to prepare a self-contained document and instead requests we address the following issues:

a) A review of GOP macro-economic policies, the effects of recent changes, and the impact of the IBRD industrial reform package to determine how favorable the environment is for the Mission's rural employment strategy;

b) The identification and rationale of our regional focus;

c) An analysis of prospects for new or redirected USAID interventions in infant and child mortality along with other Population, Health, and Nutrition (PHN) strategy concerns;

d) An evaluation of GOP policies affecting agriculture, especially as related to rainfed and upland intensification and diversification;

e) The integration of our proposed PL 480 assistance into the overall Mission strategy.

We have addressed the first three issues in detail. We have decided, however, to postpone an evaluation of GOP agricultural policies until this spring to allow our regional analyses and the results of our rainfed resources development review to identify which key policies need to be examined. We

did not think an agricultural policy assessment in the abstract was likely to prove very useful for Mission programming purposes. In any event, the tight PDS funding situation and the delay in allotments effectively precluded us from undertaking such an assessment in time for this submission.

As for PL 480, we have had numerous discussions with the GOP on food assistance and the GOP accepts the principle that it cannot rely indefinitely on imported food. Nevertheless, we will not be in a position to articulate a clear strategy for PL 480 until we learn the outcome of the PL 480 Title II evaluation now underway as of this writing and the upcoming Consultative Group's deliberations on the GOP's Food and Nutrition Plan. Despite the many questions the Plan raises and the slippages in its preparation, it still represents a unique and exciting opportunity for addressing the country's malnutrition problem by relating agricultural production policies to food consumption requirements. We remain hopeful that the Plan can serve as a framework for an orderly phasing and reordering of our PL 480 food assistance to be as integral to our overall strategy as possible.

Beyond these issues, we have set a more ambitious objective for this CDSS: to refine the strategy in operational terms. Hence this CDSS defines more precisely the strategy elements and examines specifically how they may apply to the needs of our selected regions, using Region VI-Western Visayas as a case in point.

The assistance strategy in operational terms is less of a departure from past USAID efforts than may appear to be the case at first glance. The fertility reduction element, for example, is a continuation of our long-standing support for the Philippine Population Program. The Local Resources Management element builds upon the lessons and the strengths of the successful Provincial Development Assistance Program (PDAP) while looking to expand further local level capacities. The other two elements of the strategy are a greater departure from past USAID efforts: Rainfed Resources Development and Rural Enterprise Development. The first shifts our attention away from raising commercial food production in

lowland irrigated areas to developing productive farming systems that are ecologically sustainable, especially in the upper reaches of the watershed. Rainfed development is perhaps more challenging, owing to the diversity of conditions and less developed institutional capacities. But our experience with adaptive research and extension of appropriate technologies (in crops as well as livestock) should facilitate our assistance in this area. Rural Enterprise Development is clearly the area in which USAID has least experience, but then few other donors have experience in assisting the smaller-scale industries.

Furthermore, the strategy elements as defined in this CDSS directly support several actions taken by the GOP over the past few years. For example, the GOP has followed a regional development approach to planning for some time and has just recently instituted a regional budgeting procedure as part of an effort to decentralize authorities and achieve more balanced development countrywide. There is strong interest within the GOP in mobilizing local resources (private as well as public) and improving local government capacities to manage development programs. Another example is the GOP's current efforts to promote the development of small- and medium-scale industry, especially outside the Metro Manila area. A number of promising approaches have been identified which are ready for expansion. As such our assistance strategy in many respects simply mirrors the GOP's employment and income distribution objectives and the innovative approaches to development it is exploring. The strategy thus is a mix of new and old emphases. Even within the newer elements, more traditional interventions can be undertaken and existing GOP programs in these areas can be supported. As a rule, we will associate our assistance with promising programs the GOP already has underway before encouraging the GOP to initiate new activities. We are confident, therefore, that the strategy can serve as an effective framework for transferring assistance resources without any interruption in planned resource levels.

A notable omission from this document is a Progress and Commitment Assessment, which is being prepared separately. Much of the analyses needed for it is contained in the Macro-Economic Analysis of Poverty found in Annex A. But we wish this document to continue to serve multiple audiences and not just AID/W. We have found that one of the unexpected benefits of last year's CDSS has been the general interest it has created in and outside government circles concerned with Philippine development problems. Over 200 copies have been distributed. Its influence on shaping how poverty is viewed and addressed may transcend our assistance resource transfers. USAID finds itself in the forefront of the development dialogue and intends to build this realization explicitly into our operating style. One way is by engaging the GOP in a policy dialogue as it relates to poverty alleviation.

Finally, this CDSS centers on a Development Assistance Strategy. Obviously, our DA and Economic Support Funded-programs are related. This issue, however, has been covered elsewhere.

## PART I - ANALYSES

### A. Macro-Economic Analysis of Poverty

A critical question identified in the review of last year's CDSS was how conducive the macro-economic policy environment is to an employment-oriented assistance strategy. To determine the answer, AID/W at Mission request obtained the services of Dr. Richard Hooley. In his detailed study of past policies and current reforms, which also included the likely impact of reforms recommended by the IBRD, Dr. Hooley concluded that the policy environment is moving in the right direction and should result in substantially expanded employment in the economy.

We have incorporated Hooley's major findings in Annex A, which analyzes the broader macro-economic aspects of poverty in the Philippines. Based on that analysis, which is summarized below, we have concluded that an employment strategy is appropriate and feasible within the evolving policy context.

#### 1. Production and Income

The total population of the Philippines reached 47.9 million in 1980 and is presently growing at the rate of 2.4 percent annually. Total Gross National Product (GNP) was estimated as roughly equivalent to U.S. \$29.8 billion in 1979, or about \$630 per capita. Weighted by value-added, production is heavily concentrated in Metro Manila, which accounted for 35.5 percent of 1979 GDP with only 12.6 percent of the population.

The recently completed World Bank study on poverty in the Philippines reported that the percentage of all families below rural/urban poverty lines apparently increased from 36.1 percent in 1971 to 54.3 percent in 1975 (although the situation may have improved somewhat since then). Of all families (urban and rural) below the relevant poverty lines, 61.1 percent relied on agriculture

as their main source of income, 7.2 percent on fishing and hunting, and 0.8 percent on forestry and logging. By agricultural crop, 47.6 percent of all poor families (nationwide) depended primarily on rice and/or corn farming, 6.4 percent on coconut, 2.5 percent on sugarcane, 4.1 percent on other crops, and 0.4 percent on livestock and poultry. Some 11.3 percent of poor families looked to industry as their main source of income and 12.7 percent to the general service sector. Cutting across the above agricultural crop categories, 6.1 percent of all poor families were farm laborers, while 54.7 percent were farmers (20.4 percent were farmer owners, 23.8 percent tenants and 3.8 percent part-owners).<sup>2/</sup>

## 2. Constraints to Economic Growth and Poverty Alleviation

The Philippines has a high ratio of population to arable land. Any further significant increase in agricultural crop production will have to be derived from more intensive land use and higher annual yields from land already under cultivation. In many areas cultivation has already exceeded the limits of suitable land area extending on to the steeper slopes, which are showing serious erosion and permanent loss of fertility as a result.

Productive assets in the Philippines are heavily concentrated in the urban subsector of Metro Manila. The World Bank study concluded that:

"The most important determinants of poverty in the (dominant) food crop sector appear to be the small farm size, limited access to land (tenancy or landlessness), low physical productivity, low value crop mix, lack of non-farm employment, and remoteness of area or lack of infrastructure. (The effects of natural disasters are also important)...Poverty outside the food crop sector, though similarly related to limited productive assets, is affected by special conditions. In coconut farming, there are large numbers of small-sized holdings, a complex tenure system controlled by absentee landlords, a high proportion of overaged trees, low physical productivity, and lack of

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<sup>2/</sup> Ibid, Vol. II, pp. 1-18.

intercropping....Sugarcane workers have suffered from over-supply of workers....In the fishing sector...competition from commercial fishermen and motorized boats, lack of equipment, and overfishing of several fishing fields have combined to limit (the) catch and incomes...(of the poorest group, the municipal fishermen), who typically fish with unmotorized boats close to the coastal areas." <sup>3/</sup>

Farm size was found to be the most important variable explaining income class differences, more important than tenancy. Although the Philippines had, in 1971, one of the highest tenancy rates in Asia, tenancy appeared to be as much a symptom of poverty as a cause. The people in many areas face serious constraints due to the poor quality of land, remoteness, or lack of infrastructure, which contribute to poverty by limiting productivity, the range of income sources, access to training and extension, and farmgate prices. The lack of public infrastructure assets in rural areas, such as roads, water control facilities, communications networks, markets, slaughterhouse and cold storage facilities, especially in comparison with those available in Manila, is a major obstacle to more balanced and equitable development.

Livestock and poultry raising is a dominant sideline for farmers and landless workers. Livestock assets are fairly widespread, but there is considerable room for improvement.

Philippine Food Balance Sheets indicate the aggregate availability of the national caloric and protein food supply was over 100 percent of sufficiency from 1970 to 1976, rising to 115 percent for calories and 131 percent for protein during this period. Actual dietary adequacy varies widely by region and area and inversely by income level. Compared to the Recommended Dietary Allowance (RDA) for Filipinos, the average Filipino diet in 1978 was found to

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<sup>3/</sup> Ibid, Vol. II, pp. 83-4.

be only 88.6 percent adequate in food energy, though 102.9 percent adequate for protein.

Government expenditures on education are comparable to those of other developing countries, and private expenditures at post-elementary levels are high. The lower quality of public education in rural areas and high cost of private schools, however, place the poor at a distinct disadvantage in preparing for and gaining access to productive employment or other income-earning opportunities as adults.

Public sector expenditures on health as a percentage of GNP are low which is the case in most LDCs. Private medical expenditures are relatively high, however. In addition, public health expenditures have been concentrated geographically in urban areas and in Central Luzon, and functionally on curative medical infrastructure, to the relative neglect of the rural areas. On the other hand, the GOP has given increased priority in the last few years to primary, preventive health services directed toward the poor, although more resources need to be redirected toward these services.

Low factor productivity is a major development problem. Low productivity of land is attributable to lack of water control and transportation infrastructure, limited research and extension service for crops other than irrigated rice, limited access to credit for agricultural input requirements, poorly developed marketing systems, and so on. Low productivity of capital is attributable to its concentration in inefficient, protected industries, to inappropriate technology and factor composition in an overly capital-intensive manufacturing sector, to inefficient management practices, to the relative underutilization of physical plants, to limited credit for capital and operating expenses of firms outside Manila without real property collateral, and to a relatively small domestic market for manufactured goods due to low income

Levels of most of the population and their inaccessibility to market places. Low productivity of labor can be attributed to most of the above as well, but especially to labor's lack of access to productive capital goods, due to the latter's concentration in urban-based and capital-intensive industries offering little employment. Poor health and nutrition status also affects the stamina, intellectual vigor and productivity of labor, first as students in the education process and later as workers.

The central government is sponsoring a development program centered on rural mobilization and greater equity, attempting to deal with these problems, many of which are of historical origin and long-standing duration. The various national government agencies implementing major portions of the development program have developed effective capacities to plan and implement large, nationwide programs. Relatively less well along is the capacity to plan and implement effective local projects tailored to satisfy local needs and priorities. Many nationwide programs bog down at the local level because they respond imperfectly to local variations. Recognizing the local diversity, the GOP is beginning to look increasingly to local government for mobilization and development of rural areas and smaller urban centers. Most provincial governments currently have a limited ability to meet the needs of their constituent populations. They require assistance in diagnosing poverty problems and in designing and implementing local projects to address these problems.

Since late 1975 substantial changes in taxation have been introduced to mobilize more domestic resources to finance the development program, but a still greater effort to improve domestic revenue generation, budgeting and financial management is urgently required. If local governments were better able to plan and budget for development projects responding to their own priority needs, they would have better incentives for improving local revenue performance which at present remains poor. The national government also continues to face a serious shortfall in revenue generations that may worsen in the future to the extent heavy development borrowing commitments to fund peso project costs continue. A regional budgeting process is in a nascent stage. New fiscal management procedures will be required to redirect resource flows to regions and local governments, and they must be accompanied by improved planning, budgeting and financial management capacity at those levels.

Finally, private capital investment resources have been skewed into an industrial sector characterized by increasingly capital-intensive production functions and a centralized urban location, as a result of (1) a highly protectionist tariff structure coupled with duty-free exemptions and low tariffs on capital equipment, (2) an apparently overvalued exchange rate, (3) low interest rates and other financial and fiscal incentives subsidizing capital goods, and (4) bureaucratic requirements that favor the larger, Manila-based firms.

The government has recognized the distortion these past policies create and has been introducing various reforms to reverse them, such as:

(a) extensive export promotion incentives (export industries tend to be among the more labor-intensive), (b) reduction of tariffs, (c) efficiency-oriented investment incentives and administrative reforms to remove the present capital-intensive and urban biases, (d) industrial revitalization and liberalization of investment regulations to stimulate small- and medium-scale industries. When fully implemented the planned reforms should improve resource allocation, cause increased efficiency and productivity, and result in a higher level of productive employment generation. The objectives of this program, supported by a \$200 million World Bank structural adjustment loan in 1980 and the promise of additional tranches later, are fully consistent with a USAID assistance strategy focusing on expanded employment in rural areas and will establish a more suitable macro-policy environment for such a strategy to succeed.<sup>4/</sup>

B. Assessment of Population, Health, and Nutrition (PHN)

The Asia Bureau's Health, Population, and Nutrition Strategy, which was issued in early 1980, identifies fertility and infant/child mortality as the two variables to which the Bureau will give most of its attention in its Population/Health/Nutrition Sector programming over the next several years. It is appropriate that we assess the principal causes of high fertility and

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<sup>4/</sup> The effect of these reforms and the rest of the macro-economic policy environment was analyzed in depth by Richard Hooley in "Macroeconomic Policy Framework for Employment Generation in the Philippines," November 18, 1980, draft.

high infant and child mortality in the Philippines before defining a PHN/ assistance strategy for the Mission.

When one looks initially at the demographic situation in the Philippines, it is self-evident that rapid population growth remains a critical development issue. Fertility, while it has fallen in recent years, is still too high; it continues to hamper efforts to redress poverty. The Mission's FY 81 Multi-Year Population Strategy (MYPS) analyzes in detail the determinants of fertility and the dynamics of the demographic situation. The FY 82 CDSS in summarizing the MYPS traces the impact of fertility on the survival patterns of poor households and the country's overall development. We therefore need not cover that ground again here.

Mortality, on the other hand, has not been previously documented. Compared with fertility, mortality in the Philippines is quite low.<sup>5/</sup> General mortality (i.e., the crude death rate, or CDR) is nearly as low as that typical of the industrialized countries or wealthier LDCs. Recent estimates put it at below 10 per thousand. Of course, the decline in mortality since before World War II is the primary cause of the rapid population growth of the past 30-40 years. Similarly, there have been marked declines in infant mortality over the same period. In 1960 the infant mortality rate (IMR) was estimated to be over 100 per thousand, while in the late 1970's most estimates had it below 70 per thousand.

The low general mortality rate masks, however, the fact that most of the deaths that do occur in the Philippines are among the young, whereas in the industrialized countries most deaths occur among the elderly. For this reason life expectancy is considerably lower in the Philippines than, say, in France.

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<sup>5/</sup> Please recall that infant mortality statistics are notoriously inaccurate in LDCs. The Philippines is no exception.

Both countries have CDRs of 10, but life expectancy in France is 73 years, while in the Philippines it is around 60. This reflects both major differences in the age structures of more- and less-developed countries and differences in the patterns of disease. In fact, the low crude death rate in the Philippines is itself a reflection of the very young population that results from an excessively high birth rate. Thus, the low death rate should not be taken as an indication that there are few public health problems. The infant mortality level clearly reveals continuing problems of malnutrition, low resistance to disease, and consequent high prevalence of respiratory and diarrheal diseases among pre-school children.

A second factor to be considered is the variability of mortality rates across geographic regions and socio-economic groups. For, while national averages may be comparatively low, they can also mask important differentials within the population. In fact, in the Philippines, there are marked variations in the levels of infant mortality, both by region and by socio-economic group. In terms of regional variations, infant mortality ranges from a high of around 90/1000 in the Eastern Visayas, Northern Mindanao, and the Cagayan Valley, to a low of around 50/1000 in Central Luzon. This fairly wide range reveals that several areas of the Philippines suffer from conditions that are quite depressed by any standard.

In addition, there are several distinctive socio-economic correlates of mortality differentials. A number of socio-economic variables are strongly associated with infant mortality, according to Concepcion's recent analysis of survey data.<sup>6/</sup> Foremost among these are women's education, women's employment (especially non-farm), family income, access to clean water, and place of

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<sup>6/</sup> Mercedes Concepcion, "Factors in the Decline of Mortality in the Philippines, 1950-75," unpublished memo, 1980.

residence (urban vs. rural). One must take care in looking beneath these simple correlations when attempting to ascribe causality. For example, is the presence or absence of piped water a direct (biological) or indirect (income-related) "determinant" of mortality? However, combining what is known about regional income and overall development differentials (synthesized in the FY 82 CDSS analysis) with the socio-economic factors just discussed reveals an apparent close fit between poverty and mortality. The places where the poorest (often landless) live are also those in which mortality is highest. Thus the poorer regions and groups selected for AID attention coincide generally with those where the manifestations of infant mortality are most severe.

Undernutrition is a serious problem for a significant segment of the Philippine population, most notably infants, pre-school children, and pregnant and lactating women. At present, the main reason for inadequate food intake is low incomes and a consequent low purchasing power. In 1978, the first nationwide nutrition survey conducted by FNRI revealed that households with incomes of less than 500 pesos per capita per year had an average daily per capita intake of 1,650 calories which represents roughly 80 percent of adequacy (i.e., the recommended dietary allowance for calories is 2,030). On the other hand, households with incomes greater than 500 pesos per capita per year had an average daily per capita intake of 1,940 calories, which represents 95.5 percent of adequacy. Finally, there is also evidence that specific nutrient deficiencies related to goiter, anemia and Vitamin A deficiency exist.

Additional survey information suggests that there is poor distribution of food within families. Adult males in the household show a higher caloric intake indicating that less food is available for the women and children. This situation contributes to the poor nutritional status of a large percentage of pregnant women, often leading to the delivery of low birth weight (below 2.5 kilograms) babies. Low birth weight in turn influences neonatal mortality, contributes to high rates of mortality and morbidity in the first five years of life, and may adversely affect individual potential for development.

In sum, inadequate child spacing and consequent maternal undernutrition lead to a relatively high incidence of low birth weight babies. A significant number of these babies become undernourished. Undernourished infants and children are highly susceptible to certain diseases, including respiratory and diarrheal diseases--the two principal causes of the high infant and child mortality rates. If a child survives the first five years of life in the Philippines, he or she is likely to live just as long as a North American, European or Japanese child. However, expectation of life at birth, because of the syndrome of undernutrition and infant and childhood diseases just portrayed, is nearly a decade less. This syndrome not only undermines the ability of poor households to follow their productive strategies but directly impinges on their quality of life.

### C. Regional Poverty Analyses

Last year's CDSS highlighted several critical characteristics of poverty in the Philippines that are worth recalling here. First and perhaps most significant is the diversity of the survival strategies pursued by various poor

groups. This diversity reflects the differences in the resources they command, the micro-environments they live in, the influences of seasonality, and ultimately accounts for differentials in poverty levels among poor groups and poor households. A second feature is the increasing pressure placed on limited land and water resources as a result of population growth and economic expansion. This is readily apparent in the deteriorating resource base, especially open access resources such as coastal fishing grounds and upland forest and watershed areas, and in the intensified competition for these resources between rich and poor as well as among the poor groups and households themselves. This brings us to a third characteristic: the interdependence of poor households. Upland slash-and-burn farmers through contributing to the destruction of forest uplands, undermine survival efforts of poor lowland farmers and fishermen. At the same time uplanders depend on lowlanders for off-season employment and some goods and services. Fourth is the strength of the survival motivation of the poor and their entrepreneurial resourcefulness in exploiting available opportunities to produce basic goods and services for home consumption and supplemental income. All of these characteristics are shaped in one fashion or another by location, topography, and cultural differences. In order to understand poverty in the Philippines it is necessary to understand the location-specific dynamics of household survival patterns. This is a more persuasive argument for a regional focus than regional disparities and assistance resource limitations.

#### 1. USAID's Approach to Planning Regional Assistance

In order to devise realistic plans for assisting the selected regions we have undertaken several regional analyses. In effect we are carrying last year's CDSS analytical framework to the regional level to determine who the

poor are and the causes of their poverty in each region. In doing so we are explicitly recognizing the location-specific nature of poverty. Obviously, our analysis represents only a first approximation based on a survey and synthesis of available data. We are developing a Regional Poverty Analysis project for FY 82 to help institutionalize this process within the GOP to permit continuing refinement in regional development efforts.

Specifically, we are developing for each of the core regions: (1) a poverty profile of the major poor groups and of the regional determinants of poverty; (2) a regional agricultural profile; and (3) a regional economic profile. These profiles will serve as a basis for designing regional assistance programs in consort with national and regional GOP representatives. We are furthest along in our analysis of Region VI-Western Visayas owing to the availability of a major body of research sponsored by PCARR/SEARCA/UPLB/NEDA that answers many of our questions. We are, therefore, able to include a poverty analysis of Region VI in this CDSS. We are pursuing the analyses of the other two core regions, Bicol and Eastern Visayas, and plan to have completed them in time for this year's ABS (see schedule in Part II, Section B.4). Regions I and II will be analyzed in time for next year's CDSS.

## 2. Summary Profile of Region VI - Western Visayas

The Regional Poverty Profile embodied in Annex B analyzes in some detail the major groups of poorer households found in Region VI, briefly sketches their survival strategies and the principal constraints they face, and traces the key determinants of their poverty at the household level and on a regional scale. The analysis will require successive refinement and confirmation. A major gap in analyzing the poorer households this time around is the relatively scant

coverage of their health and educational status and how these influence their survival strategies. It is important we build these variables squarely into our subsequent analysis in order to fine tune our PHN interventions to meet their needs. The regional analysis confirms many of the poverty trends identified on a national scale in last year's CDSS. Indeed, the regional profile should be read in the context of the more detailed, though general, household profiles developed last year. Finally, the inclusion of the regional profile as an annex is simply a reflection of the space limitation on this document. It is, however, an integral part of this CDSS and the basis for the regional strategy framework contained in Part II.

The Western Visayas is the most populous and prosperous region of those we have selected. However, the highly skewed income distribution, characteristic of Region VI, accounts for the fact that two-thirds of the region's 675,000 families fall below the regional poverty threshold. Provincial disparities within the region are great with Antique, Capiz, and Aklan showing the highest incidence of poorer households relative to their rural population, and Iloilo and Negros Occidental containing the greatest number of poorer households within the region, given their greater population.

Our analysis reveals that the landless sugar workers (mainly in Negros Occidental), rainfed rice farmers of Panay (under single- and double-cropping conditions) and the upland diversified crop, shifting cultivators (with one hectare or less) to be the most significant groups of poorer households. Upland rice farmers (with one hectare or less) and artisanal fishermen, especially in Antique, also represent sizeable groups. The estimated number of households in each of these groups are:

Landless Sugar Workers	62,500
Diversified Crop Shifting Cultivators (1 hectare or less)	45,000
Rainfed Rice Farmers (Double and single crop)	109,500
Upland Rice Farmers (1 hec- tare or less)	18,500
Artisanal Fishermen	<u>35,000</u>
TOTAL	270,500

These household groups alone comprise 55 percent of all rural families in the region. The Profile disaggregates these groups further and also identifies landless rice workers and upland coconut households among the poorer households. Urban households have been excluded from the analysis (at some cost in capturing rural-urban dynamics) in recognition of our time constraints and our strategic choice to focus on rural poverty, given the overwhelming preponderance of rural poor over urban poor in the Philippines.

The household level determinants of poverty differentials among and within groups include climate, topography, land quality, farm size, tenure, cropping patterns, irrigation, market access, and months of gainful employment available to all household members. Food security is a major objective and off-farm income a necessary supplement to the household's meager income (in kind and cash).

Within a reasonably integrated regional economic system with a discernible pattern of labor, product and service flows, there are at least four key forces underlying poverty. First, increasing population pressures on the resource base are evident, leading to unsustainable agricultural expansion into marginal lands by displaced poor and continuing land fragmentation.

Second, regional land use, cropping patterns, and employment are highly responsive to sugar prices and the demands of the sugar industry, which is the most important in the region and nationally significant as a foreign exchange earner. The structure of this industry concentrates wealth in the hands of a few, tying up substantial land assets in large plantations at the expense of landless sugar workers and seasonal migrants (mainly from the uplands) who receive a small share of the returns while enduring prolonged underemployment during periods of oversupply and periodically depressed prices. Yet, the industry supplies substantial employment to a large number of poor households who have few employment and income alternatives.

Third, the prevailing high underemployment rate poses a serious problem. Two-thirds of the region's labor force is underemployed. The problem is characterized by seasonal unemployment and underutilization of labor during working months, complicated by local imbalances between peak labor demand and supply. Population pressures and an eroding resource base are pushing people into the job market at a faster rate than agriculture or lagging local industry can absorb. The resulting labor surplus (in the aggregate) maintains low wages and intensifies competition for available work. Poorer households, in their struggle to make ends meet, are those most seriously affected.

