



AGRICULTURE AND RURAL DEVELOPMENT TECHNICAL SERVICES PROJECT
AID/LAC/DR/RD CHEMONICS INTERNATIONAL, U S DEPT OF AGRICULTURE

**FOOD SECURITY STRATEGY
FOR PERU**

Prepared by USAID/PERU

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EXECUTIVE SUMMARY

The "Food Security Strategy for Peru" defines the nature and scope of food insecurity in Peru, identifies major constraints to improving food security, and defines appropriate policy and program responses. The proposed responses consist of recommendations not only for USAID/Peru, but also for the Government of Peru, non-governmental organizations, and the donor community as a whole.

Food security is defined as "access by all people at all times to enough food for an active and healthy life." Food security encompasses three major dimensions: availability, access, and utilization. The three dimensions are used to assess Peru's food security problem.

Of the three dimensions of food security, lack of access is the root cause of food insecurity in Peru. In other words, *Peru's food insecurity is more than anything else a question of poverty*. If poverty can be alleviated, lack of availability and poor utilization can be addressed as well. As a result, the strategy attaches highest priority to bringing about sustainable increases in the incomes of Peru's poor.

Poverty, especially extreme poverty, is concentrated in rural areas, especially in rural areas of the Sierra. It also is concentrated among Peru's non-Spanish speaking population. Programs to alleviate poverty and food insecurity among the extremely poor therefore would be wise to target residents of the rural Sierra and non-Spanish speakers. The groups in question suffer not only from low incomes, but also from limited access to public services.

Poverty alleviation is a medium- to long-run phenomenon. In the short to medium run, large numbers of Peruvians will continue to be malnourished or at nutritional risk. In particular, substantial numbers of young children will continue to be vulnerable to irreversible physiological damage unless measures are taken to enable them to benefit from whatever food to which the incomes of their households give them access. As a consequence, the proposed strategy's primary focus on income generation for the poor will be complemented by a focus on utilization, especially on Peru's most nutritionally vulnerable population, children less than three years of age either currently malnourished or at high nutritional risk.

The absence of an explicit focus on food availability is not to say that it is unimportant. Again, lack of food access -- that is, lack of purchasing power -- is the fundamental cause of lack of food availability in Peru. If Peru's poor were not poor, that is, if they could translate their nutritional needs into effective demand for food, food availability would increase markedly.

The root cause of poverty in Peru is low labor productivity, which, in turn, reflects inadequate investment in human and material capital and poorly developed public policies and institutions. From a food security perspective, policies and program actions that raise the productivity of currently poor people -- and tilt the pattern of Peru's economic growth more toward labor-intensity -- call for the highest of attention.

Chapter 4 of the strategy outlines a package of policies and program actions that will contribute to improvement of food security in Peru. Highlights include

- ◆ Give priority to Peru's most food insecure people, that is, its extremely poor
- ◆ Give income generation primacy of place and be open to opportunities for income generation wherever those opportunities may present themselves. To put it negatively, do not restrict one's set of options *a priori* to any one sector, including the sector in which a target population currently is engaged. Further, recognize that, geographically, the most promising income opportunities may be found in locales other than those in which the extremely poor now reside. As a particular case in point, a logical place to look for income and employment opportunities for currently poor rural people is in the secondary and tertiary cities that can provide services to and add to the production of their respective countrysides
- ◆ Focus public sector investments in productive infrastructure on public goods with high rates of return. Specifically, continue to increase the proportion of the public sector budget dedicated to construction and maintenance of both trunk and access roads, especially in the Sierra. The ability of the currently food-insecure in the Sierra to take advantage of income opportunities hinges directly on their connections with other than local markets
- ◆ Complement the focus on income generation with nutrition programs for Peru's most vulnerable populations, especially poor pregnant and lactating mothers and children less than six years old. Focus social sector expenditures, both investments in infrastructure and delivery of services, on basic education and primary health care, especially in secondary and tertiary cities in the Sierra
- ◆ Introduce more focus into USAID/Peru's future PL 480 program. Limit projects essentially to income generation and tightly targeted nutrition programs that are likely to result in demonstrable impacts for extremely poor households

FOREWORD

The food security strategy presented in this document is the outgrowth of a six-month project sponsored by USAID/Peru and undertaken jointly by personnel from USAID/Washington's LAC TECH Project and the Research Center of Universidad del Pacífico (CIUP). USAID/Peru sponsored the project not just to guide its own programs, but also -- and more importantly -- to be of use to the Government of Peru, non-governmental organizations, other donor agencies, and other interested parties.

The scope of work established for the project was daunting, if not "Mission Impossible." In brief, the project team was charged with examining the status of food security in Peru, with identifying the major obstacles to improving food security, and with defining appropriate programmatic responses, both generally and specifically for USAID. As discussed in the text, food security was defined in sweeping terms, encompassing the three rubrics of availability, access, and utilization. As a practical matter, therefore, project tasks ranged from an assessment of macroeconomic policies, to an examination of the workings of productive and social sectors, to attempts to understand the dynamics of intra-household behavior.

The conceptual and programmatic sweep of the project has made the past six months very exciting. At the same time, the experience has been very humbling. Given the brevity of time at the team's disposal, the authors are painfully aware of how lightly they have touched on a number of important topics, of the fragility of the empirical foundation for some of the project's conclusions, and, in general, of how much they still do not know. On the other hand, the project team is encouraged by the consistency of the strategic directions that have emerged from the project, and it believes that they constitute a compelling policy and programmatic package for the future.

In the final analysis, the development of a strategy comes down to making choices, to sticking one's neck out and saying that some actions are more important than others. The project team has tried very consciously not to shy away from that task. For ease of presentation and focus, this document concentrates on the forest, and looks only at a limited number of trees. For more detail on how and why some policy and program options emerge with higher priority than others, the reader is referred to CIUP's report, "Proyecto Seguridad Alimentaria," which, in essence, is the empirical underpinning of the conclusions presented here.

The authors are indebted to a broad range of institutions and individuals -- especially in Lima, Ayacucho, Cajamarca, and Washington -- for their openness, collaboration, and guidance. Although it is impossible to name them here, the team owes them all a profound intellectual debt and wants them to know how much their contributions are appreciated.

CHAPTER 1: INTRODUCTION

1.1. OBJECTIVES OF THE FOOD SECURITY STRATEGY

The food security strategy presented in this document has three objectives

- ◆ To define the nature and scope of food insecurity in Peru,
- ◆ To identify the major constraints to improving food security, and
- ◆ To define appropriate responses to Peru's food insecurity, first, for the Government of Peru, non-governmental organizations, and the donor community as a whole, and, second, for USAID/Peru

1.2 DEFINITION OF FOOD SECURITY

The definition of food security used in this strategy is

**Food security is access by all people at all times
to enough food for an active and healthy life**

This is the definition of food security popularized by the World Bank. It also is the definition used in the Food, Agriculture, Conservation, and Trade Act of 1990, which made important changes in the U.S. international food assistance program. USAID's 1992 Policy Determination Number 19 defines food security as "when all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life." Both definitions emphasize the accessibility of food or effective demand. This contrasts with earlier definitions that focused more narrowly on food availability or supply.

1.2.1. DETERMINANTS OF FOOD SECURITY

Current definitions of food security encompass three basic elements: availability, access, and utilization. The three elements are recognized widely within the international community as capturing the major dimensions of food security, and, therefore, will be used to assess the food security problem in Peru.

◆ Food Availability

Food availability can be a problem at the national, household, or individual level. A country cannot achieve food security unless available food supplies are sufficient to

supply every person in the country with an adequate diet. The food supplies necessary can be produced domestically, they can be imported commercially or through concessional aid programs, and, in the short-run, they can be drawn from stocks. Food availability also can be a problem at the household or individual level. If food supplies are inadequate at the national level, there is not going to be enough food available to feed all households and all individuals, even if distributed equally among them.

In a world increasingly integrated through trade and political-economic ties, global availability of food is of increasing importance to household food security. Availability of food at the household level also requires that food be available in local markets, which also requires relatively smooth market operations, functioning infrastructure, and a free flow of information.

◆ **Food Access**

Achieving food security in a country also requires that households have the ability -- that is, the purchasing power -- to acquire sufficient food. Some households will be able to produce sufficient food to feed themselves. Others will have to rely on earnings from farm and non-farm activities or on income transfers, food subsidies, etc., to be able to purchase a nutritionally adequate diet. Food, in other words, is a commodity, access to which is governed by the same factors that govern access to any other commodity. That is why poverty and food insecurity are so closely linked. Access also is a concept that has relevance at the national level. If countries earn sufficient foreign exchange from exports of goods and services, it does not matter if they produce enough food to feed their populations adequately. They can buy it on the international market.

◆ **Food Utilization**

People also can be said to experience food insecurity when they fail to consume proper diets, even when food is available. Similarly, food insecurity can occur when people consume proper diets, but poor health stands in the way of their bodies absorbing sufficient nutrients. Given food accessibility, improper food utilization is the result of personal tastes, culture, peer pressures, lack of knowledge, inadequate household processing and storage, inadequate food labeling, misleading advertising, and lack of access to or utilization of health, water, and sanitation services.

1.2.2 **TIME DIMENSION OF FOOD INSECURITY**

In theory, two types of food insecurity -- chronic and transitory -- can be distinguished, but, in reality, they are closely intertwined. Chronic food insecurity is consistently inadequate diet caused by inability to acquire food. It affects countries and households that persistently lack the

ability to acquire food, whether by producing it themselves or by buying it, bartering it, borrowing it, sharing it, etc. Chronic food insecurity is rooted in poverty. Transitory food insecurity, on the other hand, is a temporary decline in a country's or in a household's access to food. At the country level, it results from instability in food production or in export earnings. At the household level, it results from instability in production, household incomes, employment, or food prices. In its worst form, transitory food insecurity can result in famine. Typically it is the chronically food insecure who are hit hardest by transitory food insecurity problems.

1.2.3. WHAT FOOD SECURITY IS NOT

Food security differs from

◆ **Food Self-Sufficiency**

Food security does not mean food self-sufficiency. Since most foods can be traded internationally, national self-sufficiency only makes sense when a country has a comparative advantage in producing them. In addition, food security is achieved only when all households have the ability to buy food. Thus, there is no necessary link between food self-sufficiency and food security. In fact, empirical studies tend to confirm that food self-sufficiency has no intrinsic value in eliminating chronic food insecurity. In some countries, excessive concern with food self-sufficiency has led to costly and uneconomic investments. The investments have tended to undermine, not only per capita income growth, but also food self-sufficiency itself, by diverting resources from otherwise productive uses.

◆ **Agricultural Development**

Food security focuses on who the food insecure are and how to promote their access to food. In many cases, one of the better ways to promote access of the food insecure to food is to stimulate agricultural productivity and growth. Additionally, since demand for rural non-farm goods and services often stems from the agricultural sector, food security may depend in part on increased agricultural growth. Even in rural areas, however, the need to find ways to assist households at risk to generate additional income quickly moves the scope of analysis and action beyond the agricultural sector into more generalized rural growth.

◆ **Broadly Based Economic Growth and Poverty Alleviation**

Combatting food insecurity requires more than a commitment to broadly based economic growth and poverty alleviation, although the three are closely related. A strategy directed to the achievement of broadly based, economic growth differs from a food

security strategy in its geographic scope and in its time frame. In the first case, the scope is countrywide and the time frame is long-term, in the second case, the strategy is more location-specific and medium-term. A strategy directed toward poverty alleviation, like a food security strategy, also will be targeted to the poorest geographical regions, occupations, ethnic groups, etc., but, like a strategy to achieve broadly based economic growth, will be oriented toward the longer term.

◆ **Feeding Programs**

Feeding programs do not food security make. Rather, they are one particular response to a food security problem. Their geographic focus is location-specific and their time frame is immediate.

CHAPTER 2: DEFINITION OF PERU'S FOOD SECURITY PROBLEM

Food insecurity in Peru is serious, with problems involving all three dimensions of food security -- availability, access, and utilization

2.1. LACK OF NATIONAL-LEVEL FOOD AVAILABILITY IS A PROBLEM

2.1.1. FOOD SUPPLIES HAVE DECLINED AND ARE INADEQUATE

Inadequate food supply has been a continuing problem in Peru. During the last three decades, for example, calorie availability has risen above the level of 2,300 calories per person per day (one of the cut-off points for eligibility under PL 480, Title III) only three times (four times according to the estimates of the Ministry of Agriculture) (see Figure 2.1)

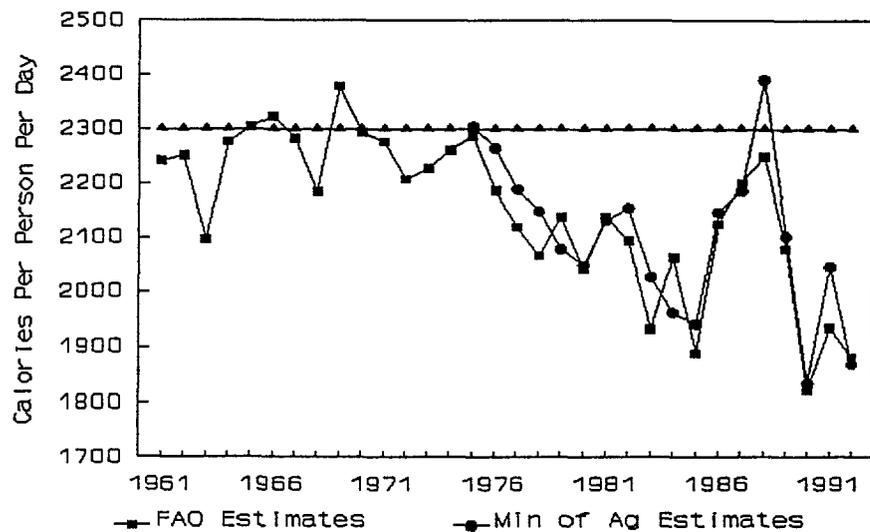


FIGURE 2.1. TRENDS IN FOOD SUPPLIES

The first indication that a country has serious food security problems is that its total food supply is insufficient to provide everyone with enough food for a healthy life even in the unlikely event that the food were divided equally among all members of the population. From a national-level food security perspective, the problem of lack of food availability in Peru was particularly serious in the mid-1980s and early 1990s when levels of calorie availability fell below 2,000 calories per person per day (in 1983-1985 and in 1990-1992). Reasons for Peru's poor performance with respect to food availability include low levels of agricultural productivity, drought, rural violence accompanied by abandonment of farms, scarcity of foreign exchange, and, perhaps most importantly, low levels of effective demand for food on the part of Peru's poor.

2.1.2. THE DIVERSITY OF THE NATIONAL DIET HAS DETERIORATED

The diversity of the Peruvian diet also has deteriorated over the years. For example, the composition of the diet has shifted away from animal protein toward carbohydrates, and grains have become the most important source of calories in the country. Reliance on a limited number of commodities as the principal source of nutrients is not desirable from a nutritional point of view. It also makes poor households and the country as a whole more vulnerable to food insecurity, since food supplies now come from fewer commodities.

2.1.3. PER CAPITA FOOD PRODUCTION HAS DECLINED

The per capita value of food production stagnated during the 1960s and has declined steadily since the beginning of the 1970s (see Figure 2.2). Production of grains also failed to keep pace with population growth during most of the last three decades. Grain production did increase substantially during the mid- to late 1980s in response

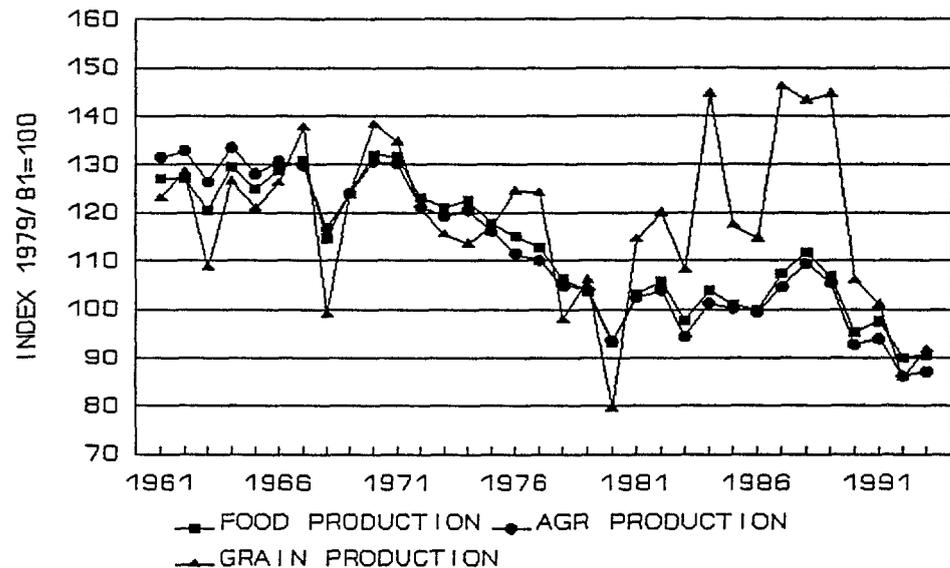


FIGURE 2.2 TRENDS IN PER CAPITA FOOD AND AGRICULTURAL PRODUCTION

to significant subsidies, but once the subsidies were removed, the per capita value of grain production returned to its long-term, downward trend. The dramatic increase in rice production in 1994 suggests that the agricultural sector finally may be beginning to respond to the new economic environment created by the current government's economic stabilization and structural adjustment reforms.

2.1.4. DEPENDENCY ON FOOD IMPORTS, INCLUDING FOOD AID, HAS INCREASED

One result of declines in production has been increased reliance on imports to meet domestic food needs. Grain imports, in particular, have increased substantially, from approximately 30

percent of total food grain supply in the 1960s to over 60 percent in 1992 (see Figure 2.3)

Declines in domestic production would not be a problem if Peru could afford to import food commercially. In fact, the combination of misguided economic policies and periodic natural disasters has made

Peru heavily dependent on donated food to meet its food needs. Concessional imports of food grains have become very important, growing from an average of six percent of total imports in the 1970s to more than 20 percent of total imports in the early 1990s

Peru does not have to produce all its own food in order to guarantee food security for its population. In other words, food self-sufficiency is not necessary for food security, nor is it reasonable for Peru to aspire to that objective. Neither is agricultural self-sufficiency necessary for food security. There is no reason that Peru must pay for its food imports with foreign exchange earned from agricultural exports. The problem is that Peru has not earned enough from the combination of its agricultural and non-agricultural exports to pay for its imports of agricultural products. Since 1981, the value of Peru's agricultural imports -- most of which are food imports -- has significantly outweighed the value of its agricultural exports (see Figure 2.4), and its overall trade balance has been negative more years than it has been positive throughout the last decade.

