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SUGGESTIONS FOR A NUTRITIONAL STRATEGY FOR  
THE UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT  
MISSION TO HONDURAS

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**SUGGESTIONS FOR A NUTRITIONAL STRATEGY FOR  
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## EXECUTIVE SUMMARY

This "Strategy to Reduce Malnutrition in Honduras" was prepared for USAID within the framework of the Agency's Policy Paper on Nutrition (1982) which views nutrition as both a cause and a consequence of development policies and programs. The strategy was prepared through a review of available documentation and from interviews with personnel from USAID-Honduras and with representatives of private, public and international institutions in Honduras. The analysis of the nutrition problem is based on previous work by Sigma One Corporation for the Health and Nutrition Division of LAC/DR and the recently available tabulations of the 1987 National Nutrition Survey for Honduras.

The 1987 National Nutrition Survey indicates that the prevalence of malnutrition in preschool aged children has declined from 56 percent in 1966 to 37 percent in 1987, according to the "Gómez" weight for age criterion. The 1987 Survey reports that the prevalence of severe and moderate chronic malnutrition is 31.6 percent on a national average; this is high by modern international standards and in comparison with other countries of the region.

The principal finding is that despite the apparent general improvement in nutritional status in Honduras, malnutrition persists as a widespread problem with serious consequences for development and for the wellbeing of the great majority of poor people in rural areas. Malnutrition in the context of extreme rural poverty will require specific attention from private and public institutions and in the formulation of policy. Even if Honduras were placed on a path of rapid and sustained economic growth, more than a fourth of the country's children would be malnourished in the year 2000.

The households with malnourished children also suffer from diets that are inadequate in quantity and quality; other indicators of basic services are also grossly inadequate. Reported morbidity is very high and educational levels are very low. On the positive side, over 80 percent of the children have been vaccinated for childhood diseases.

The problem is largely a rural problem, for example, the relative risk of being chronically malnourished to a severe degree is nearly four times greater for rural areas than for the metropolitan area of Tegucigalpa. In the western regions nearly half of the children are chronically malnourished and, alarmingly, in Health Region 4 in the South and Region 5 in the West the prevalence of acute malnutrition is 14.7 percent and 9 percent, respectively. The children represented by these numbers were, at the time of the survey, at a high risk of death.

USAID's economic, agricultural, private sector and health programs as they operate today and their planned enhancements for the future are likely to cause significant nutritional improvements. These improvements, however, will be insufficient to halve the prevalence of malnutrition by the end of the century. Specific actions must be promoted and supported to address the severely acute problems of certain regions, at once, and to ameliorate the negative developmental consequences of chronic malnutrition throughout the rural regions of Honduras. It may also be necessary to provide nutritionally oriented services for some segments of the urban population in order to obtain political support for the policy reforms that

are required for the success of the USAID programs. The elements of the strategy include:

1. Establish a system of clear and stable economic incentives that cause value to be assigned to the time and products of the poor so that the returns they obtain for their efforts reflect their real value to Honduras.
2. Reorient the provision of public services (health, water, sanitation, roads, schools, technology transfer, and marketing services) to assure adequate coverage for the producers and workers in the traditional agricultural sectors.
3. Provide immediate relief for the acute nutritional problems of the Western and Southern regions.
4. Promote a national awareness of the need to solve the Nation's severe food and nutrition problems, and support the reorientation of national institutions toward a sustainable approach to these problems.

"Structural Adjustment" of the economy will do a lot to restore incentives for income growth in the traditional agricultural sectors. Some in the urban based population will, however, have to experience real declines in their incomes for some time. There is some risk that these persons would suffer malnutrition as a result of their decreased incomes. Analysis must be undertaken to analyze these risks and to explore the possibility of the need for urban based safety net programs to facilitate the necessary economic transition to a path of sustainable and broad-based growth.

There is a need to accelerate nutrition activities under Health Sector II. The child survival interventions should include information and resources for the feeding and care of sick children. Foods for the feeding of pre-school children and mothers should also be included. Growth monitoring and "well baby" programs need to be instituted through community based actions utilizing indigenous personnel within a well defined institutional base of referral and support. Emphasis should continue on the promotion and maintenance of breast feeding as well as birth spacing as initiatives with a high nutritional payoff. These efforts could be supported with a "take home" food donation program that provides food for the household but that is biased toward children.

There is a need for social marketing actions directed at the medical professions in the private and public sectors to make them aware of nutritionally based health problems and their management.

The policy initiatives being promoted under the agricultural sector program, including the move to a more neutral structure of intersectoral incentives and the greater orientation of the traditional subsectors toward world markets will greatly enhance nutritional wellbeing in the medium to longer runs. The inclusion of "home economics" type components within several production oriented projects (Natural Resources Management, LUPE, and the Coffee Improvement Project) are steps in the right direction and should be intensified and accelerated.

Increased emphasis on marketing system improvements are warranted. The marketing system needs to be improved to better deliver price information to

producers by reorienting the role of the public sector to a supportive rather than a commercial and intervenor's role. Furthermore the private entrepreneurial system needs to be supported towards greater technical and economic efficiency in its role as extractor of farm produce and in its role as supplier of goods and services to the rural population. Processing, storage and other agri-business activities could become an important source of productive employment in rural areas. Infrastructure for market towns should be assessed for possible investment opportunities.

Rural off-farm income generation is a most important issue from the nutritional point of view; the agricultural program should be focused on this on a more explicit manner. It should not be assumed that increased output will automatically increase productive rural employment; the policies and the projects should be designed to directly stimulate the growth of labor incomes within the context of an internationally competitive agricultural sector.