Finally, the highly skewed income not only reflects prevailing poverty levels but also operates as a determinant in disproportionately channeling development benefits inevitably to the wealthier segments of the population. While some leveling mechanisms exist to transfer income or make employment available to the poor, they are inadequate to the task given the proportions and dimensions of the region's poverty problem. Where sugar is

concerned, the regional equity objective is inevitably weighed against the national policy to keep sugar production high for export and foreign exchange earnings.

## PART II - STRATEGY

This section builds upon last year's CDSS. It extends from the preceding macro-economic review, population, health and nutrition assessment, and the poverty profile of Region VI, and reflects the evolution in the Mission's thinking over the course of this past year. It sketches the outlines of an employment strategy responsive to the poor's need and defines the strategy elements in some detail. As part of relating the strategy directly to GOP plans and priorities for rural mobilization (both private and public) we will continue our close dialogue with Filipino colleagues.

### A. Towards a Poverty Group-Oriented Employment Strategy

Last year's CDSS staked out a Mission strategy of more productive rural employment as a logical extension of our diagnosis of the nature of poverty. Yet the shape and details of such a strategy remained largely undefined in relation to the needs of the poor.

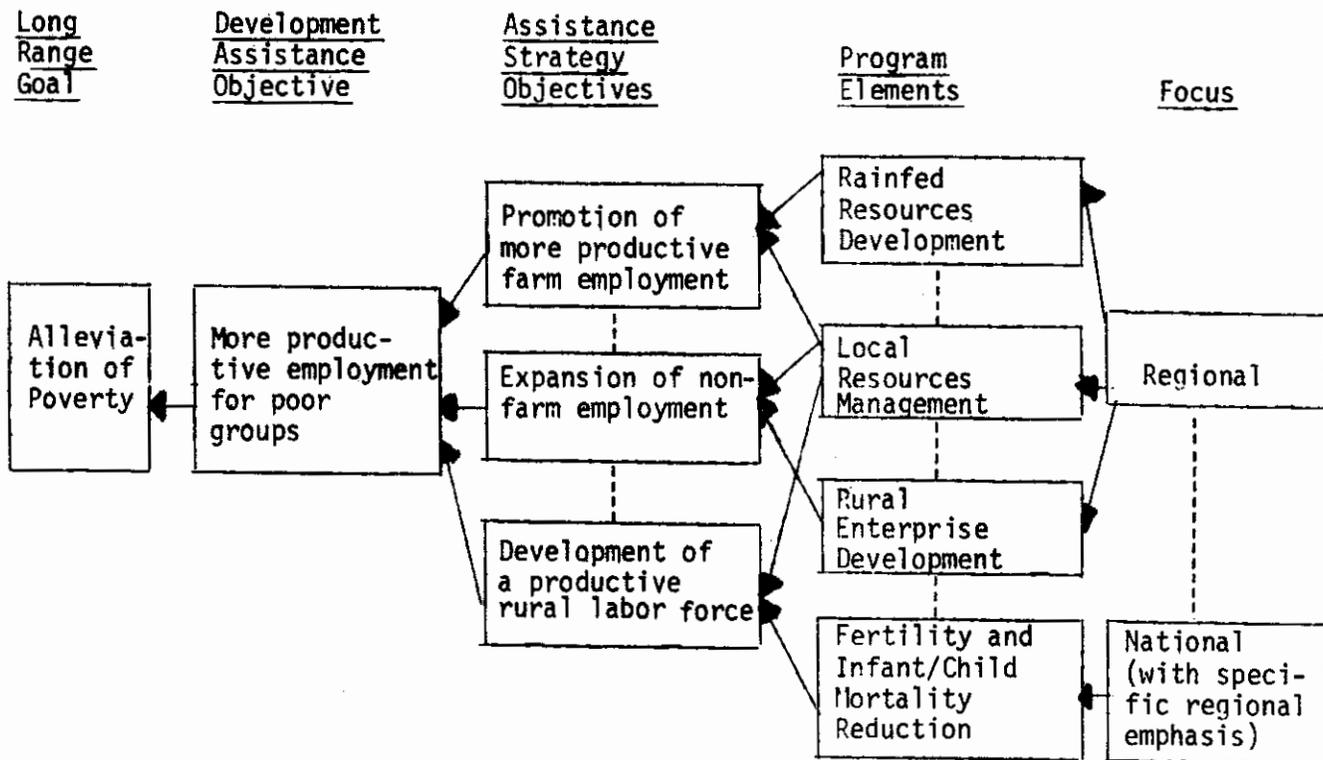
While employment creation is key to this strategy, the survival patterns and requirements of poor households argue for a different strategy from more conventional employment strategies that rely simply on accelerated employment creation in the modern sector of the economy to absorb surplus labor. While such a strategy is appropriate for the long term it ignores the fact that the majority of the poor rely largely on the traditional sector of the economy for their current employment and income. The traditional sector is composed of household production units, farm and non-farm, which produce goods and services consumed mainly by the poor themselves. Indeed poor households display considerable resourcefulness in fashioning a self-help economy structured to provide the production, marketing, credit, transportation, insurance,

health care, and other facilities essential to their survival and advancement. As one aspect of a responsive employment strategy, we need to build on this resourcefulness and natural survival motivation by expanding the options and resources available to these households. Such an approach starts with efforts to improve farm production for consumption at home and within the local community before encouraging a market orientation. It recognizes the need for innovative mechanisms of resource control which provide more equitable access and incentives to small producers for intensive and sustainable resource utilization. It also accepts that poor households diversify their employment activities and increasingly rely on off-farm income sources. Small-scale local manufacturing and services are an important part of this traditional economy.

This strategy subscribes to the hypothesis that an economic environment that reserves a place for small-scale and household production activities sets the stage for a more rapid and broadly-based economic growth process than an environment that serves only a limited number of more sophisticated and higher cost production units catering to the more limited market demand of those with higher income. The strategy envisages that as small entrepreneurs gain experience from purely locally-oriented production they can gradually expand into the larger market system; that as their real incomes rise, they will use a larger share of their higher total income for non-subsistence goods and services, stimulating effective monetary demand and investment throughout the whole economy. Finally, such an explicit focus on the poor's household production may help buffer these households from early displacement by the modern sector before they are able to command modern sector jobs and market goods and services. Such an approach to employment squarely places the welfare of poor households up front.

The assistance strategy elements described below are framed against this concept of an employment strategy. As we select those interventions most supportive of this strategy in keeping with our comparative advantage and resource availabilities as a donor, we need to consider the national and regional, short-run and long-run opportunities open to us.

Schematically our strategy looks like this:



## B. Regional Programming Implications

### 1. Program Elements

Through a number of research activities involving collection of data and development of analysis about the target regions, several consultations with Filipino colleagues and others interested in Philippine development, and various other discussions (including a Mission-sponsored seminar on Hilly/Upland

Development), it has been possible to evolve and broadly define the major elements of the Mission's development assistance strategy. Three of the four program elements in the strategy will be regionally focused while the fourth element, although national in scope, will devote specific attention to the target regions. The parameters of the nationally-applied Fertility Infant/Child Mortality Reduction program element are discussed in a later section with somewhat more precision drawing from the MYPs and our nutrition analysis. The regionally directed program elements have been refined, so far, only in relatively general terms. In the following section these three program elements are briefly described as they appear to us at the present time. Given the broad nature of each of these program elements, specific applications must be developed for the particular characteristics and requirements of each of the target regions. How this might be approached is explored in relation to Region VI - Western Visayas.

a. Rainfed Resources Development

Last year's CDSS proposed a program emphasis on rainfed crop intensification and diversification (in lowlands as well as uplands). As we begin to understand better the complexities of rainfed/upland development we find that the problem is broader than a production strategy can address. The central issue is sustainable resource utilization. Moreover, there is no clear geographical or jurisdictional line delimiting uplands, rolling hills, and lowlands. The rainfed area is a continuum of differing slopes and farming systems, where a considerable range may be seen even within a small area. This calls for a systems perspective on how people in these areas can use the available resource base more productively in a sustainable fashion as a means of improved livelihood and overall development. As one moves from the more gentle to the steeper

slopes, from the higher potential to the more marginal and fragile lands, the concern for ecologically sustainable farming systems becomes paramount. An approach for working in rainfed areas, including the upper reaches of the watershed, has evolved from various discussions and interchanges with counterparts and Ford Foundation personnel and particularly from the Upland/Hilly Development Workshop sponsored by USAID in November 1980.<sup>7/</sup>

The basic approach calls for a highly flexible program allowing for differential pilot-testing (in the first stage) of models that build upon the positive aspects of what area residents are already doing. Critical to success is the close involvement of the people themselves in devising appropriate institutional mechanisms responsive to their needs. The set of pilot efforts are expected to generate not only applied research information but more importantly learning experiences, both positive and negative, which can begin to fill the knowledge gap and define various possible approaches, some of which would be more widely replicable. However, given the great diversity in micro-climates, topography and farming patterns, a single package of technology with universal applicability will not be possible.

Indeed, given the range of agro-climatic conditions, and more especially of topography, it is evident that at least a two-track approach will be required, characterized primarily by a difference in emphasis. On the more steeply sloping areas and in the higher elevations, the entire ecological balance is often precarious and primary emphasis must necessarily be directed toward ecological stabilization and/or improvement while assuring minimum socio-economic returns to area inhabitants. Upland farms often have both

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<sup>7/</sup> See Summary of Proceedings for full account of workshop's tentative findings and recommendations.

moderate and steep slopes so individual farmers should be concerned about the long-term productivity of their land. Ecological deterioration of the steep, upper slopes can also be of concern to many people outside of the specific areas involved since farmers further down the watershed may be affected by increased erosion and reduced water supplies, while even coastal fishermen may feel an effect through siltation and destruction of productive coral reefs.

On the lower and less steeply sloping areas, most of which may already be devoted to agricultural production of various types, primary emphasis may be directed toward improvement of agricultural productivity, although environmental considerations must always be of concern. Within these areas program activities would be directed toward diversified, multi-cropping systems, including livestock, which can be most responsive to each particular mix of rainfall, soil, topography, farmer capacities and farmer interests. Vertical, single crop interventions similar to Masagana 99 are unlikely to be appropriate for these areas. Activities will be directed toward marginal improvements, starting from present practices and adapting technologies (both crop and livestock) to fit differing conditions, rather than development of wholly new technology. However, support activities to provide agricultural inputs, such as credit supply, or development of market outlets and transportation networks to facilitate storage and sale of agricultural products, may also deserve support in pilot areas.

Whatever the particular sets of activities that will be undertaken in various pilot sub-projects in the selected regions, a guarantee of continued access to productive resources (whether through tenure or usufruct) is critical. A first effort in this regard should be focused on developing procedures

and capacities in GOP agencies to carry out effective land mapping and titling activities, an essential prerequisite for establishing access rights. In addition, there are preliminary efforts already underway including a Ford Foundation support project in Antique and the USAID-assisted Buhi Upland Project in Bicol (as part of Rinconada IAD III) from which preliminary lessons and guidelines may be drawn in the formulation of new activities in support of the development of rainfed resources of the Philippines. Certain other ongoing activities will be considered for selective support such as the Upland Hydro-Ecology group at UPLB to allow continued basic research on upland socio-economic and technical questions and to provide a source of needed expertise.

Another key activity would be to continue the kinds of support initiated by the Ford Foundation in the establishment of the Upland Development Working Group within the Bureau of Forestry Development. This working group provides a long needed forum for bringing together the many public and private institutions concerned with upland problems, which is an essential step in developing institutional mechanisms capable of learning about and coordinating responses to upland development concerns. A similar institutional arrangement for a Rainfed Working Group for the more agriculturally-oriented areas on the lower slopes could be explored and supported, with the Ministry of Agriculture as the lead agency. For both groups, the continued involvement of a wide range of interests is a sine qua non for any effective improvement of the rainfed areas.

b. Rural Enterprise Development

This strategy element embodies both a short- and long-term perspective. For the short term, emphasis on smaller private enterprises (household, cottage and small-scale) is appropriate given that they represent the majority of rural

enterprises and employ a significant proportion of rural labor. They can respond to rising local demand while providing immediate employment and income opportunities to rural households. For the longer run, simultaneous attention to small- and medium-scale enterprises is required to upgrade the quality of employment and significantly expand rural employment. Interregional and international markets can provide the stimulus for production. Dispersal of these industries in rural areas and market towns will be critical to generating employment for rural households.

It will not be easy to implement a program in this area. AID's recent experience is limited. The constraints facing rural enterprises are complex. A long gestation period is required to provide favorable conditions for rural enterprises to flourish. Nevertheless, in view of the importance of non-farm employment and increased income to poor households, rural enterprise promotion is an integral element of our strategy.

As part of our assistance in this field we will work with the GOP to develop systematic knowledge concerning the nature of existing rural enterprise sectors in the selected regions, the constraints to their growth, opportunities for development, and the impact of current GOP policies and incentives on their performance. From these analyses we can proceed directly to the early identification, design, and monitoring of sub-project interventions.

Rural enterprise finance is another priority area. Numerous studies identify access to working capital as a significant constraint facing small enterprises, particularly those in the selected regions. Continuing improvements are needed in the performance of rural financial institutions in mobilizing private capital and meeting the financial needs of small manufacturers. This will require efforts to develop more flexible policies and administrative

practices, as well as incentives for motivation by financial institutions serving rural areas.

We also plan to assist in market and product development to provide support for small enterprises within the region to service local demand and to gain access to expanded and higher quality interregional and export markets. This will require improved raw material supply (especially from within the region), better market information, the development of new product lines, improvement in design and even quality control, and improved organization. These activities will be in line with the GOP's overall industrial diversification and decentralization and to promote the expansion of non-traditional manufactured exports.

A program directed specifically at mini-industries will be developed. Also particular attention will be given to identifying and assisting small-scale industries that provide improved employment and entrepreneurial opportunities for poor households, especially women, both to reinforce existing patterns and to affect over time fertility patterns.

Additional areas of focus might include financial and technical support for the development of infrastructure facilities, bonded warehouses, service centers, mini-industrial estates, technical systems and training, program design to improve productivity and output in selected priority industries.

Presently the IBRD and ADB have projects directed at small- and medium-scale industries. These efforts are almost totally in medium- and long-term credit with the vast majority of firms benefitting from these projects being located in larger Philippine cities and at the upper end of the medium scale classification. As a result, there is little likelihood that we will duplicate any ongoing activities supported by other donors by the assistance efforts we are proposing in this area.

c. Local Resources Management

The strategy implies substantial decentralization of decision making and devolution of authorities to allow responsiveness to local needs. It also seeks to involve beneficiaries more directly in the planning and implementation of development efforts to broaden their impact. Improving local government capacities to generate local and nationally allocated resources and to manage them more effectively is integral to all strategy elements. The purpose of the AID-supported Local Resources Management Project is to help develop these capacities and to support local pilot projects for identified poor groups.

We are proposing a long-term effort (10 years or longer) to help develop the necessary capacities within local government entities to carry out a poverty group-oriented strategy, and to support employment-oriented projects and programs, especially those directly assisted by AID. The planned approach is to test, promote, and institutionalize a set of processes involving: diagnosis of local poverty conditions; local strategy formulation; identification of local actions supportive of their chosen strategy; revenue generation, resource mobilization, budgeting and financial management; local project implementation and evaluation. The concepts, methodologies, and processes developed will be supportive of, and in turn can be strengthened by, other proposed regionally focused programs assisted by AID, i.e., Rainfed Resources Development; Rural Enterprise Development; and the health, nutrition and population programs in which local governments play direct and indirect roles.

To facilitate establishment or strengthening of these processes, the project will provide for U.S. and Filipino technical assistance, training, applied research and systems development. A second component will make available to

local governments financial resources not available locally or through national allocations for locally initiated projects.

Local governments at the provincial and rural municipality levels have shown a willingness to provide matching resources for locally initiated projects. AID's assistance will counterpart GOP and local government fund allocations for several types of projects. These may include innovative demonstration projects (e.g., community tree lots); small-scale infrastructure (e.g., sanitation, access roads); cooperative or public enterprises (e.g., public markets, slaughterhouses, small fishing pier facilities).

The project will be measured in terms of sustained improvements in the living standards of poor households as a result of projects generated and administered at the local level. The effective establishment of processes to support a stream of local projects and other development efforts will be a key indicator of accomplishment. The project is also expected to influence national policy and operational procedures affecting local governments.

It will be necessary to approach institutional capacity building and local project activities through a learning process,<sup>8/</sup> refining both the definition of the problem and means of addressing it as experience is gained. New kinds of GOP and donor commitments will be required: i.e., commitments to devolution of authorities and responsibilities, experimentation in innovative project design, and implementation of new administrative procedures, each requiring some risks particularly since in many cases the program will involve largely unproven local organizations. Each component must, therefore, be responsive to continuing redesign.

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<sup>8/</sup> Annex D is a reprint of an article in Public Administration Review by Dr. David Korten who has been a consultant to the Mission in developing this strategy element. The article provides an interesting model for viewing community organization and local capacity building as a learning process.

## 2. A Regional Strategy Framework

These strategy elements were identified a priori in last year's country-wide poverty diagnoses and defined somewhat more precisely as described above in the course of this past year. We now need to establish a framework for applying these program elements in each of the selected regions. The diversity and location-specific nature of poverty in the Philippines suggest that actual implementation of these program elements will require differing emphases to respond to each region's unique characteristics and capacities. In developing a regional assistance strategy framework, the Mission will be guided by the overarching idea that the satisfaction of basic human needs requires an increase in the productivity, and hence, the incomes of poor families. Thus, the regional strategy framework will need to give particular emphasis to expanding access to productive resources and jobs to those who are in greatest need.

While the Mission's basic orientation is toward employment generation and increased productivity, we remain mindful nonetheless that this is a medium- to long-term objective and that it will not have immediate impact on the most severe forms of poverty. Thus, the regional strategy framework must also incorporate the basic population/health/nutrition strategy which is outlined in detail below and which includes the early provision of mortality reducing services which are required to satisfy minimum quality-of-life criteria among the poorest people in each of the groups identified for special attention in the regional strategy. Such services represent real income to people who otherwise could not afford them while at the same time leading to the sorts of improvements in physical well-being that will inevitably lead to improvements in productivity and increased incomes in the future. Thus the package of selective primary care interventions outlined in the PHN strategy represents an important component of the regional strategy.

To illustrate how the program elements might be tailored to each region's needs, we have identified some intervention options for Region VI based on the Regional Profile found in Annex B.

### 3. Intervention Options for Region VI - Western Visayas

Following informal brainstorming sessions with selected regional line agency representatives in Iloilo (January 13-14, 1981) along with our own in-house deliberations, we can outline tentatively the main points of convergence between our strategy elements and the region's needs and suggest some concrete assistance options for alleviating the region's poverty. These should serve as a beginning framework for evolving a sub-strategy for Western Visayas.

Of course, considerable more discussion with the GOP at various levels is needed to refine mutually agreeable programs. Much of this will take place in the course of project development. Also, the nature of our support for any of these efforts will be determined by portfolio considerations (discussed below in Section D), decisions about most appropriate funding source, and funding availabilities. Some interventions may fit within an explicit program emphasis (e.g., Rainfed Resources Development). Other activities may be left to local government initiative supported under the Local Resources Management Project (e.g., assistance to artisanal fishermen). Still others may be developed into discrete projects (e.g., communal irrigation).

As a guiding premise in identifying possible programs, we need to recognize the region's highly skewed income distribution coupled with the diversity and differential levels of poverty among poor groups. This argues in favor of a selectively targeted approach to meeting the survival needs of the more significant poverty groups. A comparison of the poorer household groupings identified in Annex B reveals that the landless sugar workers, the rainfed rice

farmers, and the diversified shifting cultivators are the three most numerous among the poor groups. We, therefore, propose to concentrate our assistance efforts in this region to reaching these groups. Let us look at what each poor group may require.

Landless Sugar Workers. Inclusion of these poor households in our regional priorities stems from their serious plight and their numbers in the region. Yet the structure of the sugar industry imposes basic limitations on a donor's activities and on the ultimate impact of that assistance. Admittedly, we need to be realistic in our expectations. We think there are, nevertheless, some interventions that, while not confronting the power structure, could substantially help sugar workers in the short run. The first relates to mechanization. Given current levels of employment in the sugar industry and the lack of alternative employment opportunities, mechanization in the industry should be forestalled. A first step would be for USAID to support research on the likely effects of mechanization (possibly under the Regional Poverty Analysis Project) with a view to influencing government policy, if appropriate.

A more promising area for immediate benefits to sugar workers is promotion of rural industry in Negros Occidental, especially sugar by-product processing (e.g., candies, molasses, livestock feed). Assured market outlets will be key to success in this area. It will be easier and probably of greater benefit to the landless themselves if such industry can serve local demand first. If sugar workers had at least access to jobs during the off-milling season (July-September) they could supplement their meager incomes. Particular attention will need to go to the types of small-scale and cottage industries that could employ the women of the household more steadily than their erratic, very low paid work in the sugarcane fields.

Also, stepped-up delivery of health and nutrition services can act as a direct income transfer to improve the well-being of sugar workers and their families.

Beyond these modest efforts, it will be up to the GOP to initiate the necessary policy changes to deal more directly with the problems facing these households. Such things as: assured access to home lots for household food production, strong worker organizations, and a more socially conscious attitude on the part of planters, along with expanded employment opportunities in the region's economy will be needed to redress poverty among the landless sugar workers.

Rainfed Rice Farmers. The four identified groups of rainfed palay farmers (double-/single-crop and under/over one hectare) taken together represent the largest number of poorer households in the region (110,000 or one-third of the total number). They are worth USAID consideration not only in terms of numbers and degree of poverty but as an avenue to helping landless workers who shift between sugar and rice as well as those who depend solely on rice production for their livelihoods.

Any assistance to these farmers must begin with the realization that currently the region is producing a sizeable surplus of rice which is of adequate quality for export and is depressing farmgate prices. This argues for a two-prong approach: diversification plus improved harvesting and post harvest handling.

Diversification should be viewed from a total farm systems perspective and include attention to crops and livestock. Multiple cropping in Southern Central Antique and Iloilo is constrained by seasonal lack of water. For these farms development of at least partial irrigation may offer additional opportunities.

Actual returns will be limited by farm size and tenure. And of course irrigation feasibility will depend on favorable marginal cost/marginal benefit considerations and in the case of pump schemes, low cost (probably renewable) energy sources and technology. An obvious intervention point would be to channel some of our support to the Farm Systems Development Corporation (FSDC) to these rice farmers. Another possibility, admittedly more costly, would be to support the inventory and, where feasible, the exploitation of groundwater resources. Apparently, little groundwater survey work has been undertaken since the 1940's.

The double crop farmers present a different challenge since they should probably diversify away from a second crop of rice unless they can produce high quality rice and obtain the premium price. But the marketing of alternative crops currently poses more difficulties than a second crop of rice.

Livestock, especially backyard production of ruminants (cattle, carabao, goats), could provide a ready market for alternative forage crops and enhance farm profitability by reducing costs for power and providing low cost fertilizer, while increasing household consumption of meat and dairy products. Our interventions in this area should be confined to helping improve husbandry practices (such as feeding, shelter, breeding, disease and parasite control, and marketing).

The IBRD is supporting the Kabsaka program which is directed at extending double cropping of rainfed rice and promoting rainfed diversification within Iloilo province. Marketing questions appear to have been inadequately addressed so far. Whatever we do in the area of rainfed diversification we need to coordinate closely to avoid duplicating the IBRD-supported efforts. However, the Kabsaka rice technology is designed for use in a specific micro-climate found only in certain parts of Panay and cannot be replicated throughout the region. Thus our efforts in other rainfed areas can benefit from evaluation of other aspects of the overall Kabsaka program and the design and implementation process it entails.

As for improved rice harvesting and post harvest handling, considerable technology is available at IRRI and UPLB or through the Ministry of Agriculture on how to cut post harvest losses and improve the quality of rice. The challenge will be assuring that these technologies are affordable and suitable to the needs of the region's rainfed farmers and then extending them to the farmers.

In the meantime, it may prove feasible to begin to channel the lower quality rice surpluses under the food discount program to low income households with malnourished children. We are planning to test variations in separate models under the Food and Nutrition Outreach Project.

As with all poorer groups, promotion of cottage and small-scale industry that responds to seasonal unemployment patterns and existing non-farm activities, can help rainfed farmers. An obvious industry is simple food processing, which could provide a market for a variety of agricultural produce and expand overall employment opportunities. Household food preserving could be a first step in this direction, (e.g., drying, pickling, candy making). Technical information dissemination to household/cottage industries has not received adequate priority.

Upland Rice and Diversified Crop Shifting Cultivators. Our concern for these groups is well established in the FY 82 CDSS and our subsequent thinking about upland development. The shifting cultivators with one hectare or less are by far the most significant group (45,000 households). They not only represent a very poor group but also control to a degree the future environmental quality and thus the region's agricultural resource.

A starting point is to assure the involvement of upland beneficiaries in the design and implementation of all development efforts. As part of an upland program we should support the issuance of forest occupancy permits and other arrangements to guarantee access to productive resources. The inaccessibility

of the uplands in the region complicates the task of reaching the shifting cultivators. At the same time facilitating access to new migrants or to lowlanders interested in taking advantage of uplanders should be avoided. An improved footpath or animal trail may be more appropriate in many instances than a new road, which is a higher priority need in the more productive and populated rainfed areas that serve the uplanders. We also have to accept that upland rice serves a real food security need, although prospects for major yield increases are unlikely and marginal costs/marginal benefit ratios are unfavorable. This suggests for the short run a reliance on environmentally sound technologies to rice production and increased crop diversification, and backyard livestock production, especially cattle and goats, for home and community consumption. Also expanded health, nutrition and family planning service delivery at regular lowland markets frequented by uplanders could provide immediate benefits. For the long term, support of infrastructure development, conservation efforts, market development and agro-forestry introducing perennials (e.g., coffee, cacao, ipil-ipil, abaca, fruit trees) will be needed. The Ford Foundation-supported Antique Upland Development Project is already beginning to develop agro-forestry approaches which show promise and which may be applicable province-wide within a year or two. Ranching by small farmers may also offer worthwhile opportunities. With respect to upland infrastructure development, a labor-intensive rural works approach could be seriously explored as one effective way to provide significant seasonal employment for upland farmers while building community assets like terraces, trails, catchment areas, and even reforestation on the very steep slopes. Ultimately rural industry will have to absorb much of the new generation of uplanders if they are to advance their socio-economic position.