In contrast to food self-sufficiency, food self-reliance is a reasonable objective for Peru to set for itself. If the government provides a stable and supportive economic framework conducive to broadly based economic growth, there is no reason that Peru should not be able to pay for its food imports, especially its grain imports. Thus, the important question to be answered

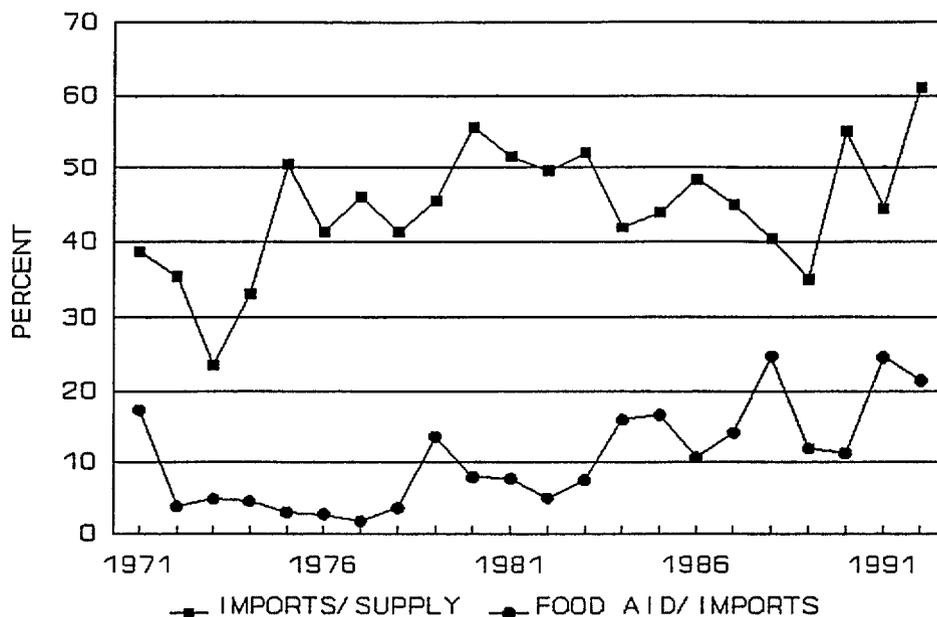


FIGURE 2.3. TRENDS IN GRAIN IMPORTS

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concerning the need for food aid in the future is not when food donations can be replaced by domestic production, but when the economy will develop sufficiently to generate enough foreign exchange -- from both agricultural and non-agricultural exports -- so that concessional imports can be replaced by commercial imports

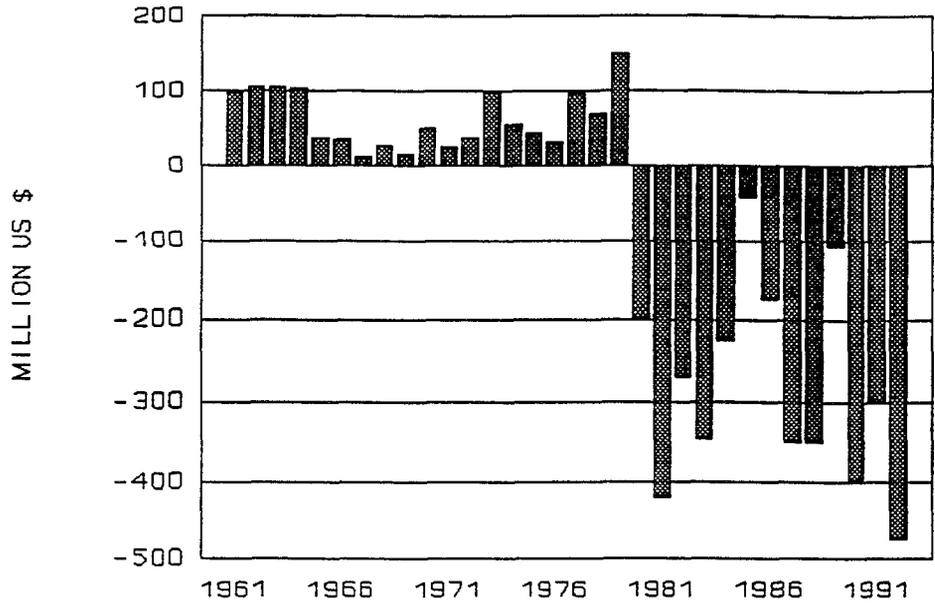


FIGURE 2.4. CHANGES IN THE AGRICULTURAL TRADE BALANCE

2.2. CHRONIC POVERTY MEANS LACK OF ACCESS TO FOOD IS A PROBLEM

Poverty, or lack of purchasing power at the household level, is the root cause of food insecurity in Peru. And the root cause of poverty in Peru is low productivity, which, in turn, reflects inadequate investment in human and material capital and poorly developed public policies and institutions.

Poverty contributes to food insecurity by restricting people's access to the amount and quality of food they need to live healthy and productive lives. Poverty also constrains households' access to services such as health, water and sanitation, and education, which also contribute to food security -- for example, by helping to improve the biological utilization of food in the short, medium, and long term.

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Poverty and lack of purchasing power also are the ultimate cause of low levels of food availability in Peru. If Peru's poor households had enough purchasing power to translate their nutritional needs into effective demand for food, domestic food production would increase, or foreign exchange would be used to pay for the food imports required to make up the gap between total food needs and domestic production.

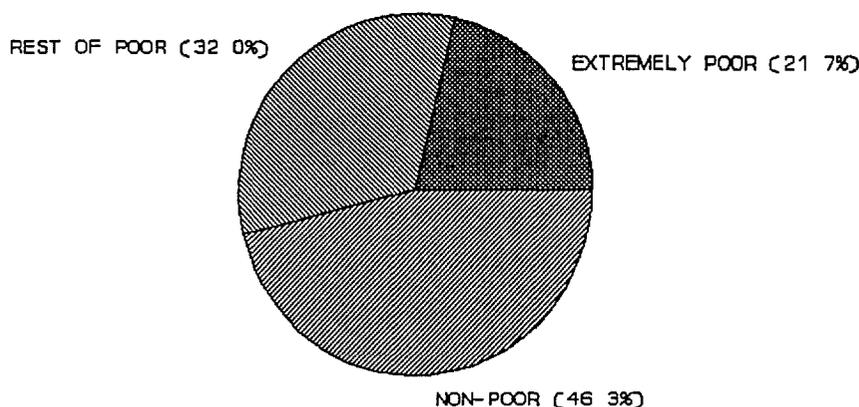


FIGURE 2.5 EXTENT OF POVERTY IN PERU IN 1991

2.2.1. POVERTY IS WIDESPREAD

Poverty is widespread in Peru. The most recent evidence comes from a 1991 survey supported by the World Bank. The universe from which the survey sample was drawn consisted of the approximately 16 million people living in Lima, in other urban areas of the coast, and in urban and rural areas of the Sierra. At the time of the survey, it is estimated that 8.6 million people, or 54 percent of the population sampled, lived in poverty, that is, in conditions that failed to meet minimum standards of food access, education, health, and housing. Of this group, it is estimated that approximately 3.5 million people -- or one fifth of the population sampled -- lived in extreme poverty, that is, they were too poor to afford even a basic basket of food (see Figure 2.5).

2.2.2 POVERTY IS A CHRONIC PROBLEM

Widespread poverty is not a new problem for Peru. Although hard statistics are available only for the last two decades, the problem has existed for years. The most recent analysis of Peruvian poverty comes from a study undertaken by the Economic Commission for Latin America and the Caribbean (ECLAC) as part of a broader study of trends in poverty from 1970 to 1986 throughout the hemisphere. Like the World Bank in its 1991 poverty analysis, ECLAC based its conclusions on household survey data. It also estimated two poverty lines. The first poverty line, which was used to estimate the numbers of extremely poor, was based on the cost of a country-specific food basket that met international requirements for energy and protein. The line then was scaled up to take into account necessary non-food expenditures. Households whose expenditures fell below this latter cut-off were classified as poor.

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Although the estimates from the World Bank and ECLAC analyses are not strictly comparable (the poverty lines are different and the geographical coverage of the World Bank analysis is more limited), they are presented together in Figure 2.6. The results of the ECLAC analysis are similar to those of the World Bank in that it is estimated that 50 percent or more of

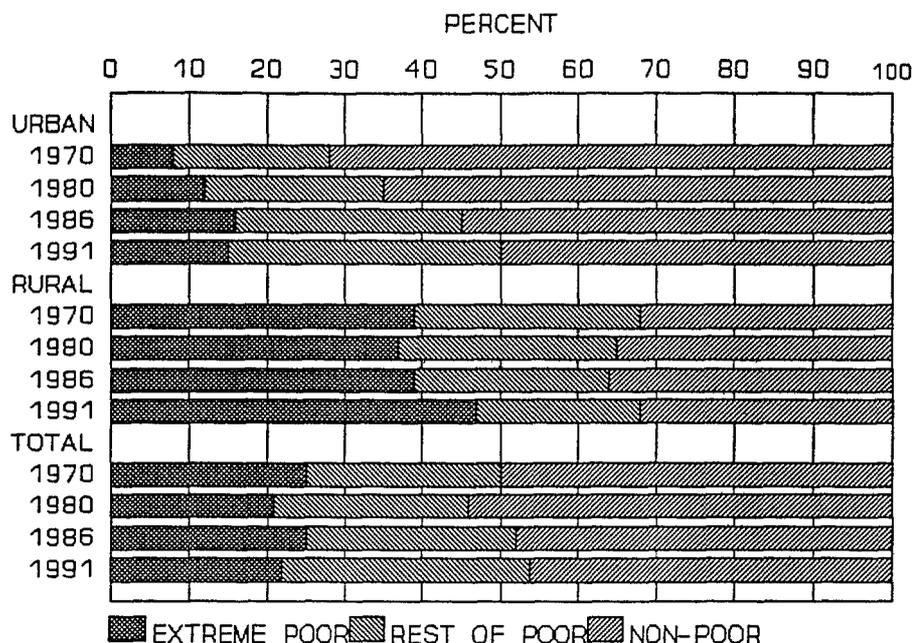


FIGURE 2.6. POVERTY LEVELS IN PERU IN 1970, 1980, 1986, AND 1991

the Peruvian population lived in poverty in 1991, as well as during the 1970s and 1980s. According to ECLAC, the percentage of households living in poverty declined during the 1970s, both for the country as a whole and for rural areas. These gains were completely wiped out, however, between 1980 and 1986. The World Bank analysis suggests that both total and rural poverty increased even more between 1986 and 1991. Urban poverty, on the other hand, increased substantially during both the 1970s and the 1980s, as increasingly more of the rural poor migrated to major urban centers, especially to Lima.

2.2.3. POVERTY, ESPECIALLY EXTREME POVERTY, IS CONCENTRATED IN RURAL AREAS

From the perspective of food security, it is the extremely poor who are most important, since, by definition, they are the people who are least likely to have adequate diets. Extreme poverty has been and still is primarily a rural problem.

Both the ECLAC and World Bank analyses indicate that the incidence of extreme poverty has been and continues to be much higher in rural than in urban areas of the country. According to the ECLAC analysis, approximately 40 percent of the rural population lived in extreme poverty during the 1970s and 1980s, over twice the percentage in extreme poverty in urban areas.

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(see Figure 2 6)
 According to the World Bank analysis, rural areas of the Sierra were the region most affected both by poverty and by extreme poverty in 1991, it is estimated that two thirds of rural Sierra households were poor, and 47 percent were extremely poor (see Figure 2 7) In contrast, in 1991 only ten percent of Lima households

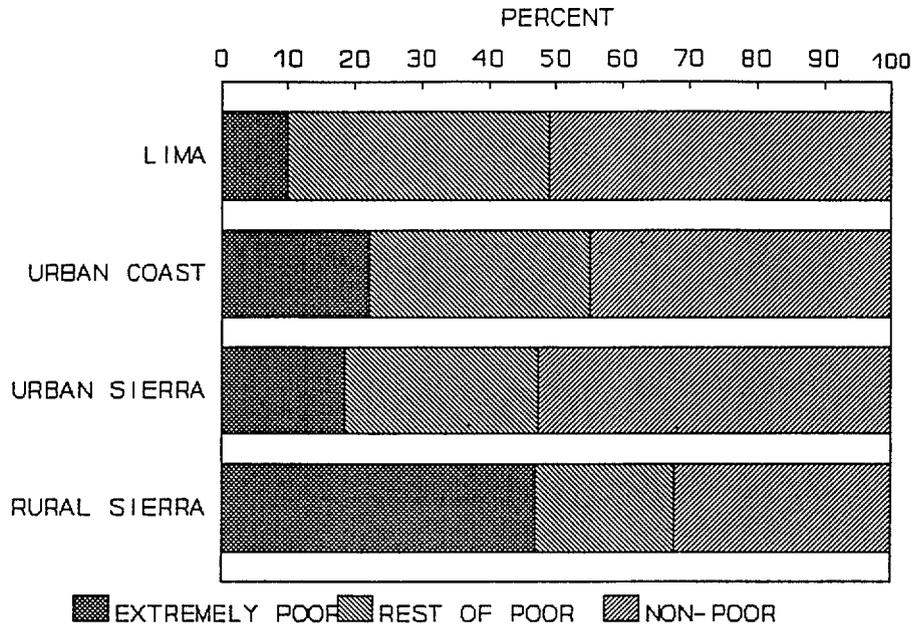


FIGURE 2 7 INCIDENCE OF POVERTY WITHIN KEY REGIONS IN 1991

fell in the category of extremely poor households, one half of the corresponding percentage for urban households on the coast and in the Sierra

Figure 2 8 presents still another way of looking at the 1991 survey results Extreme poverty is concentrated heavily in one region of all extremely poor people in Peru in 1991, 45 percent -- or almost 1 6 million people -- lived in rural areas of the Sierra The poor who were not extremely poor, on the other hand, were concentrated predominantly in Lima Although Lima is the area of the country least affected by poverty in relative terms, it is so big that it is estimated that 37 percent of all poor Peruvians -- approximately 3 2 million people -- lived in the Lima-Callao Metropolitan area in 1991

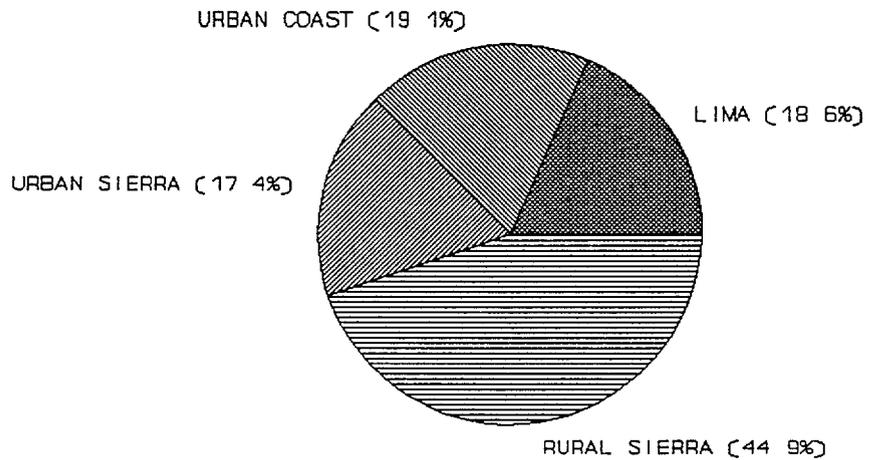


FIGURE 2 8 DISTRIBUTION OF THE EXTREMELY POOR AND FOOD INSECURE (3 5 Million People)

2.2 4

POVERTY, ESPECIALLY EXTREME POVERTY, IS CONCENTRATED AMONG THE NON-SPANISH-SPEAKING POPULATION

Poverty also is a major problem among Peru's non-Spanish-speaking people, including those who speak Quechua, Aymara, and other indigenous languages. More than three fourths of the non-Spanish-speaking population are poor (79 percent), and 55 percent are extremely poor (see Figure 2 9). Non-Spanish speakers evidence higher rates of poverty than do Spanish speakers. They are one and one half times as likely to be poor as Spanish speakers, and almost three times as likely

to be extremely poor. As a consequence, although non-Spanish-speakers account for only 11 percent of the total population, they comprise 19 percent of the poor and 27 percent of the extremely poor.

Although a significant percentage of Peru's non-Spanish speakers lives in rural areas, they are not poor just because of where they live. A comparison of average per capita incomes from the 1991 survey shows the average income of Spanish speakers to be significantly greater than that of non-Spanish speakers. It also shows that rural non-Spanish speakers are 1.3 times as likely to be poor as rural Spanish-speakers, and twice as likely to be extremely poor.

2 2 5

EXTREME POVERTY, ESPECIALLY IN RURAL AREAS, IS EXACERBATED BY LACK OF ACCESS TO BASIC SERVICES

Most extremely poor Peruvians lack not only cash income, but also access to important public services such as water, sanitation, and education. Furthermore, lack of access to basic services, like extreme poverty, is primarily a rural problem. Figure 2 10 presents information on the extremely poor, indicating how many lack access to one or more basic services (education, water, sanitation) as well as to cash (or its equivalent in kind) income. It also indicates the areas

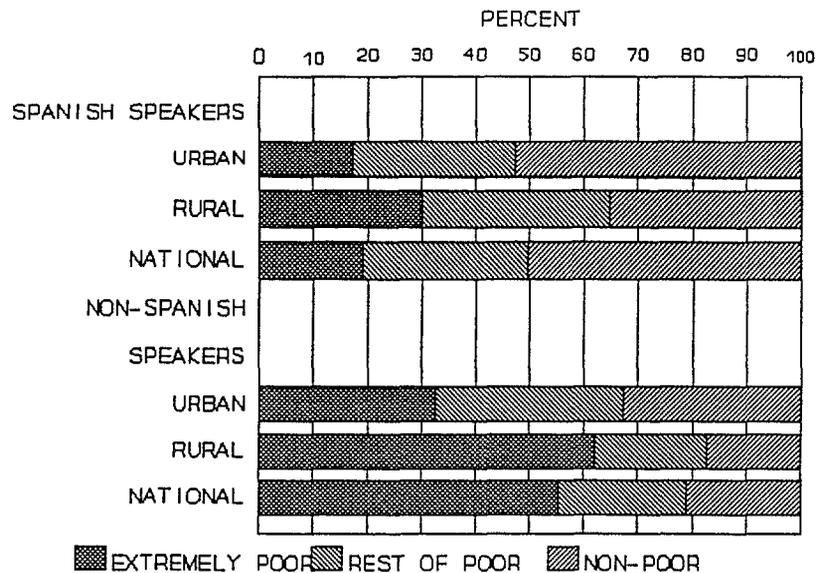


FIGURE 2 9: INCIDENCE OF POVERTY AMONG NON-SPANISH AND SPANISH SPEAKING HOUSEHOLDS

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of the country where the extremely poor and service-deprived are concentrated. By far the largest numbers of extremely poor live in the rural Sierra, and the great majority -- approximately 1.5 million people -- lack access to basic services as well as income.

In fact, extremely poor and rural Sierra households lack access to basic services across the board. For example, the 1991 Living Standards Survey suggests that about two thirds of the heads of extremely poor households have no more than a

primary education, in contrast to about one third in non-poor households. Among the poor in the rural Sierra, the proportion rises to almost three quarters (see Table 2.1). In a similar vein, it is

estimated that only slightly more than half of extremely poor households had access to a public water system in 1991, compared to 80 percent of households throughout the country. The rest of the extremely poor were

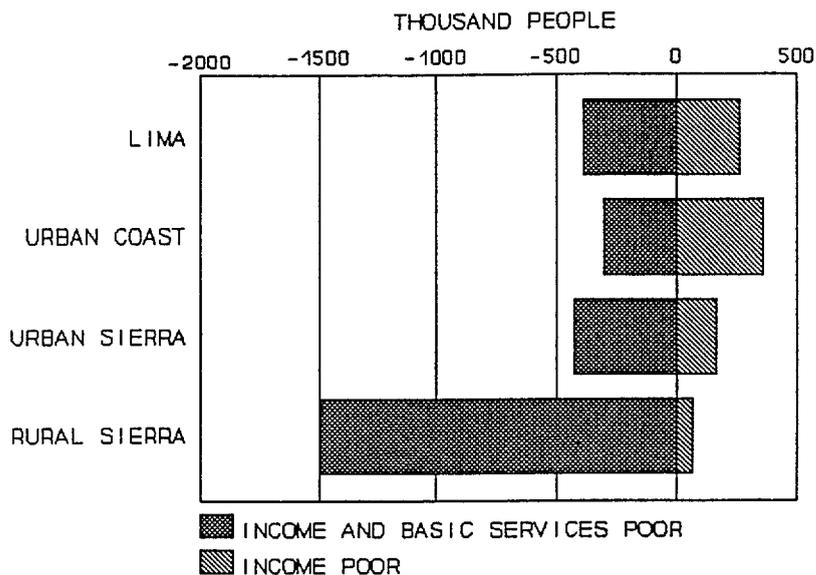


FIGURE 2.10: DISTRIBUTION OF EXTREMELY POOR HOUSEHOLDS BY NATURE OF POVERTY (BASIC SERVICES AND INCOME) AND BY GEOGRAPHICAL REGION

TABLE 2.1 LEVELS OF EDUCATION OF HOUSEHOLD HEAD AND POVERTY

HIGHEST GRADE COMPLETED BY HEAD	EXTREMELY POOR	POOR	NON POOR	TOTAL	RURAL SIERRA
None/Initial	12	10	4	7	16
Primary	55	47	30	38	58
Incomplete Secondary	14	14	12	13	11
Complete Secondary	16	21	27	24	12
Non University Higher	2	3	7	5	2
Incomplete University	0	2	4	3	1
Complete University	1	3	16	10	1
Total	100	100	100	100	100

SOURCE: 1991 World Bank Living Standards Survey

**TABLE 2.2. DISTRIBUTION OF PUBLIC SERVICES TO THE POOR IN 1991
(Percent of Households)**

TYPE OF SERVICE	EXTREMELY POOR	POOR	TOTAL	RURAL SIERRA
SOURCE OF DRINKING WATER				
Public	55	70	80	43
Well	26	14	8	23
River/Spring	14	9	7	32
Water Truck	1	4	3	2
Other	4	3	2	2
HOURS OF PUBLIC WATER SUPPLY IN HOUSEHOLD				
1-3 hours/day	21	18	15	14
4-6 hours/day	15	14	12	11
7-12 hours/day	17	21	20	8
13 or more hours/day	47	47	52	67
SANITATION				
Public Service	28	49	63	8
Well-Septic	4	5	4	6
Latrine	40	23	17	49
None	29	23	17	49
SOURCE OF LIGHTING				
Electricity	49	71	81	31
Gas/Oil/Kerosene	44	24	16	61
Candle/None/Other	7	6	4	10
COOKING FUEL				
Electricity	1	1	3	0
Gas	4	14	28	1
Kerosene	39	51	45	7
Coal/None/Other	7	4	2	8
Wood	49	30	22	84

SOURCE. 1991 World Bank Living Standards Survey

dependent either on wells or on rivers or springs (see Table 2.2). Interestingly, the extremely poor who did have access to public water systems appeared to be more affected by cutbacks than others. In the rural Sierra, less than half the population had access to a public water system, compared to 90 percent in other areas. Less than 30 percent of the extremely poor are estimated to have had public sewerage service, compared to slightly over 60 percent of the total population. The rest either used latrines (40 percent) or lacked facilities entirely (30 percent). In the rural Sierra, the meager access of the population to public sewerage services -- eight percent -- is particularly striking. The extremely poor also used gas, oil, or kerosene for lighting more frequently than wealthier households, who were much more likely to use electricity.