At least two regions of the country have grave problems with acute malnutrition, and it is possible that other population groups will suffer deleterious effects from an economic transition to more neutral economic incentives. These households need humanitarian assistance with their income, food and health problems. Furthermore, they need to be assisted with information and resources to enable them to respond to the expected improvements in the structure of economic incentives. Some of these households are currently being assisted through food donations and other developmental efforts of the Private Voluntary Organizations and the efforts of other donors. In light of the available data these latter efforts appear insufficient.

The role of targeted food programs as assistance to these groups is a very complex matter. The difficult issues include the identification of target groups by geographic and socio-economic criteria. The choice of food commodities and the means for accessing them are also difficult in terms of administrative aspects, disincentives to production and marketing of indigenous production. The current pressing problems in the rural areas, however, require serious consideration of the use of donated or subsidized foods for certain households.

USAID's economic resources, development assistance, and physical presence give it a unique leverage opportunity to create a nationwide consensus that it is in the whole country's interest to solve the Nation's malnutrition problem. Not only must the future political leadership be made aware of the severity and extent of the problem, but they and the "entrepreneurial sector" must be persuaded that the nutritional problem puts a brake on economic growth. Importantly, the nutrition problem needs to be seen by all as a problem of severe rural poverty and not a problem to be solved by an urban based cheap food policy.

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## 1.0 INTRODUCTION

Honduras continues to be one of the poorest countries in the Americas. The extent and acuteness of poverty is greater today than it was ten years ago, for example, the proportion of the population in absolute poverty (i.e. having a household income that cannot purchase a basic food basket) has risen in the 1980s (García et. al., 1988).

In the late 1970s, the nutritional status of the country's children was the worst in Latin America, falling below the level that would have been expected on the basis of income per capita, other socioeconomic indicators, and a number of health sector indicators (Harrell, et.al., 1986). Recent data, from the first nationally representative study in more than twenty years (The 1987 National Nutrition Survey) indicate that the prevalence of malnutrition in preschool aged children has declined from 56 percent in 1966 to 37 percent in 1987, according to the "Gómez" weight for age criterion<sup>1</sup>. The 1987 Survey reports that the prevalence of severe and moderate chronic malnutrition is 31.6 percent on a national average; this is high by modern international standards and in comparison with other countries of the region.

Several partial studies during the seventies suggested that nothing had changed from 1966, with malnutrition being as prevalent in the marginal areas of Tegucigalpa as in the rural areas and the smaller urban communities. The apparent decline in malnutrition since the late seventies, in spite of economic decline suggests that there must have occurred some improvements in the health system. The data, today, suggest that, now, malnutrition is primarily a rural problem. A rapid rate of migration out of the rural areas has increased the proportion of poor households in urban areas, and as a result, today, poverty in Honduras is not just a rural problem as it was in earlier times (Franklin, et.al., 1988). Nevertheless the majority of rural dwellers live under conditions of poverty and severe deprivation of the most basic needs. This deprivation is manifested by the much higher prevalences of malnutrition in rural areas; the relative risk of being malnourished is three to four times greater

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<sup>1</sup> For intertemporal comparisons we've adjusted the prevalence of weight for age deficits using the now obsolete Gómez criterion less 20% of Gómez grade I. This adjustment accounts for the number of "normal" children whose weight would be expected to be below the Gómez cut-off points on a purely random basis.

for children in rural settings than for children from Tegucigalpa (1987 National Nutrition Survey).

Among principal causes for these severe problems are domestic policies that have created a complex and mutually contradictory structure of incentives. In aggregate, the prices faced by agricultural producers have fallen relative to prices received by other sectors of the economy. According to the agricultural sector strategy for USAID, the purchasing power of farm families, particularly the poorest, has declined dramatically. Overall, the Honduran economy has been stagnant during the decade of the 1980s. For some households in rural areas these conditions of severe deprivation have placed their children in acute malnutrition and at risk of death.

This report presents a suggested strategy for USAID in addressing the problems of malnutrition in Honduras. This strategy has been developed within the overall framework of the AID Policy Paper on Nutrition (1982) which views nutrition as both a cause and a consequence of successful developmental programs and policies. The focus of AID's Policy is to seek ways of enhancing the positive nutritional impact of existing developmental activities and to identify those projects, programs and policy areas which may be subject to modification in the light of nutritional considerations. This strategy was developed through a review and analysis of available documentation and interviews with USAID/Honduras personnel and through discussions with representatives of private, public and international institutions in Honduras. This review was accomplished during a two week visit to Tegucigalpa in October of 1989 by the two authors who are, respectively, an economist and a medical nutritionist. The principal finding is that despite the apparent general improvement in nutritional status in Honduras, malnutrition persists as a widespread problem with serious consequences for development and for the well being of the great majority of poor people in rural areas. Malnutrition in the context of extreme rural poverty will require specific attention from private and public institutions and in the formulation of policy. Even if Honduras were placed on a path of rapid and sustained economic growth, more than a fourth of the country's children would be malnourished in the year 2000.

## **2.0 FOOD AND NUTRITION PROBLEMS IN HONDURAS**

The 1987 National Nutrition Survey (HNNS) found that more than one third of the nation's pre-school aged children exhibited signs of significant growth retardation associated with malnutrition. On a country wide basis, chronic malnutrition of moderate and severe degrees affected 31.6 percent of the children and another 3.9 percent were acutely malnourished (Table 1). By the traditional Gómez criterion (weight for age) in its modern interpretation, 37 percent of the children in the sample suffered frank malnutrition. This latter figure compares with a nationwide estimate for the prevalence of malnutrition obtained by INCAP in 1966 of 56 percent, using the same criterion.