With all these ideas we will need to identify which are the most likely institutions for implementing programs and their current capacities.

The Regional Development Plan (RDP) proffers a broad macro-economic prescription for essentially accurately diagnosed conditions in the region (e.g., skewed income distribution and underemployment). The options discussed above can serve as a more explicit definition of interventions and help set some priorities within the current RDP for our assistance. These options are generally consistent with some of the broad objectives of the plan.

The main donors in the region are IBRD (overwhelmingly), ADB and then USAID. IBRD is mostly involved in major infrastructure (roads, ports, and power including substantial energy development), rainfed agriculture in Iloilo Province (Kabsaka), and education. ADB is largely involved in lowland irrigation. This suggests plenty of scope exists for the kinds of emphases we are considering. (See Annex C for a more detailed breakdown of other donor activities in the region.)

#### 4. Strategies for Other Regions

We intend to follow an approach similar to that described for Region VI in developing poverty analyses and identifying programming implications in the other selected regions.

The analyses on Eastern Visayas-Region VIII (currently underway) include a Coconut Farmer Profile, a Poverty Profile and an Economic Profile. A Preliminary Agricultural profile is already done. These various analyses should be completed by March 15, at which time we will engage regional officials in a dialogue on how we can best help the region address its poverty problems, keeping in mind their priorities and capacities as well as other donor activities. Thus by early April we should have a preliminary regional assistance strategy for Eastern Visayas.

For Bicol-Region V a similar set of analyses ought to be ready by mid-April and the regional assistance strategy framework formulated by early May.

These efforts should shape our FY 83 ABS.

We will follow the same process for Region I-Ilocos Norte and Region II-Cagayan Valley, concentrating on understanding the Cordillera mountain range which straddles both regions. We are aiming to have the preliminary analyses and assistance strategy frameworks completed in time for next year's CDSS. Given the more limited data base for these regions, early programming of PDS funds (during FY 81) will be needed to ensure that the necessary field data can be collected and analyzed in time.

By the time we complete the first go-around of regional analyses the Regional Poverty Analysis Project should be in place, ready to carry forward this process and to begin institutionalizing it within the regions.

### C. National Programming Implications

The remaining element of the assistance strategy, fertility and infant/child mortality reduction, has a nationwide focus as well as regional applicability. In last year's CDSS, population/health/nutrition was not fully integrated into the overall strategy nor defined very precisely. This section is intended to fill that gap. It also briefly describes our approach to energy and the need for the Mission to be alert to the national policy implications of our strategy elements.

#### 1. Fertility and Infant/Child Mortality Reduction

Population, health and nutrition have important implications for the realization of our employment strategy. The control of excess fertility is

critical to this strategy. Indeed, control of population growth is basic to nearly any approach that might be selected to alleviate poverty. This has been a matter of policy within A.I.D. for well over a decade now and is amply described in the FY 82 CDSS and the MYPS. The relationship of health and nutrition to this strategy is somewhat less direct. There is substantial evidence that postneonatal and early childhood nutrition is related to learning skills and adult mental capability.<sup>9/</sup> The health-productivity linkage is more controversial.<sup>10/</sup> We have neither the space nor the resources to explore these issues in depth here. Nonetheless, we assume that there is a strong, mutually reinforcing relationship among all three health sector variables--fertility, mortality, and morbidity--and between these and employment/productivity.

Fertility deserves higher priority in the Philippines situation than mortality reduction. The country is past the mid-point of the "demographic transition"--a time when fertility is still reasonably high but mortality is quite low. While mortality, especially infant and child mortality, remains a problem, scarce resources and intensely competing demands for those resources dictate that fertility continue to receive greater attention.

Our 1979 Multi-Year Population Strategy argues that, while a substantial proportion of recent fertility decline is unquestionably caused by factors other than availability of family planning services per se, the basic socio-economic conditions that predispose toward smaller families are such in the Philippines

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9/ A good summary of this evidence can be found in J. Brozek (ed), Behavioral Effects of Energy and Protein Deficits. Proceedings of the International Nutrition Conference, November 30-December 2, 1977. DHEW, NIH Pub. No. 79-1906, August 1979.

10/ W. Malenbaum, "Health and Productivity in Poor Areas, Empirical Studies in Health Economics. Proceedings of the Second Conference on Economics or Health, Baltimore, Johns Hopkins University, 1970. Malebaum argues, on the basis of empirical studies in a large number of developed and developing countries, that health variables account for a significant proportion of the variance in productivity during all stages of economic development, but specially at the earlier stages.

that a program that attempts to make family planning services nearly universally available represents the most cost-effective approach to further lowering the fertility level. The MYPS emphasizes the delivery nationwide of family planning services to a population in which there is considerable evidence of a latent demand for these services, while at the same time addressing itself to the less direct determinants of fertility that are likely to affect family size norms and childbearing behavior for some years to come--Section 104(d). One of the most significant determinants of fertility of immediate relevance to our employment strategy is women's employment in rural industry.

The issue of mortality control raises two important questions. First, are there fertility-related aspects of a mortality control undertaking that would produce greater declines in fertility than could be gained from a fertility control program alone? Second, is the mortality problem of sufficiently high priority to represent a legitimate claim on our scarce resources?

The answer to the first question depends on whether the probability of survival of children already born affects subsequent childbearing behavior. The "child survival hypothesis" argues that if parents can be reasonably assured that their currently living children will survive, they will have fewer children overall. Thus, in the aggregate declining infant mortality will lead to declining fertility. The hypothesis remains the subject of considerable controversy. Nevertheless, it is striking that there is no country in which a significant and sustained decline in fertility was not preceded by an important decline in both general and infant/child mortality.<sup>11/</sup> Certainly this has been the case in the Philippines. Consequently, we accept as a major assumption of this strategy that further declines

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<sup>11/</sup> We do not mean to imply single factor causality. Clearly fertility is a function of many different variables. It may be, however, that mortality decline is a necessary if not sufficient condition of subsequent fertility decline.

in infant/child mortality will be required before fertility will fall to satisfactory levels--i.e., below 20/1000 by the year 2000. Indeed, there is some speculation that the decline in fertility that has occurred has been heavily influenced by rising age at marriage. Since the average age at marriage is now approaching the high 20's for men and the mid-20's for women, it is expected that age at marriage will have less and less effect on future fertility and that the declines that must occur if the 20/1000 goal is to be reached will have to come about as the result of declining marital fertility. For this to occur, child survival takes on added importance.

Regarding the second question, while mortality is leveling off, it appears to be declining at quite different rates among different social groups and across different geographical areas. The declines have more or less ceased entirely among some groups while they are still quite rapid among others, especially the poor. This suggests an intervention strategy that would apply previously successful strategies to groups which have not yet been reached (and among whom mortality is still quite high). In this respect, assistance efforts to reduce infant mortality can lead to direct benefits to poor households in terms of improved quality of life.

Cost effectiveness of PHN service delivery is an added reason for us to remain concerned with infant and child health care and mortality prevention in the Philippines. The Philippines currently has underway a series of single purpose or vertical social services delivery systems. The immediate and long-term cost implications of these separate and often overlapping systems are considerable. Furthermore, there is substantial evidence that if these services were planned as a single "package," there would be mutual reinforcements among the different components that would make each more effective than it is when planned independently.

Thus, maternal and child health care, nutrition and family planning, when conceived as a package of primary health care, can achieve greater impact than can be achieved when they are planned and delivered separately.

We look upon the combining of services from a practical rather than a doctrinaire viewpoint. The degree of combination must be determined in relation to local needs, service delivery capacities, financial capabilities and other local circumstances. The starting point is a national level commitment and capacity to plan comprehensively for a primary health care system that explicitly includes family planning, health and nutrition services and seeks to deliver these services on a cost-effective basis. Local level implementation may follow differing models relying on delivery systems in place.

The Mission proposes a PHN strategy that centers around the notion of selective primary care as the major vehicle for the delivery of fertility and mortality control services. All of the elements that are required to bring about significant further declines in infant and child mortality are incorporated in a selective primary care approach except one, the increased availability of nutritious foods to families with malnourished children or with children at risk of becoming malnourished. Our approach to the food availability issue, including the potential role of PL 480, is addressed in the new Food and Nutrition Outreach Project Paper.

With a primary care package, the critical elements of a fertility and mortality-centered approach, besides nutrition are: 1) early case detection and referral/treatment, as appropriate, of upper respiratory and diarrheal diseases; 2) family planning;<sup>12/</sup> 3) encouragement of breastfeeding (mortality, nutrition

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<sup>12/</sup> Family planning services represent more than just a fertility control measure. Family planning is also a very important (some think the most important) maternal health measure.

and fertility implications); 4) immunization for DPT and tuberculosis; 5) immunizations for neonatal tetanus; and 6) health and hygiene education. Barangay-level workers can be taught to deal with each of these areas effectively and in a way that creates mutual reinforcement among the individual interventions. Thus, we endorse the Philippine Government's commitment to primary health care. We will encourage the Government to give highest priority to those measures which are likely in the short run to have the greatest impact on infant/child mortality and fertility.

Waterborne diseases are an important contributor to high rates of infant and child morbidity and mortality. Although the incidence of waterborne disease is somewhat lower in the Philippines than in several other countries in the region, contaminated water remains a significant health problem. Therefore, it is important to take water supply and sanitation interventions into account in our PHN strategy. There may be an important relationship between the timing of a water supply intervention and its impact on health status. We have tentatively concluded that water and sanitation projects are likely to have the greatest health impact where there exists a degree of community organization, commitment, and income sufficient to maintain the system for a fairly sustained period. Furthermore, we feel that there are significant, perhaps pre-eminent, non-health rationales for investment in water supply and sanitation activities. Therefore, insofar as health sector resource allocation is concerned, we will continue to support water supply activities where there are good reasons to believe the systems are strongly desired and sufficiently well supported by the community to endorse. However, because of their more direct health impact we will give first priority to the extension of primary care programs.<sup>13/</sup>

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<sup>13/</sup> For additional comments on this issue see our reply to the Domestic Water and Sanitation Policy Paper contained in Manila 19063 (1980).

This financial consideration leads directly to the final element of the Mission's PHN strategy: the financing of primary care. The full costs of developing and sustaining a comprehensive primary care program are well beyond the Government's ability to finance, even with assistance from the international development banks and our own more limited resources. In the final analysis, most of the costs of a quality primary care system in the Philippines will have to be absorbed by the communities in which the services are delivered. We can make a unique contribution in assisting the Philippines to systematically explore alternative mechanisms for the financing of an integrated primary health care delivery system that emphasizes the reduction of fertility and infant and young child mortality. Our ongoing Bicol Integrated HNP and Panay United Services for Health Projects and the proposed Local Resources Management Project can offer concrete field experience and lessons in this area.

The Mission is not proposing to restrict population and nutrition activities to the CDSS regions, but we do foresee substantial applicability of these activities to the selected regions. The decision not to concentrate just on the CDSS regions is based on several considerations. The population problem is national and USAID has been associated with the national program for several years. Population efforts are long-term in nature, with major impact in the next generation. By then the modern sector of the economy, especially manufacturing, should be able to absorb a substantial share of the labor force if the GOP's employment generation efforts are successful. Hence it is appropriate to aim the fertility control program nationwide to bring down the number of people who enter the labor force. Moreover, the heavy population concentrations are found in urban and lowland/coastal areas where infant mortality rates are lower. Lastly, the costs of a nationwide population program are small in

comparison with other development programs and USAID's resources in this area are sufficient to support a national program. A decision on our part to restrict resources to the CDSS regions would result in very uneven coverage by the national population program at this stage.

Nevertheless, within this nationwide program, differential emphasis on high fertility groups and in our selected regions can be tested for replication elsewhere. Such differential treatment can also advance our research into a number of questions relating to fertility differentials and the relationship between other elements of this strategy and the fertility control objective. Over time it may be appropriate for the Population Program to rely on the private sector for continuous service to the more accessible and affluent areas while the government program becomes more directed to the remote areas.

In the area of health and nutrition, we are proposing to aim interventions on infants and pre-schoolers (along with pregnant and lactating mothers) as a means of: a) supporting the fertility control program; b) transferring real income in the form of an essential service for the poorest groups; and c) ensuring that the productivity of the next generation of laborers is not hampered by the effects of early childhood malnutrition and poor health. This is mainly a long-term problem that concerns all Filipino youngsters.

The Food and Nutrition Outreach Project includes regions outside our regional focus as well as Region V-Bicol. It has direct applicability within the selected regions and to the target groups. At least one of the pilot sites will be in Region V-Bicol. The food discount program should increase food consumption among all household members, with immediate as well as long-term benefits for the participating low income families. Furthermore, the food discount program assumes that local food production and incomes will increase

sufficiently to obviate the need for continued food subsidies. Here our other assistance efforts in rainfed resources development can be a direct contributor to a food and nutrition strategy.

In the identification and development of alternative approaches to financing primary care we see the greatest scope for testing in our selected regions, recognizing, however, that countrywide replicability of the results will be critical to solving the financial problem and bringing about the desired impact on overall fertility.

Several other donor agencies play key roles in the population, health and nutrition field. While USAID is the major donor in population, especially outreach, the World Bank, through its Population I and II loans, is providing large-scale support to the Ministry of Health for both family planning and primary care training and infrastructure. UNFPA provides important supplementary assistance in the population sector. UNICEF provides assistance in health (especially oral rehydration therapy) and nutrition. WHO provides technical assistance in all three areas, but especially in preventive health and disease control. Since other donor assistance is available for a variety of PHN activities, especially for capital and recurrent costs, and because AID's health sector resources will be quite limited for the next few years at least, we plan to capitalize on our strong comparative advantage as innovator and risk-taker--a role that is particularly suitable given our comparatively large resident technical staff and longer exposure to development programs in the Philippines.

Finally, the Mission approaches this PHN strategy with a certain degree of modesty regarding the impact of direct service programs on fertility and mortality. The factors that influence these two variables are numerous and the interrelationships among them are very complex. Furthermore, the evidence is

strong that socio-economic factors do play a very important role in determining fertility and mortality, especially at the early stages of decline. At these earliest stages, changes in income, educational level, employment type (non-farm rather than farm), etc. appear to be more powerful than service delivery per se in producing change. Furthermore, the poorest and least developed areas are also the most difficult to reach with any sort of service.

It seems sensible, then, to pursue the basic employment orientation of the CDSS vis-a-vis the more isolated and marginal poor groups before initiating a service delivery program aimed specifically at them, concentrating in the meantime on assisting in the establishment of high quality services in the easier-to-reach areas of the country where socio-economic progress has already begun to bring fertility and mortality rates down.

## 2. Energy

The Philippines' continued heavy dependence on increasingly costly oil imports and the heavy depletion of its forests in part to meet the growing rural demand for cooking fuel have serious implications for the success of our rural employment strategy. We view energy as a major dimension that pervades all our assistance programs. We plan explicit assessment of the energy implications of our proposed interventions and will seek to identify the least energy-intensive approaches. There are also a few specific activities we can support at the national level to advance our strategy objectives, such as technical assistance and training in energy planning, renewable and small-scale energy technologies, resource assessment.

## 3. A Policy Agenda

As we proceed to implement our strategy and its four program elements,

we expect to identify policy dimensions that will have to be explored at the national as well as regional level. The GOP's development task is far more complex than the small role we have defined for ourselves in directing assistance at the poor. Indeed, the GOP must reconcile a number of development goals, some of which are competing. We can perhaps facilitate its task while helping assure the success of this strategy by engaging in a dialogue with the GOP on development policies as they relate to our mutual objective of poverty alleviation. To carry on such a dialogue effectively requires an explicit agenda of a few key policy themes that the Mission can raise in its many contacts with the government at all levels. The following are illustrative of a few broad policy themes we already see as directly relevant to our assistance strategy:

- Bureaucratic reorientation. The decentralization theme of the CDSS argues for sustaining a substantive dialogue with the GOP on perceptions of decentralization in both philosophical and practical terms. The style of resource management at the national level needs to respond to local needs as expressed at subnational levels. This style requires changes in attitudes as well as capacities of both national personnel and local personnel. Incentive structures in organizations must be altered to provide the basis for changing attitudes. We recognize that this is a long-range process, the success of which can only be measured in relative terms. One way to contribute to it is through an approach to designing projects which link flows of resources to the functioning of a learning process at local levels. We are aware that the practical application of our strategy will be to create "pressure points" within the national management structure.
- Energy demand. The GOP needs to continue its explicit examination of the structure of demand in its energy planning. So far demand projections have tended to be straight line projections based on growth assumptions primarily relating to the modern sector of the economy. This shortcoming has been

recognized and increasing attention is given to rural household demand requirements and to the demand implications of high energy intensive technologies. We will continue to reinforce and support this trend.

- Environmental policy. Growing population pressures on fragile ecological resources is rapidly approaching crisis proportions with consequences that threaten the present and future livelihoods of rich and poor alike. A comprehensive eco-management system will be required to at least arrest, if not turn around these trends.
- Underemployment and productivity. Lagging productivity is a reality of the country's industrial sector at the same time that a major portion of the population is seriously underemployed--with little opportunity to escape from the conditions of poverty. This poses a difficult dilemma likely to be resolved only through the search for highly innovative technological options that take into account the country's factor endowments in relation to the needs of its underemployed population.

Within these broad areas, specific policy analyses and recommendations could define what policies are most conducive to setting a favorable environment for redressing poverty. We should be prepared to support such efforts.

#### D. Portfolio Implications

##### 1. New Programming Style

The poverty diagnosis presented in Part I and the strategy discussed above argue for a different programming style over the planning period. The project-by-project approach as followed in the past may not be the most appropriate way to transfer assistance resources. Lack of knowledge and experience, for example, in working with farmers in rainfed areas and problems associated with rural enterprise development dictate a more flexible programming approach. In most cases, the

specification in advance of precise models or complete implementation details when designing projects will not be possible or desirable from the standpoint of encouraging local participation and allowing for needed adjustments in implementation as experience is gained.

We are therefore proposing a portfolio in support of the strategy composed eventually of four large core programs, coincidental with the four strategy elements. These programs would be long-term commitments. They would be supplemented by no more than four to six discrete, more traditional projects that are clearly related to the core elements. Thus, the total portfolio would be composed of a total of perhaps ten activities at one time.

A typical design would take as its focus one of the four broad core program areas, outline the parameters of concern to be addressed within that program area, identify the specific components of activities, (i.e., institutional development, environmental management, credit mechanisms, etc.) and describe the process by which field testing of interventions within each component would take place. These long-term programs would be essentially flexible funding mechanisms to support a predetermined set of sub-elements and an appropriate number of related sub-projects, identified and designed in detail by Philippine government and private institutions against some defined criteria. Performance of these programs would be measured in terms of processes and capacities in place and/or knowledge gained about selectively replicable activities rather than tangible project-type output targets (e.g., trees planted, pumps installed, contraceptives or nutribuns delivered, etc.). PIDs and PPs would be approved by AID/W and authorized on the basis of the universe of concerns to be addressed within the specific core area, and its constituent components. Once funds are obligated on this basis, release of funds against individual project components would be based upon sub-obligation documents issued against detailed plans approximating project papers which would be reviewed within the Mission.

This programming style will require certain adjustments in AID as well as GOP procedures which have to be worked out in the design and approval process of the core programs. We have already begun to move in this direction with the large Population Planning III Project and are proceeding in similar manner in the development of the ESF program.

## 2. Grant/Loan Ratio

Notwithstanding a shortage of grant financing Agency-wide, the portfolio's grant requirements should be determined based on strategy considerations rather than simply budget levels. During the early years of the planning period (e.g., FY 82-84) the GOP will be engaging in a learning process about institutions, socio-economic relationships and poverty survival strategies of target groups. This will mean a demand for grant financing in real terms at least equal to if not above FY 80 levels. We plan to reevaluate the criteria against which we program grant funds for both new and continuing projects. New criteria must be developed which assess relative degrees of risk and experimentation within a project design in order to evaluate that project's relative claim on grant financing for its component activities. This will entail redefining the basis upon which individual input items (technical assistance, training, construction, commodities, etc.) are either loan or grant financed. Finally, the Mission will need to consult the GOP on the criteria for programming grant and loan financing.

## 3. Financing of GOP Operating Expenses

Another implication of this strategy is the possible use of USAID financing for operating costs of projects, including personnel compensation, honoraria, incentive allowances, vehicle maintenance, and so forth. The newer activities undertaken in implementing the strategy will place heavy demands on scarce management and administrative capacity at both national and local levels of government. In order to attract government personnel from jobs in other agencies, or ask agencies

to second their top personnel to such activities, it may be necessary to provide financial incentives from dollar funds which are temporary but necessary given tight OE levels within the GOP budget. The Development Cooperation Report of the OECD for 1979 has suggested that donors re-examine their policies of limiting loan and grant activities to primarily capital costs. It is frequently the case, particularly in the Philippines, that funds are more readily available for capital outlays than for operating costs. USAID's financing of such costs should not, however, detract from the need to examine the recurrent cost implications of an activity if replicated.

E. Resources

1. Budgetary Sources and Levels

The strategy and proposed portfolio are in a real sense suitable to either DA or ESF funding, depending on what decisions the GOP wishes to make concerning the latter. PL 480 resources can be applied in support of the Fertility and Mortality Reduction program emphasis. Within DA the decision on loan and grant will depend on the criteria we develop in the coming months.

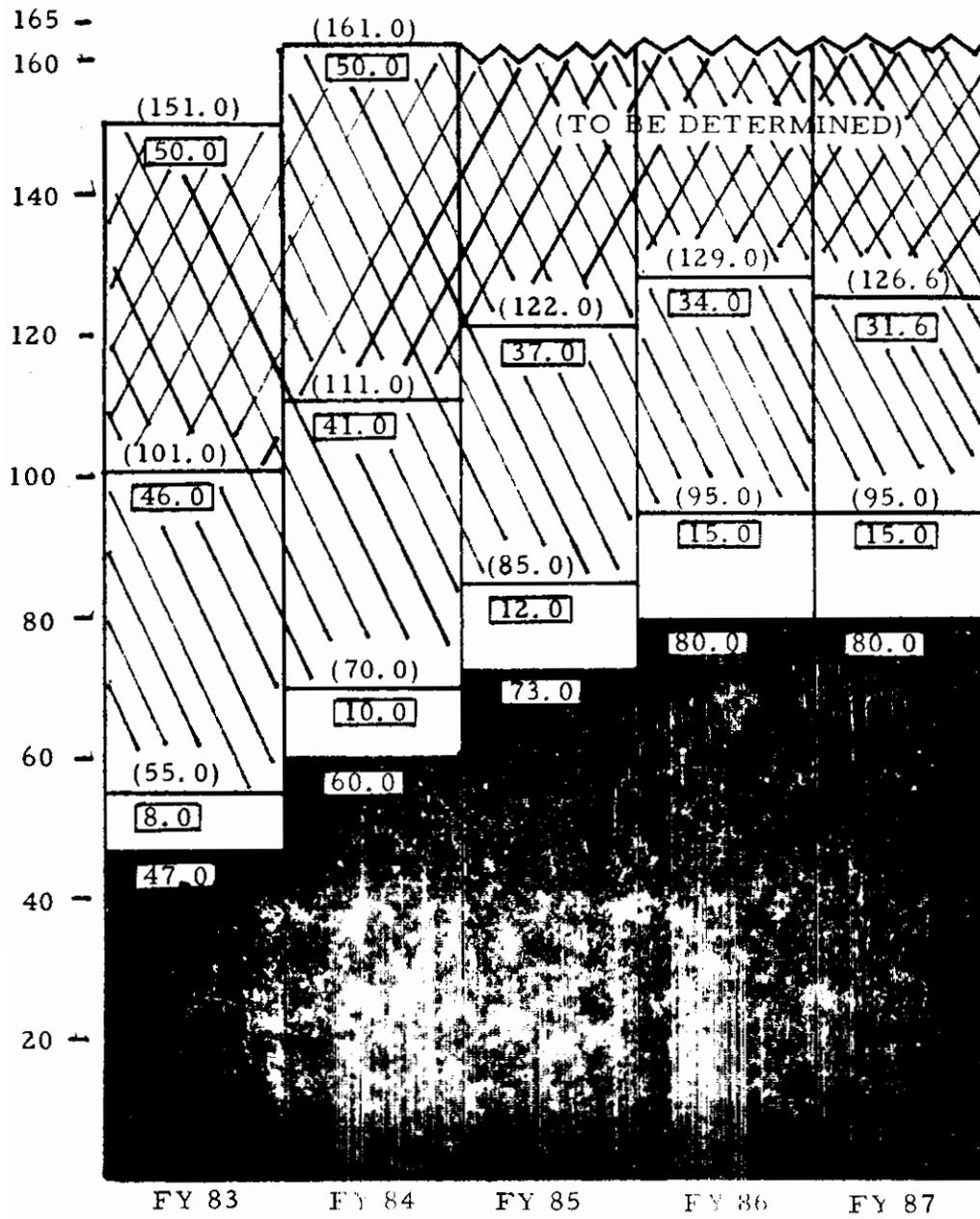
Our proposed assistance planning level (PAPL) coincides with the Bureau's indicative planning level of \$95 million in DA for FY 87 (State 323007). This simply straight lines the FY 86 figure out one more year.