2.2.6 THE RURAL POOR ARE DEPENDENT ON AGRICULTURE

Extremely poor Peruvians depend more on agriculture than on any other economic activity for their livelihood. In 1991, it is estimated that over 40 percent of the heads of extremely poor households were engaged primarily in agriculture, 27 percent as independent operators and 14 percent as landless agricultural workers. The strong association of agriculture with poverty points to the need to look for ways to raise the incomes of farm households. The 1991 Living Standards Survey suggests that there is virtually no difference in the percentages of poor and non-poor households that own land in the Sierra (see Table 2.3). There is, however, a significant difference

in the quantity and quality of land owned.

The poor have roughly 50 percent less land than the non-poor.

The poor also are less likely to own irrigated land.

about a third own irrigated land, compared to about half of the non-poor.

The incomes of the rural poor also are affected by the crops that they grow.

Most poor rural Sierra farm

households produce potatoes, barley, and wheat.

Crops produced more by poor than by non-poor farmers include barley, potatoes, oca, and olluco.

In contrast, yellow corn and rice are grown more by non-poor farmers.

Wheat and white corn are produced about equally by both. Finally, off-farm employment is of major importance to rural poor households in the Sierra, given the small quantities of land owned and low agricultural productivity.

TABLE 2.3. AGRICULTURAL LAND OWNERSHIP IN THE RURAL SIERRA

	POOR	NON-POOR	TOTAL
ALL FARM LAND			
Households owning land (%)	81.6	84.1	82.5
Land/capita for households owning land only	0.34	0.69	0.45
IRRIGATED LAND			
Households owning land (%)	36.0	48.7	40.2
Land/capita for land-owning households only	0.24	0.29	0.26
NOTE: Distribution of rural Sierra population	67.8	32.2	100.0

SOURCE: 1991 Living Standards Survey

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2.2.7 FOOD PRICES ALSO AFFECT ACCESS

Food prices also are important because food accounts for a major share of the expenditures of the poor. According to the 1991 survey data, the commodities that account for the largest share of expenditures of poor and extremely poor households are rice, bread, sugar, tubers, and meat. Consumption of one's own production is significant -- slightly over half of the value of household consumption -- only among poor and extremely poor households in the rural Sierra. Even Peru's poorest people, therefore, rely heavily on markets for basic food staples. The products for which consumption of farm household production accounts for significant proportions of household consumption are chicken (90 percent) and dairy products, tubers, meat, vegetables, and eggs (70-80 percent). There are only marginal differences in the "own-consumption" patterns of the poor and the extremely poor. In these products, therefore, many of Peru's rural poor and extremely poor are insulated from changes in market prices. The poor and extremely poor would stand to benefit, however, from declines in the prices of wheat, rice, and sugar as a result of decreases in the effective protection for those crops.

In summary, the incidence of extreme poverty in the rural Sierra and among the non-Spanish speaking population of Peru largely accounts for the incidence of extreme poverty at the national level. This finding suggests that programs to alleviate poverty and food insecurity among the extremely poor would be wise to target the rural Sierra and non-Spanish speakers. The groups in question suffer not only from low incomes, but also from low access to public services, including education and water and sanitation. Improvements in access, especially to productive economic opportunities and to education, are essential to reduce their poverty.

2.2.8. POVERTY SHORT OF EXTREME POVERTY IS MORE URBAN IN CHARACTER AND LESS A PROBLEM OF ACCESS TO BASIC SERVICES

Most poor households that are not extremely poor appear to have relatively good access to public services, including education. The access they enjoy to basic services, summarized in Figure 2.11, is very different from the access of extremely poor households to basic services summarized in parallel Figure 2.10. Unlike extremely poor households, poor households that

are not extremely poor not only are concentrated in Lima, but also are poor largely because they work in low-paying, low productivity jobs or because they are unemployed. What is needed to raise their incomes above the poverty level is more productive jobs. Since this group is more highly educated than extremely poor households, they also are better equipped to take advantage of more and better employment opportunities resulting from continuation of the economic reform program.

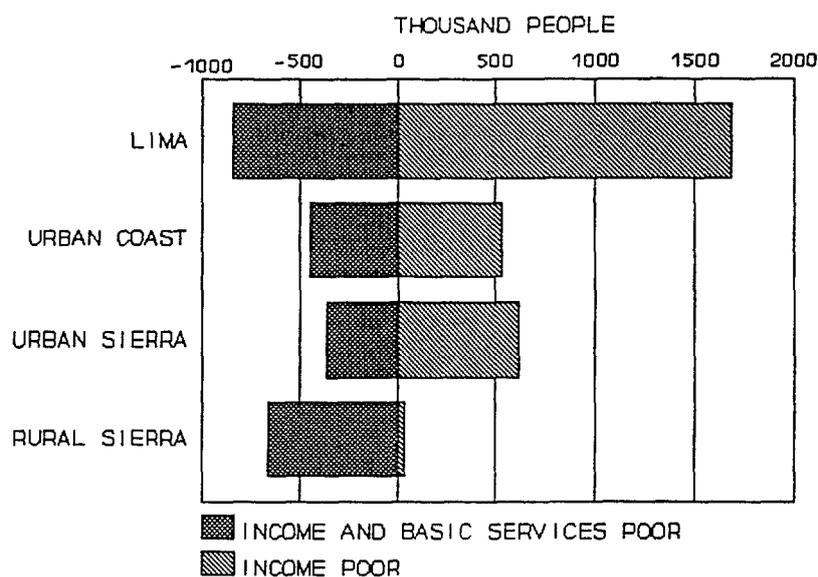


FIGURE 2.11. DISTRIBUTION OF POOR HOUSEHOLDS BY NATURE OF POVERTY (BASIC SERVICES AND INCOME) AND BY GEOGRAPHICAL REGION

2.3. FOOD UTILIZATION ALSO IS DEFICIENT

2.3.1 CHRONIC MALNUTRITION IS A SERIOUS PROBLEM

The most direct measure of food utilization is nutritional status (see the Note at the end of the chapter for alternative measures). Nutritional status can indicate whether people are consuming appropriate quantities and qualities of food. It also is an indication of whether people's bodies are able, biologically, to absorb the nutrients available, which is why poor health conditions can result in poor nutritional status even when there is adequate food availability.

According to the most recent national data (DHS/ENDES 1991-92), more than a third of children under five -- 36.5 percent -- suffer from chronic malnutrition (that is, they are too short for their age) (see Figure 2.12), about ten percent suffer from undernutrition (which also is referred to as global malnutrition), and only one percent suffer from acute malnutrition (that is, wasting). These findings suggest that Peru's nutritional problem largely is chronic malnutrition, that is, the nutritional insults suffered during the first few years of life result in retarded growth, from which those affected never recuperate fully. Peru, like other countries with high rates of chronic malnutrition, is full of chubby children who are short for their age. In other words,

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even though the children in question may receive sufficient calories after the critical weaning period, there is not enough "catch-up growth" to compensate for the early deprivation. They grow to be short adults, even though they may become heavyset during adulthood.

The low prevalence of acute malnutrition suggests that lack of food is not a major problem nationwide, although it obviously is for those affected. Indeed, acutely malnourished children are at high risk of dying during episodes of wasting.

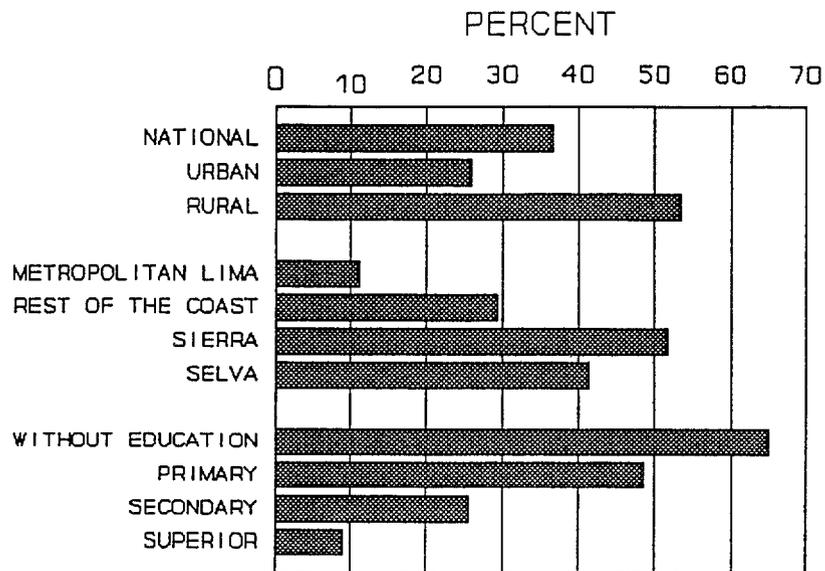


FIGURE 2.12. INCIDENCE BY REGION OF CHRONIC MALNUTRITION IN CHILDREN UNDER FIVE AND LEVEL OF EDUCATION OF HEAD OF HOUSEHOLD

2.3.2. CHRONIC MALNUTRITION IS MORE SERIOUS IN RURAL AREAS AND IN THE SIERRA

According to the results of the 1991/92 survey, children living in rural areas and in the Sierra are much more likely to suffer from chronic malnutrition than their counterparts in Lima. In 1991, more than half of children in rural areas (53.4 percent) and more than half of children in the Sierra (51.6 percent) suffered from chronic malnutrition. In Lima, the corresponding figure was 11.2 percent (see Figure 2.12). To put it another way, of all Peruvian children found to be chronically malnourished in 1991, more than half lived in the Sierra, while only six percent lived in Lima (see Figure 2.13).

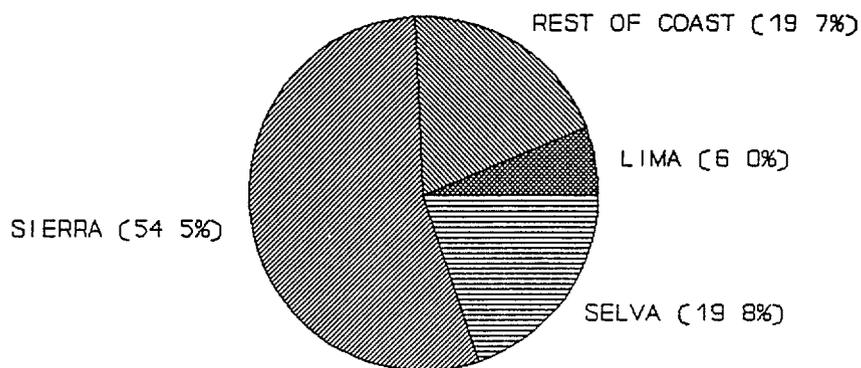


FIGURE 2.13 DISTRIBUTION OF CHRONICALLY MALNOURISHED CHILDREN

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TABLE 2 4 PREVALENCE OF CHRONIC MALNUTRITION (STUNTING) AMONG SCHOOL CHILDREN IN 1993 BY DEPARTMENT

DEPARTMENT	NUMBER CHILDREN STUNTED	PERCENT CHILDREN STUNTED	PERCENT OF TOTAL STUNTED CHILDREN
Huancavelica	15877	72	5 0
Apurimac	10954	69	3.5
Cajamarca	34219	65	10 8
Ayacucho	15813	64	5 0
Amazonas	9651	64	3 1
Huánuco	20377	62	6 4
Cusco	18499	60	5 9
Loreto	15257	60	4 8
Junin	20266	59	6 4
Pasco	5279	57	1 7
Ancash	18592	54	5 9
Puno	18259	54	5 8
Ucayali	6321	52	2 0
San Martin	10933	52	3.5
Piura	24478	50	7 7
La Libertad	17168	47	5 4
Lambayeque	9218	40	2 9
Madre de Dios	894	37	0 3
Arequipa	7259	30	2 3
Ica	3884	29	1 2
Tumbes	1111	27	0 4
Moquegua	821	24	0 3
Lima	27987	24	8 9
Callao	2033	20	0 6
Tacna	857	18	0 3
Country	316007	48	100 0

SOURCE 1993 Survey of Heights of School Children

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Since children do not recover height lost during their formative years, recent information from a census of the heights of school children can shed light on the distribution of chronically malnourished children throughout the country. The data, which were collected in 1993, indicate that the two Departments with the most stunted children were Cajamarca (with 10.8 percent of all stunted children in the country) and Lima (with 8.9 percent) (see Table 2.4). Cajamarca also was the Department with the third highest percentage of children stunted (65 percent). Other Departments with high percentages of stunting were the Departments that make up the *Trapezio Andino* -- Huancavelica (72 percent), Apurimac (69 percent), Ayacucho (64 percent) and Cusco (60 percent). Taken together, those four Departments accounted for over 19 percent of all chronically malnourished school children in the country.

2.3.3. RATES OF CHRONIC MALNUTRITION HAVE NOT DECLINED

In stark contrast to the dramatic declines in Peru's child mortality rates over the last decade, there appears to have been little or no improvement in chronic malnutrition. As noted above, the 1991/92 survey found that slightly less than 37 percent of children under five were chronically malnourished at the time, little different from the rates found in earlier surveys in 1984 and 1972. The differences in the trends of child mortality and child malnutrition call into serious question the use of child mortality rates as indicators of national food security, as is currently the case with the eligibility criteria legislated for PL 480, Title III, programs.

2.3.4. INADEQUATE BREAST FEEDING AND WEANING PRACTICES CONTRIBUTE TO CHRONIC MALNUTRITION

Children at the age of weaning are at particular risk of chronic malnutrition. The largest increase in the percentage of children stunted occurs between the ages of 6-11 months and 24-35 months, the same time that the largest increase takes place in the percentage of children weaned. According to the 1991/92 survey, stunted children -- those whose height for age is more than two standard deviations below the norm -- made up only 6.3 percent of children less than six months old, but accounted for over 40 percent of children between 24 and 35 months old, the percentage of children weaned increased from 17 percent at the age of 6-11 months to almost 87 percent at the age of 24-35 months (see Figure 2.14).

The period between 3-5 months and 24-35 months is critical in a child's life. After a child is four to six months old, breast milk becomes insufficient as the sole food. Delaying the introduction of supplementary feeding beyond that point increases the risk of undernutrition and illness. On the other hand, giving an infant foods other than breast milk under the sanitary conditions that prevail in many parts of Peru increases the risk of infectious diseases. Doing so can bring on diarrhea, for example, which can lead to undernutrition even when a child's total food intake is adequate.

In Peru, over 95 percent of infants are breastfed. Still, Peruvian mothers begin to provide supplemental foods to their children at very young ages: more than 40 percent of babies are estimated to receive supplements before they are one month old. The consequence is increased risk of diarrheal diseases. According to the 1991/92 survey, 30 percent of children 6-24 months old had diarrhea in the two weeks prior to interview. An additional problem is the inadequacy of the foods used

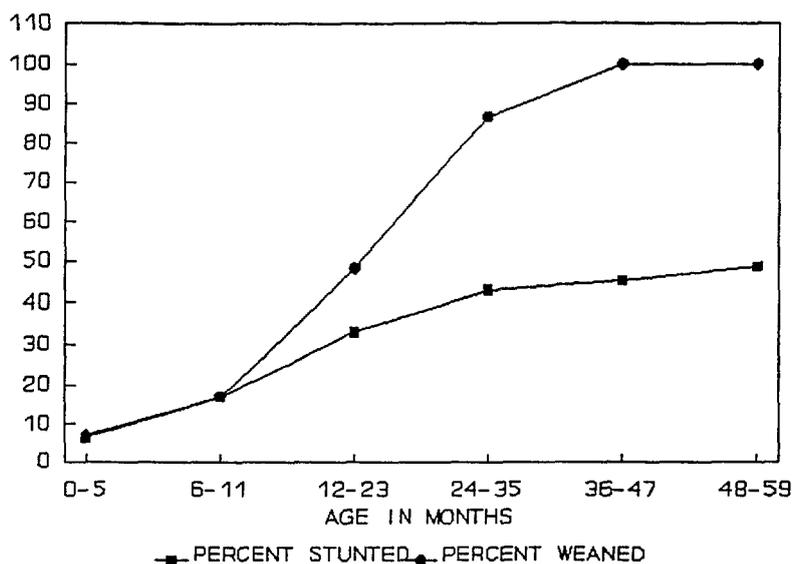


FIGURE 2.14 RATES OF STUNTING AND WEANING BY AGE OF CHILD

to wean children. The preferred weaning foods in Peru are diluted preparations. Mothers choose them because they believe them to be nutritious and good. In fact, the preparations do not provide children with sufficient calories and other nutrients at a stage of life that is crucial for growth and the development of motor and cognitive skills.

2.3.5. MICRONUTRIENT DEFICIENCIES ARE A PROBLEM

Other types of malnutrition relate to micronutrient deficiencies rather than to the overall intake of calories and protein. Three micronutrients are considered most frequently: iron, iodine, and vitamin A. Each has far-reaching implications for health, growth, and development. Micronutrient status is hard to measure because it often involves laboratory analysis, typically of blood. As a result, rates reported for such deficiencies usually refer to study populations, rather than to national samples.

Iron deficiency is believed to be Peru's major micronutrient problem. One study has estimated rates of iron deficiency anemia of 64-75 percent among young children on the coast, and rates of 40-50 percent among women of reproductive age (ICN Report for Peru). With the increased economic hardships of recent years, rates of anemia likely have risen as people have reduced their consumption of animal products and other relatively expensive iron-rich foods. To date, there has been no attempt to fortify wheat flour or other widely consumed products with iron, as has been done in other countries.