While over the previous twenty year period there has been a significant reduction in the prevalence of malnutrition (nearly twenty percent by the Gómez criterion), the present levels are a major problem for national development. The households with malnourished children also suffer from diets that are inadequate in quantity and quality; other indicators of basic services are also grossly inadequate. Reported morbidity is very high and educational levels are very low. On the positive side, over 80 percent of the children have been vaccinated for childhood diseases.

The anthropometric data of the 1987 HNNS reveal that the problem is largely a rural problem, for example, the relative risk of being chronically malnourished to a severe degree is nearly four times greater for rural areas than for the metropolitan area of Tegucigalpa (Table 1). In the western regions nearly half of the children are chronically malnourished and alarmingly in Health Region 4 in the South and Region 5 in the West the prevalence of acute malnutrition is 14.7 percent and 9 percent, respectively. The children represented by these numbers were, at the time of the survey, at a high risk of death.

The measurement of dietary adequacy is very imprecise, nevertheless, it is patent that for the great majority of the population the diets are inadequate, monotonous and of poor quality. Nearly half of the households in the HNNS reported caloric availability below 80 percent of the recommended levels (Table 1). Regardless of measurement errors, these households were at high risk from a dietary stand point. Protein levels were below 80 percent of recommendations for 16.1% of the sample households, on a nationwide basis. More than half of the national average

Table 1. Nutritional Indicators and Related Health and Socio-Economic Variables  
Source: Honduras National Health and Nutrition Survey 1987

Nutritional Indicators	:Metro :Region	HEALTH REGIONS							National Average		
		ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN			
ANTHROPOMETRY	:	:	:	:	:	:	:	:	::	:	
Weight for Age:	:	:	:	:	:	:	:	:	::	:	
Gomez II and III	:	5.1	16.7	12.2	13.1	13.9	21.5	11.2	13.1	::	13.3
Gomez(I+II+III-20%)	:	12.7	40.4	37.5	37.3	42.7	52.4	33.7	43.3	::	37.0
CHRONIC	:	:	:	:	:	:	:	:	:	::	:
Height for Age	:	:	:	:	:	:	:	:	:	::	:
Moderate	:	10.5	18.1	25.5	19.6	19.5	25.3	17.8	19.8	::	19.3
Severe	:	4.4	17.1	13.0	11.3	11.7	23.6	10.0	10.8	::	12.3
Moderate & Severe	:	14.9	35.2	38.5	40.9	41.2	48.9	27.8	30.6	::	31.6
ACUTE	:	:	:	:	:	:	:	:	:	::	:
Weight for Height	:	0.1	6.6	0.0	3.6	14.7	9.0	2.5	3.5	::	3.9
FOOD CONSUMPTION	:	:	:	:	:	:	:	:	:	::	:
Percent households below 80% adequacy:	:	:	:	:	:	:	:	:	:	::	:
Calories	:	46.4	50.0	43.9	47.5	63.1	53.4	43.3	46.6	::	49.1
Proteins	:	10.5	19.2	14.3	16.5	26.4	11.5	16.9	15.6	::	16.2
Children % below 80%:	:	:	:	:	:	:	:	:	:	::	:
Calories	:	:	:	:	:	:	:	:	:	::	62.0
Proteins	:	:	:	:	:	:	:	:	:	::	29.7
PERCENT INADEQUACY	:	:	:	:	:	:	:	:	:	::	:
Potable water	:	20.8	52.8	47.4	34.3	70.4	52.8	70.8	53.3	::	45.8
Sanitation	:	4.1	56.0	61.8	33.2	76.5	60.0	49.9	53.9	::	43.8
Housing-dirt floor	:	16.2	71.1	65.8	39.9	72.2	66.6	58.1	84.8	::	52.0
Health access >1hr	:	9.2	44.6	51.1	27.5	51.6	53.4	29.7	35.6	::	34.2
ADULT ILLITERACY %	:	7.2	38.8	29.3	25.0	41.0	40.8	25.1	35.1	::	27.9
Families with Child Mortality: age < 5	:	2.7	9.8	8.9	6.1	8.3	13.0	8.6	8.9	::	7.6
OCCUPATIONS	:	:	:	:	:	:	:	:	:	::	:
Percent low status	:	27.4	42.4	40.7	37.2	47.3	41.7	36.3	37.5	::	37.1
Subsist. & landless	:	0.5	32.0	29.5	19.5	27.6	30.3	23.1	29.5	::	21.9
FOOD AID:	:	:	:	:	:	:	:	:	:	::	:
Percent receiving	:	2.3	16.4	18.4	12.3	17.7	16.0	37.7	8.4	::	15.6

caloric intake is provided by maize and beans. Regional and urban-rural differences were marked; regions four and five showed the poorest diets and in the metropolitan area the diets were not so poor, particularly with respect to quality (Table 1).

The poor quality of the rural diets is indicated by the proportion of the proteins provided by animal products. At a national level 28.9 percent of the proteins are provided from animal products where as in the rural areas more than half of the households reported that less than 25 percent of the proteins were of animal origin<sup>2</sup>. Other nutrients such as iron and vitamin A were also consumed at inadequate levels on a nationwide basis. In rural areas vitamin A intakes are grossly inadequate, 86.3 percent of the rural households reported consumption levels that are below half of the recommendation.

The inadequacy of the diets was more severe for the pre-school aged children; their diets were disproportionately poorer in quantity and quality than the diets of the other household members. On a nationwide basis, 62 percent of the children had diets that were below 80 percent of the energy recommendation and 29.7 percent had diets that were also below 80 percent of the protein recommendations (Table 1). Of course, these inadequate and monotonous diets for children would also be deficient in other important nutrients such as iron and vitamins. In the case of children of preschool age, the lack of quality in the diet could be a very serious impediment to their development.