Our proposed annual DA levels are (in \$ millions):

<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>	<u>FY 87</u>
50	55	70	80	95	95

The following figure provides a rough indication of resource allocations among core programs and other activities, and major funding accounts.

Total Proposed Resource Levels for FY 1983-1987



Legend

-  DA Portfolio for support of Core Programs.
-  DA Availabilities to support other activities.
-  PL 480 Resources.
-  Economic Support Fund.

## 2. Staffing

The implications of the strategy and its attendant programming style for Mission staffing are several. First, we anticipate a significant reallocation in the way in which direct-hire staff use their time, concentrating more on innovative design, monitoring, and evaluation and less on routine design and documentation. Although the number of project design documents (PIDs and PPs) will probably decline, the level of documentation required to release funds against individual project components as they develop will increase.

Second, the long-term experimental approach to project design may have expansive implications for staffing insofar as implementation is concerned. We are not in a position at this time, however, to predict what the actual staff requirements will be in terms of skills mix and levels. An increased use of outside contractors for project implementation is likely, recognizing this will be expensive.

Third, increased collaboration with regional counterparts, monitoring and evaluation will require more frequent travel of Mission staff to the selected regions. We may want to consider the possibility of re-establishing one or more regional liaison offices staffed either part-time or full-time by USAID employees and/or Filipino direct-hire professionals.

GENERAL OUTLINE

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MACROECONOMIC ANALYSIS  
Philippine FY 1983 CDSS

I. Production, Income and Development Performance

A. GNP, Investment and Record of Growth

The total population of the Philippines reached 47.9 million in 1980 and is presently growing at the rate of 2.4% annually--still high, but significantly less than the 3.0% rates between 1948 and 1970. The labor force participation rate declined in the late 1960's, particularly among the school age population as school enrollments were growing, but it has risen slightly since then to 62.8% in 1979.<sup>1/</sup>

Total Gross National Product (GNP) was estimated as roughly equivalent to U.S. \$28.9 billion in 1979, or about \$630 per capita. The annual growth rate of real Gross Domestic Product (GDP) averaged 6.7% from 1972 to 78. While it subsequently declined to 6.0% in 1979 and 4.7% in 1980, it has averaged well above the 5.1% level of the preceding 12 years (1960-72). Weighted by value added, production is heavily concentrated in Metro-Manila, which accounted for 35.5% of 1979 GDP with only 12.6% of the population. Per capita GDP in Manila was 2.8 times the national average that year. By contrast, the two regions with the lowest per capita GDP that year, Eastern Visayas and Bicol, tallied only 48.9 and 54.2% of the national average, respectively, less than 20% of the Manila score.

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<sup>1/</sup> Of working age population 15 years old and older. The rate for males was 80.6%, for females 39.1% in 1977. (Participation rates by sex are not yet available for 1979. The overall rate in 1977 was 59.6%.)

Total consumption expenditures have been reduced from 85 and 81% of GNP in 1960 and 1972, respectively, to 75% in 1979. Investment outlays for gross domestic capital formation have been substantially increased, from 16.2% of GNP in 1960 to 20.8% in 1972 and 29.4% in 1979. The rapid growth of investment expenditures since 1972 is attributable to construction activities, led by government construction which increased as a percentage of GNP from 1.9 in 1972 to 5.7 in 1979. Real private construction expenditures were seriously declining between 1967 and 74, but have rebounded and more than doubled since then, comprising 7.3% of GNP in 1979. Meanwhile, net domestic savings has increased from 11.1% of GNP in 1960, and 11.4% in 1972, to 14.4% in 1979.

B. Structure of Production and Employment

In 1979 about 24% of GDP was contributed by agriculture, 36% by industry (of which the manufacturing subsector alone accounted for 25.3% and construction another 7.2%) and 39.7% by the service sector (of which government services amounted to 4.8%). Recent industrial sector growth, buoyed by large increases in construction and utilities output, reached an average annual real rate of 8.6% from 1972 to 78, but slipped in 1980 to 5.9%, well below the 1967-72 average of 6.4. The manufacturing subsector grew at a modest 6.9% in 1972-78, falling to only 5.1% in 1980, barely above its 1967-72 performance of an annual 5.0% growth.

Real growth rates in the agricultural sector have been remarkable, increasing from an average of 4.2% between 1967 and 1972 to 5.0% from 1972 to 78 and 5.3% in 1979, although it fell to 4.4% in 1980 due to typhoon damage and low international prices for coconut oil and copra. All crops have done fairly well, with rice paddy and corn production,

accounting for 18.5% and 6.4%, respectively, of total 1978 value added in this sector, growing at rates of 6.7 and 6.2% between 1967-74.

Poultry output grew by 12.1% a year (up from a 2.0% annual growth 1967-74). Fishery production, accounting for about one-sixth of the 1978 agricultural sector output value, grew by 4.9% annually from 1974 to 78.

Production for export comprised 19.8% of GDP in 1980, up from 17.6% in 1972 and 10.6% in 1960. Much of the increase has been due to rapid growth of the so-called non-traditional (mostly manufacturing) exports, from a minor 6% of total exports in 1960 and 14% in 1972, to a sizeable 47.5% in 1980. The "traditional" agricultural and mineral exports (coconut, sugar, forestry, abaca, pineapple, tobacco, copper, gold, iron, chromite ores, and a few petroleum products) have conversely dropped from 94% to 52.5% during the same period. The nominal U.S. dollar value of total exports increased at an average annual rate of 23.4% between 1972 and 1980, compared with 5.8% during the previous 12 years. Non-traditional exports grew an average of 44.9% per year, while the more traditional items scored an average 16.0%, during the past 8 years, compared with averages of only 13.6 and 5.1%, respectively, during 1960-72.

Open unemployment declined from 7-8% of the labor force in the late 1960's to 4-5% in the middle and late 1970's. The more important problems are underemployment, especially seasonal unemployment in agriculture, and the low productivity of most jobs. Of the 15.43 million workers employed in August 1976, some 23.6% were working less than 40 hours a week. For agricultural workers this ratio rose to 30.9%, for

self-employed non-agricultural workers 30.2% and for unpaid family workers 48.1%. Such part-time employment was less common only for non-agricultural wage and salary workers (7.7%) and self-employed agricultural workers (mostly small farmers themselves) (17.2%).

(The composition of those employed in 1976, by type of worker, was: self-employed 35.8%, private wage and salary worker 33.0%, government wage and salary worker 8.2%, and unpaid family worker 22.6%).

Classified by major industry, 52.7% of total 1976 employment was provided by agriculture (down from 61.2% in 1960), 10.9% by manufacturing (down from 12.1% in 1960), 3.8% by other industry (construction, utilities, mining, and quarrying), and 32.3% by the services sector (up from 22.9% in 1960). The poor employment performance of the manufacturing sector, which provided jobs for only 6.9% of the incremental labor force between 1971 and 76, has been accompanied by forced labor absorption at low and declining levels of productivity in agriculture and services. Despite the high rates of agricultural growth noted above, for example, net output per worker in that sector increased by an annual average of only 0.5% between 1972 and 76, while in the general service sector it rose not at all, and in the services subsector <sup>2/</sup> it actually declined by 1.1% a year. In 1976, output per worker averaged ₱6971 (\$937) nationwide, but only ₱4163 (\$560) in agriculture and ₱5419 (\$728) in the services subsector. Output per worker in the commerce and industrial sectors averaged more than 3 times that in the agricultural sector, or ₱13,492 (\$1813).

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<sup>2/</sup> The general service sector, which provided 32.6% of total employment in 1976, is composed of 3 subsectors: commerce, which employed 12.1%, transportation, communication and storage, 3.6%, and the other services, which employed 16.9%.

Total 1976 employment was divided 69/31 between rural/urban and 65/35 between male/female. Naturally, the agricultural sector dominates the rural scene, employing 72% of all workers there. Of the 3185 thousand families dependent on the agricultural sector in 1971, 68.6% listed rice and/or corn as their main source of income, 8.7% coconut, 3.7% sugarcane, 5.9% other crops, 0.9% livestock and poultry, 1.7% forestry, and 10.3% fishing and hunting.

The urban scene is predominately one of commerce (23.8%) and manufacturing (16.7%), with domestic services also significantly large (12.2%). Most (80-90%) of the urban employment in commerce is accounted for by retail trade, which in turn is largely composed of small units, such as the sari-sari variety stores which employ about 65% of "establishment" retail trade workers. These are mostly self-employed and unpaid family workers. (In 1976 some 48% of all urban self-employed and 53% of urban unpaid family workers were listed under commerce.)<sup>3/</sup>

Most (61.7%) male workers are in agriculture, forestry, fishing or hunting, while that sector employs only 35.9% of the women. A larger proportion of women are in manufacturing (14.7%) than men (9.4%), but more women find work in commerce (20.0% compared with 7.8% of the men). Nationwide, 12.7% of employed women work in the domestic service subsector, which is heavily concentrated in urban areas (indicating a much larger proportion of urban working women are employed in this activity -- this is also true of the commercial sector, but to a lesser degree). By occupational category, almost 3 times as high a proportion of women as of men work in the professional and technical (including teachers), sales, and services, sports and related fields, and almost twice as many women

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<sup>3/</sup> World Bank, Aspects of Poverty in the Philippines: A Review and Assessment, Report No. 2984-PH, Washington, D.C., May 1980 draft, Vol. II, p.199.

proportionately, work as clerks. Men are dominant, proportionately as well as numerically, as farmers, farm laborers, fishermen, hunters and loggers, miners and quarrymen, transport workers, manual laborers, and as administrators, executives and managers.

C. Income and Its Distribution

The national income accounts indicate that, while personal consumption expenditures have declined as a proportion of GNP, they have nevertheless continued to grow in real terms faster than population. Real per capita personal consumption expenditures grew at an average annual rate of 1.8% from 1972 to 78, compared with 1.4% from 1960 to 72, while real GNP per capita grew at 3.9 and 2.2%, respectively, during the same two periods.

Periodic family surveys indicate declining shares of both income and expenditures attributable to the bottom 20% stratum of families between 1961 and 71, with a significant improvement between 1971 to 75. The expenditure share of these families reportedly rose from 5.9% in 1971 to 7.0% in 1975 while their income share rose from 3.6% to 5.5%. These results are of questionable validity, however, since there is reason to suspect the 1975 survey underestimated income and expenditures in the higher income strata more seriously than previous surveys did.

The 1971 data on sources of family income reveal that while 34.4% of all families depended on entrepreneurial activities in farming, livestock and/or poultry raising for their main source of income and while 57.5% obtained some income from that source, only 18.1% of total family income was so obtained. Some 54.0% of all families obtained some income from entrepreneurial fishing, forestry and/or hunting, but only 4.3% listed these activities as their main source of income, and only 3.4% of all income

was so derived. While only 10.7% of all families listed agricultural wages and salaries as their main sources of income, 21.9% obtained some from that source, but it provided only 6.3% of total income. Non-agricultural wages and salaries sustained 32.3% of all families as a main income source and provided 38.0% of all income, in contrast to the other sources just mentioned, and provided some income for 39.0% of all families.

In rural areas, 74.1% of all families obtained some income from entrepreneurial farming, livestock and poultry and 69.0% from fishing, forestry and/or hunting, but only 37.2% of all rural income was so derived. Some 28.9% earned part of their income as agricultural wages or salaries and 25.5% as non-agricultural wages or salaries, totalling 35.1% of all rural income. A larger proportion of rural families (11.0%) earned some income from entrepreneurial manufacturing than urban families (9.4%), but they brought home a smaller portion (2.8%) of total rural income than their urban counterparts (3.4%). Almost 30% of rural families said they produced some articles for their own use, but these were valued at only 0.6% of rural income.

Non-agricultural wages and salaries were clearly the predominant urban sources of income, accounting for 53.0% of all urban income, amounting to the main source of income for 62.9% of urban families and providing some income for 70.1%. The second largest source of urban income was from entrepreneurial trading activities, sustaining 10.6% of urban families as a main income source and accounting for 10.1% of all urban income, but providing some income for 22.2% of urban families. Some 19.2% of all urban families derived some income from entrepreneurial farming, livestock, and poultry, and 19.0% also listed fishing, forestry and/or hunting activities, while

5.6% earned money from agricultural wages and salaries. Some 9.3% of urban families considered these agricultural activities to be their main source of income, indicating strong urban ties with rural areas, although only 5.6% of urban income was so derived.

Last year's CDSS and its Annex A reported a detailed analysis of the nationwide incidence and composition of poverty. The reader is referred to that document and its annexes for those details. The recently completed World Bank study on poverty in the Philippines reported a more thorough analysis of the same data, utilizing the Family Income and Expenditure Survey (FIES) data tapes rather than the published tables, and a few more relevant facts were obtained.<sup>4/</sup> These are summarized briefly below.

Utilizing separate poverty lines for rural and urban areas, adjusted for inflation, the percentage of all families below the lines apparently increased from 36.1 in 1971 to 45.3 in 1975, a result inconsistent with the improvement in both per capita personal consumption expenditures reported in the national income accounts and the share of family income and expenditures attributed to the bottom 20% of income recipients in the FIES. The analysis indicates the incidence of poverty rose for both rural and urban families, but much more rapidly in urban areas, increasing from 15.3 to 30.9% in Manila and from 29.1 to 45.6% in other urban areas, the latter almost equalling the poverty incidence of rural areas (47.5%). The rising incidence of poverty in urban areas reversed the trend of 1965-71, when it was apparently declining. The incidence of rural poverty was already rising in the earlier years, though not as rapidly. The study found indications that the overall incidence of poverty was declining

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<sup>4/</sup> World Bank, Aspects of Poverty in the Philippines: A Review and Assessment (In two volumes), Report No. 2984-PH, Washington, D.C., Dec. 1, 1980. The poverty lines used by the Bank in this study were slightly lower than those used by USAID in the FY 82 CDSS, so the incidence of poverty figures

from 1957 to 1965 and levelled off from 1965 to 71, before the recent rise.

Other evidence that real incomes may have declined between 1971 and the mid-1970's comes from real wage indices of the Central Bank and data on real earnings per worker derived from surveys conducted by the National Census and Statistics Office (NCSO) and the Bureau of Agricultural Economics (BAEcon). The real Central Bank wage rate index for unskilled workers declined by 32% from 1972 to 78, a fall believed to be overstated due to the possible omission of significantly large allowances added in recent years. NCSO and BAEcon data on real earnings in both manufacturing and agriculture also indicate significant drops after 1971, however, ranging from 27 to 39% from 1971 to 1978 in manufacturing establishments with more than 20 workers in Manila and outside Manila, respectively, and from 11 to 12% from 1971 to 75 for agriculture workers in Central Luzon and all Philippines.<sup>5/</sup>

The Bank noted that some developments indicate the poverty situation might have improved since 1975, since the country has experienced fairly good weather and rising crop production since then, many large government infrastructure projects have been completed, more land is now irrigated and the use of high-yield varieties is wider spread, resulting in higher output of major crops, especially rice, and there is some evidence that nutritional intake and agricultural wages have improved.<sup>6/</sup> In addition, the real retail prices of ordinary rice and

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reported here are somewhat lower. The composition of poverty -- of those below the lines -- does not change very much, however, for small changes in the cut-off points used, nor do the observable trends.

<sup>5/</sup> Richard Hooley, "Macroeconomic Policy Framework for Employment Generation in the Philippines," Nov. 18, 1980 draft, pp. 6-9.

<sup>6/</sup> World Bank, Dec. 1, 1980, op.cit., Vol. II, p.17. Yields rose from 1.6MT/ha. to 2.0, representing a major achievement, and improvements were registered for both rainfed and irrigated and for upland rice, -- pp. 81-3.

and white milled corn reportedly dropped by 17-21% between 1975 and 79,<sup>7/</sup> which would tend to raise the real income of families who purchase those commodities.

As discussed in more detail below, effective legal minimum wages, including required allowances, failed to keep up with inflation and dropped sharply in real terms between 1970 and 1975, by 36% for workers in Manila and by 29% for agricultural workers. Decrees promulgated since 1975 have gradually increased effective minimum wages and the August 1980 decree resulted in real levels higher than in 1970 for plantation workers, about the same as 1970 for non-plantation agricultural and Manila workers, and still slightly lower than 1970 for non-agricultural workers outside Manila. It is believed, however, that these legal wage floors are not widely enforced outside the larger plantations and urban firms and that for most workers in the economy, particularly in the rural sector, actual real wages are still somewhat below 1970 levels, although there as probably been some improvement since 1975. The available data on overall average real wages since 1975 are rather ambiguous, however, so the picture is not very clear.

Only 43% of all families in 1971 depended on wages and salaries for their main sources of income, and over three-fourths of those were non-agricultural workers for whom the incidence of poverty (41%) was considerably less than for the nation as a whole (62% by USAID calculations, see Annex A of the Philippine FY 1982 CDSS). As a proportion of those families below the poverty lines, non-agricultural wage and salary earners comprised only 21% and agricultural wage earners another 12%. Even if we had better

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<sup>7/</sup> Republic of the Philippines, Food and Nutrition Plan (Objectives and Strategies), Manila, December 1980, p. 40.

data on actual wage rates and earnings to compare with the legal minimum levels, it would not provide us with a very reliable proxy for the actual income of the poor groups we are mostly concerned about.

The Bank noted the strong "positive relationship between family size and poverty incidence." "Families with 6 members and more contained about 52% of the total families and accounted for 68% of the poor families and about 80% of the poor population."<sup>8/</sup>

By breaking up the large agricultural sector into its subsector components, the Bank study enables us to develop a more precise profile of the composition of the 1971 poor group. Of all families (urban and rural) below the relevant poverty lines, 69.0% relied on the general agriculture, forestry, fishing and hunting sector as their main source of income: 61.1% on agriculture itself, 7.2 on fishing and hunting, and 0.8 on forestry and logging. By agricultural crop, 47.6% of all poor families (nationwide) relied primarily on rice and/or corn farming, 6.4% on coconut, 2.5% on sugarcane, 4.1% on other crops, and 0.4% on livestock and poultry. Some 11.3% of poor families relied on industry as their main source of income (5.9% on manufacturing and 4.7% on construction), and 12.7% on the general service sector (4.3% on commerce and 4.1% on transportation, communication and storage).

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<sup>8/</sup> World Bank, Dec. 1, 1980, op.cit., Vol. II, pp.10-12.

Cutting across the above agricultural crop categories, 6.1% of all poor families were farm laborers, while 54.7% were farmers (20.4% were farmer owners, 23.8% tenants and 3.8% part-owners, with 6.7% unspecified farmers and tubs gatherers). By far the largest number of poor families were dependent on rice and corn farming, and half of these were located in the Cagayan Valley, Bicol and the Visayas.<sup>9/</sup>

D. Quality of Life Indicators

The Philippines has made substantial progress in improving the quality of life for its people in recent years. Life expectancy at birth has been raised from 49 years in 1960 and 57 in 1970 and 62 in 1980. Infant mortality has been reduced from 98 per 1000 per live births in 1960 to 80 in 1970 and 74 in 1975, and the crude death rate has declined from 18 per 1000 population in 1960 to 9.2 in 1973 and 7 in 1975. A 1978 nationwide survey showed some reduction in malnutrition rates over previous surveys in the 1960's and mid-1970's; and the same survey found 66% of the population (84% of the urban population, 58% of the rural) had access to public waterworks or tube wells, compared with only 43% in 1975. While the 1978 figures may not be entirely comparable with the 1975 estimate by WHO, the latter reported an increase in those served by piped systems and artesian wells between 1970 and 1975 of from 73 to 81% in Metro-Manila and urban S. Tagalog and from 27 to 33% in rural areas.<sup>10/</sup>

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<sup>9/</sup> Calculated from Ibid., Vol. II, Tables 1.4 and 1.5, pp. 13 and 15.

<sup>10/</sup> World Bank, May 1980 draft, op.cit., Vol. II, pp. 73-7. The corresponding figure given for 1975 coverage in "other urban" areas is 48.5%, not 55% as reported in source (computational error), and the 1970 ratio given for other urban areas of 70% is subject. The 1970 percentage of total production covered is given as 26%, but this number is mathematically inconsistent with its component ratios, and should probably be closed to 36%.

The adult literacy rate has improved from 72% in 1960 to 83% in 1970 and 89% in 1980, and shows little difference between the sexes (87% for men and 86% for women in 1975), although the rural rate (79%) was significantly lower in 1970 than the urban (93%). Primary school enrollment ratios have improved from 95% in 1960 to 105% in 1975 and for the secondary school level from 26% to 56%, the latter rising to 66% by 1978. The female ratio is higher than the male in elementary, 108 to 103%, but lower in secondary, 47 to 65%. Most of the increase in enrollment was achieved in the 1960's, although high school expansion continued throughout the 1970's. Such aggregate data mask, however, what are believed to be considerable rural/urban, regional and poverty group differentials, especially at the secondary level.

## II. Constraints on Economic Growth and Poverty Alleviation

### A. Natural Resource Endowment

Like Korea, but unlike Thailand and Malaysia, the Philippines has a high ratio of population to arable land. Of an estimated 4.66 million hectares of potentially arable land, about 4.61 million were under cultivation in 1975, leaving little room for further expansion. Land under perennial crops, such as coconut, fruit trees, coffee, abaca, rubber and bananas, totalled less than half the estimated potential of 6.2 million hectares, however, and some unutilized potential still remained on land suitable for grazing (about 28%, or .65 million ha.) and for fishponds (65%, or .33 million ha.).

The country has been pressing the outer limits of its more productive farmland for several years, and any significant increase in agricultural crop production will have to be derived from more intensive land use and higher annual yields from land already under cultivation. Its most

underutilized natural resource seems to be its abundant and relatively well-educated labor force, numbering 17.5 million in 1979.

In many areas cultivation has already exceeded the limits of suitable land and has gone onto the steeper slopes, which are suffering serious erosion and permanent loss of fertility as a result. There is considerable underutilized potential for well-managed forestry and hydroelectric power generation, but existing population pressures on potential sites create difficult social and political constraints to their development. Abundant mineral resources offer considerable potential for further development, as does geothermal energy; and heavy annual rainfall coupled with pronounced dry season weather patterns and mountainous terrain provide considerable potential for gravity irrigation, which has been only partially exploited to date. Unexploited potential for pump irrigation also exists, but is less attractive now because of the high cost of energy.

**B. Maldistribution of Productive Assets**

Productive assets in the Philippines are heavily concentrated in the urban subsector of Metro Manila. Preliminary estimates for 1980 indicate that, while the National Capital Region employs only 13% of the working population, it accounts for 32% of Gross Value Added (GVA). Productivity per worker is 3.2 times as high in Manila as in the rest of the country. Excluding resourced-based industries, nearly 90% of all manufacturing value added is produced in the Manila area, and in 1976 value added per worker in manufacturing averaged 3.0 times as high as in the agricultural sector. Conversely, while the agricultural sector employed 47% of the working population in 1980, it accounted for only 23% of GVA.

The exhaustive World Bank study on poverty concluded that:

"The most important determinants of poverty in the (dominant) food crop sector appear to be the small farm size, limited access to land (tenancy or landlessness), low physical productivity, low value crop mix, lack of non-farm employment, and remoteness of area or lack of infrastructure. (The effects of natural disasters are also important)... Poverty outside the food crop sector, through similarly related to limited productive assets, is affected by special conditions. In coconut farming, there are large numbers of small-sized holdings, a complex tenure system controlled by absentee landlords, a high proportion of overaged trees, low physical productivity, and lack of intercropping... Sugarcane workers have suffered from oversupply of workers... In the fishing sector... competition from commercial fishermen and motorized boats, lack of equipment, and overfishing of several fishing fields have combined to limit (the) catch and incomes...(of the poorest group, the municipal fishermen), who typically fish with unmotorized boats close to the coastal areas."<sup>11/</sup>

Farm size was found to be the most important variable explaining income class differences, more important than tenancy. Although the Philippines had, in 1971, one of the highest tenancy rates in Asia, tenancy appeared to be as much a symptom of poverty as a cause. The people of some regions suffer serious constraints due to the poor quality of land, remoteness, or lack of infrastructure, which contribute to poverty by limiting productivity, the range of income sources, access to training and extension, and farmgate prices. The lack of public infrastructure assets in rural areas, such as roads, water control facilities, communications network, market, slaughterhouse and cold storage facilities, especially in comparison with those available in Manila, is one of the more notable characteristics of the Philippine economy.

Population pressure and inheritance customs -- and the lack of employment opportunities elsewhere -- have resulted in many farms at

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<sup>11/</sup> World Bank, Dec. 1, 1980, op.cit., Vol. II, pp.83-4.

or below the minimum viable farm size. The average 1971 farm size in the predominant rice and corn sector, which comprised 63.5% of all farms and 48.9% of total farm area, was 2.8 ha. Only 20.1% of the total rice and corn farm area was accounted for by farms of 10 ha. or more. Coconut farms, which accounted for 18.4% of all farms and 25.3% of farm hectareage, averaged 4.9 ha. in size, although a much larger (42%) proportion of the total area was in farms of 10 ha. or more.<sup>12/</sup>

Of the total number (2.35 million) of farms in 1971, 58.0% were operated by full owner-cultivators, who averaged 3.9 ha. per farm and held 62.9% of all farm land. Tenants operated 29.0% and part-owners 11.4% of the farms and 20.6 and 11.0% of the farmland, respectively. The average farm size of the part-owners was 3.5 ha., but for tenants only 2.6 ha., accounting for most of the slightly greater incidence of poverty among tenant farmers reported above.