Goiter, which results from iodine deficiency, also is estimated to be a serious problem. Goiter is common in mountainous countries, because of their leached soils. The latest study in Peru,

conducted in 1986-88, estimated that goiter was endemic in 88 percent of communities in the Sierra and Selva and that, in 130 provinces, the average prevalence among school children was 36 percent (ICN Report for Peru) Peru has legislated the production and distribution of iodized salt since 1940 In practice, however, only 60 percent of the population is estimated to consume it Reasons for low coverage include cost, irregular distribution from production points on the coast to endemic zones like Cajamarca and Amazonas, and widespread availability of non-iodized salt Other countries, including Bolivia and Brazil, have overcome similar obstacles successfully by subsidizing increases in production costs and by involving small production facilities in marketing

Less is known about the status of vitamin A in Peru One project in Puno that did look at it found that average consumption of retinol -- that is, vitamin A -- came to only 45 percent of recommended levels (ICN Report for Peru)

NOTE ON NUTRITIONAL STATUS

Measures of growth are the most reliable indicators of children's nutritional status and also furnish an indication of the nutritional status of a country's population as a whole Protein-calorie malnutrition, which is the most common form of malnutrition among children in developing countries, is measured in three different ways The easiest way is to measure children's weight for age, which is usually referred to as global malnutrition or undernutrition This measure is a synthesis of the two other types of malnutrition and, unfortunately, is not very sensitive to cases in which children are deprived of small amounts of food over long periods of time, a characteristic of chronic malnutrition A second measure, weight for height, tells whether a child is malnourished currently It is referred to as wasting, or more technically, as acute malnutrition The third measure, height for age, reflects past as well as current nutrition status and is the best indicator whether malnutrition is a chronic problem Measuring acute and chronic malnutrition is more difficult than measuring undernutrition it is not easy to measure the height (length) of young children who do not stand still -- or stand at all -- and small differences in measurement can affect results dramatically

CHAPTER 3 CONSTRAINTS TO FOOD SECURITY

This chapter identifies the principal constraints to food security in Peru, taking into account the three dimensions of availability, access, and utilization. Although they overlap to a certain extent, the constraints fall conveniently into three categories: first, institutional and economic policy constraints, second, constraints related directly to Peru's productive sectors, especially agriculture, and, third, constraints related directly to Peru's social sectors.

3.1. INSTITUTIONAL AND ECONOMIC POLICY CONSTRAINTS

Of the various crises that Peru has confronted this century, the period from 1975 to 1992 arguably was the most severe. The events of those years affected every echelon of Peruvian society, economically, politically, and socially. In the economic realm, the crisis sealed the demise of the anti-market, heterodox, largely ill conceived policies that, applied inconsistently since the late 1960s, finally catapulted the economy into a free fall of incomes, generalized unemployment and underemployment, and hyperinflation. Politically, it signalled the delegitimization of traditional parties. And, in the social arena, the crisis exacerbated the deep divide between Peru's haves and have nots, accompanied by the pervasive effects of the coca economy and widespread violence.

The severity of the crisis makes the turnaround that the Fujimori government has engineered since late 1992 all the more remarkable. To a large extent, public order has been restored and, for the first time in decades, social peace does not appear a remote possibility. The economy, energized by sweeping pro-market reforms, is making an impressive recovery. The open question is whether advances to date can be consolidated and built upon or whether unpredictability and instability will return. Unfortunately, a number of legacies make the latter alternative a distinct possibility.

◆ Legacy of Inconsistent Economic Policy

Since the 1950s, Peruvian economic policy has featured periods of liberal policies (the 1950s), gradual interventionism (1963-1968), heavy interventionism (1968-1975 and 1985-1990), timid liberalization (1976-1985) and ultraliberalism (1990 to the present). The different periods have showcased remarkably different, even diametrically opposed applications of key instruments of economic policy. As a result, the economy has been deprived of predictability and stability, necessary conditions for sustained investment -- and for the jobs and incomes that go with it.

A significant byproduct of the incessant swings in economic policy has been a substantial increase in transaction costs, both for the private sector and for the government itself. In the former case, entrepreneurs have become accustomed to look for profits in the rents that the state has indulged through the purposeful manipulation of key relative prices.

In the latter case, inconsistency in policy formulation has resulted in a perpetual flux of rules and regulations. High turnover of personnel has made the situation even worse as it became virtually impossible to maintain a critical mass of civil servants able to implement policy professionally.

Some observers argue that the consistent implementation of free market policies since 1990 augurs well for future continuity. Others attribute the consistency to the coercive power of multilateral financial institutions. In the latter view, Peru's rank dependence on foreign creditors, rather than internal commitment, has been the key catalyst to introduce and keep reforms in place. Whether the drive for reform will be kept alive, therefore, remains to be seen.

◆ **Legacy of Rent-Seeking Behavior**

Rent-seeking is endemic in Peru, not only in so-called economic elites, but throughout the entirety of civil society.

At present, economic policy has transferred to the market the determination of the key relative prices of the economy, the exchange rate, interest rates, and wages. The ongoing privatization of state-owned concerns also is eradicating a significant source of influence-peddling. These decisions represent steps in the right direction. Still, as alleged abuses of recent public sector contracting suggest, old ideas -- and practices -- may die hard.

In recent years, substantial numbers of non-governmental organizations have emerged -- in many cases, to mitigate the impact of structural adjustment on the poor. Their emergence has not been free of rent-seeking either. In many places, in fact, so many organizations compete to serve the same clientele that an atmosphere of "*asistencialismo*" has been engendered. In its worst form, "*asistencialismo*" results in poor people looking for rents in much the same way as the entrepreneurs discussed above, rather than participating in development activities that allow them to capitalize themselves and generate sources of income sustainable over time. Ironically, a number of the organizations in question receive support from donors.

◆ **Legacy of Unpredictable "Rules of the Game"**

In a market economy, "rules of the game" are essential to facilitate transactions among private parties. The sanctity of property rights, the acceptance of a local currency as a medium of exchange and store of value, and respect for a country's legal system, for example, underpin the very functioning of its markets. When these "institutions" are the repository of public trust, markets can succeed as allocators of resources and as instruments of economic growth.

In Peru, many of the rules of the game taken for granted elsewhere either have not been defined or have not been enforced in a predictable way. Since the 1960s, for example, overregulation, expropriation, restrictions of property rights, unpredictable legal systems, and weak, often non-existent judicial enforcement have been the rule, not the exception. The upshot is institutional uncertainty, which manifests itself in weak, segmented markets.

The current government, in a bid to foster foreign direct investment, has taken measures to eliminate red tape, to increase security of property rights, to create a stable tax environment, and to introduce impartial, speedy arbitration procedures to settle disputes. For many Peruvians, though, the new rules of the game still are not credible. For some, the concentration of political power in the current administration fuels fears that rules may be manipulated arbitrarily. For others, the concern lingers that the reforms, as well as the commitment to pro-market policies, will disappear once the Fujimori government leaves office.

As long as rules of the game lack credibility, private firms, producer associations, and social organizations will take matters into their own hands to reduce institutional uncertainty. Not only will they set up their own norms to guide and validate economic transactions, they also will devise their own forms of enforcement. In Peru, the upshot is a plethora of networks whose exchange relations are characterized by intense personal contact. As a corollary, transactions costs rise for every participant in the economy, both for modern firms in the formal sector and for those who eke out a living in the informal, low-productivity economy.

The coexistence of so many networks bound by personal relations has profound implications for the prospects of broadly based economic growth in that it segments markets one from another and reduces the scope for transactions in a large, anonymous market. As a result, the advantages normally derived from a high degree of specialization and division of labor are lost.

◆ Legacy of Weak State Institutions

An ironic consequence of Peru's heavy state interventionism is the erosion of the capability of the state itself. A byproduct is the total loss of prestige and credibility by a number of key public institutions. The judiciary perhaps is the most obvious example.

Public sector reform is needed urgently to consolidate economic reform. The government has made notable progress in some areas -- in the restructuring of SUNAT, for example -- but others lie in limbo. The role of the state in the economy, for instance, awaits firm definition -- whether it will limit itself solely to regulatory functions or whether it will participate in the provision of market goods and services. The current debates on the fate of Petro Perú and the pros and cons of state development banks

illustrate the uncertainty. A second area is the efficiency and targeting of education and health services, a topic discussed in more detail below. A further deficiency is the virtual absence of budgeting, accounting, and control systems to monitor and evaluate the impact of public spending. In the past, public resources often have been allocated more by political expediency than according to criteria that seek to maximize public benefit. Now that the Treasury is awash in funds, there is even less incentive to exercise discipline and, correspondingly, the danger that vast resources will be wasted.

Gross Domestic Product grew by seven percent in 1993, and conservative estimates suggest that the rate of growth this year will surpass ten percent. From an all-time high of 7,600 percent in 1990, inflation will drop to about 18 percent this year, and well may fall to below ten percent in 1995, a feat last achieved in the early 1960s. In 1993, the fiscal deficit fell to 1.4 percent of GDP, significantly lower than the 8.5 percent registered in 1988. In contrast to practice that prevailed until 1990, the deficit is being financed in non-inflationary ways. At present, net international reserves surpass US\$ 5 billion and continue to grow. Foreign capital is pouring in, in both portfolio and direct investment.

Although the current picture definitely is rosy, it still is not entirely clear that Peru's economy has turned the corner once and for all. First, despite obvious progress, 1993 GDP still is only 97 percent of what it was in 1980 and just 82.5 percent of what it was in 1987. Second, although both public and private investment has picked up, the total in 1993 still made up only 15.7 percent of GDP, a proportion significantly lower than the 28.8 percent obtained in 1981. If one excludes investment in construction, the proportion plummets to 4.1 percent. Third, the recovery has been highly selective. Since the last quarter of 1992, economic growth has been led basically by mining, fisheries, construction, and electricity. The dynamism of the first two sectors is tied to the vagaries of natural resources and to the evolution of international prices, while additional growth in construction and electricity is contingent on additional expansion of investment. In contrast, two sectors in which one normally looks for employment generation -- agriculture and manufacturing -- still are depressed. Manufacturing, in fact, has seen its share of GDP fall from 37 percent in 1987 to 28 percent in 1993. Fourth, the percentage of people adequately employed has fallen from 18.6 percent in 1990 to 12.4 percent in 1993. Fifth, as Chapter 2 makes evident, poverty, far from going away, continues to be a major development challenge.

Is the glass half-empty, or is it half-full? Are the shortcomings of Peru's pattern of growth solvable with time if the government adheres to the economic program currently in force? Is the current trajectory of economic growth sustainable? Is it conducive to growth that is broadly based? The answers to these questions likely are no, unless steps are taken to address a number of core economic constraints.

◆ **Financing of Future Fiscal Expansion Is Problematic**

For the first time in over three decades, Peru will post a substantial surplus in its fiscal account in 1994, a phenomenon attributable in large part to the extraordinary revenues - - approximately US\$ 2.5 billion -- generated from the sell-off of state-owned concerns. The fiscal stimulus furnished by those revenues has been the catalyst of an economic dynamism that will make Peru the fastest growing economy in the region this year.

The current fiscal expansion would not be cause for alarm if the Peruvian treasury had the capacity to continue to generate equivalent revenues in the future. Were it not for privatization, however, all indications suggest that the fiscal account would be in the red. Tax revenues as a percentage of GDP still hover around 12 percent, a proportion far too low to continue to finance the ambitious public programs undertaken this year. If tax revenues do not increase, at some point Peru will have no choice other than painful fiscal adjustment.

◆ **The Current Account Deficit Is Very High**

Peru's trade deficit is projected to come to US\$ 1 billion in 1994, double the level registered in 1993. The current account deficit, which also factors in international transactions in tourism and financial services, will total about US\$ 3.0 billion, or more than six percent of GDP.

A current account deficit reflects an excess of total expenditures over total income. In other words, it is a situation in which a country "is living beyond its means." Such imbalance is feasible as long as financing is forthcoming from abroad. Aside from multilateral and bilateral aid, there currently are five sources of such financing: capital repatriation, foreign acquisition of state-owned concerns, short-run capital inflows, foreign direct investment, and proceeds from drug activities. Of the five sources, the first two are one-shot transactions. Short-run capital inflows, on the other hand, are highly unstable and speculative, since they are determined by differentials between domestic and foreign interest rates. Of late, there has been an outflow of funds in response to rising rates in the United States. Foreign direct investment takes time to materialize and, in the past, has consisted mainly of the purchase of existing assets. The last source, *cocadólars*, is extremely significant. Approximately one third of legal exports are generated each year from illegal activities.

In the past, the standard response to balance-of-payments disequilibria has consisted of sharp reductions of public and private expenditures and steep depreciations of the sol, which in turn have triggered lower output, falling incomes, and higher inflation. Should one or more of Peru's current sources of external financing dry up in the near future, the Central Bank has adequate foreign exchange at its disposal to head off a major balance-of-payments crisis for a couple of years. When one thinks longer term, however, one

cannot discard the possibility of a crisis of significant proportions, at least if the country continues to fail to expand legal exports significantly

◆ **Exports Are Limping Badly**

The current government has proposed an export-led model of economic growth. It is somewhat ironic, therefore, that exports constitute the Achilles heel of its economic program. *In nominal terms, the value of exports in 1994 will be lower than in 1980, in per capita terms, it will be equal approximately to the value reached in 1950.* Additionally, exports are heavily dependent on commodities, a constant in the historical evolution of Peru's external sector.

There is evidence of substantial domestic and foreign investment in traditional export sectors, especially mining and fisheries. As a result, a significant expansion of foreign exchange is expected in years ahead. For example, it is estimated that gold exports soon will reach approximately US\$ 900 million a year -- which obviously will go a long way to head off balance-of-payments crises. As a rule, though, mining and fisheries generate relatively little employment and are weakly linked with the rest of the economy. Again, the upcoming boom represents nothing terribly new. enclave production has been a distinguishing feature of export-led growth in Peru since the nineteenth century.

None of this is to suggest that Peru somehow is "doomed" to perpetual dependence on narrowly based traditional exports. As experience in newly industrialized Asian countries demonstrates, dependence can be lessened through a combination of productivity enhancement in traditional sectors and vigorous expansion of manufacturing exports with higher value added. For such a transition to take place, however, two elements are essential: public investments conducive to broadly based growth and a policy environment that furnishes appropriate production and investment incentives.

◆ **The Market Rate of the Sol Is Higher Than Its Parity Rate**

In contrast to practice during the García administration, the exchange rate now is unified and determined basically by market forces. Still, the sol's market rate does not reflect its parity rate, that is, its market rate is not an accurate indicator of the international competitiveness of domestic producers. During the first semester of 1994, for example, inflation rose by nine percent, but the sol depreciated nominally by barely 1.5 percent. In the second semester, the sol actually has appreciated, even in nominal terms. The consequence is that Peruvian products have become less competitive in world markets.

In Peru, the disparity between market and parity rates, which is estimated to have averaged 30 percent since 1990, has its roots in the phenomenon called *Dutch disease*. Dutch disease occurs when massive inflows of foreign exchange lead to a sustained

overvaluation of local currency. Short-term capital inflows and, most importantly, proceeds from illegal exports, are the main sources of such inflows in Peru. Currency overvaluation can bolster the incomes of the poor when they are primarily consumers of tradeable goods (for example, foodstuffs) and producers of non-tradeables (for example, services and simple manufacturing goods in the informal economy). This characterization appears to fit the Peruvian case. Although a misalignment of market and parity rates can have favorable short-term consequences, the consequences in the longer term are not so benign, in that sustained overvaluation leads to generalized misallocation of resources. Not only are exports penalized, but production for the domestic market also suffers. For example, agricultural producers, both of exportables and of home products, find it hard to compete with artificially cheap foreign substitutes. As a result, profitability in the sector decreases, and disinvestment ensues. Under these circumstances, it is not uncommon to find small and medium farmers either leaving their land or seeking profitable investment opportunities elsewhere.

Nor is local industry immune. When overvaluation is severe, not even manufactures with handsome potential to compete internationally -- textiles, for example -- stand much of a chance. The upshot is sustained increases in the trade deficit, unemployment, and declines in tax revenues associated with lower output.

Although there is consensus that the sol is overvalued relative to its parity rate, most observers do not call for forced devaluation or other drastic measures. Indeed, after the chaos of the exchange rate regimes of the recent past, non-inflationary stability still merits the highest premium. Moreover, the optimism generated by the impending mining boom has led most to conclude that Peru's exchange rate misalignment is manageable in the short and medium run and that, little by little, the disparity between the sol's market and parity rates can be reduced. What continues to be nettlesome, however, is the narrowness of Peru's export base, both product and employmentwise. This problem, which is structural in character, will not go away by itself. Rather, public investments are called for both to lower the costs of entry of the poor into export industries and to raise the productivity of labor across the board.

◆ **The Financial Sector Is Fragile**

Some banks -- most notably, Banco de Crédito and Banco Wiese -- are doing extremely well. The two giants now hold 51 percent of all deposits, up from 32 percent in 1990, thus suggesting that substantial market concentration has taken place. Other banks are saddled with high proportions of loans of doubtful recovery, and most banks have high unit operating costs. The typical response to such problems is to hike loan rates. Hiking rates is an option because of the oligopolistic structure of the market, on one hand, and the high floor that international lenders -- ever sensitive to perceived country risk -- impose on domestic rates, on the other. The bottom line is that rates on sol-denominated loans continue to be very high, and act as a deterrent to domestic investment.

Margins of intermediation in Peru are among the highest in the region. Accordingly, the recent announcement that several foreign banks await approval to launch operations in Peru would appear to be a positive development. Time will tell, however, whether the entry of foreign entities -- which generally are blessed with unimpeded access to funds from their home offices and other banks abroad, are relatively free of reserve requirement constraints, are endowed with highly efficient, computerized systems, and are less burdened by low-quality portfolios -- will threaten the very existence of the domestic banking system.

◆ **Income Distribution Is Extremely Skewed**

Inequity is a distinguishing feature of the Peruvian economy. Major attempts at redistribution in the recent past -- by Velasco from 1968 to 1975 and by García from 1985 to 1990 -- backfired due to heavy interventionism that ultimately led to hyperinflation. The final tally is unmitigated disaster. *from 1973 to 1993, real income per family dropped an average of 73 percent*. Ironically, evidence suggests that the well-off were spared such misfortune. In times of hyperinflation, the rich and the upper middle classes normally can protect their wealth by purchasing non-monetary assets and by speculating in the foreign exchange market.

To be fair, there is no evidence, so far, that the pro-market economic reforms in place since 1990 are ameliorating economic inequality. If anything, inequality may have worsened. From 1992 to 1993, the take of enterprise owners (profits) rose from 50 to 55 percent of total national income, at the same time, the take of workers employed in the formal sector (wages) dropped from 15.5 percent to 13.9 percent. Some current policies also may be fueling asset concentration -- for example, the government's acceptance of its outstanding debt as payment for state-owned concerns, which effectively confers enormous advantages on parties who have bought Peruvian debt in secondary markets at hefty discounts.

Some will argue that income and asset concentration does not pose an insurmountable problem provided that government policy is successful in bringing about vigorous economic growth. In this view, the rising tide of growth will lift all boats, including those of the poor. Implicit here is the assumption that economic growth will be conducive to the massive creation of high-productivity jobs. Unfortunately, Peru's recent pattern of growth does not bear this assumption out. Two lead sectors of the recovery, mining and fisheries, are capital-intensive industries, while construction employs mainly unskilled labor. In addition, the few manufacturing industries that have completed the updating of their production techniques have raised productivity at the expense of employment. Overall, the manufacturing sector employs fewer workers today than it did in 1990. *In 1990, manufacturing offered close to 90 percent of the jobs it had generated in 1979, by 1994, the percentage had fallen to just 62 percent*.

The bottom line of this discussion is that the economic policy mix of the current government may require modification if it is to improve income distribution and to lower the mind-boggling levels of unemployment and underemployment that currently characterize the Peruvian economy. Unless these structural problems are addressed, broadly based economic growth will remain illusory. The combination of the disparity between the market and parity rates of the sol and the artificially high costs of investment financing favors the continuation of Peru's historical pattern of growth -- narrowly based export industries that are capital-intensive in character and, if anything, protect profits by squeezing wages. The policy package must be altered to reverse the incentives against the development of potentially competitive labor-intensive industries -- which, in the final analysis, boils down to raising the productivity of labor.