The malnutrition problems revealed by the dietary and anthropometric indicators are paralleled by other indicators of deprivation and poverty. These latter also reveal major differences between the metropolitan area and the rural regions. For example, more than half of the rural regions have inadequate water supplies and inadequate sanitation, where as the same conditions are less prevalent in Tegucigalpa (see Table 1). Additionally, literacy rates are much lower in the rural areas, and the economic indicators indicate a much higher rate of low income occupations for the rural areas. Two thirds of these are small farmers and agricultural workers.

Morbidity from diarrhea was reported to be high, ranging from 22.9 percent in the metropolitan area to 38.2 percent in Health Region 7 in the center of the

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<sup>2</sup> Diets with less than 25 percent protein from animal products are considered to be inadequate with respect to their amino acid composition. Furthermore diets that are inadequate in energy tend to cause misuse of proteins.

country. The prevalence of acute respiratory infections are very high, at a 70 percent level nationally. This is associated with difficulty in access to health services; 34.2 percent of the sampled households reported that the nearest health facility was further than one hour away. These access problems are lowest in the metropolitan area (9.2%) and highest in region five in the West with 53.4 percent of the households reporting difficulty of access to health facilities. These logistical problems of access to health are undoubtedly aggravated by low incomes which impede the households' use of private health providers.

In summary, the malnutrition problems in Honduras are caused by the extreme poverty in rural areas that underlies the inadequacy of the diets and the problems with the health and sanitation systems. These problems are manifested by the growth retardation of the children, the high levels of morbidity, the extremely poor diets that are available for the feeding of children and the generally inadequate diets for most households. Without specific actions directed at this problem over 25 percent of the population will remain malnourished through the end of this century. Even a return to significant and broad based economic growth will be insufficient to greatly reduce the prevalence of malnutrition unless specific nutrition oriented development actions are undertaken.

## **2.1 Malnutrition in the Development Process**

In spite of economic stagnation and piecemeal efforts at economic reform the prevalence of malnutrition has declined in the last twenty years. Given the economic stagnation of the last decade, this improvement is likely to be associated with the general and worldwide improvements in health. Undoubtedly, USAID's and other investments in the Honduran health system, have contributed to the improvement. Some of the improvement must have also resulted from the economic growth during the 1970s, however, the deterioration during eighties must have impeded greater improvement and may have caused a reversal of progress. This is evidenced by the deterioration of the diets during the 1980s.

Even with the apparent improvement in the early eighties, there is need for specific programmatic actions directed at the malnutrition problem and to the population groups that are at high risk.

Actions such as those that have been undertaken by USAID under the health sector projects (I & II) and the natural resources management project are significant steps in the right direction. Continuation and strengthening of these efforts, as is planned, are further steps toward alleviating the problem. More must be done. The rate of improvement must be doubled if malnutrition is to be halved by the year 2000.

The fundamental problems regarding food and nutrition in Honduras are:

1. Persistent and extreme rural poverty (lack of purchasing power).
2. Monotonous and low quality diets that are inadequate in energy and nutrients for all members of poor households.
3. Inadequate food availability for feeding of pre-school children, in quantity and quality terms.
4. Inadequate coverage of the health system that prevents access to preventive and curative health care.
5. Inadequate water and sanitation.
6. Poor housing.
7. Low levels of formal education and low availability of information for production and nurturing.

All of the foregoing would, of course, be significantly ameliorated if the economy were placed on a path of rapid, broad based and sustained growth. No matter how optimistic the prospects for economic growth may be, it would be insufficient to overcome the depth of deprivation that exists in some regions of the country in a foreseeable future. Furthermore the problems of access to food and health care may themselves impede the ability of households to respond to improved incentives and therefore to participate in any expected growth process.

### **3.0 THE ROLE OF USAID IN REDUCING MALNUTRITION**

This report centers on initiatives that can be supported by USAID-Honduras through its economic program, development assistance activities and through policy dialogue. In the case of the latter of these, USAID is in a uniquely advantageous position to promote concerted national action towards the amelioration of nutritional problems. USAID has a substantial economic presence and a large resident staff of technical personnel. With these resources and renewed emphasis towards reducing malnutrition directly, USAID can redirect some of its resources and efforts to produce significant beneficial nutritional impacts, in the short run. These impacts can be achieved within the framework of the mission's development strategy and the agencies overall policy framework for economic assistance, food and agricultural development, private sector orientation, health and nutrition policy.

The portfolio of economic support and project activities can be expected to produce substantial improvements in nutritional well being if the mission's overall objectives are realized. The depth of the problem, however, requires that certain critically needed activities be specifically directed at the nutritional problems of the country. In fact, certain of the nutritional activities suggested for implementation will help facilitate the success of the economic and agricultural policy dialogue efforts as well as the success of a number of project activities. If only because they will help promote political support for the USAID program and initiatives.

The Agency policy wide for AID is to improve nutrition through sectoral programs in agriculture, health, food aid, population, and education as well as through direct-nutrition programs. The policy is to be implemented by incorporating nutrition and food consumption as factors in decision-making in sectoral strategies, programs and projects. It can be accomplished through any or all of the following mechanisms.