Of the total number (681,700) of full tenants identified in 1971, some 76% of them, or 517,600, were operating 1.13 million ha. of rice and corn farms comprising 65% of all tenanted land. The 78,700 coconut farm tenants accounted for another 11.5% of all tenants and 20.0% (348,700 ha.) of all tenanted land.<sup>13/</sup>

By 1980 the Operation Land Transfer (OLT) portion of the Agrarian Reform Program, begun in 1972, had issued Certificates of Land Transfer to 380,000 rice and corn tenants for a total of 629,000 ha., nearly reaching the estimated targets of those eligible (396,000 tenants and

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12/ NEDA, 1979 Philippine Statistical Yearbook, Manila, p.245.

13/ Ibid., p. 246, and World Bank, Dec. 1, 1980, op.cit., Vol. II, p.196, both reporting results of the 1971 Census of Agriculture by NCSO. The 1971 Family Income and Expenditure Survey, also by NCSO, apparently tallied 2.50 million families dependent on farming as their main source of income, and of this total 1.04 million (41.5%) were classified as farmer owners, 986,000 (39.5%) were full tenants, 187,000 (7.5%) were part owners, 287,000 (11.5%) were farm laborers, and another 11.5% were unspecified. -- Ibid., Vol. II, p.154.

730,700 ha.). The conversion of tenants ineligible for land transfer (on holdings of less than 7 hectares) to formal leaseholders, providing more security of tenure and a significant reduction in rents, reached 408,464 tenants and 469,914 ha. in 1979, or 67 and 64% of program targets. These two programs have now reached a combined total of 78% of the 1.0 million rice and corn tenants now believed to have existed in the country, and they cover 75% of tenanted rice and corn land. (For a more complete assessment of land reform see FY 82 CDSS, Annex E.)

Their numbers were much smaller, totalling only one-eighth as many as those dependent on rice and corn production, but those families dependent on coconut production as their main source of income had a slightly higher incidence of poverty (57%) than other agricultural households (53%). The poor in the coconut subsector are believed to be labor-caretakers and tenants receiving a share of the harvest and small farmers obtaining low yields from aging trees.

Sugarcane farms comprised only 1.1% of all farms in 1971, or about 27,000. Of that total 54% were tenant-operated and these were predominantly small farms: 55% of all sugarcane farms were 5 hectares or less in size, but they covered only 9% of the total area planted to sugar. The majority of the poor families in the sugarcane subsector (62,000, by World Bank calculations, in 1971)<sup>14/</sup> are landless workers on large farms and plantation.

Livestock and poultry raising is a dominant off-farm occupation for farmers and a large number of landless workers. It provides 10-25% of total agricultural income in Central Luzon, and 10-47% of total income

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<sup>14/</sup> Ibid., Vol. II, p. 155.

of coconut farmers. A survey of 3 barangays (in Iloilo, Bicol and Pampanga) found 75% of landless laborers raising an average of 5.5 chickens and one sow per family. The national average of backyard livestock per family in 1979 was 1 carabao, 0.5 head of cattle, 2.1 swine and 13.2 chickens.<sup>15/</sup> Although livestock assets are fairly widespread, there is much room for improvement.

Access to institutionalized credit is limited in both the agricultural and manufacturing sectors. Although government credit programs have improved the situation somewhat in recent years, these have concentrated mostly on the irrigated rice farmer in the agricultural sector and have not had much impact in the manufacturing sector outside Manila. By keeping real interest rates low and sometimes negative, institutional credit has been subsidized and rationed to preferred-risk users, effectively excluding the poorer farmers and entrepreneurs who need it most. The extremely cautious, collateral-conscious approach of the typical Philippine banker, the centralized approval process and the time-consuming and confusing red tape requirements all work to the disadvantage of the small borrower in favor of the large firms and larger-scale farms.

The rate of fixed capital formation increased from 15.9% of GNP in 1972 to 24.3% in 1979, growing in real terms at an average annual rate of 11.9% compared with an average of 1.0% per year during the preceding 5 years. Expenditures on government construction increased

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<sup>15/</sup> Ibid., Vol. II, p.67, and World Banks, May 1980 draft, op.cit., Vol. II, p. 126.

at a real rate of 22.5% and rose from 1.9% of GNP in 1972 to 5.7% in 1979. After falling by 4.3% a year from 1967 to 72, private construction expenditures rose by 11.7% annually, from 4.6% of GNP in 1972 to 7.3% in 1979. Private investment in construction was heavily concentrated in residential housing, however, which comprised 53% of the total. Durable equipment purchases rose from 9.5% of GNP in 1972 to 14.4% in 1975, and then fell back to 11.3% in 1979, while growing at an average real annual rate of 8.9%. The fiscal and financial incentive system, together with the protective trade regime, has substantially biased private investment toward capital intensive technology. This has effectively limited access of wage labor to productive capital assets, reducing overall employment in the modern industrial and commercial sectors of the economy and helping to reduce the real wage rate. A disproportionate amount of private sector investment has also been concentrated in Manila, further restricting such access to those residing in the capital city and surrounding areas. A far-reaching set of reforms linked to and supported by the 1980 World Bank Industrial Structural Adjustment Loan is designed precisely to correct many of these deficiencies in the nature of private sector investment and is discussed in more detail below.

C. Balance of Payments, Trade Regime and Inflation

The Philippine balance on current account has deteriorated from a deficit of \$1.17 billion in 1978 to an estimated \$2.17 billion in 1980, despite a strong 73% growth in export earnings during the same period. The dollar value of merchandise imports increased by 66% over this two-year period, or by \$3.13 billion, almost half of which was

accounted for by increased payments for petroleum products, which increased by \$1.37 billion, even though the physical volume of oil imports slightly declined. Almost all the rest of the import increase was in capital and intermediate goods and raw materials (\$1.58 billion). A large (73%) rise in service imports of \$1.16 billion, largely due to increased freight and insurance charges related to the increased oil prices and higher interest payments, also contributed to the rising current account deficit. Most of this deficit was covered by a \$1.75 billion surplus on capital account, as the Philippines continued to borrow heavily to maintain the level of imports essential to its own domestic production activities and to its economic development program.

In contrast to the rapidly rising prices of imported petroleum products, which accounted for 30.6% of all merchandise imports in 1980, the prices of coconut products, one of the Philippines leading traditional exports, declined dramatically. The price of sugar, another key export, partially recovered in 1980 after 3-4 year slump, and the value of mineral exports held up well. As noted above, the most encouraging aspects of the export performance has been the rapid growth of non-traditional exports.

The manufactured export sector, however, is rather heavily dependent on imported inputs and has developed few backward linkages to the domestic economy. Domestic manufacturing is also heavily import dependent and, moreover, is relatively capital-intensive and inefficient. It is not very competitive on either cost or quality ground with foreign products, despite lower wage costs. The highly protective tariff structure and various capital-use incentives under which this situation has developed are now being subjected to close scrutiny and significant reform in order

to reduce the capital-intensive bias, encourage greater use of the more abundant factor of labor, utilize foreign competition to force more attention to efficiency considerations, and promote more production for export. While the protectionist trade regime has been a major cause of the poor employment performance of the manufacturing sector, there are good reasons to believe the reforms currently underway will significantly improve the country's ability to exploit its comparative advantage in labor and improve that performance.

The exchange rate of the peso vis-a-vis the U.S. dollar has been kept relatively stable since early 1977, depreciating by about 2% in late 1979 and early 1980. It has thus followed the dollar's general decline and recent partial recovery, amid wide fluctuations, against the currencies of other major trading partners like Japan. The large overall balance of payments deficit, despite the heavily protectionist tariff regime and the heavy foreign borrowing required to finance most of the current account deficit, suggests that the peso exchange rate is overvalued. If relative domestic price movements are taken into account, the trade-weighted real effective exchange rate has indeed appreciated during the last two years. Much of the reluctance to permit a more rapid rate of peso depreciation seems to be due to the fear it would exacerbate the domestic rate of inflation. Since an overvalued exchange rate biases the peso value of exportables downward, vis-a-vis given world market prices, it also tends to reduce the returns to the relevant factors of production. And since Philippine exports are relatively labor-intensive, this serves as an additional drag on real wage levels in both urban and rural areas. At any given world market price for a primary export product like coconut oil or sugar, for example, the peso price received by producers is artificially depressed, thus contributing to the high incidence of poverty in those sectors. An overvalued exchange rate also biases the

peso costs of imported inputs, such as those of capital and intermediate goods, downwards, thus encouraging the further capital-intensive and import-dependent development of industry and agriculture and thereby reducing employment.

After averaging only 7.4% annually for the preceding 4 years, the rate of inflation jumped to 21.5% in 1979 and continued at an average annualized rate of 15.2% during the first 11 months of 1980 (CPI for the Philippines, calculated from December to December of each year and to November of 1980). The sudden spurt in price levels followed large increases in prices of imported oil, which, as a matter of energy policy, have been passed on to consumers together with additional taxes on various forms of energy consumption as conservation measures. The domestic retail price of regular gasoline was increased by 186% from ₱1.66 per liter in 1978 to ₱4.75 in August 1980 (U.S. \$2.40 per gallon). The retail price of diesel fuel doubled. Retail price controls were also allowed to expire in 1979 to avoid serious production disincentives, and the subsequent price adjustments of important food items contributed to the high level of inflation. In response to the extraordinary inflation rate in early 1980, retail price controls were reimposed on nine important food items in February: rice, corn, eggs, poultry, pork, cooking oil, sugar, canned milk and canned fish.

It has been Government policy over the last few years to decree minimum wage rates and required cost of living allowances to recover ground lost to inflation, so that, together with petroleum prices, there has been a significant cost-push element behind the inflationary spiral. Two other factors must share the blame, however. One is the high level of deficit financing required to fund the growing capital outlays of

of the government, in pursuit of its economic development program, and the other is the lack of any significant increase in efficiency, overall productivity per unit of factor input, in the manufacturing.

Monetary policy seems to have been fairly conservative during this period of high inflation. Total real liquidity (including both the money supply and quasi-money) declined throughout 1979 and at least much of 1980, as did real public credit through the first quarter of 1980 (the latter starting to rise again in the second quarter). Negative real interest rates contributed to a reduced level of domestic savings, and this prompted a reform of interest rate ceilings (raising them) in Dec. 1979.<sup>17/</sup>

In addition to substantially raising the domestic cost of energy, the government has responded to the energy crisis by accelerating its program to develop domestic energy sources, primarily oil, geothermal and hydro power, planning to spend U.S. \$9.5 billion on this effort over the next five years.<sup>18/</sup> This program is expected to reduce the country's total energy consumption dependence on imported oil from 82.0% in 1980 (already down from 88.2% in 1978) to 41.3% by 1985.

D. Supply and Distribution of Basic Goods and Services

Philippine Food Balance Sheets indicate the aggregate availability of the national caloric and protein food supply was over 100% of sufficiency from 1970 to 1976, rising to 115% for calories and 131% for protein during that period. The First Nationwide Nutrition Survey

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<sup>17/</sup> Net domestic savings by households fell from an average of 7.9% of GNP between 1973-77 to an estimated 5.4% in 1980.

<sup>18/</sup> The Philippines is already second only to the U.S. in the production of geothermal power, and will soon be first.

in 1978 indicated per capita consumption, as purchased at retail, was sufficient only for cereals and cereal products (102.8%) and sugar and syrups (113.8%), however, and seriously deficient for other energy foods and all body-building foods. Significant amounts of the latter are consumed from home production, though, especially among the poorer families. Dietary adequacy varied widely by region and area and inversely by income level, ranging from 109.3% for calories and 142.5% for protein among those with more than ₱2000 annual per capita income to only 78.3% for calories and 84.9% for protein among those with incomes less than ₱250. Adequacy of fats and oil consumption ranged from 97.8% to 27.9% between the same income brackets. Compared to the Recommended Dietary Allowance (RDA) for Filipinos, the average Filipino diet in 1978 was found to be 102.9% adequate for protein, 88.6% adequate in food energy, 91.7% adequate in iron, and 68.6% adequate in Vitamin A. The problem is apparently not so much a deficiency in overall food supply as the lack of sufficient income among the poorer groups to buy the food they need.

Government expenditures on education are comparable to those of other developing countries, and private expenditures at post-elementary levels are high. The lower quality of public education and high cost of private schools place the poor at a distinct disadvantage, however, in the preparation for and gaining access to productive employment or income-earning opportunities as adults. Public allocations per capita differ significantly among regions, especially at the secondary level, and a disproportionate amount (25%) also goes to the college level, both to the disadvantage of the rural poor. Although enrollment rates are high, so also are drop-out rates. Only 83% of those entering elementary

school in 1969/70 reached Grade 2, while 59% completed Grade 6, and only 34% completed the secondary level.<sup>19/</sup>

Public sector expenditures on health are comparatively low as a percentage of GNP, and although private medical expenditures are relatively high, this again works to the disadvantage of the poor. In addition, public health expenditures have been concentrated geographically in urban areas and in Central Luzon and functionally on curative medical infrastructure, which is fairly well-developed in the Philippines, to the relative neglect of the rural areas and of primary, preventive health services that would be of more benefit to the poor. Access to safe water and sewerage also varies widely among regions and provinces, as well as among urban vs. rural population, as noted above.

Public credit, extension and marketing services in the agricultural sector have focused mainly on irrigated rice farmers, who have become relatively better off as a result of their consequent ability to produce higher yields with irrigated high-yield varieties of rice. More recent programs focussing on the corn farmers, sustenance fishermen and livestock raising are just setting underway, but rainfed, including upland, farmers have not yet enjoyed such support on a nationwide basis.

Institutional credit in the manufacturing sector, despite various government attempts to direct specific programs at cottage and small or medium scale operations, has remained seriously biased toward the large firms with real property collateral and established reputations (and for the most part, a location near Manila). The government is presently studying financial reforms that might help provide easier access to credit to small firms outside Manila.

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<sup>19/</sup> World Bank, Dec. 1, 1980, op. cit., Vol. II, p. 33.

E. Resource Allocation, Factor Productivity and Productive Employment

Private capital investment resources have been skewed into an industrial sector characterized by increasingly capital-intensive production functions and a centralized urban location, due (1) to the highly protectionist tariff structure coupled with duty-free exemptions and low tariffs on capital equipment and intermediate goods, which raises the returns to goods /produced with relatively more capital while lowering the returns to labor, (2) an apparently overvalued exchange rate, propped up by high tariffs on consumer goods and heavy foreign exchange borrowing to cover large trade deficits, (3) low interest rates and other financial and fiscal incentives encouraging and subsidizing the acquisition and utilization of capital goods and resulting in their rationing to preferred-risk firms, and (4) bureaucratic requirements for access to investment incentives and importation authority that favors the larger, Manila-based firms.

Legal minimum wage levels and cost-of-living allowances fell sharply behind the high rates of inflation in the early 70's, declining in real terms by 21% between 1970 and 72 and by another 10-19% (10% for agriculture, 19% for non-agriculture) between 1972 and 75. Since 1975 it has been government policy to keep effective legal minimum wage levels (including required allowances) from falling farther in real terms and to gradually regain the ground lost due to the earlier bout with inflation. By 1978 the effective minimum wage levels for Manila workers had recovered their 1972 value in real terms, while those for agricultural workers had almost recovered their 1970 level. The wage decrees resulting from the National Tripartite Conference in August 1980 restored the legal real effective minimum wage levels of Manila

non-agricultural workers to their 1970 levels and raised the legal minimum levels of agricultural wages nearly to their 1970 level of non-plantation workers and 29-36% higher than 1970 for plantation workers, while the level for non-agricultural workers outside Manila were raised to a position 13-19% above their 1972 level, but remained 6-10% below 1970. (In dollar terms, effective minimum wages decreed in August 1980 were equivalent to \$3.79 - 3.98 per day for Manila workers, \$3.65 - 3.83 for non-agricultural workers outside Manila, \$3.11 - 3.29 for plantation workers, and \$2.30 - 2.49 for non-plantation agricultural workers. Aside from the larger plantations and urban firms these legal standards are difficult to enforce.

While legal minimum wages and allowances are somewhat higher than free market levels and, to the extent they are enforced and complied with, may limit employment to some degree, the government authorities are conscious of the adverse employment effects of minimum wage legislation and have consistently sought to keep such raises to the lowest politically acceptable levels. It is believed that distortions in the nature of investment are attributable more to capital-use subsidies than to artificial labor-use costs. There are no rent control laws that would significantly affect the use of land for productive purposes, although the operation of some property tax laws, such as those taxing improvements more heavily than land, may be effectively discouraging improvements and encouraging an excessive holding of idle land.

Commodity price controls on a few basic food items have been imposed as temporary expedients to help control inflationary tendencies. Upward adjustments are frequently permitted, however, to maintain production incentives, so that the controlled prices are seldom

very different from market clearing levels. There was a period of time in the mid-1970's when the domestic price of rice was maintained above a <sup>market</sup> depressed world/level in order to maintain the production momentum required to achieve national self-sufficiency.

Public sector fiscal and monetary policies have been effectively used to increase the rate of fixed capital formation, both public and private, but especially public infrastructure construction. As noted in Part I above, continued progress has been achieved in raising the level of domestic resource mobilization until recently, when the rate of net household savings declined during the period of high inflation and negative/<sup>real</sup> interest rates.

The private sector marketing system is dominant and very active in the Philippines, but poor transportation and communication facilities and relatively weak local governments create conditions in which some entrepreneurs can establish monopolistic or monopsonistic control over localized segments of certain markets and exploit them for non-competitive profits, skewing local prices and resource allocation away from competitive optimums, especially in the less accessible areas.

Low factor productivity and how to raise it is the essence of the development problem. Low productivity of land is attributable to lack of water control and transportation infrastructure, limited research and extension services for crops other than irrigated rice, lack of credit to support high yield input requirements, poorly developed marketing systems, and so on. Low productivity of capital is attributable to its concentration in inefficient, protected industries with limited domestic market potential and no export potential, to inappropriate technology and factor composition in an overly capital-intensive

manufacturing sector, to inefficient management practices, to the relative underutilization of physical plant compared with its actual economic scarcity, to poorly developed institutions to provide for capital and operating expenses outside Manila, and to a relatively small domestic market for manufactured goods due to low income levels of most the population and to their inaccessibility to market places.

Low productivity of labor can be attributed to most of the above as well, but especially to labor's general lack of access to productive capital goods, due to the latter's concentration in urban-based, capital-intensive industries offering little employment. Poor health and nutrition status affect the stamina, intellectual vigor and productivity of labor, first as students, in the educational process and later as workers. The poor quality of the educational opportunities available to the bulk of the population and the lack of emphasis on vocational and technical skills training and business management must also share the responsibility for low productivity.

As noted above, output per worker has risen in the manufacturing sector due mostly to capital deepening, while output per unit of capital invested has declined. Since very little labor has been absorbed in the manufacturing sector, an inordinant burden of incremental labor absorption has been placed on the agricultural and service sectors, where the bulk of new jobs have been created in low productive activities providing little more than subsistence incomes.

The government has recognized these adverse trends and has for several years been introducing various programs to reverse them, culminating in the far-reaching industrial structural adjustment reforms begun in 1979 and 1980 and scheduled for full implementation over the

next 5 years. These reforms consist of: (a) extensive export incentives and promotion (export industries tend to be among the more labor-intensive), (b) reduction of protection through tariff reform, (c) efficiency-oriented investment incentives and administrative reforms to remove the present capital-intensive and urban biases and accelerate employment generation and investment outside Manila, (d) industrial revitalization and liberalization of investment regulations to promote efficiency and stimulate small and medium-scale industries, and (e) implementation of eleven major industrial projects. Of this list of reform packages, only the last, which includes some highly capital-intensive project proposals that would require a considerable magnitude of capital investment and managerial resources while providing relatively few jobs, seems not to support the goal of employment generation. It is encouraging to note, in this regard, that the authorities are subjecting each major project proposal to extensive analysis and are apparently adopting a flexible attitude, intending to approve their implementation only after favorable feasibility analysis have been conducted. It is a matter of some concern, however, that the employment implications of these proposals, in comparison with alternative uses of the large sums of money involved, be fully considered.

The government has already introduced many of the reforms planned under this program, including a schedule of gradual tariff reductions (and some increases--on capital and intermediate goods), export promotion measures, commercial banking reforms and higher interest rates. When fully implemented the planned reforms should improve resource allocation, cause increased efficiency and productivity, and result in a higher level of productive employment generation. The objectives of

this program, supported by a \$200 million World Bank loan in 1980 and a promise of additional tranches later, are fully consistent with a USAID strategy focussing on expanded employment in rural areas and will establish a more suitable macro-policy environment for such a strategy to succeed. The government has also taken a step towards improving productivity through improved labor-management cooperation by the recent establishment of a Productivity Council. However, the Council has not yet begun to function.

F. Structural Responsiveness to Needs of Poor

Traditional political structures were controlled by an urban-based elite who did not channel a proportionate share of government resources toward the rural areas where the majority of the people lived. The present government, while more centralized in some respects than before, has placed a more ambitious and more equitable, rural-focused development program as its primary goal. It has devoted far more effort and financial resources to the task of identifying and resolving some of the key constraints to growth and poverty alleviation than its predecessors. It has concentrated on rural infrastructure and support services for rice and corn farmers, who are the largest single block of poor in the country. It has frequently articulated its intention and has implemented several programs to strengthen the capacities of local governments to undertake development programs of their own, primarily at the provincial level, although some trends tended to further centralize power at the same time.

As it stands now, the central government is sponsoring a development program centered on rural mobilization and greater equity. It has pushed its own fiscal and managerial resources near the limit in

this effort. Responsible officials in government planning agencies recognize, however, that more rapid progress could probably be achieved by helping local governments (provinces, rural municipalities and barangay villages) do more for themselves, since central government agencies cannot tailor specific program or project details to satisfy the needs of different local groups nearly so effectively as can local governments. The challenge is to bring resource allocation mechanisms through the budget, and administrative processes through national line ministry operations, into line with this perception.

Most local governments currently have a limited ability to articulate and meet the needs of their constituent populations. They require professional assistance in poverty analysis, need and priority diagnosis, project identification and design, revenue generation, budget and financial management, implementation and evaluation. There is evidence the national government is willing to assist local governments further in such an effort, and this would improve the system's responsiveness to the needs of the poor.

The paternalistic nature of the social system, while tending under traditional rural conditions to sustain a patron-client type of society, nevertheless inculcates the responsibilities of the wealthy and the better-off to care for the needs of their less fortunate tenants, workers and neighbors in times of calamity, personal misfortune, or other dire need. Some paternalism seems also to be present in relationships between local and national government officials. Mixed with modern concepts of development management and democratic responsibility, perhaps this cultural trait can be made to work for the benefit of the poor. On the other hand paternalism also tends to induce a sense of apathy on the

part of the poor toward the possibilities of improvement through self-help and economic development that is difficult to overcome.

G. Social/Economic/Political Mobility

This is a complex question that we cannot explore in depth here, but a few general points may serve as brief overview. The Philippines has a broadly-based, mass education system; and the government and business establishments do seek out and promote talent, despite an elitist social structure and the existence of some nepotism and cronyism. Bright young people of relatively poor parentage are able to make their way up through the system to positions of much higher responsibility and income. They are often aided by cultural ties to a more highly placed godfather or patron. Such mobility is still relatively rare due to the opportunity cost of education, poor quality of public schools, and other economic and social disadvantages of the poor, but the social system does permit it.

Except for the numerically small minority tribes in various mountain areas there do not appear to be any significant ethnic, linguistic, religious, regional or economic group excluded from development, political or administrative position due to their group identity. Remoteness, inaccessibility and other spatial variables do restrict the mobility of some groups and their access to productive resources and services, however.

H. Restricted Flow of Information

The government has sponsored numerous surveys and studies into various aspects of the poverty problem over the last decade. It has cooperated fully with the major World Bank review and assessment of poverty just completed and sponsored nationwide fertility and nutrition

surveys in 1978. More data are available about the dimensions of poverty in the Philippines than in most other developing countries, and the various government agencies are more open to wide-ranging discussions and ideas on how to deal with them. Survey and study results are routinely reported in the press, since there is little effort to restrict or control this kind of information.

There seems to be a cultural bias against unfavorable information flowing upward through the bureaucratic hierarchy, however, that is more difficult to deal with. Subordinates are usually extremely reluctant to identify problems and tell their superiors when and why things are not going so well, especially if it might be interpreted as a criticism of the superior's own judgement or breadth of knowledge or understanding of the situation as manifested in his own design of a project or operational instructions. Many well-intentioned nationwide programs bog down at the local levels because they are not able to respond to local variations of the problem, and the top leadership of the national agencies involved seem often, though <sup>not</sup> always, to be very slow at diagnosing the reasons for failure and changing their game plan in a meaningful way, even through their subordinate staffers at local levels are often very much aware of the problems and the reasons for them.

Another constraint in the development of rural areas is the great difficulty and sheer cost of obtaining relevant economic, technological, and bureaucratic information outside Manila. Communications facilities are so far very poorly developed throughout the country, and it is still impossible in many provincial capitals (and difficult in most others) to

place a telephone call to Manila, let alone to another town or from a municipal center. Government services to collect and disseminate relevant information on production technologies, prices, market contacts and even on other services available to the entrepreneur are also poorly developed and located only in the regional centers. The common assumption of the Western free enterprise, or capitalist, economic model of costless and perfect information on the part of every economic unit does not hold here.