3.2. PRODUCTIVE SECTOR CONSTRAINTS AFFECTING FOOD SECURITY

This section discusses constraints that affect Peru's productive sectors. Because of the focus on food security, the lion's share of attention is given to constraints affecting the country's agricultural sector.

◆ The Profitability of Agriculture Is Low

Although there appears to have been improvement in 1994, agriculture has not evidenced high returns in recent years. In 1991-92, corn, cotton, rice, and wheat all are estimated to have been unprofitable. In 1992, returns to potato production were barely positive, 1.7 percent, a substantial improvement over the negative 12.4 percent return registered in 1991, but a rate hardly competitive with returns elsewhere in the economy.

In addition to the economy-wide constraints discussed above, a number of sector-specific factors help to explain the relatively low profitability of agriculture. Perhaps most fundamental is the sorry state of economic infrastructure in rural areas. Peru's countryside is characterized by deterioration of roads, lack of electricity, and inadequate water, especially in the Sierra, all of which affect negatively the profitability of agricultural activities. Low returns also are associated with *minifundismo*, a phenomenon that evolved historically not only from population pressures on arable land, but also from the widespread exclusion of peasants from areas best suited for cultivation. Of a total of approximately 1,540,000 economic units in the agricultural sector, it is estimated that 71 percent are less than five hectares, and that they cover just 12 percent of the cultivated area of the country. Most small farms are not viable economically. On the coast, 71 percent are estimated not to be viable, while the corresponding estimates for the Sierra and Selva are 90 and 80 percent, respectively. In general, *minifundios* occupy lands of the poorest quality, have inadequate irrigation, and are located far from major markets. As a rule, technology is primitive and outdated, and soils often are eroded. Yields typically are very low, and farm families consume substantial portions of their production themselves. Perhaps the most visible concentration of *minifundismo* is found

in the approximately 90,000 *comunidades campesinas* concentrated primarily in the central and southern Sierra and comprising substantial numbers of Peru's extremely poor

◆ **Prospects for Extending Cultivation Are Poor**

On the coast and in the Selva, arable land is underused, in the Sierra, it is overused. Overall, the ratio of arable land to population in Peru is 0.40 hectares per capita, roughly half the level estimated by experts for food self-sufficiency. If current trends continue, the ratio will drop to 0.13 hectares per capita by 2005. If all remaining arable land on the coast and in the Selva were brought under cultivation, the ratio would rise to 0.27 hectares per capita.

The supply of arable land in the country has suffered and continues to suffer from two phenomena. First is the rapid pace of *urbanization* that Peru has sustained since the 1940s. In many instances, urbanization has evolved chaotically, at the expense of valley lands propitious for agriculture. The other phenomenon is *soil erosion*. On the coast, it is estimated that 141,000 hectares -- or 18 percent of total cultivated area -- are affected seriously by problems of salinity and drainage. In the Sierra, the situation is worse. 800,000 hectares -- or 60 percent of arable land -- are estimated to be affected by erosion. In general, soil erosion is more acute in lands inhabited by poor farmers, especially in the Sierra. In that region, it is estimated that farmers have overexploited 600,000 hectares to the point of severe ecological damage. Fortunately, although their adoption has not been that widespread, proven practices do exist for poor Sierra households to conserve soils and increase productivity and income (see the discussion of PRONAMACHS below).

Among the program options available to increase arable land is investment in rural infrastructure, especially roads. At the moment, Peru is embarked on a major program of road repair and new construction, facilitated by loans from the Inter-American Development Bank and the World Bank. Significantly, the program contemplates the rehabilitation of roads that link areas of agricultural production -- especially areas located in the Selva -- with main highways leading to large urban centers. If the program materializes, the supply of agricultural products likely will increase, and significant savings will be realized.

On the coast, sizable increases in arable land will come about only if major irrigation projects launched years ago are brought to completion. There are two compelling arguments for not rushing headlong to complete them, however. First, the task would be very expensive. It is estimated that a total of US\$ 6.6 billion, the equivalent of 20 percent of GDP, would be required. Second, evidence suggests strongly that the projects in question actually yield very low returns. The original feasibility studies have not been updated and rely on unrealistic assumptions concerning availability and use of water, product profitability, market demand, etc. Moreover, the objective of many of the

projects has not been to minimize costs, but to maximize water supply per area. Also, ecological factors often have been ignored. Examples of projects that have sustained ecological damage include Tinajones, Chira-Piura, and San Lorenzo.

◆ **Use of Agricultural Technology Is Sub-Optimal**

Agricultural productivity could increase markedly if improved technology currently available enjoyed widespread use. Both demand and supply constraints have acted as barriers to technology development and diffusion.

On the demand side, government policies have undermined the profitability of agriculture for decades. Under such circumstances, it is natural for producers to exercise caution in adopting what they perceive to be risky production techniques. Although the current administration has eliminated a number of distortions against agriculture, the imbalance between the market and parity rates of the sol continues to dampen investment in the sector. Available evidence suggests that only a limited number of crops are profitable under the existing structure of relative prices. The crops in question are primarily export crops blessed by low operating costs and natural comparative advantages.

On the supply side, the economic crisis of the 1980s virtually dismantled agricultural research and extension programs in Peru. Funding for agricultural development shrunk markedly, especially funding for research and extension. Despite budget austerity, a number of programs -- bean, corn, potato, rice, and wheat programs, for example -- did succeed in attracting support and yielded high returns. In the end, though, the programs could not be sustained. Factors contributing to their demise included political interference, uncompetitive salaries, high turnover of personnel, and bureaucratization.

The Fujimori administration is encouraging the private sector to assume a leadership role in the generation and transfer of technology, but the jury still is out on the future of this strategy. Perhaps the most significant constraint to whatever strategy is adopted in the future is the prolonged absence of institutional continuity in past approaches to agricultural research and extension. *since 1960, agricultural research and extension has taken place under 16 different institutional frameworks!* Perpetual reinvention of the institutional wheel obviously does not augur well for sustainability. Finally, little attention has been paid to the poor state of agricultural research in Peruvian universities. For the most part, universities are so strapped financially that research does not receive high priority.

◆ **Water Rights Legislation Is Inadequate**

At present, a total of 1.3 million hectares -- or 35 percent of arable land in Peru -- falls under irrigation. The Peruvian government is the sole owner of rights to water, and

issues licenses to users. Despite the scarcity of the resource, licenses are priced very low. Consequently, water is used inefficiently and little incentive exists to invest in irrigation improvement.

The current government has prepared legislation defining a new system of water use rights. Under the new system, water would become a private, tradeable good. In essence, the responsibility for pricing and allocating water would fall to the market. The government's proposal has met intense opposition. One objection is the contention that the new system favors individual rights -- especially those of big producers -- over those of producer organizations. There is also concern that the new system will divert water away from agriculture toward urban centers and economic activities such as mining and industry. The issue of water rights is highly sensitive politically, thus making its resolution unlikely before the presidential elections of April 1995.

◆ **The Agricultural Workforce Is Dominated by "Informales"**

The agricultural labor market mirrors labor conditions in the country at large. During the last two decades, the number of salaried workers in Peru has shrunk relative to the number of workers under informal arrangements. In rural areas, population pressures and low *minifundio* incomes have triggered an explosive increase in the supply of seasonal labor. The sheer size of the agricultural workforce, together with its geographical dispersion, inhibits workers from organizing themselves to extract better terms from employers. If anything, the break-up of coastal cooperatives has made matters worse, since seasonal workers now must contend with small employers who prefer to use family labor over salaried workers. When in need, employers hire labor only for short periods of time, normally less than a week.

The high proportion of seasonal workers in the agricultural workforce largely explains the *very low real incomes that accrue to agricultural labor*. At the same time, the structure of the market poses significant problems for the enforcement of labor laws. For example, the law stipulates that agricultural workers -- like workers in any private firm -- are eligible for benefits such as vacation, profit sharing, social security, etc. In practice, agricultural laborers commonly work for more than one employer during a given week, thus making it easy for individual employers to ignore their obligations. Minimum wage laws also are very difficult to enforce, especially in the Sierra. To gain legal recourse, workers typically must travel to urban areas to present their complaints, which can be costly both in time and in income foregone. In addition, the resolution of conflicts takes time, and outcomes are uncertain.

◆ **Resolution of Land Disputes Is a Major Constraint**

Dispute resolution is a significant problem not only for labor, but also for land. The bottleneck is not the law *per se*, but the fact that so few parcels are registered and titled. For example, of the 5,022 *comunidades campesinas* officially recognized in September 1993, only 1,004 were titled. More broadly, of all legal cases brought to the Agrarian Tribunal in that year, 70 percent had to do with land claim disputes. To complicate matters further, legal authorities also must contend with claims from the approximately 120,000 families that fled their properties during the worst years of the campaign against armed insurgency.

Inadequate registration of parcels and problems of land titling smother the development of financial markets in the countryside. Commercial creditors are reluctant to lend large sums of money to borrowers who do not have adequate collateral. When they do, financial entities must be prepared for possibly lengthy and costly foreclosure procedures. In principle, a number of problems associated with credit provision could be addressed by obliging borrowers to purchase insurance policies to protect banks against risk. The insurance market in Peru is not well developed, however. As a rule, insurance companies are reluctant to offer such policies at reasonable cost.

◆ **Formal Financing of Agricultural Activities Is Scarce**

The collapse of the Banco Agrario eliminated the main source of formal financing for agriculture. Although its closure opened up opportunities for commercial banks, very few are active in lending to the sector. In the past, the Banco Agrario was so dominant that, for all practical purposes, commercial banks are newcomers to the field, and it will take them time to become acquainted with the particular characteristics of agricultural borrowers. At the moment, commercial banks finance primarily export activities.

The government is promoting the establishment of *cajas rurales*, but progress to date has been painfully slow. Only six *cajas* are in operation with loanable funds of just US\$ 10 million. For now, the slack is being met by FONDEAGROS and marketing agents such as input suppliers and traders. Neither are efficient mechanisms of financial intermediation. FONDEAGROS, which is financed by revenues from agricultural import surcharges (see below), is tainted by political patronage and has a poor record of loan collection. It has been estimated that as much as 50 percent of its loan portfolio is overdue. Credit furnished by marketing agents is sporadic and linked to demand only for specific products, in other words, it does not represent a "line of credit" that a borrower can renew for other crops or productive activities, nor does it establish any kind of a working relationship with a credit agency. Finally, neither intermediary is concerned with savings mobilization.

◆ **Coca Cultivation Has Adverse Effects**

Although coca cultivation has raised farmer incomes, the effect on the economy as a whole largely has been adverse. First, the illegality of coca production and the danger inherent in growing it raise transactions costs for farmers. Second, the coca economy has bred violence and undermined state institutions, especially the police and judiciary. Third, coca has replaced other crops -- for example, coffee. Fourth, evidence points to extensive ecological damage from coca cultivation. In the last ten years, it is estimated that 200,000 hectares have been allocated directly to coca cultivation, which has led to a process of deforestation affecting 700,000 hectares.

◆ **Geographical Isolation Stands in the Way of Integration of Markets**

The effects of geographical isolation go beyond low productivity *per se*. The physical isolation of substantial numbers of producers from urban centers, together with their lack of communication with them, often makes the costs of marketing produce to other than local markets prohibitively expensive. Even more generically, the remoteness of so many production units acts as an obstacle to broad-scale development of *backward and forward linkages*. Markets remain segmented, and investment in activities related to primary agriculture -- for example, input processing, product packaging, marketing and transportation -- fails to receive high priority. As a result, real incomes tend to remain stagnant, effective demand is held in check, and the advantages normally derived from larger, integrated markets are lost.

◆ **Marketing Systems Are Inadequate**

Two wholesale markets in Lima determine the prices of most perishable products of the country. Most production comes from small farmers in remote areas. Farmers sell their produce to intermediaries who, in turn, sell to the wholesale markets. Most farmers sell in small quantities and, thus, do not command much market power. Losses are estimated at 200,000 metric tons of perishable produce annually. Reasons include poor transportation, overcrowding, pollution, and generally inadequate facilities.

Once again, the physical isolation of farmers from markets and the poor state of transportation infrastructure emerge as key constraints to the well-being of Peru's rural poor. In addition, most small farmers are not equipped with *storage facilities* to give them bargaining power with intermediaries. Furthermore, producers typically have only limited *information on wholesale prices and transportation costs*. The consequence is a downward bias of producer prices against producers. For their part, intermediaries generally transport produce in non-refrigerated vehicles. Last but not least, both producers and consumers suffer from the absence of well established grades and standards.

◆ **Agricultural Import Surcharges Are Counterproductive**

Introduced in 1991 to stabilize prices and to protect producers of wheat, pasta, corn, rice, sugar, and powdered milk, agricultural import surcharges have failed to fulfill their objectives. In the interim, imports of goods subject to the surcharges actually have increased. Apparently, the imbalance between the market and parity rates of the sol has more than offset the increase in price associated with the surcharges. It also appears that the system is prone to manipulation by narrowly based interests. Producers actually have benefitted very little, since surpluses extracted from consumers have accrued largely to importers and agroindustrialists.

Poor consumers also have been affected adversely. For the poor, the foodstuffs that are subject to surcharges are major components of household expenditure. To the extent that marketing intermediaries are successful in passing on the cost of the surcharges to the consumer, therefore, the poor not only are paying more for food than would otherwise be the case, but, proportionally, are bearing more of the burden than others. The oligopolistic nature of the food industry in Peru suggests strongly that this is precisely what has happened.

3 3. SOCIAL SECTOR CONSTRAINTS AFFECTING FOOD SECURITY

Social sector programs also can make important contributions to food security in Peru, and there are a multiplicity of such programs. Food assistance programs are the most visible, and their impact on food insecurity is the most direct and immediate. Among traditional social sector programs, primary health and basic education are the most important from a food security perspective. Temporary employment generation programs, created to assist the poor to maintain their access to adequate diets during the recent economic crisis, also contribute significantly to food security.

3 3 1. LACK OF COORDINATION AMONG A MULTIPLICITY OF SOCIAL SERVICE PROVIDERS AND PROGRAMS

What complicates the situation in Peru is the wide range of actors involved in social sector programs -- numerous central government agencies, regional governments, community groups, donor agencies, private firms, and non-governmental organizations (NGOs) -- and the large number of programs that they carry out. Coordination among actors is poor. In essence, each individual actor operates from its own perception of Peru's food security problem. In addition, considerable gaps and duplications exist among programs.

The area of food assistance is particularly complicated. A multiplicity of institutions are involved in a variety of programs, often with financial support from several donors. NGOs are

among the most important actors involved in the delivery of food assistance. CARITAS operates a nationwide network that distributes volumes of food assistance in excess, at times, of those of government programs. ADRA, CARE, and PRISMA also import food commodities, design and supervise food programs, and mobilize donor support for food assistance. CARE monetizes imported food commodities on the commercial market to generate local currencies for its food assistance programs and those of the three other NGOs. To help it deal more effectively with the large quantities of food assistance coming into the country, the Government of Peru created a separate agency, the National Food Assistance Program (PRONAA), to coordinate the receipt, transport, and distribution of food assistance nationwide. Since its creation, PRONAA has become more active in the provision of food assistance, and recently has begun to buy locally produced foods for distribution in its programs.

The distribution of food assistance through a variety of different types of programs makes program coordination difficult. It also makes it difficult to understand the overall dimensions of food assistance in Peru and to assess its impact on food security. Most programs fall into at least one of the following categories:

◆ **Maternal-Child Programs**

PANFAR is one of the most successful food assistance programs in reaching its target groups -- women and children, from birth to 59 months old, at high risk of malnutrition. The program is implemented by the Ministry of Health with support from PRISMA. Its objective is to improve the nutritional status of target children and their mothers through the delivery of supplemental food and primary health care services. PANFAR operates nationwide, with 67 percent of its beneficiaries in rural areas and the remainder in marginal urban areas.

The "*Vaso de Leche*" program, implemented by the Ministry of Education, has a similar target group -- pregnant and lactating women and pre-school children -- and also is nationwide in scope. "*Vaso de Leche*" does not provide complementary services as does PANFAR, and is not as well targeted (see Subsection 3.3.7). Some also question the appropriateness of the one commodity -- milk -- that it relies on to achieve nutritional impact.

Several other NGOs, including CARE and CARITAS, manage programs directed to mothers and pre-school children.

◆ **School Feeding Programs**

The Ministry of Education runs a Ministry-funded school feeding program as well as a FONCODES-financed program in the poorer areas of the country. The target group of each program is primary school children, and its objective is twofold: first, to improve school attendance and academic performance, and reduce desertion, and, second, to

improve nutrition. The FONCODES-financed program differs from the larger program in that it uses specially formulated, high-nutrient foods, involves parents and communities in the program, and attempts to evaluate impact.

◆ **Community Feeding Programs**

Several programs provide direct food assistance to the urban poor. All use the same vehicle -- "*comedores populares*" -- that is, community kitchens that self-selected groups of women in poor urban neighborhoods have established to provide low-cost lunches to their members or to the general public. Taken together, these programs reached over one million urban beneficiaries in 1991. In doing so, they provided a relatively quick and easy way to insure that urban poor people had access to food during the worst days of the economic crisis.

◆ **Income Generation Programs**

Several programs are oriented to improve the food security of rural communities by increasing the productivity of their agricultural resource base. A prime example is CARE's ALTURA program, which is implemented in conjunction with PRONAMACHS, the National Watershed and Soil Management Program of the Ministry of Agriculture. Working in the poorest areas of the Sierra -- Cajamarca, Ayacucho, Apurimac, Huancavelica, Cusco, and Puno, ALTURA uses food to encourage rural communities to adopt improved agroforestry and soil conservation techniques. Although the number of participants is relatively small compared to participants in community feeding programs, improvements in incomes and food security generally are sustainable.

Several NGOs also sponsor programs to raise women's incomes through microenterprise activities. These programs operate in urban areas and, again, the number of beneficiaries is relatively small.

Among the traditional social sector agencies within the central government, the Ministry of Health is responsible for providing health services to those who do not receive them from other sources, namely, the poor and food insecure. Within the Ministry, the National Feeding and Nutrition Institute (INAN) coordinates the implementation of several direct food assistance projects. The Ministry of Health also is responsible for assessments of Peru's nutrition problems. Responsibility for primary education falls to the Ministry of Education. As noted above, the Ministry of Education runs its own school feeding program as well. There also exists an extensive network of formal pre-schools and non-formal pre-schools with strong community involvement (PRONOEI).

The Government of Peru has set up several temporary employment generation programs in response to the economic crisis at the end of the 1980s and the beginning of the 1990s. In 1991, the Government created FONCODES, a social investment fund to finance small productive and social infrastructure projects to provide temporary employment for the poor. FONCODES also receives significant funding from the World Bank and the Inter-American Development Bank to fund projects in health, basic education, and other sectoral activities designed to benefit the poor. Like social investment funds elsewhere in Latin America, FONCODES has a short-term focus. Its objective is to help the poor survive until the Peruvian economy is able to respond to the new incentive structure created by structural adjustment and until the capacities of the Ministries of Health and Education improve sufficiently. With USAID support, the government also developed a special Emergency Social Investment Program (PEIS). Directed by the National Development Institute (INADE), PEIS was designed to provide temporary employment to the poor during the economic downturn. Although the primary objective of the different temporary employment programs has been to address problems of transitory food insecurity, it is important to note that they have made investments in productive and social sector infrastructure in previously underserved areas, and, thus, can be expected to contribute to the amelioration of chronic food insecurity as well.

3.3.2. LACK OF A COMPREHENSIVE STRATEGY FOR ADDRESSING PERU'S FOOD SECURITY PROBLEMS

Another, perhaps more fundamental constraint is the absence of an overall strategy for addressing Peru's food security problems, as well as the absence of clear mechanisms for prioritizing them and for channeling government and donor resources to resolve them. Many who are active in food security in Peru fail to view it in all its dimensions -- availability, access, and utilization -- or to appreciate the complexity of the interactions among them. Many also appear to have fallen into the trap of equating promotion of food security with feeding programs, and do not appreciate that many other program actions are needed to bring about sustainable food security for food insecure households in the medium to long term.