- A. Identifying projects based upon analysis of nutrition and food consumption problems; this is especially appropriate in formulating country development strategies.
- B. Including nutrition as a factor in project design:

1. in agriculture, through maximizing consumption effects of crop and technology selection, research and extension, and appropriate national policies.
  2. in health, through primary health care which emphasizes growth monitoring of children, providing pre- and post-natal nutrition, supporting environmental health measures, and promoting proper infant feeding practices.
  3. in food aid, through targeting appropriate rations to at-risk groups complemented by growth monitoring, health care, and nutrition education.
  4. in population by complementing voluntary family planning services with nutrition programs whenever feasible.
  5. in education, through promotion of basic education for women, nutrition education in the schools, training community outreach workers in nutrition, and advanced training for professionals and policy makers in LDCs in nutrition.
- C. Targeting sectoral projects to individuals or households at risk of developing nutrition problems.
- D. Monitoring and evaluating nutrition impacts of projects that are likely to affect nutrition, food consumption, or food production.
- E. Complementing sectoral programs with nutrition projects to enhance nutrition impacts.
- F. Utilizing the private sector, especially the food industry, in food programs whenever feasible.
- G. Encouraging appropriate national agriculture, health, and nutrition policies to address nutrition and food consumption problems.

## H. Coordinating with governments and other donors to achieve nutritional improvement.

The following sections present an overview of USAID's activities that are expected to produce nutritionally beneficial effects, already. After the overview a concluding section presents an assessment of areas in which increased or additional nutritional emphasis may be warranted.

### 3.1 Proposals for Economy Wide Reforms

Over the decade of the eighties the emphasis of USAID's economic assistance to Honduras has been on promoting economic stabilization through fiscal and monetary austerity, correcting chronic balance of payments and indebtedness problems through improved export performance by providing economic and technical resources to reorient the economy towards a path of sustained growth. Only in recent years has there been renewed concern for broader participation in the benefits of growth and on specific problems of the poorest people in Honduras.

The record on the success of the economic program is mixed. The value of resources made available to Honduras has been large by almost any measure; the gains obtained on an economy wide basis have been modest at best. Certain sectors have benefitted more than others, and regrettably traditional agriculture has not benefitted, but rather has suffered during this process.

Economy wide policies of the government which have severely distorted economic incentives have had deleterious impacts on the poorest segments of the population - farmers and farm workers in the traditional sub sectors of agriculture. Coffee producers and workers as well as maize and beans subsistence and semi subsistence farmers have been placed at an increasing disadvantage by the economy wide policies.

The principal element of the economy wide policy that has castigated the poorest rural households has been the deterioration of the intersectoral prices faced by the traditional agricultural commodities produced on medium and small farms. This coupled with specific commodity tax and subsidy policies (including importation of basic grains with tariff exonerations and with an overvalued currency) has lead to

a marked decline in purchasing power by these low income households. For the producers of basic grains the overvaluation of the currency means that imported grains are artificially cheap and therefore the prices received by domestic producers are artificially low as a result of the exchange rate and trade policies. For the producers of traditional exports, such as coffee, these policies also reduce the real purchasing power of their efforts. These are the very households that suffer most from the multiple deprivations in basic goods and services.

The above is not to say that USAID has fostered these policies, but rather to highlight that the large amount of resources provided to Honduras have not yielded policy reforms that would benefit the majority of the poorest households which are engaged in traditional agriculture. The progress of policy reform has been halting and in a piecemeal fashion, with many partial measures aimed at promoting non-traditional exports. The problem is that these partial measures have created rent seeking opportunities for groups of favorably situated urban dwellers.

Paradoxically, expressions of concerns for the well being of the poor have been used by those that benefit from the economic distortions to impede substantial economy wide reform of the pricing regime.

The authors of this report have not reviewed the current year's proposals for economic policy dialogue, yet some of the now standard prescriptions for structural adjustment would certainly seem warranted from the nutritional point of view. For example, in reforming the economy wide structure of relative prices traditional farmers would gain as producers in excess of any loss they might suffer as consumers. Increased efforts to promote efficiency of public expenditure could redirect resources from inefficient parastatals towards improved health, education infrastructure and research systems. Control of inflation through sound fiscal and monetary policy can remove noise from the economic signals that affect production, marketing and consumption decisions of low income households. Reduction of the "inflation tax" would benefit low income person's more because their wealth is primarily the flow of current transactions rather than capital, as such they are relatively less able to avoid the inflation tax than are richer households. Efforts at tax reforms which would place public financing on a broader economy wide basis could improve the intersectoral price incentives for the poor by removing the reliance of public revenues on taxes on international trade. A tax reform could be designed to produce progressive income distribution effects. All in all, a mutually

consistent set of measures for reform of economy wide policies could yield significant effects for the long run amelioration of malnutrition in Honduras. The reform must, however, be implemented in a logical and complete sequence; piecemeal and halting approaches will continue to help the better off and do little to help and may perhaps hurt the poor.

### **3.2 The Agricultural Sector Strategy**

USAID'S agricultural sector strategy document ( October, 1989) is well focused on the nutritional problems of the country. It is commendable that its programmatic components are explicitly directed at reducing malnutrition and that its expected impacts have been analyzed in terms of their potential effects in nutritional improvements including improved consumption of food by the poor and reduced prevalence of malnutrition. This orientation is central to the overall development of the agriculture sector and to the contribution of agriculture to the development of the whole economy, because "the vast bulk of the poverty is found in rural areas".

The agriculture strategy is directed at correcting these problems through higher output and improved pricing for agricultural commodities. This should produced higher incomes and more employment for rural households. The strategy is well balanced in that it also seeks to promote economy wide growth through improved export performance and better articulation of agricultural markets with the rest of the economy through factor and product markets. Central to the strategy is the argument that improved prices for agriculture will produce higher nutritional benefits for the rural population than the possible deleterious effects on urban diets which could result from the higher food prices. To address the concern for that higher prices for foods could result in higher urban malnutrition and to address the concern for rural malnutrition, the agricultural strategy proposes the implementation of targeted food assistance programs for the poor.

The agricultural strategy has three pillars, one is based on policy reforms, another on husbandry of the natural resources and improvement of human capital for sustained productivity improvements, and the third pillar is based on improving agricultural markets.