I. GOP Policies and the Revised Five-Year Development Plan

Over the past few years, crucial policy reforms responsive to the external crises and supportive of faster socio-economic growth and development in the medium term have been laid down, and efforts to get these implemented effectively are being pursued. In response to relatively intractable problems of historical origins, the government has adopted long-term measures to enhance food production, to increase industrial efficiency, to achieve financial reforms, to conserve energy and promote domestic energy development, and to address problems on balance of payments, domestic resource mobilization and public investment. Short-term, anti-inflation policies have been instituted including a temporary price freeze for nine basic commodities. In addition, efforts to improve national programs on family planning, the delivery of social services and the promotion of regional development are being continued.

In agriculture, the rice subsector has benefited from massive irrigation, more productive technology and agrarian reform. The potential for increased productivity in the other major crops like sugar, coconut and upland rice remains to be fully tapped, but programs designed to attain such goal are being initiated. Moreover, the link between food programs

and the malnutrition problem among young children will be strengthened through the National Food and Nutrition Plan that will attempt to make essential foods items, specifically rice and vegetable oil, more available to and affordable by that segment of the population identified as undernourished. A National Food Authority has recently been established to coordinate and strengthen the entire food industry (including raw, fresh, manufactured and processed food products) to ensure adequate and continuous supplies at reasonable prices.

Industrial reforms have been instituted starting in 1979 emphasizing a more efficient and competitive industrial structure, as discussed above.

On energy, the principal elements of the government's policies are the development of both domestic oil and alternative sources of energy (currently constituting 5.5 percent and 12.5 percent of total needs, respectively) and a domestic pricing policy that fully reflects oil import costs.

To help reduce balance of payments pressures, the government is banking on higher export growth reinforced by increased exportation of non-traditional products, import rationalization, reduction of dependence on imported oil, increased invisible receipts and continued direct foreign investment and concessional loan inflows.

The government is accelerating efforts to mobilize greater domestic resources by improving revenue collection and raising voluntary savings. An expanded and progressive taxation system that will broaden the tax base, inject more progressivity in the indirect tax structure, and further reduce dependence on volatile foreign trade taxation is being introduced. Measures to increase voluntary savings have included adjustments in interest rates, improved investment opportunities and price stabilization. Meanwhile, the implementation of some public investment

programs in recent years has been delayed by unanticipated cost escalation. More flexible cost adjustment schemes, streamlined budgetary procedures, effective monitoring and evaluation and manpower development programs are being implemented.

Since the country is still faced with a relatively high rate of population growth, the government is trying to enhance the cost effectiveness of the national family planning program, reorient it towards family welfare, and to better integrate population factors in the overall planning process.

Regional development investment programs have been prepared in each region as the anticipated basis for public resource allocations in the regions, better tailored for the particular needs of each region and aimed at more balanced regional development.

The government has revised the final two years of the Five-Year Development Plan. The revised Plan's basic goals remain essentially the same. Additional measures are to be introduced to contend with the external factors and complement the reforms that have already been instituted, in order to make the economy more efficient, achieve greater self-reliance in key programs like food and energy, and build a higher capacity for further development.

Government expenditures in the coming years are planned to focus on priority programs in energy development, food production, industrial restructuring, and export promotion, while providing continuing support to the delivery of public services. The production of nutritious foods and cash crops with export and energy potentials are to be given greater emphasis, responding not only to inflation but also to problems of unemployment, malnutrition and energy. To help alleviate poverty in the countryside, the revised Plan envisions that social development programs

will be supported by higher budgetary allocations in 1981-82 and aimed at providing more equitable access to social opportunities.

J. Absorptive Capacity Constraints

1. Infrastructure Needs

The serious lack of productive infrastructure outside the Manila and Central Luzon area, due to the virtual neglect of the rural areas by previous government administrations, was noted in the early 1970's by both ILO and World Bank teams of development analysts. <sup>20/</sup> They emphasized that the construction of such infrastructure was the largest, most costly and probably one of the more challenging tasks required of the present government in order to mobilize the rural sector for sustained and more equitable development. The government has moved vigorously in this area.

National government expenditures on capital account increased from less than 18% of its total budget from 1960 to 72 to an average of 31% between 1973 and 78, when the average annual level of capital outlays, in real terms, averaged 6.4 times the level of the 1960's. Of the ₱19.1 billion invested in major infrastructure projects between 1973 and 78, some 36% went for highways, bridges, seaports and airports, 31% for electric power generation, transmission and rural electrification, 25% for irrigation, flood control and drainage, 7% for municipal waterworks and 1.2% for national government buildings. The share spent in Manila and Southern Tagalog was roughly proportionate to their population (24%).

The bulk of major infrastructure investments in 1979 and 80, totalling ₱23.3 billion (U.S. \$3.1 billion) and accounting for about

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20/ ILO, Sharing in Development, A Programme of Employment, Equity and Growth for the Philippines, United Nations, Geneva, and NEDA, Manila, 1974, and The Philippines, Priorities and Prospects for Development, World Bank, Washington, D.C., 1976.

81% of total public investment, went for power and rural electrification (51.8%), water resources (20.6%) and transportation (19.9%).<sup>21/</sup>

The infrastructure needs in most rural areas are still very large. A large proportion of rural barangays (villages) do not yet have access to all-weather roads, and many have no road at all. While a considerable length of main and secondary roadway has been constructed in recent years, many such roads linking large centers of population are still in very bad shape, and all-weather feeder or farm-to-market roads have barely begun to penetrate the hinterland rural areas where most of the people live. Port facilities are slowly being improved, but remain inadequate in many areas and on many islands where inter-island shipping is the key transportation link with the national economy. Water control projects (irrigation, drainage, flood and salinity control) have proliferated during the last decade, but considerable potential remains to be tapped. Many other, smaller forms of infrastructure, specific to the locality and to the chief economic pursuits and potential of local economic groups, are badly needed -- such as markets, cold storage facilities, warehouses, etc.

While national government programs are essential for the construction of major infrastructural networks, there is a large unsatisfied need for the smaller infrastructure projects tailored to local needs. These are more efficiently planned, implemented and maintained by local institutions that can respond more directly to local needs and problems and have more personal and first-hand knowledge of local priorities and concerns.

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<sup>21/</sup> Republic of the Philippines, Economic Report on the Philippines 1978-1980, Manila, Dec. 1980, pp. 4-11.

Without a sustained effort to build and maintain the necessary local infrastructure, particularly roads, many government programs to provide training, extension, credit, health, nutrition and other services cannot be very successful, simply for lack of access and other supportive facilities.

## 2. Public Revenue Generation

Since late 1975 substantial changes in taxation have been introduced to mobilize more domestic resources to finance the development program. These reforms have been aimed at increasing the progressivity and elasticity of tax system, reducing revenue dependence on foreign trade, and simplifying and strengthening tax administration. The ratio of all domestic-based tax revenue to GNP rose from 6.1% in 1975 to 7.7% in 1979, while taxes on international trade declined from 6.0% to 4.3% of GNP, due mostly to a reduction of export duties. Total revenue collections of the national government dropped from 14.8% of GNP in 1975 to 13.4% in 1979 and an estimated 12.7% in 1980. While inflationary and recessionary economic conditions in the modern sector of the economy contributed to the poor revenue performance in 1979 and 80, a still greater effort at domestic revenue generation is urgently required.

Local government tax revenue generation has improved slightly in recent years, rising from approximately 1.2% of GNP in 1975 to an estimated 1.4% in 1980, mostly due to increasing real property tax collections. (This is exclusive of the revenue allotment from the national government, which equaled 0.8% of GNP in 1975 and 0.9% in 1980.) Local government revenue performance remains poor, but has the potential for improvement in support of locally directed development programs. Preliminary results of research into the problems of

local revenue generation, sponsored by the government, indicate that there may be significant potential for improvement in the ability of local governments to plan and budget for development projects responding to their own priority needs, thus providing better incentives for improving local revenue performance. An interesting finding is that despite the obvious need for a much higher level of development expenditure at the local levels -- a need attested to by every local executive one visits -- the annual cash surpluses of many local governments are surprisingly large, in proportion to their total annual budgets.

3. Resource Management and Allocation.

After a brief respite in 1980 from serious problems involving peso counterpart financing, it appears that we may witness in 1981 a resurgence of strict fiscal restraint. Revenue projections for the 1981 GOP budget show an increase of 17.2%, while expenditures are projected to increase by almost 20%. The 33% decline in foreign borrowings experienced in 1980 compared to 1979 will, therefore, have to be reversed in order to accommodate this increase in fiscal outlay. Those borrowings are estimated to reach ₱4.4 billion in 1981, almost double the 1980 level, and will finance 61% of the GOP's operating deficit. With over half the GOP's capital outlay program tied up with foreign-assisted projects, and a projected peso/dollar counterpart ratio of 2.28:1 for 1981, it is likely that donor projects in 1981 and beyond will again experience shortfalls. This problem will be exacerbated to the extent that the large number of projects begun in 1978-1979 get into full swing, thereby requiring substantial amounts of peso cost financing. The year 1981 will also see a large number of new project starts which will push the peso/dollar counterpart ratio to almost 4.8:1 by 1982.

It is against this backdrop of national resource management problems that the capacity of the GOP to budget for and redirect resource flows directly to regional and local levels must be understood. Although legal procedures exist to permit direct fund releases to regional level government entities, they are seldom used because they must be activated by the Manila office of the line ministry concerned. Moreover, the production of regional budgets with the CY 1981 GOP Budget Act may reflect more of a bookkeeping entry than an indication of a regional budgeting strategy. Approximately 32% of total budget resources were attributable to activities occurring in the individual regions. In 1981, this proportion should reach 46%. However, about one-quarter of that amount is being channelled through a number of lump sum appropriations controlled directly by the President or Minister of Budget. In addition, it appears most of this money is actually spent outside the regions themselves (e.g. in Manila and other urban centers), instead of on goods and services generated within the regions.

On the other hand, there appears to be a conscious policy of increasing budgetary resources to depressed and lagging regions over time. In 1981, Central Luzon (Regions III & IV) and Metro-Manila with 35% of the national population will command 34% of the national budget; Regions V, VI and VIII will command 22.2% of the national budget, having 22.7% of the country's population. Beyond this criteria, however, there seems as yet to be little functional linkage between the regional planning process and the budget mechanism. Regional budgeting remains an amorphous concept which has yet to capture all the implications of the planning process in setting priorities for annual allocations of resources. In Central Luzon,

for example, the focus is on infrastructure and agricultural production; in the three regions targetted for assistance under the CDSS, the emphasis seems to be in social services, primarily health and education, with less resources going to agriculture and to infrastructure except for selected investments in roads.

#### 4. Institutional Efficiency

The various national government agencies implementing major portions of the development program, particularly the Ministry of Agriculture, the National Irrigation Administration, the Ministry of Public Highways, the National Power Corporation, the Rural Electrification Administration, the National Economic and Development Authority and a few others, have developed capacities to plan and implement large, nationwide programs. Relatively less well along is the capacity to plan and implement effective local projects tailored to satisfy local needs and priorities, either by regional offices of national agencies or by local (provincial, city and municipal) governments themselves. For a country as regionally and locally diverse as this one it is imperative that such locally-specific capacities be utilized for the effective mobilization and development of the rural and smaller urban areas. Limited local government capacity to deal with its own development problems constitutes a major constraint to a sustained, equitable development effort in this country. While some progress in this direction has been achieved over the past 12 years under the USAID-assisted Provincial Development Assistance Program, a major continued effort is needed, particularly at the rural municipality and barangay levels.

Significant elements of the central government, including NEDA, the Ministry of the Budget, the Ministry of Finance, the Ministry of Local Government and Community Development, and the Ministry of Human

Settlements, apparently recognize this need and are discussing ways to increase the financial resources available to local governments and to improve the latter's ability to plan, budget and implement effective local development programs and projects, responding to locally determined needs and priorities.

A considerable body of socio-economic statistics needed for planning and evaluating appropriate development programs are available nationwide and to some extent on a regional basis, although there are serious gaps where important information is either lacking or badly out-of-date. While the reliability and comparability of some key data series has apparently declined in recent years, due at least in part to personnel problems and tight budgetary restrictions, the government is presently engaged in a USAID-supported project to identify more appropriate and complete development indicators, especially those measuring progress in basic human needs areas of concern, and to determine the most cost-effective ways to obtain them.<sup>22/</sup>

Similar data requirements of provincial and city development planners are farther from being met, however, and one of the more serious constraints to working effectively at the local level is the current paucity and unreliability of socio-economic statistics at that level.

##### 5. Human Resources

On the whole, the Philippines has a better educated population than most other developing countries of its income group. It has a fairly high percentage of people who have finished high school and who have gone on through at least some college-level training. While

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<sup>22/</sup> Economic and Social Impact Analysis/Women in Development (ESIA/WID) Project.

it is sometimes noted that national government agencies are weak in the middle-management levels, in contrast to their strength in the senior positions and also in the more junior levels, this is believed to be due more to the salary structure in comparison with the private sector than to the unavailability of talent.

Well-trained professional and technical personnel tend to be concentrated in the National Capital Region (Metro-Manila) and a few regional centers. There is a relative lack of capable public officials in the other regional centers, and even fewer can be found in provincial capitals. A frequent complaint of governors is their inability to attract the qualified people needed for their provincial development staffs, partially due to low salary scales and remoteness, but also to the lack of quality educational, recreation, health and communication facilities and other social amenities that are more readily available in Manila and the larger regional cities. The difficulty in getting qualified technical and managerial personnel to work in the poorer provinces and rural municipalities poses a serious constraint to a strategy planning to rely largely on local resource mobilization and local management.

A very significant development in the pattern of foreign outmigration in recent years, is the rapidly growing number of Filipinos who are leaving the country for temporary employment abroad. This current outflow of Filipino workers is vastly different from the emigrants in the early 1960's when the "brain drain" saw the permanent exodus of thousands of Filipino professionals and technical people to the United States and Canada each year. This new breed of Filipino emigrants are mostly blue-collar workers who have contracts for placements in the Middle East for a limited period of time. Unlike the brain drain

of the '60's, the new outmigration trend has the blessings of the government, which, through the Ministry of Labor and Employment (MOLE), itself promotes the export of manpower and monitors rather closely the activities of the Filipino expatriates.

A study made by Manolo Abella of MOLE in 1979<sup>23/</sup>, showed that of some 41,441 Filipino workers (other than seamen) who had overseas jobs from 1975 to the first quarter of 1977, 15,383 or 37.1 percent were in the Middle East and another 11,485 or 27.7 percent were in other Asian countries. Approximately 42 percent of the workers placed abroad during the period were employed as craftsmen, construction and production process workers, transport/equipment operators and general laborers, although there were also a significant number of professional, technical and related personnel (16.5 percent of total), artists and entertainers (19.8 percent) and service workers (18.8 percent). More recent data suggest that for the last few years, more than 80 percent of Filipino workers with contracts abroad go to the Middle East. This is largely because the increased infrastructure activities in the region during the late 70s has resulted in stepped up demand for middle-level or blue-collar workers. Correspondingly, the share of these type of workers to total emigrants have substantially risen.

The Philippines sent abroad over 167,000 contract workers including seamen during the period 1972-1976 (though this figure may have included returnees.) This is equivalent to about 10 percent of the additions to the labor force during that period. Though no firm data on the total number of Filipino workers abroad is available, it is

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<sup>23/</sup> Manolo I. Abella, Export of Filipino Manpower, Institute of Labor and Manpower Studies, Ministry of Labor, 1979.

believed that the overseas sector (including permanent migrants) was the fourth biggest absorber of labor during the 70's, having taken in more new workers than several industries like mining, utilities, construction, transport and communication and, as some suspected, even manufacturing. MOLE statistics indicated that about 138,302 Filipino workers including 44,818 seamen were placed overseas in 1979 alone. This represents roughly 0.8 percent of the country's total work force and about one-fifth of the additions to the labor force for that year. It is not surprising then that government, faced with the growing size of the domestic labor force and the need to generate more than 600,000 additional jobs each year, has encouraged the exportation of Filipino manpower.

Moreover, from an economic standpoint, overseas employment benefits both the individual and the government, Filipino contract workers earn much higher income than they get at home. The Abella study showed that in 1975-77 the average professional working in the Philippines earns only one-eighth of what others like him earn abroad as contract workers. In the case of manual laborers, the income differential is much bigger. Production and transport workers have average contract salaries, exclusive of board-and-lodging, that are over ten times the average local earnings. Service workers, such as chambermaids, waiters and househelps, on the average earn abroad close to 20 times what they can expect to earn at home. In the past few years, however, the nominal take-home-pay of local workers has nearly doubled, primarily due to inflation, and the income differentials between overseas and domestic salaries may have been reduced. A significant proportion of Filipinos who have placements overseas, particularly the construction and service workers, seamen, and even

nurses, come from low-income households. Their remittances form a considerable part, if not the only, source of income for their families. Although Abella determined that the large majority of contract workers from 1975-77 come from Metro-Manila and the nearby provinces, he pointed out that the apparently smaller percentage coming from the other regions is probably misleading, since many people living in the capital city are themselves recent migrants with relatives to support in the provinces.

For its part, the government requires overseas Filipino contract workers to remit to the country at least 30 percent, and seamen, construction workers and others who receive free room and board, 70 percent, of their earnings through the authorized banks of Central Bank. Such workers' remittances amounted to some \$358.7 million in 1979 or about 1.2 percent of GNP that year. This amount covered about one-fifth of the country's \$1541 million trade gap and helped substantially in reducing the balance of payments deficit in 1979. Indeed, overseas employment has become one of the country's leading sources of badly-needed foreign exchange.

The continued outflow of skilled manpower, however, has had serious implications on the domestic labor market. The country has experienced a heavy drain on high level manpower as a result of migration in the 60's. Lately, some industries have been complaining that, due to the loss of skilled workers, productivity has suffered and replacements are difficult to find. On the other hand, though it is accepted that external migration has trade-offs, it may be erroneous to assume that country's development scenario would be much better than what it is today without such outflows. As Pernia

pointed out in an article on brain drain, the problem "stems out of the inability of the (Philippine) economy to absorb the ongoing supply of certain high-level skills,"<sup>24/</sup> Similarly, the Abella study indicated that the estimated loss in productivity due to migration is still marginal and that there is hardly any justification for assuming suitable replacements for contract workers cannot be made, though it may take some time. Furthermore, in response to persistent protests by business firms on the continuing exodus of skilled workers and professionals on whom they have incurred substantial costs to train, the government will no longer allow any skilled worker employed in certain "critical" industries to leave for employment abroad if his employer here does not approve of the departure. If the departing worker is unemployed, he must show proof that he has been out of job for the past six months. These critical industries include petrochemicals, aviation, telecommunications, power, hotel (skilled workers), and agricultural research and technology. Although it is difficult to implement and enforce, the new government policy is designed to check the departure of highly trained and experienced workers that cause serious production problems in certain industries. Some enterprises which have experienced high turn-over of employees have, in fact, been forced to undertake regular training activities at considerable cost to avoid more costly disruptions in production, although this may work to the advantage of the poor, unskilled labor groups.

Another possibly adverse effect of overseas employment related to the country's loss of human capital is the cost of replacing the

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<sup>24/</sup> Ernesto Pernia, "The Question of the Brain Drain from the Philippines," International Migration Review, Spring 1976.

skills needed at home. There are high social costs entailed in the education and training of these workers and their employment abroad may diminish the stock of human resources the Philippines sorely needs, including doctors and nurses. But, on the other hand, it is difficult to determine what part of these costs should be attributed to migration, considering that most of these investments would probably have been made anyway, regardless of whether the recipients migrate or stay. Much of this human capital is enhanced by experience abroad and returned, since the bulk of the present outflow of Filipino workers is absent only for temporary periods and returns to the country after a few years with more skills than when it left. There is no empirical evidence, however, that enables us to estimate the relative magnitude of the economic impact of returning workers.

**ANNEX B**

**POVERTY PROFILE**

**OF**

**WESTERN VISAYAS**

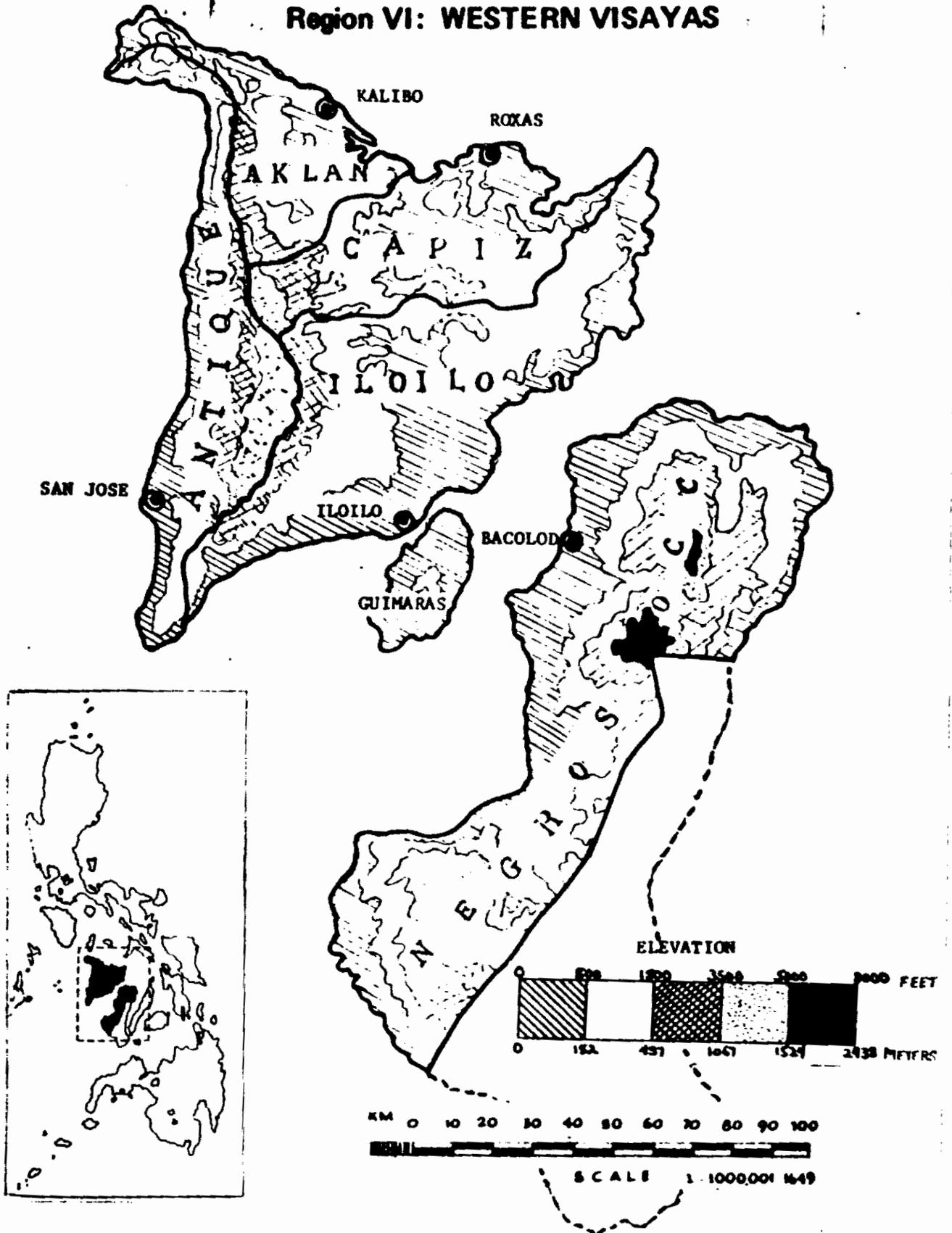
**(REGION VI)**

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**USAID**

**January 20, 1981**

# Region VI: WESTERN VISAYAS



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POVERTY PROFILE  
WESTERN VISAYAS  
(REGION VI) <sup>1/</sup>

I. OVERVIEW

The Western Visayas, comprising the major Islands of Panay, Guimaras, and the western half of Negros, is the fourth most populous region of the country, with 4.15 million or about 10 percent of the national population. In last year's CDSS ranking, it was the sixth most depressed region. In effect Region VI along with Region I, is more prosperous in aggregate terms than the other regions we have identified for USAID concentration. This is largely accounted for by the highly developed sugar industry in Negros Occidental and Iloilo, which provides 60 percent of the nation's sugar production.<sup>2/</sup> A contributing factor is the gains from rice production programs (principally Masagana 99) which have made Iloilo the most productive rice area of the country. Urbanization is also a factor, with 27 percent of the population located in urban areas, primarily in Iloilo City and Bacolod. This region also has the

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<sup>1/</sup> Much of the data for this profile has been drawn from a series of eight working papers on "The Process of Regional Planning" completed December 1976. The research was sponsored by PCARR/SEARCA/UPLB and carried out in close collaboration with the Regional Office of NEDA, Region VI. The study provides a comprehensive, high caliber first approximation of employment and income differentials among five homogeneous agricultural zones (HAZ) in the region (i.e., irrigated, rainfed, rolling hills, uplands and coastal). The level of disaggregation by ecological zones and farm types is almost ideal for addressing the poverty questions of interest to USAID. For this profile we have simply rearranged the data in terms of poverty groups rather than HAZ and summarized the major findings in the study. We are reasonably confident in using these data given the methodology and field survey work from which they derived. The study also has NEDA's full endorsement. Plus the nature and quality of published data at the regional and provincial level is inappropriate and much less reliable for our purposes. Finally, since this study is available and appears reasonably sound it is cost-effective to use it rather than attempt an independent study, especially given our time constraints. Other sources of information include discussions with local officials, researchers, and citizens, field observations as well as several secondary sources and surveys listed in the Bibliography.