Food assistance programs, in particular, could benefit from the development of an overall policy framework or strategic plan that would set forth the objectives of such assistance, define institutional arrangements, assign priorities to target groups, and identify appropriate program actions. In the absence of such a policy or strategy, practice is largely determined by the judgments of individuals and the proclivities of different agencies. Programs also suffer from the absence of standard operating procedures. At the moment, for example, many programs with the same objectives and target groups vary greatly both in the levels and in the duration of the assistance they provide. Unit costs, measured in terms of food cost and total cost per beneficiary, vary substantially. The absence of standards for monitoring and evaluation also makes it difficult to set priorities among programs and to improve their management.

The following is an example of issues that need to be resolved. A number of the programs discussed above, such as the "*comedores populares*" and the temporary employment programs

sponsored by FONCODES and INADE, were designed in response to the increase in transitory food insecurity accompanying the economic crisis at the end of the 1980s and the beginning of the 1990s. The objective of these programs was to enable poor people to maintain access to a minimum nutritionally adequate diet, either directly, through access to subsidized meals, or indirectly, by creating temporary jobs for unemployed people. Now that the economy has begun to recover, the question arises whether the programs should be terminated or whether their focus should be shifted consciously to bring about sustainable improvements in food security in the medium and long term. In answering the question, acknowledgement must be made that not all experience has been glowing. For example, there is evidence that some of the schools and health posts constructed under temporary employment programs do not have teachers and nurses to staff them.

3 3 3. DECLINE IN AVAILABILITY OF PUBLIC SECTOR FINANCING

Public sector financing of social services declined severely during the 1980s. By 1990, total central government spending had plummeted to less than 15 percent of GDP. For its part, social sector spending, which had accounted for approximately four to five percent of GDP during the 1970s and early 1980s, fell to 1.9 percent of GDP.

Within the social sector, health's share of the central government's budget remained fairly stable at four to five percent (or one percent of GDP) until 1990, at which time it declined to 3.2 percent (or 0.5 percent of GDP). Measured on a per capita basis, spending by

the central government on health increased from about US\$ 5 in the early 1970s to US\$ 14 in the early 1980s, and then declined to US\$ 8 by 1990. Allocations to education, on the other hand, have declined more sharply, from 17 to 19 percent of total central government spending

TABLE 3.1: TRENDS IN SOCIAL SECTOR SPENDING IN PERU BETWEEN 1970 AND 1990

	1970	1975	1980	1985	1990
SHARE OF TOTAL SPENDING (%)					
Health	5.5	4.7	4.7	4.4	3.2
Education	18.8	17.5	13.3	11.8	9.7
Total	24.3	22.2	18.0	16.2	12.9
U S DOLLARS PER CAPITA					
Health	5.2	10.1	12.7	7.9	8.3
Education	17.7	37.6	35.7	21.3	25.0
Total	22.9	47.7	48.4	29.3	33.3
SHARE OF GDP (%)					
Health	0.9	0.9	1.1	1.0	0.5
Education	3.2	3.4	3.0	2.8	1.4
Total	4.2	4.4	4.1	4.8	1.9

SOURCE: World Bank

at the beginning of the 1970s to about 13 percent at the end of the decade and during the 1980s. Measured as a share of GDP, the figures tell a similar story. In the first half of the 1970s, education expenditures were equivalent to 3.5 percent of GDP. The share dropped to 2.5 to three percent thereafter. Per capita spending on education has fluctuated considerably, but, in general, increased from an average of US\$ 26 in the 1970s (with notably high expenditures during the middle of the decade) to \$34 between 1980 and 1986, before falling to \$25 in 1990.

3.3.4. EXCESSIVE RELIANCE ON FOOD ASSISTANCE

Food assistance to Peru increased by almost 300 percent between 1980/81 and 1991/92 (from 123 thousand metric tons to 484 thousand metric tons), at the same time that the volume of food assistance worldwide grew by only 47 percent. The United States, the major food donor, increased the value of its assistance by almost 200 percent between 1980/81 and 1991/92) and by 136 percent in the three years from 1990 to 1993.

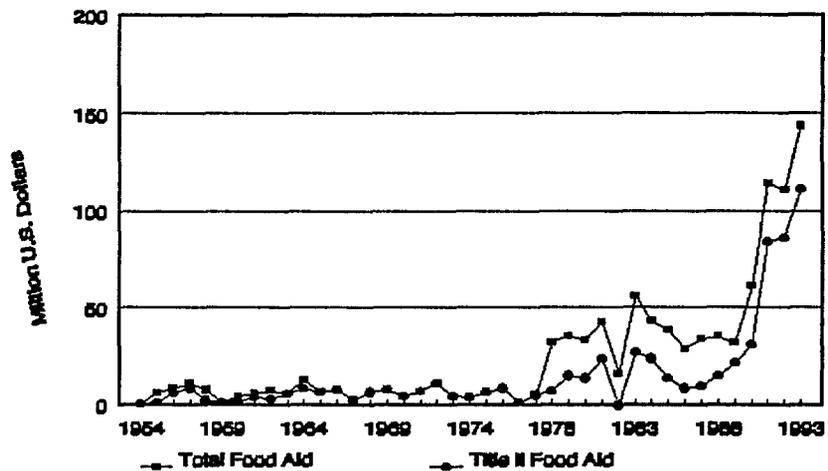


FIGURE 3.1: TRENDS IN U.S. FOOD ASSISTANCE TO PERU

Food assistance also

became a more important component of USAID/Peru's portfolio, increasing from an average of 54 percent of the total portfolio during the 1980s to an average of 75 percent during the period 1990-1993.

Two additional statistics give an even better idea of the importance of food assistance to the country. In 1991, food assistance programs provided over 226,000 metric tons of food to at least nine million beneficiaries. In the same year, central government budget allocations to the Ministries of Health and Education came to US\$ 186 million and US\$ 246 million, respectively, donor food assistance resources totaled at least \$150 million.

Large quantities of food assistance have been both an advantage and a disadvantage. Food assistance has made a positive contribution to food security in the country. At the national level, it has helped increase the overall supply of food available, which has helped moderate price increases, thereby making food more affordable for poor households. Food assistance programs also have had a direct impact on household and individual food security through a variety of direct distribution programs, including mother and child health, school, and community feeding.

programs. The drawback of large quantities of food assistance is that it probably has encouraged the tendency to equate food security with feeding programs and, thus, led to excessive reliance on food assistance as a solution to Peru's food insecurity problems. The availability of food assistance also has contributed to the climate of "*asistencialismo*" in Peru, both at the national level and at the household level.

3.3.5. INSUFFICIENT ATTENTION TO COMPLEMENTARY HEALTH AND EDUCATION PROGRAMS

Traditional social services have an important role to play in the alleviation of food insecurity in the short, medium, and long run. If food is utilized properly, the result is improved nutrition, if not, food that is available and accessible is wasted. In Peru, poor dietary and sanitary practices and poor health are the primary constraints to proper food utilization. Improvements in health status can have an immediate impact on the ability of both children and adults to utilize better whatever food is available. Nutrition education, if focused on proper breast feeding and weaning practices, can have a major impact in reducing the high rates of chronic malnutrition among small children in Peru. In the medium and long term, improvements in health and education also are required to raise the productivity and incomes of the poor and, thereby, increase their access to food.

In the design of food assistance programs in Peru, insufficient attention generally has been paid to the importance of complementary health measures, micronutrient supplementation, and the promotion of better health and nutrition practices, including breast-feeding, weaning, and child growth and development monitoring. In addition, health and nutrition programs have not been integrated well either conceptually or operationally with temporary employment and other programs designed to improve poor families' access to food.

3.3.6. GEOGRAPHICAL AND CULTURAL BARRIERS TO THE DELIVERY OF SOCIAL SERVICES

Peru's difficult topography, in combination with poor transportation, communications, and logistics systems, presents major obstacles to the delivery of food assistance as well as health, education, and water and sanitation services. Geographical isolation is especially pronounced in the central and southern Sierra, where terrorist activities have constituted an additional threat. By restricting access to and from rural areas, especially in the Sierra and Selva, geographical barriers also have contributed to keeping Peru's large non-Spanish-speaking population relatively unassimilated into the national economy. As a result, social sector programs must be tailored to a wide range of ethnic, cultural, and linguistic differences, complicating service delivery even more.

3 3 7 POOR TARGETING OF SOCIAL SECTOR INVESTMENTS AND SERVICES

Peru's social sector public policy choices have contributed to serious inequities in levels of development between urban and rural areas and among different regions of the country. The disparity is especially noticeable in the distribution of schools, health facilities, and potable water and sewerage systems. As the data presented in Chapter 2 indicate, the great majority of the extremely poor, who live in the Sierra, also enjoy limited access to basic social services such as education, water, and sanitation. More recent data from the 1993 Census of Housing and Population make clear that there also are major disparities in the availability of public services among geographic regions. The percentage of households with access to basic services is particularly low in Cajamarca, in the four Departments of the southern Sierra that make up the *Trapezio Andino* -- Apurimac, Ayacucho, Cusco, and Huancavelica, and in Huánuco, Amazonas, and Loreto (see Table 3 2).

Food assistance also appears poorly targeted. Most food does not go to the rural Sierra, which is the area of the country where the majority of Peru's extremely poor live. Further, what food assistance does reach the Sierra does not appear well targeted to the poor or extremely poor. In fact, analysis of data from the 1991 Living Standards Survey suggests that only in Lima is food assistance relatively well targeted. In Lima, 74 percent of the extremely poor and 37 percent of the poor receive some form of food assistance. In contrast, only 6 5 percent of the non-poor benefit. In rural areas of the Sierra, only four percent of the extremely poor and only four percent of the poor benefit from food assistance programs. In fact, of all food assistance provided in the rural Sierra, it is estimated that 44 percent is captured by non-poor people. Finally, different programs differ in their effectiveness in reaching intended target groups. For example, an examination of "*Vaso de Leche*" beneficiaries suggests that the program is less successful in reaching its intended target groups than in reaching others. Although it aims to reach children under six and women, the largest proportion of its beneficiaries are school-aged children. Fifty percent of beneficiaries fall between the ages of six and 14, and only one in four is less than six years old. In addition, nearly 20 percent of beneficiaries are not poor.

3 3 8 INSTITUTIONAL CONSTRAINTS AFFECTING PUBLIC SECTOR DELIVERY OF HEALTH CARE SERVICES

During the last decade, the Government of Peru expanded its primary health care infrastructure, including infrastructure in previously underserved areas of the country. Between 1980 and 1990, the number of health care centers increased by 60 percent, and the number of health posts doubled. The challenge now is to improve utilization of the infrastructure and to reallocate resources to activities that are essential for preventive care, especially health education and community outreach. Many health centers and posts are poorly equipped and maintained. Some have no electricity and running water, and available equipment often is obsolete or defective. In 1990, one quarter of all centers could not operate due to lack of equipment. The distribution of health care staff also is a problem. There are ten times more health professionals in Lima

than in the least developed regions. In some regions, in fact, as many as three of every four health centers do not have a physician, and as many as one of every three posts has no staff at all. Shortages generally affect isolated facilities the most, precisely the facilities that tend to serve rural poor people and indigenous groups. Finally, public sector health care professionals have been affected adversely by the decline in real civil service wages. The decline in earnings has caused morale problems and led to work stoppages and serious staff shortages, even at crucial times.

3.3.9. INSTITUTIONAL CONSTRAINTS AFFECTING PRIMARY EDUCATIONAL ATTAINMENT, ESPECIALLY IN THE SIERRA

Sections above make passing reference to the relatively low educational attainment of the poor and extremely poor, the decline in public sector spending for education, and the relatively limited access of food insecure Peruvians to educational services. In recent years, evidence has mounted worldwide regarding the high economic returns to investments in broadly based primary education. Not only does primary education provide literacy and numeracy and enhance the marginal productivity of labor, it also gives people more wherewithal to take charge of their lives. Expanding girls' education appears to be especially efficacious in bringing about lower fertility and better health and nutrition. It is fitting, therefore, to conclude this chapter by pulling together available evidence on the close relationship between educational attainment and food security in Peru, and the major constraints to be addressed.

First of all, a recent study by the Ministry of Education demonstrates that Peru is no exception to the rule of high rates of return to investments in primary education. Returns are estimated to be high throughout the country, with returns in rural areas substantially higher than in Lima. On the negative side of the ledger, Peru is similar to other parts of the world in its substantially higher rates of illiteracy for women than for men. In 1991, for example, 10.5 percent of rural Sierra women 15 to 19 years of age are estimated to have been illiterate, the corresponding estimate for rural Sierra men of the same age is 1.7 percent.

All available evidence supports the hypothesis that poor educational attainment correlates very closely with poverty. As one might expect from Chapter 2, the populations that evidence the lowest educational attainment are residents of the rural Sierra, non-Spanish speakers, and women. As one also might expect, geographically it is not only the Sierra that suffers from low educational attainment, internal inefficiency, poor educational quality, uncertified teachers, and schools without electricity, water, and sewerage, these characteristics describe the Selva as well.

In sum, improving food security depends on improving the access of poor people to basic education and reducing illiteracy, especially in rural areas and among women. Although Peru has experienced an impressive expansion in primary enrollments in recent years, it also has suffered a major decline in expenditures per student and an exodus of trained teachers from the system. Very little infrastructure is maintained, and supplies of textbooks and school materials are woefully inadequate. Repetition rates are high, particularly in the early grades, which

greatly increases the costs of advancing students from one grade to another. There are wide disparities in educational attainment and efficiency among regions and between urban and rural areas. Departments with the poorest educational attainment tend to have the highest proportions of uncertified teachers and schools without electricity, water, and sewerage. For example, the Department with the lowest percentage of students completing sixth grade is Ayacucho (28 percent), which also has one of the highest percentages of uncertified teachers (65 percent). Rural areas, especially in the Sierra, have proportionally the highest numbers of students repeating grades. In Ayacucho, it takes 15 student-years to produce one graduate from the sixth grade, two and a half times what would be required in the absence of repetition and dropouts.

TABLE 3 2 SOCIOECONOMIC INDICATORS BY DEPARTMENT IN 1993

DEPARTMENT	POPULATION			NUTRITION	EDUCATION			HOUSING		SERVICES		
	Total	Percent Urban	Percent Rural	Percent School Children Chronically Malnourished	Illiteracy Rate			Total Housing	Percent Housing Precarious	Percent Without Public Drinking Water	Percent Without Sanitation Services	Percent Without Electricity
					Total	Male	Female					
TOTAL	22639443	70 1	29 9	48 3	12 8	7 1	18 3	4427517	31 1	53 3	60 0	45 1
VERY POOR												
1 HUANCVELICA	400376	26 1	73 9	71 9	34 1	18 7	47 7	87619	29 4	87 7	94 2	80 6
2 APURIMAC	396098	35 1	64 9	68 6	36 9	21 5	51 5	84776	38 5	82 4	87 8	80 4
3 CAJAMARCA	1297835	24 7	75 3	65 5	27 2	14 9	39 0	250459	17 2	81 9	85 9	82 8
4 HUANUCO	678041	38 6	61 4	62 2	24 7	14 5	34 6	131332	34 2	80 9	81 5	74 7
5 AMAZONAS	354171	35 5	64 5	64 1	19 9	11 0	29 4	65801	26 2	80 6	84 9	82 3
6 AYACUCHO	512438	48 1	51 9	64 2	32 7	18 0	45 8	114555	28 3	73 1	85 5	74 3
7 LORETO	736161	58 0	42 0	59 7	10 8	7 0	14 9	113114	58 9	70 7	71 1	51 5
8 CUSCO	1066495	45 9	54 1	60 0	25 4	14 3	36 4	221168	34 0	71 7	76 5	57 6
POOR												
9 PUNO	1103689	39 2	60 8	53 6	22 2	10 9	32 9	269778	44 0	83 8	87 9	80 0
10 SAN MARTIN	572352	60 8	39 2	52 0	12 5	7 6	18 5	106257	28 9	73 8	80 8	62 5
11 PASCO	239191	58 9	41 1	57 4	15 2	7 8	22 8	46782	16 5	73 8	79 3	54 4
12 ANCASH	983546	57 4	42 6	54 3	21 1	11 8	29 8	198857	34 4	59 9	68 8	55 0
13 UCAYALI	331824	65 1	34 9	52 3	9 6	6 9	12 6	55436	37 1	80 0	80 7	51 9
14 JUNIN	10992993	65 5	34 5	58 5	13 4	6 3	20 2	210878	10 9	55 5	69 2	42 1

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TABLE 3 2 SOCIOECONOMIC INDICATORS BY DEPARTMENT IN 1993 (Continued)

DEPARTMENT	POPULATION			NUTRITION Percent School Children Chronically Malnourished	EDUCATION			HOUSING Total Housing	Percent Housing Precarious	SERVICES		
	Total	Percent Urban	Percent Rural		Illiteracy Rate					Percent Without Public Drinking Water	Percent Without Sanitation Services	Percent Without Electricity
					Total	Male	Female					
REGULAR												
15 PIURA	1409262	70.4	29.6	49.9	16.3	11.3	21.2	262389	16.6	52.5	70.8	58.5
16 LA LIBERTAD	1287383	68.5	31.5	47.5	13.0	7.2	18.4	248069	50.9	50.0	57.6	45.2
17 MADRE DE DIOS	69854	57.4	42.6	38.9	8.0	4.8	12.9	13529	51.9	78.3	79.8	50.9
18 LAMBAYEQUE	950842	77.1	22.9	39.8	11.0	7.1	14.6	169325	45.0	45.9	57.3	34.1
19 ICA	578766	83.5	16.5	29.1	5.8	3.4	8.0	113395	76.1	40.9	57.6	25.0
ACCEPTABLE												
20 AREQUIPA	939062	85.7	14.3	30.2	7.6	3.5	11.6	183515	19.0	41.1	52.4	30.2
21 TUMBES	158582	87.6	12.4	27.4	6.6	5.5	8.0	29468	5.8	42.4	59.9	30.4
22 MOQUEGUA	130192	82.8	17.2	23.7	8.8	4.2	13.9	30511	32.1	42.0	48.1	38.3
23 TACNA	223768	89.7	10.3	18.1	7.4	3.9	11.2	46360	32.5	34.2	39.5	26.3
24 LIMA	6478457	96.8	3.2	23.6	4.1	1.9	6.2	1252664	27.1	28.7	32.2	17.9
25 CALLAO	647565	99.9	0.1	19.7	3.0	1.6	4.4	121480	23.5	27.9	29.2	17.6

SOURCE FONCODES Based on data from INE's Population and Housing Census of 1993 and the Ministry of Education's Census of School Children's Heights in 1993

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CHAPTER 4: PROPOSED FOOD SECURITY STRATEGY

4.1. CENTRAL FOCI

Of the three rubrics of food security -- availability, access, and utilization, lack of access is the root cause of food insecurity in Peru. In other words, *Peru's food insecurity is more than anything else a question of poverty*. If poverty can be alleviated, lack of availability and poor utilization can be addressed as well.

In what follows, a strategy is outlined that attaches highest priority to poverty alleviation. As discussed in Chapter 1, however, poverty alleviation is a medium- to long-run phenomenon. In the short to medium run, large numbers of Peruvians will continue to be malnourished or at nutritional risk. In particular, substantial numbers of young children will continue to be vulnerable to irreversible physiological damage unless measures are taken to enable them to benefit from whatever food to which the incomes of their households give them access. As a consequence, the proposed strategy's primary focus on income generation for the poor will be complemented by a focus on utilization, especially on Peru's most nutritionally vulnerable population, children less than three years of age either currently malnourished or at high nutritional risk.

The absence of an explicit focus on food availability is not to say that it is unimportant. Again, lack of food access -- that is, lack of purchasing power -- is the fundamental cause of lack of food availability in Peru. If Peru's poor were not poor, that is, if they could translate their nutritional needs into effective demand for food, food availability would increase markedly.