On the policy side, an important feature of the agriculture strategy is that an increased orientation of the agricultural system toward international price structures is not in conflict with nutritional improvement. An implicit effect of the reorientation of the pricing system towards world markets is that it will improve incomes in the rural areas in the short run and in the longer run contribute to economy wide growth, and hence to urban incomes. Therefore, the agricultural strategy statement recommends initiatives, such as liberalization of agricultural markets, trade and exchange rate policy reforms to restore incentives to agriculture so as to compensate for the real price declines which have resulted from economy wide policies such as the currency overvaluation and the industrial protection policies. Furthermore the strategy calls for more equal treatment of traditional agriculture in light of the advantages that have more recently been afforded to non traditional agricultural exports.

The strategy, in its second pillar addresses the problems of agricultural resources, including natural resources and human capital. Efforts to enhance the productivity of these in sustainable manners will increase incomes and assure vital inputs such as firewood to the rural household economy. For the longer run, improvement in human capital formation in terms of general and specific skills will greatly enhance agricultural productivity and the households' ability to provide for their basic needs.

The third pillar of the strategy is to promote improved access to product and factor markets. Indeed, better articulation of all markets through increased investments in infrastructure, public information and support for rural entrepreneurship could be one of the highest pay off areas in terms of reducing poverty and malnutrition. Improvement of the marketing system could improve farmers' incomes and also facilitate their access to other important needs such as clothing, energy, appliances, housing, etc.. At the same time investments in the marketing system could help low income small scale retailers and intermediaries.

A unique feature of the strategy statement is its use of specific nutritional targets, along with more conventional output and income targets. The nutritional targets presented are reasonable in terms of what can be expected from the proposed programmatic elements, but the targets highlight the difficulty in improving nutrition through economic processes, alone. The strategy's best scenario for reduction of

malnutrition indicates a 1.4 percent annual rate of improvement. At this rate of improvement, the prevalence of malnutrition will remain around one third by the end of the century. It would take twenty years to achieve the prevalence rates already observed in countries like Bolivia and El Salvador, which are themselves countries that also have severe nutritional problems.

Some of specific actions proposed within the agricultural portfolio should increase the rate of improvement of nutritional status. For example, the intensification, through the Land Use and Productivity Enhancement (LUPE) Project, of some of the lessons learned in the area of "home economics" in the natural resources management project should greatly enhance the nutritional impact of the LUPE Project in its geographic areas of operation. The increased focus on the producer's family that is being discussed as a potential effort of a renewed coffee sector project will also expand on the benefits of improved economic incentives. The strategy also recognizes that more emphasis needs to be placed on the production of nutritious foods, e.g. beans, fruits, vegetables and animal products.

### **3.3 Health Sector Strategy**

The USAID health program in Honduras emphasizes the importance of child survival services as key to reduce infant mortality and morbidity as well as to increase life expectancy. The strategy has a twenty year horizon (1980 - 2000) and is to be implemented in three distinct phases. Each phase has a slightly different focus and builds on the gains made under the previous phase.

Phase one (1980 - 1988) coincided with Health Sector I Project. It has addressed the most pressing systems and institutional problems in the health sector (lack of effective management, and the planning and logistical services needed to maintain a primary health care program). These problems had been identified in the 1980 Health Sector Assessment; in 1984 a component for nutrition was added to the Health Sector I Project as recognition by the Ministry of Public Health of the nutritional problem as a priority concern. The project, overall, has been a major contributor to the achievements in the health area; according to the project paper for Health Sector II (1988) these have included:

a 40 percent reduction in deaths from diarrhea

- over 80 percent immunization levels for polio, measles and DPT in children under the age of five
- a 40 percent decline in the number of cases of malaria throughout Honduras since 1981
- a reduction in IMR from 90 in 1980 to an estimated 70 infant deaths per 1000 live births in 1985
- an increase in contraceptive use from 27 percent to 35 percent of women in union between 1981 and 1984
- a reduction in the unit cost of medications
- an increase in the number of outpatient visits handled by the MOH
- an increase of the mean duration of breast feeding in urban areas by one month
- the establishment of national diarrhea, family planning and breast feeding programs; and
- the improved functioning of the cold-chain for vaccines at all levels.

Phase 2 (1988 - 1995) coincides with the Health Sector II Project and will introduce new elements to the overall health strategy as well as build upon the foundation laid in phase one. While the main focus in phase 1 was on management improvements at the central level, in phase 2 focus will be on the sustainable implementation of the system improvements at the regional and subregional levels. Special attention will be given to logistics, local programming (decentralized decision-making and management), health and management information system, training, maintenance, education and communications.

Nutrition activities under this project are to focus on improved growth monitoring and targeting of feeding activities in order to identify the population

groups at highest risk, nutritionally. The task of this project is to expand coverage. Other activities include the development of norms on nutrition surveillance and targeting, in service training, supervision, and improvements in the health information system. Improvement in weaning practices and feeding as well as improved maternal nutrition will be achieved through a mass education program and the provision of iron and vitamin supplements.

Those elements of the child survival package which are least developed, such as nutrition (growth monitoring and targeted supplemental feeding) and acute respiratory infections will receive special attention. The provision of basic water and sanitation services in the rural areas and water quality testing form a major component of the Health Sector II Project. The development of water and sanitation systems will work in concert with, and complement child survival activities, and the health impact in such services will be closely monitored. Greater participation in this project by private entities, particularly PVO's will be an important feature of the project.

The focus of the phase 3 (1995 - 2000) will be a Health Sector III Project which will consolidate the gains of phase 1 and 2. An important focus of this project will be to continue to support the decentralization of planning and decision making. The design of Health Sector III will, of course, depend on the evaluation of Health Sector II in 1993.