<sup>2/</sup> Five-Year Philippine Development Plan, 1978, 1978-1982 - Regional Development Framework and Annexes, Figures 19, p. 53.

highest percent urban of the five selected regions. Notwithstanding, two-thirds of the region's 675,000 families fall below the regional poverty threshold of P 4,965 for 1975. This attests to the more highly skewed income distribution that characterizes Western Visayas in relation to the other selected regions and to the degree of poverty hidden under the regional aggregate statistics. Perhaps one of the more revealing comparisons shows that Region VI has the second highest percent of malnourished children of all regions in the country. Thirty-nine percent of the region's children are malnourished.<sup>3/</sup> While this may reflect the region's ability to collect better data, it also must reflect the high concentration of landless agricultural workers and moderate numbers of fishermen who are known to be most at risk. Table 1 provides a summary provincial profile for the Region which should be kept in mind as we identify who the poor are and analyze the regional dynamics underlying their poverty.

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<sup>3/</sup> Operation Timbang Results as of February 1976.

TABLE 1

REGION VI ECONOMIC PROFILE

Characteristics Province	Area (sq. km.)	Topography (% of land in each slope category)	Climate (rainfall)	Land Use	Environmental Quality	Land distribution & tenure patterns	Population 1975 (000)	Family size	RBD Distribution		RBD Density (Persons per km <sup>2</sup> )	Net Annual Out Migration Rate
									Upland (over 8% slope)	Rural		
Aklan	2,500 (10,511)	A - 43% B - 17% C - 21% D - 10% E - 24%	Mostly Type I 2 dry months	Market Oriented - coastal - riceponds - lowland rainfed - palay - rolling hills - coconuts/ - bananas	Satisfactory vegetative cover & little erosion pro- blem	- skewed - 86% of farms are below 3 has., and cover 53% of area cultivated - tenancy 27%	293 (7.1)	5.45 (+ 4 away)	47	90	167	1.15
ANTIQUE	260 (1,051)	A - 43% B - 17% C - 21% D - 10% E - 24%	Northern Antique Type II 3 dry mos. Southern Antique Type III 5 dry mos.	Subsistence - narrow belt - coastal - coconut - lowland palay - upland rice, - corn, coconut - bananas, root - crops and pas- - nuts	Long dry spells & steep slopes lead to major erosion pro- blem compound- ed by S/B Forest denuded	- not skewed - 94% of farms are below 3 has., and cover 53% of area cultivated - tenancy 25%	307 (7.5)	5.10 (+ 8 away)	50	86	223	1.25
DAVAO	260 (1,051)	A - 11% B - 20% C - 25% D - 30% E - 24%	Type I 1-2 dry months	Cash/subsistence - coastal fish- - pond/coconut - sugarcane - lowland rainfed - palay	Coral/reef/mar- grove being destroyed	- skewed - 81% of farms are below 3 has., and cover 46% of area cultivated - tenancy 75%	334 (11.1)	6.2 (+ 3 away)	92	92	225	1.3
IGLIG	260 (1,051)	A - 14% B - 12% C - 22% D - 20% E - 35%	Northern Type I 2 mos. Southern Type II 5 mos.	Market Oriented: - Sugarcane - lowland paddy - Coastal fish- - pond/coconuts - Upland coconuts	Soil erosion heavy	- skewed - 71% of farms are below 3 has., and cover 41% of area cultivated - tenancy 70%	1,306 (32.1)	5.5 (+ 5 away)	2	2	225	1.3
MIGUANS OCCIDENTAL	2,605 (10,000)	A - 11% B - 14% C - 27% D - 23% E - 25%	Northeast Type I 2 dry mos. South: Type II 3 dry mos.	Market Oriented: - Sugarcane - Coastal fish- - ponds/coconuts - Palay/corn	Forest denuda- tion and soil erosion acute	- most skewed - 70% of farms are under 3 has., and cover 19% of area cultivated - tenancy 54%	1,742 (37.5)	6.35 (+ 5 away)	28	66	225	1.1
REGION VI	2,605 (10,000)	A - 17% B - 16% C - 23% D - 18% E - 26%	Types I, II, III	- Palay - Sugar - Coconuts - Fishponds		- skewed - 77% of farms are under 3 has., and cover 33% of area cultivated - tenancy 48%	4,092 (100.1)	6.17 (+ 5 away)	22	73	205	1.1

1/ Data for this table are pieced together from PCARR/MEDA Study W.P. #3, pp. 26-67. Figures vary slightly from GOP official statistics.  
2/ Slope categorization: A over 30%; B 18-30%; C 8-18%; D 3-8%; E 0-3%.

## II. WHO ARE THE POOR IN THE REGION?

Identifying poverty groups is subjective and often arbitrary. But it is important to attempt at least an approximation, if we are to focus our assistance more directly on the poor. Table 2 provides a breakdown of 24 major farm and occupational groupings of rural households in the Western Visayas. These groups have been ranked first according to household incomes and then the 15 poorest according to numbers of households. Then a composite ranking against both variables has been made excluding groups with less than 10,000 households. From this, we can distinguish the following as the most significant poverty groups in the region:

<u>Rank</u>	<u>Groups</u>	<u>No. of Households</u>
1	Landless Sugar Workers	62,500
2	Diversified Crop, shifting cultivators with 1 hectare or less of land	45,000
3	Upland Palay farmers with 1 hectare or less of land	18,500
4	Rainfed Palay farmers double crop (both tenure groups)	61,000
5	Rainfed Palay farmers single crop (both tenure groups)	48,500
6	Artisanal fishermen	35,000*
7	Upland coconut	<u>15,500</u>
	TOTAL	286,000

These groups represent about 58 percent of all rural households in the region.

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\* Includes 6,000 coastal coconut farm households which derive most of their income from fishing.

TABLE 2

IDENTIFICATION OF MAJOR FARM/OCCUPATION TYPES IN REGION VI  
(1975)

MAJOR FARM/OCCUPATION TYPE	No. of HH <sup>2/</sup>	Farm Business Income (P)	Off-Farm Income (P)	Total Income (1975) (P)	RANK ORDER Nos. of HH Combined
<b>IRRIGATED (0-3% slope)</b>					
Irrigated Palay < 1 ha.	35,500	1,726	1,400	3,126	10
Irrigated Palay > 1 ha	9,000	4,778	1,000	5,778	16
<b>RAINFED (0-8% slope)</b>					
Coastal Coconut	134,000	1,173	2,100	3,273	5/
Rainfed Palay < 1 ha.	6,000	1,337	1,300	2,637	12/
(double crop: Palay-Palay)	24,500				6 )
Rainfed Palay > 1 ha.	36,500	2,851	1,000	3,851	14 )
(double crop: Palay-Palay)					3 )
Rainfed Palay-Corn < 1 ha.	2,500	1,364	1,300	2,664	7
Rainfed Palay-Corn > 1 ha.	5,500	2,696	1,300	3,996	15
Rainfed Palay Single Crop < 1 ha.	18,000	1,082	1,300	2,382	4 )
Rainfed Palay Single Crop > 1 ha.	30,500	1,718	1,600	3,318	13 )
Rainfed Sugarcane < 10 ha.	6,000	13,950	2,000	15,950	18
Rainfed Sugarcane 10-25 ha.	2,000	44,062	3,000	47,062	20
Rainfed Sugarcane > 25 ha.	2,500	301,874	1,600	303,474	21
<b>UPLAND (above 8% slope)</b>					
Upland Palay < 1 ha. (plowed)	97,500	862	850	1,712	1
Upland Palay > 1 ha.	18,500	1,704	1,200	2,904	9
Upland Coconuts (=3 ha)	6,500	2,498	400	2,898	8
Upland Sugarcane 1-10 ha.	15,500	5,500	2,200	7,700	17
Upland Sugarcane > 10 ha.	2,500	32,740	1,150	33,890	19
Diversified Crops, shifting < 1 ha.	1,500	1,157	1,300	2,457	5
Diversified Crops, shifting > 1 ha.	45,000	2,067	1,100	3,167	11

MAJOR FARM/OCCUPATION TYPE	NO. OF HOUSEHOLDS	FARM INCOME	OFF-FARM INCOME	TOTAL INCOME (1975)	RANK ORDER	
					INCOME	NO. OF HOUSEHOLDS COMBINED
<b>FISHING</b>						
Artisanal fishermen	38,000	-	-	NA	5/	6
Fishpond laborers	29,500	6/	-	NA	-	-
Fishpond operators (caretakers)	6,000	6/	2,526 7/	5,958 7/	-	-
	2,500	3,432 7/				
<b>LANDLESS AGRICULTURAL WORKERS</b>						
In lowland rice	92,500	8/	1,699 9/	2,265 9/	3	10
In sugar	6,000	8/	1,500 10/	1,875 12/	2	1
	62,500					
TOTAL	373,500	(76 percent of total rural households in the region)				

1/ This typology should be viewed as indicative only. The crop year in which survey was taken was characterized by relatively high sugar prices and early stages of the introduction of high yielding rice varieties and Masagana 99 program. Since then sugar farms and single crop rainfed palay farms have probably contracted, while double crop rainfed palay and upland palay farms have probably increased.

2/ Rounded to nearest 500 drawing from Table 5.1, PCARR/NEDA VP No. 4, P. 56.

3/ Ibid. FBI is the return to farmers' own labor and land, calculated by deducting from gross farm production variable costs, value added, landlord share, and, in the case of sugarcane farms, fixed cost and overhead.

4/ Ibid. Pp. 29-41.

5/ Coastal coconut households are being combined with artisanal fishermen, since 60 percent of the coastal farmers' total income is derived off-farm, primarily from fishing. In the absence of income data for fishermen, the total income of coastal coconut farmers is used here as an indicator of likely maximum HH income for artisanal fisher-men. As such, fishermen may be ranked higher on the income scale than justified in reality.

6/ W.P. #4, P. 50. Figures of fishermen have been divided by 1.8 average workers per HH to arrive at HH numbers estimate.

7/ Elizabeth S. Nicolas and Aida P. Librero, "Some Insights into the Socio-Economic Condition of Fish Farm Caretakers in the Philippines." While figures are nationwide averages, W. Visayas falls within general norm in regional comparison contained in same article.

8/ Estimate derived from PCARR/NEDA W.P. No. 4, P. 49. Because of reliance on speculative estimating assumptions described later in this paper this may understate the number of households in this group.

9/ Clarissa Custodio, Socio-Economic Profile of Landless Ag. Workers, Table 12, P. 31, LRW Proceedings.

10/ Estimated from data in Ed Tejada "Socio-Economic Study of Landless Rural Workers in Sugar Plantations in Negros Occidental." P. 88 in Proceedings from Workshop on Landless Rural Workers, Los Banos, Dec. 8-9, 1978. (Calculation: average 9.07 months of employment at 5.8 days per week times 4 weeks/month at 7 pesos/day.) Since 80 percent of sugar workers are on Pakiao basis which in 1975 seems to have effectively resulted in less than 7 pesos minimum daily wage, this estimate may be somewhat overstated.

11/ Estimate derived from difference between FBI and Total Income.

12/ This is consistent with other estimates for landless workers nationwide as a whole. World Bank estimates are P 2,100-3,000 for 1975. IBRD Poverty Study, Dec. 80, Appendix 4C, P. 15.

Table 3 shows how they are distributed by province. If we look at which group registers the most households within each province and across all provinces, we note some interesting points of convergence:

- Landless sugar workers are predominant in Negros Occidental;
- Single crop rainfed palay farmers are most important in Iloilo;
- Double crop rainfed palay farmers are most concentrated in Capiz;
- Artisanal fishermen are most significant in Antique.

If we rank the provinces in terms of the incidence of poorer households found in each, Antique emerges as the poorest with 84 percent of all rural households in the province composed of the poor groups we have identified. Capiz and Aklan follow with 65 percent and 62 percent, respectively, of provincial households made up by these groups. On the other hand, measured against absolute numbers of poor households Iloilo ranks poorest with 35 percent of all the households found in our poor groups, followed closely by Negros Occidental which has 31 percent of the poorer households. Thus provincial targeting is not appropriate. Rather, it is the poor groups keeping in mind provincial concentration that is the relevant focus for assistance strategies.

Let us look briefly at these groups to see how they differ.

#### Landless Sugar Workers

This group is invariably identified among the poorest in the entire country. Nearly 50 percent of all sugar workers in the country are found in Negros Occidental. <sup>4/</sup>

There are three categories of sugar workers:

- Dumaans, who live and work regularly throughout most of the year as permanent employees on sugar estates and make up nearly three-fourths of this group.

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<sup>4/</sup> IBRD, Poverty Study Appendix 4-C, P. 156. Much of the following discussion is drawn directly from this appendix.

TABLE 3

PROVINCIAL DISTRIBUTION OF  
POORER HOUSEHOLDS <sup>1/</sup>

Province Group	Aklan	Antique	Capiz	Iloilo	Negros Occidental	Region VI
Landless Sugar Workers	-	-	3,000 <sup>2/</sup> (5%)	12,500 <sup>2/</sup> (20%)	47,000 <sup>2/</sup> (75%)	62,500
Diversified, Shifting Cultiva- tors ≤ 1 ha.	1,200	4,300	3,400	8,100	28,000	45,000
Upland Palay Farmers ≤ 1 ha.	3,000	4,500	3,600	5,200	2,200	18,500
Rainfed Palay Farmers, single crop	-	11,500 <sup>3/</sup>	-	34,000 <sup>3/</sup>	3,000	48,500
Rainfed Palay Farmers, double crop	13,500	-	25,000 <sup>3/</sup>	18,500 <sup>3/</sup>	4,000 <sup>3/</sup>	61,000
Artisanal Fishermen	4,000 <sup>4/</sup>	15,000 <sup>4/</sup>	3,000 <sup>4/</sup>	7,000 <sup>4/</sup>	6,500 <sup>4/</sup>	35,500
Upland coconut farmers	5,000	1,000	2,000	3,000	4,500	15,500
Total Poorer HHS	26,700	36,300	40,000	88,300	95,000	286,500
Total Rural Households <sup>5/</sup>	43,000	43,000	61,000	151,000	191,000	493,000
Incidence of Poorer HHS within Province	62	84	65	58	50	58
Percent of Total Poorer HH within Region	9	13	14	31	33	100

1/ PCARR/UPLB Study, W.P. #4, Table 2.30, P. 43, except when otherwise indicated.

2/ Educated guesses on percentage distribution subject to confirmation/correction.

3/ Provincial estimates are derived from regional totals and provincial aggregates for all rainfed palay groups keeping in mind that Antique and Iloilo are only provinces with much single cropping.

4/ Source: BFAR. No. of fishermen has been divided by 1.8 average fishermen per HH to estimate number of HH. Coastal coconut HHs have been added in.

5/ 1975 NCSO Provincial Population data has been divided by 6.17 family size to obtain approximate household nos. Figures do not total owing to rounding error.

- Pangayaws, who live in nearby villages and work seasonally as casual laborers on predominantly smaller farms. They represent the other fourth of the total estimated number of sugar worker households.

- Sacadas, who are the migrant seasonal workers employed by large estates. These workers are excluded from the estimated number of households since they are counted as part of the upland or fishing households of which they are members. In any event, sacadas probably represent no more than 10-15 percent of sugar laborers at peak demand.

The dumaans have a stable dependency relationship with the planters. They trade off income for job security and in-kind benefits in the way of housing, rudimentary education and health care. Patron-client ties and plantation demand for their labor services along with their lack of education and skills reduce their opportunities for employment outside sugar. The household has little access to land to grow food and must therefore rely on cash purchases of rice. They supplement their sugar wages mainly with backyard livestock. During the off-milling season between late June and August their income is interrupted with little alternative work available. The high vulnerability of this group is reflected in their poor socio-economic status: low income, limited education, poor nutrition, illness, indebtedness, etc. <sup>5/</sup>

The dumaans are in competition with the sacadas who are considered harder workers by many sugar planters and are willing to work at lower wages. Fortunately for the dumaans, labor demand far outstrips the supply of sacadas. But on the margin, some dumaans have been displaced, migrating to the uplands or to Bacolod. The depressed sugar prices of the past five years have significantly cut demand for labor affecting dumaans and sacadas alike.

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<sup>5/</sup> Tejada, op. cit and Rural Workers Office "Report of the Landless Rural Workers in an Hacienda," (Binalbagan, Negros Occidental), May 1980, attest to this.

The pangayaws have similar income levels but a less stable income flow and fewer in-kind benefits than the dumaans. On the other hand, they are able to diversify their sources of income beyond sugar (e.g., other crop farming, fishing, construction work). This provides for some independence to compensate for less security. Since pangayaws tend to work the smaller farms, there is little competition between them and the other two categories of workers.

#### Diversified Crop, Shifting Cultivators

This type is the most common among the upland farmers found in the region. These farmers on one hectare or less cultivate upland rice, corn, rootcrops, vegetables, coconuts, bananas, peanuts, ginger, abaca, coffee. The cropping patterns as well as crop yields are determined by climate type, seasonal weather conditions, land fertility, labor and home-grown seed availability. Household labor and seed saved from the previous crop controls how much land is planted in a given season, while the soil quality heavily determines yields. Rice is grown following slash-and-burn practices. Land use is intensive with double and triple cropping common, especially in the higher rainfall areas. Much of the production is for home consumption though any food surplus and the small quantities of cash crops are sold for cash or bartered. Food security in the form of rice is the major determinant of the household's agricultural strategy. A cow and a pig are typically found on these farms. Off-farm income represents as much as 50 percent of total household income. Household members, often the unmarried son, will seasonally migrate as sacadas to Negros Occidental. The uplands of Antique and Aklan have been the major suppliers of sacadas. These farmers, often referred to as kaingineros, are not ethnic minorities but settlers who have moved up to the mountainside over several generations. While diversity is the rule, they share many of the characteristics and constraints of the marginal kaingineros identified in last year's CDSS Annex B, Profile of Upland Farmers. Insecure land tenure, depleted and eroded soils, and limited markets are major constraints for

this group. Population pressures and intensive cultivation of steeper slopes (over 18 percent) and fragile forest lands degrades the upland environment. This is especially evident in Antique, Iloilo and Negros Occidental. There are another 8,000 households who cultivate up to two hectares who follow similar practices, although with somewhat better returns. Living in and near the forest lands, these farmers are in continual competition with other claimants on the resources -- loggers, ranchers, miners, and of course each other as they all contribute to the tragedy of the commons.

#### Upland Palay Farmers

These farmers are settled and plant palay annually on the same plot of one hectare or less. These households are found generally on the slopes above 8 percent of all five provinces. While palay is the predominant crop, some small quantities of other crops may also be interspersed (e.g., coconuts, bananas, corn, sugarcane, rootcrops). This is particularly true for the additional 6,500 households who cultivate one to three hectares of land. Yields vary with soil climate conditions but are generally low. Input use is limited. Production is mainly consumed by the households. Food security is an important concern. When sugar prices are favorable, these farmers expand into this crop. The plow-method practices and the repeated sowing of annual crops worsen leaching and soil erosion. They also deplete soil nutrients, reducing soil fertility. Little fertilizer is used to replenish the soil. Declining productivity forces these farmers to look off the farm for additional income. Supplementary income is limited mainly to that from household members hiring out as laborers to other farmers, especially in lowland rice and sugar areas.

Rainfed Palay, Single Crop Farmers

This type of household is found mainly in Southern Iloilo and Central Southern Antique where rainfall is the limiting factor. Tenancy is around 50 percent on farms above one hectare and 62 percent on farms one hectare and under. Sharing arrangements vary. One practice is for tenant and landlord to share 50-50 the costs and the income. The predominant cropping pattern is one crop of rice during the wet season followed by upland crops, most commonly mung and cowpea, or by fallow. Some corn, sugar, or coconuts may also be grown. Rainfall patterns influence farmers' cultural practices, along with considerations of production costs, yield, risk, and weed problems. If rainfall is heavy in the middle of May, farmers are likely to plant wet seeded rice (WSR), otherwise they grow transplanted rice (TPR). On WSR they use mainly high yielding varieties (HYV) with higher fertilization rates (e.g., 38 kilograms of nitrogen per hectare on average). On TPR they retain the traditional varieties and apply low rates of fertilizer. TPR gives slightly higher yields on average--2.5 tons per hectare compared to 2.4 tons per hectare for WSR. The use of HYV is the significant variable; however, yields for the commonly planted traditional varieties under TPR are 1.8 tons per hectare, though HYV yields 3.5 tons per hectare. HYV yields under WSR approach 2.8 tons per hectare. Farmers believe that WSR should go with improved varieties and higher levels of fertilizers, but that traditional varieties when transplanted require less fertilizer. Yield data suggest farmers would do better to transplant HYV. Use of HYV in TPR, however, significantly increases weeding problems compared to the use of local varieties. Weeds can reduce yields significantly. For upland crops, use of traditional varieties is the common practice. Labor requirements vary considerably. WSR needs a total of about 71 man-days per hectare with the heaviest demand for harvesting and processing

(e.g., 48 percent) followed by hand weeding and land preparation. TPR requires 94 man-days per hectare with planting the highest user. Total labor input for mung is 49 man-days with harvesting and processing accounting for 80 percent of the labor utilized. The farmer operator supplies about 25 percent of the labor use, engaging mainly in land preparation during May-June. He also handles the fertilizing, spraying, and the supervision of his farm. Plus he works on others' farms during harvest when he can get one-sixth of the crop. Family members contribute 14 percent of the total labor needed, especially in processing the crop after harvest and in other minor operations. Hired workers are the major source of labor, supplying 58 percent of the total. They participate in transplanting, weeding, and harvesting. They are drawn from neighboring farmers and landless rice workers and are used throughout the year, particularly in the months of July, September, October, December and January.<sup>6/</sup>

Proximity and easy access to market encourages production and improves profitability. Farmers market their HYV rice after harvest and retain the local varieties for home consumption. Use of credit remains limited, however. Carabao are generally used in cultivation. Some backyard livestock is kept to provide cash from June to August for the purchase of needed inputs (seeds and fertilizer). Off-farm employment is high. It supplements low farm income especially on small tenanted farms, providing some 40 percent of cash inflow.

#### Rainfed Palay, Double Crop Farmers

These farmers are located throughout the rest of Panay where rainfall is most abundant and the dry season is much shorter. They follow cultural practices

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<sup>6/</sup> This household profile has been expanded using data from N. M. Roxas and M.P. Genesis, "Socio-Economic and Agronomic Characteristics of Existing Cropping Systems of a Rainfed Lowland Rice Area in Iloilo," (1977).

for rice similar to the single crop farmer. The distinguishing feature is that their cropping pattern is rice-rice. Many of these farmers have been able to shift from rice-upland or rice-fallow crop patterns by adopting wet seeding and HYV with shorter maturity. The larger farmers (above one hectare) obtain somewhat higher incomes than the smaller ones, where tenancy is highest (69 percent). Given tenancy and small farm size, as much as 50 percent of the latter's income must come from off-farm sources to support the family. Even the farmers with larger plots often do not own the land and look to off-farm sources of income too.

### Artisanal Fishermen <sup>7/</sup>

Fishermen are found in all five provinces, but Antique shows the greatest number of households in absolute and relative terms. The artisanal fishermen face the familiar problems of competition with trawlers and high technology for an "open access" resource, coupled with low dockside prices and limited storage and processing facilities. The rising cost of fuel affects those with motorized bancas and the weather makes their income seasonal. Conditions vary. For example, Antique's dryer climate is more favorable to the fishermen than the 10 months wet season in Capiz. Fishing households diversify their activities by collecting shells, weaving, broom making, and farm work when available. It is significant that fishing families are larger than any other poverty group. Clearly, the population pressures on the resources are acute.

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<sup>7/</sup> The PCARR/NEDA Study unfortunately was unable to survey fishermen as extensively as farmers. It is reasonable to assume that fishermen in Western Visayas conform to the general profile emerging from a variety of studies countrywide conducted by ICLARM and BFAR. Much of this work is summarized in the Fishermen Profile in Annex B of the FY 82 CDSS. The comments in this section are drawn from the limited data in the PCARR/NEDA Study as well as from discussions with local officials.

### Upland Coconut Farmers

While these households are found throughout the region, they are only a major group in Aklan--although there are almost as many households scattered around Negros Occidental. Typical farm size is between 0.8 and 3 hectares, and often tenanted. Some farmers also have small plots of rice, corn, and rootcrops for home consumption. Where an urban market is accessible vegetables may be grown. Intercropping is not widespread. Agricultural employment is limited to three short harvest periods. Productivity is low (average of 32 nuts per tree) owing to limited fertilizer use and aging trees. Depressed international prices, poor management practices, limited credit are major factors accounting for low incomes of these households. Off-farm employment is sought to supplement income.

### Landless Rice Workers

This group has been tentatively excluded from our identification of the most significant poverty groups because it comprises fewer than 10,000 households. Since this estimate is derived from the speculative assumptions outlined below, the number of households may be understated, in which case they would cross over the artificially set line of 10,000 households we have drawn in our ranking. For this reason, a brief description of their survival patterns is included here.

The PCARR/NEDA study estimates there are some 30,000 persons that can be considered landless rice workers. In the absence of an explicit definition of what persons are included, it is assumed that the figure refers to farmers' family members hiring out as well as to landless households and their family members. Since landless households have little other employment alternative or competing demands from their own farm operation as do farmer household members, a realistic assumption is that at least two-thirds of the hired labor demand in rice production is supplied by landless households. Thus if we take 66 percent of the 30,000

persons engaged as rice laborers, we get an estimate of 19,800 landless rice workers. Accepting that an average 2.2 landless family members are actively engaged in rice production according to Hyami's Laguna Survey,<sup>8/</sup> we can estimate the number of landless rice workers' households to be at least 9,000 (19,800 ÷ 2.2). For lack of a better estimate we have adopted this figure as a rough indicator of the number of households. Clearly, more research will be required in this area.