4.2. VISION OF PERU IN 2010

It is one thing to list constraints to food security, it is another to suggest appropriate solutions. Different responses to the constraints discussed in Chapter 3 will have different consequences. It therefore is important to have a clear idea of what Peru ideally will be like in 15 years if things go reasonably well between now and then. With such a vision, more informed decisions can be made on priorities for policy and program responses.

A realistically optimistic vision of Peru in 2010 arguably would have the following characteristics:

- ◆ Extreme poverty will have declined substantially, but recognizable pockets still will exist in the rural Sierra and in the *barrios marginales* of Lima.

- ◆ The pressure of population on agricultural land will decrease, especially in the Sierra. A marked consolidation of land holdings will take place, but not anywhere near the scale prior to the land reform.
- ◆ The population that abandons farming, together with the natural increase of today's rural population, will be absorbed principally in secondary and tertiary cities throughout Peru, that is, in the 33 cities currently of 20,000 to 100,000 people, as well as in other provincial and district towns that grow to that size. Lima will grow, but its rate of growth will slow considerably. In contrast, migration to cities in the Selva will accelerate. In sum, Peru's population will become more urbanized, but less concentrated in the capital city.
- ◆ Primary agriculture will grow, but less rapidly than other sectors. Backward and forward linkages with primary agriculture will take on much more significance. Peru's secondary and tertiary cities will be the base of expanded and more efficient agricultural input, processing, and marketing industries. In short, primary agriculture and its ancillary industries will be modern and productive.
- ◆ Social sector investments likewise will be concentrated increasingly in secondary and tertiary cities. Basic education, primary health, and nutrition services will be adequate to meet population growth in those locales. Realistically, budgets will not be adequate to meet the social sector service needs of people in isolated rural areas.
- ◆ The primary public investment in rural areas will continue to be roads, both trunk roads to connect secondary and tertiary cities with primary cities and access roads to connect presently isolated areas with secondary and tertiary cities. These investments will promote not only increased agricultural production, but also growth in agricultural value added, increased economic activity in other secondary and tertiary sectors, and more broadly based use of education and health services.
- ◆ The growth of secondary and tertiary cities will bring with it decentralization of economic power. The power of the purse will shift markedly away from Lima. Local governments will become much more active protagonists of development.
- ◆ Peru will become a much more active exporter of agricultural and other products. Proportionally, currently non-traditional exports will take on much more importance. Through increased involvement in free trade arrangements, Peru will specialize in areas where it has comparative advantage. In other words, it will be less food self-sufficient but more food secure.
- ◆ Peru's growth trajectory will become more steady. In contrast to the historical pattern of boom and bust, Peru will grow more modestly than in some recent years, but more predictably.

4.3. PRINCIPLES FOR SETTING FUTURE FOOD SECURITY PRIORITIES

The identification of the country's food insecure in Chapter 2, the examination of major constraints in Chapter 3, and the definition of a vision for Peru in 2010 have a number of important implications for the kinds of policy and program priorities it makes sense to support to attack food insecurity in Peru. Prior to listing specific priorities, therefore, it may be wise to summarize key considerations to guide that process.

Firm, coherent monetary and fiscal policy has been essential to put Peru's economic house back in order and to restore public confidence in economic policymaking

There now must be no turning back. A consistent hand at the macroeconomic policy rudder is a precondition for sustained, steady growth in the future.

Peru's economic future hinges on increasing exports. At least in the short and medium term, however, Peru's pattern of export growth likely will be capital-intensive. Unless investments are made to increase the productivity of substantial numbers of Peru's poor, there is danger that future growth will be narrowly based.

In the short and medium term, the pervasive influence of coca on the economy, together with Peru's comparative advantages in mining and fisheries, will favor a capital-intensive growth path. From a food security perspective, therefore, investments that raise the productivity of currently poor people -- and tilt the balance more toward labor-intensity -- call for the highest of attention. Among other things, education -- and, especially, basic education -- will be essential.

Peru's legacy of activism by the state has been exacerbated by government, non-governmental, and donor responses to the economic crises of recent years. The result is a climate of "asistencialismo," which is antithetical to a long-term poverty alleviation strategy.

Years of heavy state intervention have engendered a widely accepted but counterproductive way of thinking about how to bring about broadly based economic growth in Peru. If the proposed vision of Peru in 2010 is to have any validity, a collectively shared mindset of self-reliant entrepreneurship must replace institutionalized rent-seeking. Although the economic crises of the last decade have called for direct delivery of goods and services to target beneficiaries, the time has come to reintegrate the poor as active participants in the market economy. The challenge is not to substitute for market forces, but to make markets work for the poor.

The magnitude of Peru's food security problem is so enormous and the resources available to address it so meager that hard choices must be made among many worthy policy and program options

Focus is not a luxury, it is a necessity

Whatever one chooses to do, do it well

Indeed, if the "ideal" policy or program is not doable, go with one that is Better to implement a secondary priority well than to take on what is unrealistic

As important as access of the poor to social services may be, even more basic is their access to income opportunities

Peru's capability to deliver health and education services to its poor population will be limited by low levels of national income for the foreseeable future To break out of the dilemma, highest priority must be given to the generation of economic opportunities for the poor so that they can earn higher household incomes and, thus, directly or indirectly, finance broadly based social services

Increasing income involves more than increasing production More fundamentally, it is a function of markets

In Peru, as elsewhere, it is common to debate production potentials Too often, the debate focuses almost exclusively on technology concerns and abstracts from market considerations Unless there are markets to absorb increases in production, emphasizing productivity alone will be counterproductive That lesson is true not only for national economies, in which one defies the laws of comparative advantage at one's own peril, but also for local economies In Peru, the dilemma is especially pronounced in the Sierra, where markets are small and price-sensitive For the bulk of the country's currently poor people, connections with markets are essential And, in the Sierra, that means roads

It is one thing to identify and describe who the poor are It is another to define appropriate programmatic responses to assist the poor in bettering their lot

There appears little doubt that the country's most food insecure population is concentrated in the rural Sierra and engaged primarily in agriculture. Still, that description does not necessarily imply that the best programmatic response to its development dilemma is simply to raise agricultural productivity in those areas. In fact, existing population-land ratios already are too high for a productivity-increasing strategy -- by itself -- to generate sufficient incomes to lift households in the Sierra above the poverty line. In addition, the resource base of the areas in question is too fragile to support much additional population pressure in any case. Such considerations suggest, therefore, that it probably is advisable to think of program responses outside the areas of poverty themselves. Although rural development obviously is a compelling political and economic imperative, it ultimately is the development of the people currently living in rural areas that must be the focus of attention, not the rural areas themselves.

The aspiration of a typical small subsistence farmer is not to continue as a small subsistence farmer, it is either to become a larger farmer or to move out of farming entirely

Over time, a typical economy will experience growing urbanization, on the one hand, and consolidation of farm enterprises, on the other. The flip side of consolidation is that many small farmers eventually leave farming.

If one's focal point is agriculture, one thinks primarily of agricultural solutions to development problems. If one's focal point is rural people, one is struck by the importance of non-farm activities as contributors to total rural household incomes

This principle complements the previous one. Not only must a medium-term view take emigration from agriculture into account, it also must recognize that those who stay in agriculture typically earn a substantial proportion of their total household incomes from non-farm sources. As a practical matter, farm sizes in much of Peru simply are not large enough for even the most successful of agricultural production strategies to lift most poor households out of food insecurity.

A logical place to look for income and employment opportunities for currently poor rural people is in the secondary and tertiary cities that can provide services to and add value to the production of their respective countrysides

A strategy of decentralization to secondary and tertiary cities not only is a way to deflect growing population pressures in Lima, it also is a logical outgrowth of thinking through what "rural" development must entail in coming years. Not only are secondary and tertiary cities

likely focal points of backward and forward linkage industries with agriculture, they also are appropriate destinations for future government investments in health, education, and other social services

In one sense, *the growth of secondary and tertiary cities as poles of development is Peru's only reasonable development choice* On the one hand, the current pattern of mass migration to primary cities is neither desirable nor sustainable On the other hand, the principal location of Peru's poor people -- the rural Sierra -- is overpopulated *now*, and will continue to be so, even with conceivably dramatic increases in agricultural productivity Moreover, and as painful as it may be to acknowledge, reaching all of Peru's extremely poor -- and Peru's most extremely poor are, by definition, its most isolated physically -- lies beyond the country's budgetary grasp Hard choices therefore must be made As a matter of relative priority, focusing public investment on secondary and tertiary cities is the sensible choice -- not only to service a substantial portion of Peru's currently poor population, but also to furnish relatively attractive places for currently isolated poor people to migrate in the future

Opinion is divided in Peru on the advisability of monetizing food donations As a practical matter, monetization is not a question of yes or no, it is a question of degree

Since food donations are a scarce development resource, not only for USAID but also for the entire donor community, the argument increasingly is made to use food donations exclusively "as food " Use of food exclusively for feeding obviously makes eminent sense as a response to impending famine, or, more generally, in cases where the rationale for assistance is virtually 100 percent relief Short of such extreme cases, however, some degree of monetization typically is called for

In countries where food insecurity is pervasive but not of famine proportions, development, rather than relief, becomes the guiding criterion for use of food donations Most development projects require inputs other than food In projects supported with food donations, therefore, either food must be complemented by other inputs or it must be monetized and converted accordingly In addition to this generic, pragmatic argument for some degree of monetization, two other lines of argumentation commonly are advanced in Peru First, the cost of reaching Peru's most food insecure people -- those most isolated physically from existing market networks -- often is exorbitant On cost-effectiveness grounds alone, therefore, a case can be made for monetizing food donations at port and using the cash proceeds to purchase other development inputs regionally, if not locally The second line of argumentation has to do with purported disincentive effects of feeding programs Four such effects are cited first, in the short run, the substitution of demand for local produce, particularly in small, price-sensitive regional markets, second, in the medium and long run, alterations of consumption patterns that lower demand permanently for traditional, locally produced foods, third, undercutting of traditional community labor arrangements by food-for-work projects, particularly in the southern Sierra, and, fourth,

the creation of an atmosphere of "*asistencialismo*," which fosters dependency rather than self-reliance

Interestingly, much of the ambivalence about the *modus operandi* of food donation programs comes from the non-governmental organizations responsible for managing them. Although they recognize the role that food plays in "luring" poor people into development projects, they also recognize that what most poor people want is jobs (and corresponding incomes), not food *per se*. Indeed, there is ample anecdotal evidence that, even in "successful" projects, at least some participants monetize a portion of the food they receive.

The posture toward monetization proposed here is pragmatic. Although the strategy supports monetization of a portion of food donations, it also proposes to capitalize as much as possible on those instances in which food programs not only are cost-effective but also can be targeted to Peru's extremely poor and managed in such a way as to mitigate possible disincentive effects. PANFAR is a case in point. At the moment, delivery of food donations to project areas generally is cheaper than purchase of local foods. At the same time, PRISMA plans to promote the use of traditional foods for weaning, establish a relatively stable market for those products, and, in the process, furnish incentives for increasing productivity. In a similar vein, PRONAMACHS now uses food rations less as a "wage" and more as a premium for quality work. With such innovations, food for work can respect traditional labor market arrangements and be no more distortionary than cash for work. Finally, if relative priority is given to programs in secondary and tertiary cities in the future, then, by definition, food will be inserted at points where markets are less isolated and price-sensitive, and, thus, less prone to local production disincentive effects.

4.4 FUTURE POLICY AND PROGRAM PRIORITIES FOR FOOD SECURITY IN PERU

This section proposes a strategy to promote food security in Peru. It suggests policy and program priorities across the board, and thus has implications not only for USAID but also -- and most importantly -- for the Government of Peru, non-governmental organizations, and other donors.

In general terms, a dual approach is proposed to improve Peru's food security. The first approach focuses on *policy* concerns and, in the main, is national in scope. The second approach consists of *action programs*, which are targeted primarily to the country's extremely poor. More than anything else, the proposed targeting involves reversing historical patterns of limited investment in the Sierra and redirecting resources consciously toward that region.

On the *policy front*, the food security strategy proposes the following priorities:

- ◆ Maintain the *macroeconomic policy reforms* of recent years, especially orthodox monetary and fiscal policy and the continuance of a low-inflation environment Stay the course
- ◆ Maintain the *trade policy reforms* of recent years, especially the elimination of tariff- and non-tariff barriers In addition, eliminate the last major exception to a free trade regime, namely, the *surcharges on selected agricultural imports*, which offer limited incentives to domestic producers and make basic consumption items of poor consumers -- particularly wheat products -- artificially high
- ◆ Create a policy environment conducive to the generation and spread of *savings and lending services for clients of limited means*
- ◆ Focus public sector investments in productive infrastructure on *public goods with high rates of return* Specifically, reduce substantially the proportion of the public sector budget allocated to low-return, large-scale Coastal irrigation projects On the other hand, continue to increase the proportion of the public sector budget dedicated to *construction and maintenance of both trunk and access roads, especially in the Sierra* The ability of the currently food-insecure in the Sierra to take advantage of income opportunities hinges directly on their connections with other than local markets
- ◆ Focus social sector expenditures, both investments in infrastructure and delivery of services, on *basic education and primary health care*, especially in secondary and tertiary cities in the Sierra
- ◆ *Focus safety-net expenditures* in three ways *First*, target expenditures preferentially toward the roughly one in five Peruvians who is *extremely poor* *Second*, shift the recent emphasis on short-term employment generation to a focus on activities with the potential to create *sustainable increases in household incomes* And, *third*, concentrate nutrition programs on *populations at the highest permanent nutritional risk*, especially children less than three years of age

The food security strategy's proposed public expenditure priorities typically will play themselves out through action programs Specific priorities for *action programs* include

- ◆ Give first priority to *Peru's most food insecure people*, that is, its extremely poor As documented in Chapter 2, the extremely poor currently are concentrated primarily, but not exclusively, *in the rural Sierra* In many instances, the households in question are non-Spanish-speaking households
- ◆ *Give income generation primacy of place* and be open to opportunities for income generation wherever those opportunities may present themselves To put it negatively, do not restrict one's set of options *a priori* to any one sector, including the sector in which a target population currently is engaged Further, recognize that, geographically,

the most promising income opportunities may be found in locales other than those in which the extremely poor now reside

- ◆ Complement the focus on income generation with *nutrition programs for Peru's most vulnerable populations, especially poor pregnant and lactating mothers and children less than six years old*. By virtually all accounts, PANFAR has been extraordinarily successful both in identifying such populations and in having demonstrable impact on them. Consequently, give priority to an expansion of PANFAR and PANFAR-like programs, including the promotion of native weaning foods. On the other hand, deemphasize the "Vaso de Leche" program, which has more diffuse and transitory nutritional effects.
- ◆ Introduce a *comprehensive iron fortification program of all imported wheat*. Although the "Desayunos Escolares" program has had remarkable success in reducing iron-deficiency anemia, much the same effect can be brought about through iron fortification. The cost of such a program, which would be passed on to the consumer, is estimated to be less than US\$0.005 per kilogram of wheat flour. This estimate includes fortification not only with iron, but also with Vitamin A and other nutrients.
- ◆ *Phase out subsidized feeding programs at "comedores populares"*. Although "comedores populares" have served as significant buffers to the economic shock caused by structural adjustment, most no longer require subsidization. As self-targeting conveners of poor people, however, they are natural magnets for income-generation programs. The same goes for mothers' clubs and similar organizations.

Table 4.1 summarizes this discussion by presenting the relative priority proposed for major kinds of action programs currently sponsored by Peruvian government institutions, non-governmental organizations and donors. Although the listing of programs is not comprehensive, it is illustrative of the range of programs currently in force.

If the Government of Peru were to endorse a realignment of program priorities along the lines suggested by Table 4.1, a number of government institutions would be affected. Institutionally, the major programmatic implications of such a shift can be summarized as follows:

- ◆ **FONCODES**

The institutional infrastructure that FONCODES has created to identify Peru's poor and extremely poor is impressive, and merits high commendation. Two recommendations are made for improvement: first, that FONCODES set investment priorities less mechanically as a function of the current location of poverty and more strategically as a function of where future income-generation opportunities lie, and, second, that after narrowing project selection criteria in accordance with the discussion above, it decentralize operational decisionmaking substantially.

Table 4 1 PROPOSED PRIORITY OF DIFFERENT ACTION PROGRAMS COMPARED TO THE PRESENT		
Higher Priority	Same Priority	Lower Priority
<ul style="list-style-type: none"> ◆ Trunk and access roads ◆ Small-scale irrigation ◆ Management skills ◆ Market information ◆ Production technology ◆ PRONAMACHS ◆ Micro-enterprise revolving funds ◆ Basic education ◆ PANFAR ◆ Iron and Vitamin A fortification of wheat 	<ul style="list-style-type: none"> ◆ School buildings ◆ Health centers and posts ◆ Potable water and wastewater facilities 	<ul style="list-style-type: none"> ◆ Large-scale irrigation ◆ "Desayunos Escolares" ◆ Subsidized feeding at "comedores populares" ◆ "Vaso de Leche" ◆ Community meeting facilities

◆ **INADE**

Through its Emergency and Social Investment Program (PEIS), INADE has succeeded in generating temporary employment rapidly and on a large scale. In the future, it is recommended that more conscious attention be given to the nature of the activities through which the employment is generated, specifically, the extent to which the activities are likely to contribute to a sustainable flow of increased income for poor and extremely poor people. In some instances, the nature of the activity may be such that only limited latitude may exist for absorbing unskilled labor. Such a tradeoff in the short run can be compensated for by a permanent income stream for poor people later. In other instances, the tradeoff may not be so severe. Such activities merit high priority. Construction and maintenance of access roads and the clearing of irrigation canals are pertinent examples of activities in which the tradeoff often is minimal. These programmatic implications apply also to INADE's Refugee Assistance Program (PAR).

◆ **PRONAA**

PRONAA, like FONCODES and INADE, has played a major role in attending to Peru's poor and extremely poor at a time of generalized nutritional vulnerability. Among other programs, it has sponsored rural food-for-work projects, school feeding, subsidized feeding at "comedores populares," milk distribution, iodized salt distribution, and the

purchase of limited quantities of the production of isolated subsistence farmers. As Peru now shifts from structural adjustment to growth, it is time for PRONAA to introduce more focus. PRONAA proposes to shift virtually its entire program away from subsidization of feeding to projects with the potential to generate permanent income streams for poor and extremely poor people. For example, PRONAA's future programs with "*comedores populares*" and mothers' clubs shall promote microenterprise production for both domestic and international markets. The strategy proposed here strongly endorses this redirection of programmatic focus.

◆ **Ministry of Agriculture**

PRONAMACHS is the classic example of a program begun with USAID support on a relatively small scale and, then, once the approach was proven, replicated, extended, and sustained on a larger scale. Begun in the early 1980s as a pilot program integrating soil conservation and productivity enhancement in ecologically vulnerable zones of the northern Sierra, PRONAMACHS has evidenced, and continues to evidence, remarkably high returns for subsistence farmers. Further expansion of the program is in order. If one has a winner, go with it.

◆ **Ministry of Education**

Although the impact of the "*Desayunos Escolares*" program on iron-deficiency anemia is well documented, and although the program is giving increasing priority geographically to the Sierra, the iron fortification of imported wheat appears a more cost-effective and sustainable option for addressing the problem. To the extent that the program continues in the future, let it be justified on its educational merits. There is some evidence of increased retention from the program, and a study currently is underway of its impact on learning. In the medium to long run, basic education arguably is the most effective way to effect a sustainable redistribution of assets toward Peru's currently poor and extremely poor households. If a "*Desayunos Escolares*" program can serve that end cost-effectively, so be it.

◆ **Ministry of Health**

Just as the Ministry of Agriculture has PRONAMACHS to offer as a success story, the Ministry of Health has PANFAR. PANFAR is a model for other programs in three ways. First, it succeeds in targeting Peru's most nutritionally vulnerable population about as well as any reasonable observer could expect. Second, it takes an integrated approach to the problem. Above all, it recognizes the key role played by nutrition education for mothers, including education in weaning practices. Such education is essential for sustainable results, both on children currently at nutritional risk and on children to come. Third, the program is consciously results-oriented. Monitoring is

taken very seriously, and, in the end, one can ascertain whether planned nutritional impacts actually are achieved. Again, if one has a winner, go with it.