Currently, the mainly centralized planning and decision making process within the health sector continues to create serious implementation bottlenecks. Important programmatic priorities sometimes get lost in the process of having to constantly manage crises. The result is that some important initiatives tend to move slowly from the normative stage to the implementation stage. Among them are supervision, continuing education, management training, and management information system. The major institutional constraint is the lack of strong regional structures. The regions receive inadequate support from the central level, particularly regarding delegated decision-making authority and budget control through the use of regional revolving funds. Budget levels for the regions are sometimes adjusted unilaterally at the central level, making the planning of activities difficult if not impossible. Another problem at the regional levels are the lack of capacity to adequately analyze and make use of data that are generated.

The above described strategy appears to be very sound in general, but it lacks specificity with respect to nutritional issues. For example it does not specify how nutritional target groups will be identified nor how any food supplementation efforts are to be carried out. Furthermore, it does not appear that the rate of extension of coverage will be sufficiently rapid to reach the regions with the most pressing nutritional problems. It must be recognized, however, that at the time of the design of Health Sector II the data from the HNNS were not fully available. It would seem appropriate to reprogram some project activities in light of the complete results from the 1987 National Nutrition Survey. Issues such as the inadequate feeding of children and the care and feeding of sick children would need to be addressed in any reprogramming of Health Sector II. In-service training and institutional development efforts should focus on nutrition.

#### 4.0 A SUGGESTED STRATEGY

Regardless of how quickly Honduras is able to embark on a path of sustained and broad-based growth, many households in the rural areas will continue to suffer from extreme poverty and chronic malnutrition. Initiatives in USAID's economic, agricultural, private sector and health programs as they operate today and their planned enhancements for the future are likely to cause significant nutritional improvements. These improvements, however, will be insufficient to halve the prevalence of malnutrition by the end of the century. Specific actions must be promoted and supported to address the severely acute problems of certain regions, at once, and to ameliorate the negative developmental consequences of chronic malnutrition throughout the rural regions of Honduras. It may also be necessary to provide nutritionally oriented services for some segments of the urban population in order to obtain political support for the policy reforms that are required for the success of the USAID programs.

This section presents a suggested Strategy for the improvement of nutrition which could be promoted and supported by USAID-Honduras within its overall development and policy dialogue strategy. Some elements of the strategy involve increased emphasis on nutritional issues within existing initiatives, others involve reorientation or redeployment of existing or planned resources. The level of new resources required is modest; the strategy does imply substantial reorientation of institutional philosophies and acceleration of some planned initiatives.

The unifying themes of the suggestions for a nutrition strategy for Honduras are the need to address the fundamental socioeconomic problems of chronic rural poverty and gross inadequacy of the rural health system, as well as the severely acute problems of certain regions, in manners that provide for the long run sustainability of the improvements. The policy focus of much of USAID's programs can serve as a central driving force for the strategy. Other elements will involve specific project activities. The elements of the strategy include:

1. Establish a system of clear and stable economic incentives that cause value to be assigned to the time and products of the poor so that the returns they obtain for their efforts reflect their real value to Honduras.

2. Reorient the provision of public services (health, water, sanitation, roads, schools, technology transfer, and marketing services) to assure adequate coverage for the producers and workers in the traditional agricultural sectors.
3. Provide immediate relief for the acute nutritional problems of the Western and Southern regions.
4. Promote a national awareness of the need to solve the Nation,s severe food and nutrition problems, and support the reorientation of national institutions toward a sustainable approach to these problems.

#### **4.1 Expected Nutritional Impact of Policy Reforms**

In small countries that are intrinsically open to international economic forces, policies to favor one economic sector will place other sectors at economic disadvantage. Efforts to isolate economic transactions from international valuation of resources will typically be frustrated. Whether well intentioned or not, interference with the influence of international markets will tend to create positions of privilege for a few well situated economic interests. Eventually, any desirable social goals that motivated the policy interventions will become secondary, and the policy making process will be captured by those that tend to benefit from the policy distortions. Not only are resources allocated in manners that perpetuate the positions of privilege created by the policies, but the economy as a whole tends to operate at a lower level of efficiency and output. The costs of inefficiency and foregone output are then borne by the less favorably situated--those with smaller stocks of human and physical capital--the poor. Such is the case of Honduras!

Piecemeal efforts to compensate some of the losers from economy wide distortions will often tend to aggravate the problems. The favorably situated will tend to be the first to perceive if not advocate the benefits of special concessions and compensatory schemes. Such schemes work better in rich countries than in poor countries, because the income transfers required by the economic distortions tend to be smaller as a share of the total economy in the richer countries. In poor countries the distortions are quickly transmitted throughout the economy, and the poorer segments of the society end up paying the real costs.

Since the interventions tend to occur in the domestic markets for internationally tradeable goods, economic agents attempt to move their resources to the favored sectors and away from the sectors that are being punished by the distortions; access to the favored sectors is frequently impeded by regulations or other barriers to entry. Eventually resources and consumption move to sectors that are less affected by the distortions in the markets for internationally traded goods and the concomitant regulations. At the extreme, the urban population becomes "informalized" and the unprotected agricultural sectors revert to subsistence production. The economy as a whole becomes, paradoxically, increasingly dependent on imported resources for its consumption. Unless an "export boom" (that can be taxed to finance the increasing requirement for imports) occurs, the process is unsustainable without external flows of resources.

Regrettably, once a process of this sort has been in place for a long time, its correction requires either phenomenal growth in the less favored sectors or a fall in real wages in the non tradeable sectors. This is necessary because the economy's structure of relative prices must be corrected to reflect the scarcity value of all resources. The necessary adjustments to the new prices are not costless and the economy will tend to go through a further recessive period while the adjustment occurs. Such is the dilemma that has faced Honduras in the 1980s.