Landless rice worker households<sup>9/</sup> are heavily concentrated in Iloilo province where demand for hired labor in rice is highest. Four-fifths of the household's time is devoted to rice operations on others' farms and three-fourths of total household income is derived from this source alone. As much as 85 percent of this income is in the form one one-sixth share of the harvest, which is received in return for weeding as well as harvesting under the Sagod system. Under this system landless rice workers (and other small farmers) contract to do the weeding for free in exchange for exclusive rights to harvest the weeded portion. The Sagod system provides more stable employment and an assured share of the harvest for workers within the village to the exclusion of outside transient competitors such as upland farmers or fishermen who migrate seasonally. The major drawback is that workers must work harder without receiving any income at weeding time. While the introduction of high yielding varieties and direct seeding has substantially

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<sup>8/</sup> Y. Hayami, Anatomy of a Peasant Economy, Table 3.2, P. 25.

<sup>9/</sup> The data on this group is drawn mainly from survey results of Abangay Barangay in Iloilo as reported in A. Tidalgo, "Socio-Economic Survey for Landless Rural Workers in Three Barangays: A Preliminary Report on a Rice Growing Village," in LRW Proceedings. Recognizing the pitfalls of generalizing from one barangay to the province, the above observations should be read as indicative or illustrative. Abangay is located in the center of Iloilo's rice bowl and is probably fairly representative, though.

increased the demand for hired labor especially for harvesting, competition for these jobs is heavy due to in-migration and increasing landlessness resulting from population growth, fixing of the land resource under the land reform, and displacement of fishermen and upland farmer groups as their resource base erodes. The income derived from rice is low and seasonal and must be supplemented from other activities. The predominant secondary source of income comes from working on nearby sugar farms. Other sources include carpentry, handicrafts, tricycle driving and backyard livestock like poultry, swine and ducks. Household members also sell their labor to farmers. Indebtedness is an inevitable survival tactic especially in the period from August through December where little income enters the household. This is the time when a pig may be sold. Another coping mechanism is to diversify the number of plots for harvesting. Organizing laborers under the "Cabesilla" system is a way to obtain assured work and a greater quantity of rice. Thus, seasonal unemployment, low incomes, and increasing competition at harvest time are major constraints facing this group.

#### Summary of Major Characteristics of Poorer Households

Table 4 summarizes some of the major characteristics of the farmer groups we have discussed above.

### III. REGIONAL DETERMINANTS OF POVERTY

#### a) Household Level.

Poverty levels differ from group to group and within household groups depending on climate, topography, farm size, tenure, irrigation, market access, and the average months gainfully employed by household members. Household survival strategies depending on resource availabilities respond to these local conditions and to calculations of food security requirements, risk and ties to community and patrons. In general, the outcomes are fairly predictable. Household income declines as one moves from: a) the wetter climate Type I to the dryer climate Type III; b) the lowlands to the uplands, reflecting more marginal soil quality

TABLE 4  
SUMMARY OF MAJOR CHARACTERISTICS  
OF POORER HOUSEHOLDS

Characteristics	Tenant Rate (%)	A				C				Productivity	Primary Geographic Concentration	Major Constraints
		Average Land Holdings	% w/ Cariboo	% w/o Cariboo	% using Fertilizer	% borrowing from priv. sources	% borrowing from banks	% w/o access	% w/2-dary occupation			
Landless sugar workers	-	-	-	-	-	high	low	moderate	low	low	low	<ul style="list-style-type: none"> <li>- Low wage</li> <li>- Seasonal unemployment</li> <li>- Dependency/Indebtedness</li> <li>- Little home grown food</li> <li>- Exploited/eroded soils</li> <li>- Little market access</li> </ul>
Diversified, shifting cultivators ≤ 2a.	48	≤ 1 ha. forest/steep slope land	23	23	3	8	low	92	77	low	<ul style="list-style-type: none"> <li>- Negro Occidental (though evenly distributed in Panay)</li> <li>- Seasonal income</li> <li>- Underemployment</li> <li>- Indebtedness</li> <li>- Marginal land</li> <li>- Low yields</li> <li>- Insecure tenure</li> <li>- Limited market access</li> </ul>	
Landless rice workers	-	-	32/33	-	-	32/33	11/21	36/21	moderate	low	<ul style="list-style-type: none"> <li>- Seasonal income</li> <li>- Underemployment</li> <li>- Indebtedness</li> <li>- Marginal land</li> <li>- Low yields</li> <li>- Insecure tenure</li> <li>- Limited market access</li> </ul>	
Upland Palay Farmers ≤ 1 ha.	73	≤ 1 ha. marginal land	50	32	9	14	-	86	68	low	<ul style="list-style-type: none"> <li>- Southern Iloilo and Central-Southern Antique.</li> <li>- Rising cost of inputs</li> <li>- Limited credit access</li> <li>- Lack of water</li> <li>- High tenancy</li> </ul>	
Rainfed Palay farmers, single crop ≤ 1 ha.	62	0.5 ha. 1-3 ha.	67	17	73	22	16	63	90	low	<ul style="list-style-type: none"> <li>- Northern Iloilo and Central-Southern Antique.</li> <li>- Rising cost of inputs</li> <li>- Limited credit access</li> <li>- Lack of water</li> <li>- High tenancy</li> </ul>	
Rainfed Palay Farmers, Double Crop ≤ 1 ha.	69	≤ 1 ha. ave. 2.1 ha.	77	5	41	26	23	53	91	moderate	<ul style="list-style-type: none"> <li>- Northern and Central Panay</li> <li>- Rising cost of inputs</li> <li>- Inadequate credit</li> </ul>	
Artisanal Fishermen	-	1/6 - 1/3 hold some rice or coconut land	87	17	82	23	44	34	72	moderate	<ul style="list-style-type: none"> <li>- Antique (though evenly distributed)</li> <li>- Seasonal unemployment</li> <li>- Low prices</li> <li>- Declining catch</li> <li>- Limited storage/processing</li> <li>- Limited market</li> </ul>	
Upland Coconut Farmers	-	0.8 - 3 ha.	-	-	-	8	-	92	75	low	<ul style="list-style-type: none"> <li>- Atim, Negros Occidental</li> <li>- Underemployment</li> <li>- Limited fertilizer use</li> <li>- Age of trees</li> <li>- Depressed international price</li> <li>- Poor management practices</li> <li>- Limited credit</li> </ul>	

1/ Drawn from Table 8.3, W.P. #3, p.79, unless otherwise indicated.  
2/ Tidalgo, op. cit. based on survey from only one community. Should be read as indicative.

TABLE 5

MATRIX OF REGION'S CLIMATE, TOPOGRAPHY, CROPPING, PATTERNS

Climate Type	Location	T O P O G R A P H Y			
		0 - 3% Slope	Rainfed	3-8% slope Rolling Areas	Above 8% Slope Upland
I. Short dry season: 1 - 3 months only	All of Capiz, most of Aklan, Northern-Central Iloilo, Eastern & North Eastern portion of Negros Occ.	Irrigated palay-palay	coconuts	palay-palay sugarcane (limited only)	Upland palay coconuts sugarcane (not in Aklan)  Kaingin palay rootcrops coconuts corn sugarcane abaca/coconuts
II. Longer dry season at most 4 1/2 dry months	Southern Iloilo, Guimaras, Northern Antique, North-Western Aklan, rest of Negros Occidental	palay- palay sugar- cane (Negros only)	coconuts	palay-(pa- lay of palay-corn sugarcane (Negros only)	Upland palay or corn coconuts sugarcane (not in Antique & Aklan)  Kaingin palay rootcrops corn coconuts coffee sugarcane
III. Rain not sufficiently distributed at most 6 dry months	Southern Iloilo, Central-Southern Antique	palay- (palay)- mungo	coconuts	palay (some times follow- ed by corn, beans, etc.	Upland palay or corn sugarcane (muscovado peanuts (Antiques)  Kaingin palay corn rootcrops peanuts (Antique)

and increasing market isolation; c) larger to smaller size farms where tenancy is highest; and d) the irrigated to non-irrigated areas.

The reliance on secondary occupation to supplement household income and make up for structural and seasonal unemployment is clearly linked to farm size and cropping pattern or primary occupation.

Table 5 provides at a glance a matrix of the region's climate types, location, topography, and cropping patterns. Table 6 compares aggregate household types by homogenous agricultural zones against some of the variables identified above and a few others. Our interest here is in providing a ready reference for identifying intervention priorities and points of entry later on.

In addition to the diversity and location-specific nature of poverty in the region, the various groups of poorer households are interdependent in many respects. The diversified slash-and-burn cultivators contribute to the degradation of the uplands. The resulting erosion, flooding and siltation undermine production in the lowlands and the fish resource. Not only do the landless rice workers and fishermen suffer the consequences in lower shares of rice and fish harvest, but so do the uplanders as they migrate to seasonal opportunities in the lowlands. The rainfed double crop farmers' demand for labor directly affects the landless, not to mention the high demand generated by irrigated farmers.

These dynamics are only hinted at in this summary analysis and in the PCARR/NEDA working papers. Further research will be required to answer such questions as: What are the various household groups specifically doing to advance their socio-economic status? Which groups are declining, expanding, remaining stable? Which groups are being displaced and by what forces? What are their resource potentials, especially in terms of land and water? To what extent do they control their productive assets? Where are they located specifically? What level of exchanged goods and labor takes place between the groups throughout the region?

TABLE 6

COMPARISON OF HOMOGENEOUS AGRICULTURAL ZONES (HAZ)

HAZ Variables	A Irrigation	B Rainfed	C Rolling Hills	D Upland	E Coastal	
HH Type	Irrigated paly farmers/Landless workers	Rainfed Palay/ Corn farmers/Landless workers	Sugarcane farmers/Landless workers	Upland Palay/Diversified Coconut Farmers	Fishermen	
No. of HHs <sup>1/</sup>	35,000 10,000	117,000 20,000	14,500 62,500	93,500	35,500	
GINI <sup>2/</sup>	.68	.69	.65	.56	.67	
Ave. HH Income <sup>3/</sup>	2904	2755	3162	2089	2603	
I S N O C U D O R H C E E	% Farm	48	34	40	26	2
	% Off-farm Ag.	33	33	36	42	24*
	% Non Farm	16	20	24	29	62*
<sup>3/</sup>	% from Remittance	3	13	-	3	12
Ave. Mos. of Gainful Employment <sup>4/</sup>	5.5 6.6	6.7 6.6	7.2 7.4	6.2	8.3	
Slack Period	-	Dec.-May	June-Aug.	Nov.-Apr.	June-Sept.	
Total labor demand (mandays/ha.)	120-150	100-200	120-150	30-80	-	
Hired labor req. (P/ha.)	800	420	1000	100	-	
Underemployment rate <sup>6/</sup>	50	59	64	62	50	
Mobility: <sup>5/</sup> % working outside barrio part & full time	24.5	26.5	10	31	33	
Ave. HH size <sup>7/</sup>	5.9	5.5	5.5	5.9	6.3	
Ave. labor force per HH <sup>7/</sup>	1.65	1.80	1.55	1.85	1.80	

Worse off per p.77 W.P. #5 and own analysis.

1/ Aggregated from Table 1

2/ W.P. #5, p.58. The Gini Ratio is a measure of income equality derived from the relationship between the cumulative percentage of families earning a certain (cumulative) percentage of the income. A ratio of .50 already indicates high income inequality. Here the Gini Ratios have been calculated by HAZ

3/ Ibid. Table 6.1 and 6.1-A, Pp. 47 and 48.

\* Estimates

4/ Ibid. Table 8.3

5/ Ibid. Table 5.10

6/ Ibid. Table 8.1/8.2

7/ Ibid. Table 6.1, Fishermen estimated is reduced from 1.9 to 1.8 in view of unrepresentative sample and BPAR/ICLARM data supporting latter figure

Let us now turn to a brief review of the broader context of the regional trends and forces underlying poverty.

b) Regional Level

The first observation that strikes one in reviewing the regional data is the fact that Region VI operates as a reasonably integrated economic system with a discernible pattern of labor, product, and service flows responding to seasonal supply and demand forces and price levels. This is not to imply that markets are perfect, but only to highlight that the administrative boundary coincides with the delimitation of the economic system.

Predictably, population pressures on available resources are a major factor in explaining the region's poverty. The farm population grew some 22 percent between 1960 and 1975 with annual growth rates averaging 1.5 percent.<sup>10/</sup> The effects of the population expansion are to be seen in the opening of marginal lands on the steeper slopes of Central Panay and Southern Negros. During the same period land under cultivation expanded by 13 percent, pressing beyond the cultivable land frontier into areas that should not be cultivated at all, given the destruction of the upland watershed this occasions. During the same period, increasing land fragmentation occurred, handicapping farmers' returns and profitability and forcing them to turn to off-farm sources of income. The number of farmers with one hectare increased four- to fivefold in the 15-year period.<sup>11/</sup> The fact that the cultivable land frontier has been reached, if not surpassed, and given continuing population growth, leads to the conclusion that further labor absorption must come from increased intensification of land use and/or expansion of non-farm employment. Failing this, we can anticipate additional pressure to expand cultivation into marginal, unsustainable areas.

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<sup>10/</sup> PCARR/NEDA, W.P. No. 3, P. 82.

<sup>11/</sup> Ibid.

Sugar plays a unique role in the Western Visayas economy, not only as the major contributor to the Regional Gross Domestic Product, but in the lives of the poor, beyond just the sugar workers. Regional land use, cropping patterns and employment are highly responsive to sugar prices. During the long period of favorable prices in the 1960's sugar mill capacity greatly expanded and sugarcane replaced upland rice and corn in many marginal areas. From 1960 to 1975 some 90,000 hectares were converted to sugarcane. Sugarcane in these marginal areas is characterized by relatively lower productivity (i.e., output per hectare) and higher costs, and causes accelerated soil depletion. When prices are high even the landless workers' backyards are planted to sugar. In Ilegos, especially, sugarcane expansion is at the expense of household food production. The demand for sacadas fluctuates with sugar prices. For example, Antique and Aklan supplied Negros Occidental with five times as many sacadas in the boom years than during the late 70's slump in sugar prices. Sugar processing affects even fishermen as molasses from the mills pollutes river fisheries and spawning grounds for ocean fish. While the returns to sugar have been high, the plantation system has channeled income disproportionately to the few. To compound the problem most of this wealth has not been reinvested in the region but placed in Manila banks or invested in Manila-based capital-intensive industry. In sum, to date sugar has tied up substantial land assets (35 percent of the region's land resource mainly in Negros Occidental) in large estates to the detriment of the landless sugar workers and the seasonal migrants who receive a small share of the returns while suffering prolonged unemployment during the periods of oversupply and periodically depressed prices. Yet at the same time it has provided employment to a large number of poor who have few alternative employment avenues.

The prevailing high underemployment <sup>12/</sup> is a serious problem underlying poverty. In the region, the underemployment encompasses both seasonal unemployment and underutilization of labor during working months. Two-thirds of the region's labor force can be considered underemployed. The underemployed are found mainly in the farm labor force. One-third work only a few weeks per year at the peak periods (viewed on a regional scale):

- October - Sugarcane and first rice harvest
- January to February - Second rice harvest and sugarcane harvesting/planting
- June - Rice planting and land preparation

The remainder work between five to eight months per year depending on occupation (see Table 6). Fishermen and non-farm workers show the longest period of employment (i.e., eight months). However, actual hours worked during periods of employment vary substantially by occupation.

The majority of secondary activities of the poorer households are undertaken by women which offer some paid seasonal employment in addition to their unpaid on-farm work (which averages three to four months) and household activities. Some of the principal off-farm activities are: fish vending, catching bangus fry, gathering shells, making nipa strips (for roofing), mat weaving, gathering of fire wood, making of charcoal, catching birds, baking and selling farm or excess garden products, fish drying, basket making, bag crocheting, making of handicraft materials, vending textiles, duck raising, selling tuba, working in salt beds. The degree of underemployment among women is unknown as it depends on overall time allocation between household, on-farm and off-farm work.

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<sup>12/</sup> In the PCARR/NEDA Study, underemployment is defined at the macro level as the difference between supply and demand of labor and at the micro level as anyone who is gainfully employed for less than 12 months per year and would like additional work, whether actively looking or not.

Underemployment follows a familiar pattern. Population pressures and an eroding resource base are pushing people into the job market at a faster rate than can be absorbed by agriculture. Meanwhile, local industry has been slow to develop and create new jobs. Regional industrial development has been constrained by a number of factors: inadequate or erratic raw material supply, high cost of raw materials imported from Manila, limited private investment, expensive power, undeveloped markets, inefficient food processing technology and limited equipment, local monopolies, seasonal labor shortages, and poor roads.<sup>13/</sup> Thus a labor surplus situation prevails, maintaining wages low and competition high for available work.

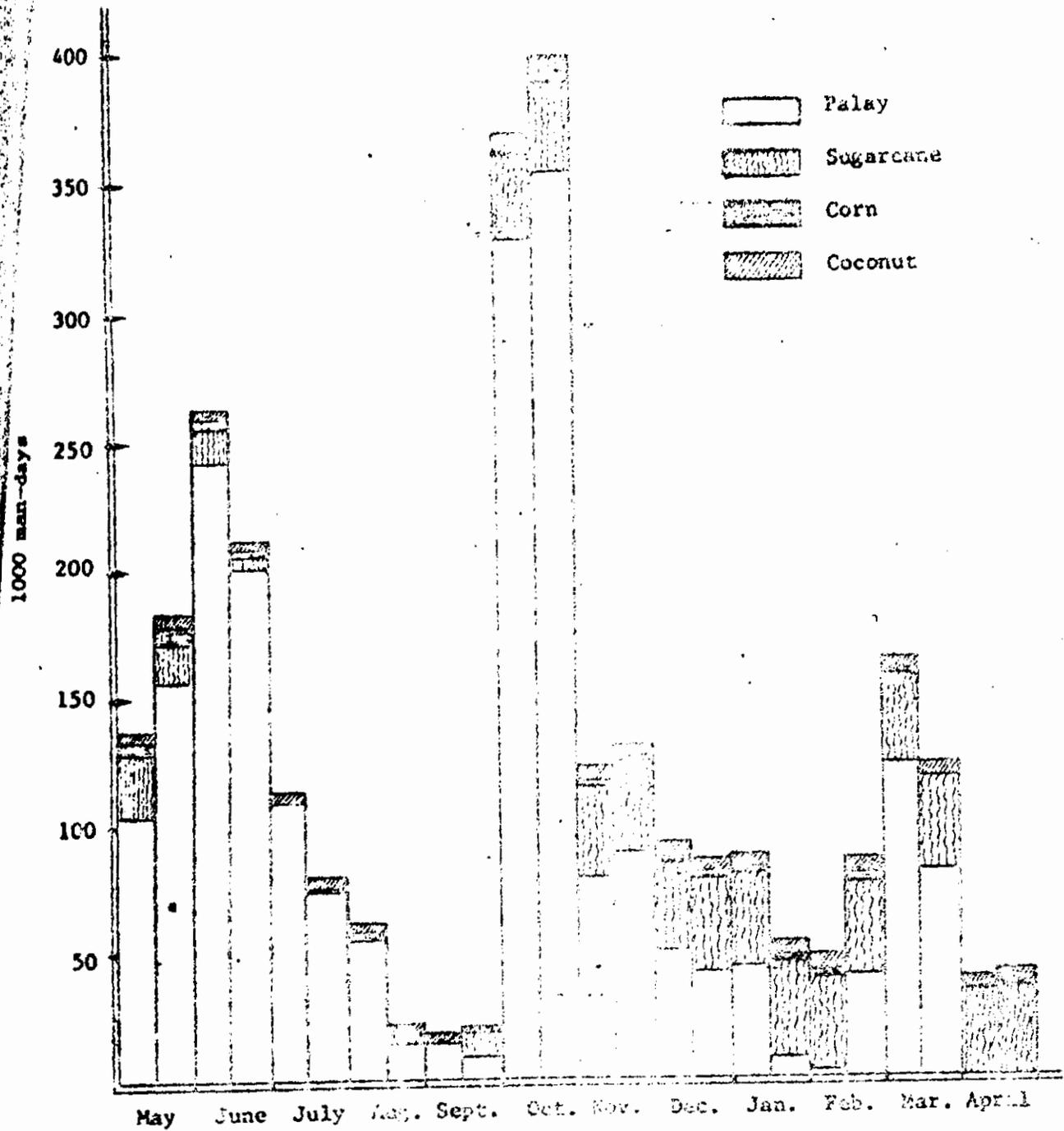
The labor surplus, however, is not evenly distributed throughout the region (since labor is never perfectly mobile). In fact, there are local imbalances between peak labor demand and supply. From October to January, labor from Antique and Aklan migrating to Negros as sacadas, especially when sugar prices are high, create some labor shortages in palay production in the home provinces. This demand has to be met by unpaid family labor. In June, peak labor demand in Iloilo and Capiz lowland paddies cannot be met from Negros since it coincides with the final sugar milling days. Instead it must be met from within the farm household or from the uplands where farmers are planting upland palay and other crops. Table 7 plots labor demand for the major crops. Thus the seasonality of agricultural employment and labor migration patterns mirror the underemployment and the search for off-farm activities needed to make ends meet. They also complicate formulation of an easy solution to the problem.<sup>14/</sup>

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<sup>13/</sup> Reported in discussions with provincial and regional authorities.

<sup>14/</sup> The preceding discussion drawn from PCARR/NEDA W.P. #4, Pp. 50-52 and W.P. #5, Pp. 69-77.

TABLE 7. LABOR DEMAND FOR MAJOR CROPS ON PANAY (1975)



SOURCE: PCARR/NEDA, W.P. 54-9-24.

A final factor in the region's poverty equation is the highly skewed income distribution. While a reflection of poverty it operates as a determinant, too, since the basic socio-economic structure of the Western Visayas inevitably favors the wealthier segments of the population--often to the detriment of the poorer elements given the acute competition for the region's resources. This skewness is apparent from the very high Gini ratios in Table 6. We have already cited the role of sugar. Suffice here to say that sugarcane farms, representing about 5 percent of all farms, earn 92 percent of the regional agricultural product with the income accruing to the owners and their families. Landlords and farmer/entrepreneurs in the rainfed and irrigated areas receive well over ten times the income of tenants. The upland farmers are clearly among the poorest, but income is less skewed owing to lower tenancy rates. The landless are at the bottom of the income scale. A number of leveling mechanisms are operative to some degree, however. First, the large sugarcane plantations pay income taxes on net earnings. To the extent that these tax receipts go to benefit poorer households, some income transfer takes place. Second, landowners in rainfed and irrigated areas provide harvest shares and wages to poorer farmers, tenants, and landless households. Third, sacadas from the upland areas supplement their meager incomes working seasonally in the sugar fields. Last, the community offers various support mechanisms whereby wealthier members supply short-term credit, food, gifts. All of these mechanisms serve in a general sense to transfer income to the poorer household. 15/

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15/ PCARR/NEDA, W.P. #4, Pp. 55-59.

## BIBLIOGRAPHY

Bureau of Fisheries and Agricultural Resources (BFAR) Statistics

Custodio, Clarissa. "Socio-Economic Profile of Landless Agricultural Workers," in Proceedings from Workshop on Landless Rural Workers (LRW), PCARR, Los Banos, December 8-9, 1978.

Hayami, Yujiro. Anatomy of a Peasant Economy, IRRI 1978.

IBRD Poverty Study, December 1980.

### ICLARM

National Census and Statistics Office (NCSO), 1975 NCSO Provincial Population Data, 1975.

National Economic and Development Authority (NEDA), Five-Year Philippine Development Plan, 1978-1982; Regional Development Framework and Annexes, 1978.

Nicolas, Elizabeth; and Librero, Aida P. Some Insights into the Socio-Economic Conditions of Fish Farm Caretakers in the Philippines.

Operation Timbang Results as of February 1976.

PCARR/SEARCA/UPLB. The Process of Regional Planning, (December 1976): Eight Working Papers on Western Visayas, Region VI, especially:

- Work Paper No. 1, "A Profile of the Agricultural Sector"
- Work Paper No. 3, "Analysis of the Agricultural Benchmark Survey"
- Work Paper No. 4, "Major Farm Types in Western Visayas and Their (Present) Contribution to Production, Employment and Income"
- Work Paper No. 5, "A Micro Profile of Rural Employment and Income"
- Work Paper No. 8, "A Synthesis: Western Visayas, Region VI"

Roxas, N. M. and Genesila, M. P. "Socio-Economic and Agronomic Characteristics of Existing Cropping System of a Rainfed Lowland Rice Area in Iloilo." Paper prepared for the Annual Meeting of the Philippine Agricultural Economics Association, Cagayan de Oro City, March 12, 1977.

Rural Workers Office, Report of the Landless Rural Workers in an Hacienda, (Binalbagan, Negros Occidental), May 1980.

Tejada, E. "Socio-Economic Study of Landless Rural Workers in Sugar Plantations in Negros Occidental," in Proceedings from Workshop on Landless Rural Workers (LRW), PCARR, Los Banos, December 8-9, 1978.

Tidalgo, A. "Socio-Economic Survey for Landless Rural Workers in Three Barangays: A Preliminary Report on a Rice Growing Village," in LRW Proceedings, PCARR, Los Banos, December 8-9, 1978.