4 5. FUTURE POLICY AND PROGRAM PRIORITIES FOR USAID

The remainder of this chapter presents future policy and program priorities specifically for USAID. This section presents an overview of how the Mission proposes to contribute to improved food security in Peru. As anticipated above, the central foci are expanded food access and more effective utilization. The discussion is organized in three subsections, policy dialogue priorities, action program priorities, and safety net priorities. The subsequent section then describes how the Mission shall focus its future PL 480, Title II, and PL 480, Title III, programs.

4 5.1. POLICY DIALOGUE PRIORITIES

In the future, the Mission shall focus its policy dialogue and implementation support in five areas -- in international competitiveness policy, in public expenditure policy, in trade and marketing policy, in rural finance policy, and in agricultural input policy.

- ◆ Under the rubric of *international competitiveness policy*, the Mission shall sponsor studies, professional debate, and advocacy of policies that aim to broaden the base and increase the competitiveness internationally of labor-intensive industries in Peru, especially in the Sierra where poverty is most pronounced. Possible activities to be undertaken include surveys of exporters' perceptions of constraints to the competitiveness of labor-intensive industries, monitoring of trends in exports of labor-intensive products, tracking of the exchange rate and its impact on the relative capital-labor intensity of Peruvian exports, and examination of non-inflationary policy alternatives to nudge the sol closer to its parity rate. One possible "win-win" alternative might consist of liberalization of regulations governing Peru's pension funds, permitting them to invest dollars in equity investments outside Peru, and, thus, to diversify and solidify their investment portfolios.
- ◆ On the *public expenditure policy* front, the Mission shall promote the assessment and adoption of policies to improve the distribution of government expenditures geographically, among productive sectors, social sectors, and safety-net uses, and in accordance with the comparative advantage of different programs in reaching the poor and extremely poor. Equally importantly, it shall support the devolution of the power of the purse away from Lima.
- ◆ In *trade and marketing policy*, the Mission shall focus on the creation and maintenance of a policy environment that is evenhanded toward the poor and extremely poor, both as producers and as consumers. The incidence of the agricultural import surcharges is a

case in point Among Peru's plethora of marketing constraints, the Mission shall continue to give priority to what arguably is the fundamental bottleneck for most of Peru's poor and extremely poor, that is, roads

- ◆ In *rural finance policy*, the Mission shall support the creation of a policy environment conducive to the generation and spread of savings and lending services for the rural poor Special attention shall be paid to striking an appropriate balance between precautionary measures required for financial solvency and incentives for rural financial institutions to increase and multiply in a variety of user-friendly forms
- ◆ In *agricultural input policy*, the Mission shall promote measures to facilitate the smooth and evenhanded functioning of land and water markets, and to promote the transfer of productive technology to currently poor farm households

In recent years, the Mission has relied heavily on its *Policy Analysis, Planning and Implementation Project* (PAPI) to support macroeconomic analysis, dialogue, and reform In the future, the project shall focus preferentially on sectoral issues -- such as those above -- that have a direct impact on small farmers, small-scale businesses, and other low-income groups The Mission also shall continue to conduct sectoral policy dialogue under its PL 480, Title III, program

4.5.2. ACTION PROGRAM PRIORITIES

In addition to PAPI and contributions to action programs under PL 480, the Mission currently is financing three projects to make a sustainable dent on Peruvian poverty -- or, to put it another way, to address the access dimension of food insecurity in Peru

- ◆ Under the *Microenterprise Support Project*, the Mission is promoting productive, labor-intensive activities in agriculture, artisanry, and apparel to enable groups traditionally isolated from formal market networks -- especially in the Sierra -- to take advantage of promising domestic and international market opportunities It also is providing support for the nascent rural banking -- *caja rural* -- system as well as for anti-poverty lending through non-governmental organizations
- ◆ Under the *PVO Support Project*, local private voluntary organizations are increasing their capability to design, implement, monitor, and evaluate agricultural and microenterprise development projects that not only target Peru's extremely poor but also have demonstrable potential to contribute to sustainable income flows for that target population
- ◆ Under the *Local Governments Project*, the Mission is promoting the economic decentralization essential for Peru's poor to have an effective say over their own destiny Among other things, the project is promoting devolution of authority for collection and

allocation of tax revenues. It also is furnishing training and technical assistance to strengthen the management capabilities of local governments, particularly in the secondary and tertiary cities that lie at the heart of the strategy outlined here.

The Mission focuses its support of health in Peru in areas with both the highest nutritional risk and the greatest poverty, namely, squatter communities in peri-urban areas, secondary and tertiary cities, and rural areas. Tactically, the Mission combines a systemic approach to primary health care with interventions directly in the household and in the community to reach and improve the health of Peru's high risk populations, especially its young, chronically malnourished children.

Of the Mission's various development assistance projects oriented toward improved health, four, in particular, target the nub of the food utilization dimension of Peru's food security problem, that is, the chronic malnutrition of Peru's children:

- ◆ Under the *Strengthening Private Sector Health Institutions Project*, the Mission is supporting 20 non-governmental organizations to provide basic health care in rural areas of Puno and Arequipa. Project activities include training of trainers in the recognition and appropriate treatment of diarrheal diseases, in teaching and encouragement of breast feeding, and in conveying appropriate and healthy weaning practices.
- ◆ Under the *Child Survival Action Project*, the Mission has addressed infant mortality in rural and peri-urban areas, and expanded immunization coverage and management of diarrheal diseases. Project activities include a multi-media health education campaign to instill key health messages in the community, including guidance on breastfeeding and weaning practices.
- ◆ *Project 2000*, the follow-on project to the Child Survival Action Project, will focus its attention on maternal mortality, on child malnutrition, and on acute respiratory illness in young children. Geographically, areas of project activity contain almost one third of Peru's population, including some of the poorest and neglected parts of the country, such as Ayacucho, Huancavelica, and Puno. The World Bank will support corresponding activities in the rest of the country.
- ◆ *ReproSalud* (Reproductive Health in the Community), a new project, will work with community-based organizations in rural and peri-urban areas to lower fertility, lengthen birth intervals, promote infant and young child nutrition, educate women and adolescents in reproductive health, and, through its women's empowerment component, create employment and raise incomes.

Finally, the Mission will consider developing a 1996 *Food Security Support Project* that cuts across the access and utilization dimensions of food security ¹ Recognizing that USAID support ultimately is only temporary, the project will assist the Government of Peru in institutionalizing the major elements of the strategy presented in this document As PL 480, Title III, resources become unavailable and as PL 480, Title II, resources gradually decline, the new project will become the Mission's principal vehicle for continuing to assist the government -- line ministries, FONCODES, PRONAA, etc -- in targeting programs cost-effectively, in selecting interventions with sustainable impact, in rationalizing safety net programs, and in developing harmonious and mutually reinforcing linkages between programs of non-governmental organizations and government initiatives Through a combination of policy dialogue and technical assistance, and in coordination with other projects in the Mission's portfolio, the project will support the government in assessing the pros and cons of alternative approaches to implement this food security strategy, and in putting the indicated approaches into practice Special attention will be paid to developing procedures for selecting among alternative secondary and tertiary cities as targets for public investment One approach to be examined will be the prism of the productive potential of watersheds, including its implications for local governmental organization of public services Finally, USAID will assist the government and non-governmental organizations, both in this project and elsewhere, in testing, refining, and making operational models of project implementation for subsequent replication and expansion A case in point is the Mission's pilot initiatives in local purchases of food aid The initiatives in question are to be evaluated shortly, and, in principle, at least, are expandable countrywide under PRONAA

4 5.3. SAFETY NET PRIORITIES

Through the combination of policy dialogue, development assistance (DA) and economic support fund (ESF) projects, and its PL 480 program, the Mission proposes to assist Peru in making the overall package of its safety net programs more coherent The Mission sees the key elements of such coherence to be

- ◆ Limiting feeding programs unrelated to nutrition improvement and income generation to *old-age homes and orphanages*,
- ◆ Expanding *PANFAR and PANFAR-like programs* substantially, and
- ◆ To the extent possible, focusing assistance to the extremely poor on the generation of *sustainable income opportunities*

¹Alternatively, it may reconfigure components of existing projects

FUTURE PRIORITIES FOR USAID'S PL 480 PROGRAM

To assure that scarce food resources furnished under PL 480 have a demonstrable impact on Peru's most food insecure population, the Mission shall apply two additional elements of focus to its food aid program. The new elements of focus, which shall apply both to PL 480, Title II, and to PL 480, Title III, are

- ◆ First, the target population of activities supported under PL 480 shall be restricted to the *one in five Peruvians who is extremely poor*. This targeting contrasts with the broader focus in the rest of the Mission's access-oriented portfolio, that is, the one in two Peruvians who is poor.
- ◆ Second, projects eligible for support under PL 480 must meet *one of three criteria*. The three criteria can be formulated as program purposes and are

Program Purpose 1	Increased income of households currently extremely poor
Program Purpose 2	Improved nutrition of children less than six years old in households currently extremely poor
Program Purpose 3	Increased basic education attainment by children, especially girls, in households currently extremely poor

The rationale for Program Purposes 1 and 2 flows directly from the central foci underlying the entire food security strategy. Program Purpose 1 focuses on access, specifically, on the need of the extremely poor for income. Program Purpose 2 focuses on utilization, specifically, on the extreme nutritional risk at which substantial numbers of Peruvian children find themselves.² The vast majority of PL 480 projects, and the entirety of Title II projects, will be directed to the achievement of these purposes.

Program Purpose 3 acknowledges the essential role that basic education plays in bringing about sustainable improvements in both access and utilization. Such improvements admittedly are longer in coming, but a growing body of international evidence suggests that, once attained, they may be more permanent. Under its Title III program, the Mission will support a modest pilot

²Although Peru's most nutritionally vulnerable population consists of at-risk children less than three years of age, Program Purpose 2 expands eligibility to include children up to five years of age. The apparent discrepancy reflects operational concerns. As practical experience under PANFAR suggests, it is virtually impossible to target children less than three years old at the exclusion of children who are four and five. The notable exception is PRISMA's *Kusiayllu* program. *Kusiayllu* projects address only the most extreme of cases, however, and, thus, for purposes of defining the target population of all future PL 480 nutrition projects, target children nutritionally at risk too narrowly.

project by the World Food Programme to test creative models for increasing the educational attainment of children, especially girls, in households currently extremely poor. The location of the pilot project will be rural areas in the Departments of Apurímac, Ayacucho, and Huancavelica. In the final analysis, broadening the base of Peru's human capital arguably is the form of asset redistribution with the highest likelihood for assuring that Peru's future economic growth indeed is broadly based.³

The proposed refocusing of the Mission's PL 480 Program carries with it a number of significant operational implications. The World Food Programme pilot project will be treated as a special case, but all other PL 480 projects, both under Title II and under Title III, will be subject to the following conditions:

- ◆ Funding of cooperating sponsors under the PL 480 Program will be a function of the degree to which the projects they propose target the extremely poor and are likely to achieve one or both of the first two program purposes defined above. In other words, the basis for making budgetary decisions will be programmatic rather than institutional. Cooperating sponsors will not be guaranteed any predetermined share of the pie. The division of the pie will result from *competitive evaluation of project proposals*.
- ◆ The logical framework will continue to be the program's core planning tool. In contrast to practice in the past, however, much greater insistence will be placed, first, on defining target populations and, second, on quantifying beforehand the benefits expected from project activities -- that is, the actual increase in income or the degree of nutritional improvement that is anticipated. No project shall go forward unless the relationship that project activities bear to the achievement of program purposes is thought through and evaluated technically. If the *logic between ends and means* is not adequate, there shall be no project.
- ◆ The logical framework also will be used to monitor and evaluate results. Continuation of funding will depend on whether projects *demonstrate impact*. Even though it will raise program costs, monitoring and evaluation will be taken very seriously.
- ◆ Corresponding to the shift of emphasis of the entire program toward results, the Mission and its cooperating sponsors will give relatively less attention to process concerns and relatively more attention to monitoring the extent to which *results* indeed are forthcoming. Much higher priority will be given to impact evaluation than to formative evaluation.
- ◆ Although program purposes will be "carved in stone," project outputs and inputs will not. On the contrary, encouragement will be given to cooperating sponsors to devise

³The Mission does not have sufficient resources to finance initiatives in basic education other than this pilot project. The need to improve basic education is so pressing, however, that the Mission shall actively encourage other donors to attach high priority to this field.

innovative ways to achieve program purposes. The intent is not to restrict *creativity*, but to channel it to the achievement of a selected set of collectively held core objectives. Figure 4.1 summarizes how the three program purposes proposed for the Mission's PL 480 Program relate to the program goal of increased food security in Peru. Figures 4.2 and 4.3 furnish examples of the kinds of means-ends analysis that will be required under the program, as well as specific examples of outputs and inputs, including integrated packages of outputs and inputs, that cooperating sponsors may want to consider to achieve the first two program purposes. Again, the examples only are *examples*, and are not meant to exclude other, possibly more effective ways of doing things. Finally, Figure 4.4 summarizes elements currently under consideration for the World Food Programme basic education pilot project.

Figure 4 1

PROPOSED LOGICAL FRAMEWORK FOR FUTURE PL 480 PROGRAM

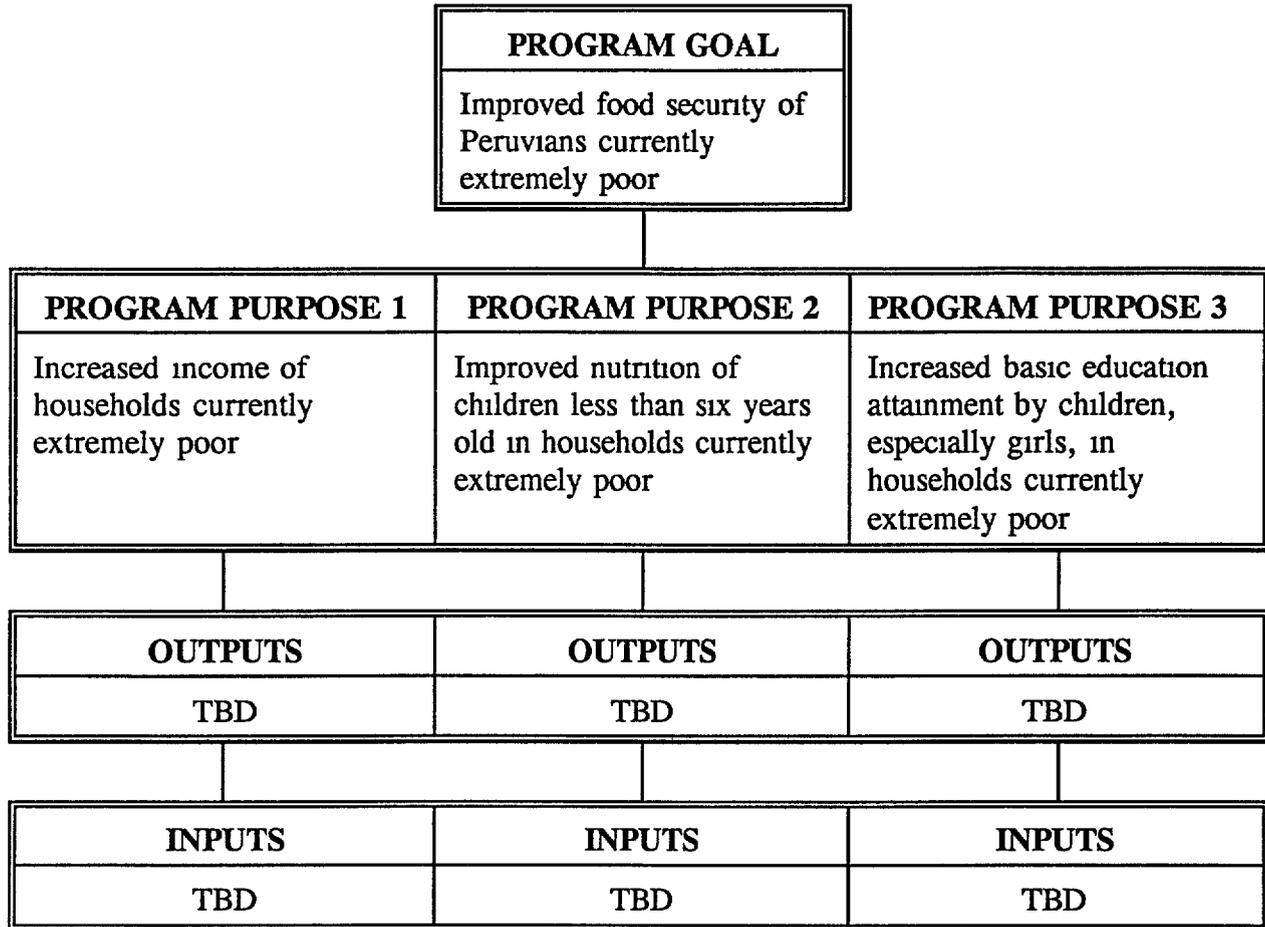


Figure 4 2

**POSSIBLE INDICATORS FOR PROJECTS
UNDER PROGRAM PURPOSE 1**

PROGRAM PURPOSE 1	INDICATORS	UNITS
Increased income of households currently extremely poor	Persons in households currently extremely poor with increased income	Number
	Increase in income per capita	Soles

OUTPUTS (Examples)	INDICATORS	UNITS
Rehabilitation of access roads	Distance of access roads rehabilitated	Kilometers
Rehabilitation of irrigation canals	Distance of irrigation canals rehabilitated	Kilometers
Adoption of improved potato seed	Area planted with improved potato seed	Hectares
Extension of market price information	Broadcasts of market price information	Number
Rehabilitation of terraces	Area of terraces rehabilitated	Square meters
<i>Artesanía</i> sales	Value of <i>artesanía</i> sales	Soles
Etc		

INPUTS (Examples)	INDICATORS	UNITS
Food distribution	Rations of food distributed	Number
Tools and equipment	Value of tools and equipment	Soles
Technical assistance	Contacts with target population	Number
Technical/management training	Training sessions	Number
Establishment of rotating fund	Value of rotating fund	Soles
Etc		

Figure 4 3

**POSSIBLE INDICATORS FOR PROJECTS
UNDER PROGRAM PURPOSE 2**

PROGRAM PURPOSE 2	INDICATORS	UNITS
Improved nutrition of children less than six years old in households currently extremely poor	Malnourished children less than six years old in target households with nutritional status restored	Number

OUTPUTS (Examples)	INDICATORS	UNITS
Improved breastfeeding practices	Mothers of target population children using improved breastfeeding practices	Number
Improved weaning practices	Mothers of target population children using improved weaning practices	Number
Improved nutritional content of food prepared in target households	Target households preparing food with improved nutritional content	Number
Improved spacing of births	Birth intervals of mothers of target population children	Months
Etc		

INPUTS (Examples)	INDICATORS	UNITS
Food distribution	Rations of food distributed	Number
Health and nutrition training	Training sessions	Number
Monitoring of target population	Regular contacts	Number
Etc		

Figure 4 4

**POSSIBLE INDICATORS FOR PROJECTS
UNDER PROGRAM PURPOSE 3**

PROGRAM PURPOSE 3	INDICATORS (Examples)	UNITS
Increased basic education attainment by children, especially girls, in households currently extremely poor	Target children successfully completing school year	Number
	Target children demonstrating proficiency in literacy and numeracy	Number

OUTPUTS (Examples)	INDICATORS	UNITS
Extension of importance of basic education, especially for girls	Meetings with parents of target children	Number
Teaching of improved curriculum	Use of improved curriculum	Yes/No
Performance incentives for teachers	Provision of incentives	Yes/No
Etc		

INPUTS (Examples)	INDICATORS	UNITS
Food distribution	Rations of food distributed	Number
Improved curriculum	Training of teachers in improved curriculum	Yes/No
Teacher aids/materials	Purchase of aids/materials	Soles
Performance incentive fund	Budgeting of incentive fund	Soles
Etc		

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