"Structural Adjustment" of the economy will do a lot to restore incentives for income growth in the traditional agricultural sectors. Some in the urban based population will, however, have to experience real declines in their incomes for some time. Who these persons are, and for how long will they suffer decreased incomes is a matter for analysis. There is some risk that these persons would suffer malnutrition as a result of their decreased incomes. Analysis must be undertaken to analyze these risks and to explore the possibility of the need for urban based safety net programs to facilitate the necessary economic transition to a path of sustainable and broad-based growth. Some specific considerations regarding nutrition should be included in the policy dialogue process:

1. A major tax reform that significantly reduces the reliance on trade taxes and is broadly based, such as on value added, incomes and/or assets would

produce nutritional improvements if it facilitates reform of the pricing regime including the exchange rate regime.

2. A broad based donor assisted program of rural public works for roads, small scale irrigation, water supply and infrastructure for market towns should be supported with local currency generations from the economic assistance program.
3. Analyze and consider for funding the possibility that a targeted income support safety net may facilitate the implementation of a necessarily ambitious structural adjustment economic reform program.

#### **4.2 Accelerated Implementation of Health and Agricultural Sector Programs That Can Improve Nutrition**

The Mission's Health and Agricultural sector programs have important components that will improve the nutritional well-being of their intended beneficiaries as well as provide an impetus and the resources for the improvement of nutrition on a nation wide basis. This report recommends that certain activities be accelerated in their implementation and that others be given a more explicit focus on nutritional objectives. The following two sub-sections present some explicit suggestions for enhancing the nutritional impact of projects in the health and agricultural portfolios.

##### **4.2.1 Nutritional Enhancements to Health Sector Activities**

The institutional strengthening activities under the Health Sector I project have created the foundations for intensified attention to nutritional considerations within the country's Child Survival Strategy. There is a need ,however , to accelerate nutrition activities under Health Sector II. Specifically, the child survival interventions should include information and resources for the feeding and care of sick children, for example. Additionally information and perhaps foods for the feeding of pre-school children and mothers should also be included; the feeding of pre-school aged children is a wide-spread and severe problem throughout the country.

The social marketing activities directed at child survival should include messages on the appropriate feeding of well and sick children. The success of growth

monitoring activities are limited by the difficulty of access to health care facilities, therefore growth monitoring and "well baby" programs need to be instituted through community based actions utilizing indigenous personnel within a well defined institutional base of referral and support. Emphasis should continue on the promotion and maintenance of breast feeding as well as birth spacing as initiatives with a high nutritional payoff. These efforts could be supported with a "take home" food donation program that provides food for the household but that is biased toward children.

There is a need for social marketing actions directed at the medical professions in the private and public sectors to make them aware of nutritionally based health problems and their management. These professionals could also promote the early detection of nutritionally related diseases and their management at the household level before they become clinical cases.

To insure a sustained and intensified focus the project should include resources for developing and maintaining a "Nutrition Advocacy" unit for nutrition related training, promotion and evaluation. The project's management information system should explicitly include nutrition surveillance information, and senior project management should adopt nutritional outcomes as important project goals.

#### **4.2.2 Enhancements to the Agricultural Sector Program**

The policy initiatives being promoted under the agricultural sector program, including the move to a more neutral structure of intersectoral incentives and the greater orientation of the traditional subsectors toward world markets will greatly enhance nutritional well being in the medium to longer runs. The inclusion of "home economics" type components within several production oriented projects (Natural Resources Management, LUPE, and the Coffee Improvement Project) are steps in the right direction and should be intensified and accelerated.

The sector strategy mentions marketing constraints as impediments to increased rural incomes and to access to adequate nutrition. Increased emphasis on marketing system improvements are warranted. The marketing system needs to be improved to better deliver price information to producers by reorienting the role of the public sector to a supportive rather than a commercial and intervenor's role. Furthermore the private entrepreneurial system needs to be supported towards greater technical

and economic efficiency in its role as extractor of farm produce and in its role as supplier of goods and services to the rural population. Processing, storage and other agribusiness activities could become an important source of productive employment in rural areas. Infrastructure for market towns should be assessed for possible investment opportunities.

Rural off-farm income generation is a most important issue from the nutritional point of view; the agricultural program should be focused on this on a more explicit manner. It should not be assumed that increased output will automatically increase productive rural employment; the policies and the projects should be designed to directly stimulate the growth of labor incomes within the context of an internationally competitive agricultural sector.

#### **4.3 Urgent Attention to Acute Food and Nutrition Problems**

At least two regions of the country have grave problems with acute malnutrition, and it is possible that other population groups will suffer deleterious effects from an economic transition to more neutral economic incentives. These households need humanitarian assistance with their income, food and health problems. Furthermore, they need to be assisted with information and resources to enable them to respond to the expected improvements in the structure of economic incentives. Some of these households are currently being assisted through food donations and other developmental efforts of the Private Voluntary Organizations and the efforts of other donors. In light of the available data these latter efforts appear insufficient (see Table 1). The HNNS data should be analyzed for the purpose of achieving a better identification of the groups currently in urgent need of assistance and those likely to be adversely affected by future economic policy reforms.

The role of targeted food programs as assistance to these groups is a very complex matter. The difficult issues include the identification of target groups by geographic and socioeconomic criteria. The choice of food commodities and the means for accessing them are also difficult in terms of administrative aspects, disincentives to production and marketing of indigenous production, and in terms disincentives for the participating households from their eventual incorporation in the productive processes of the society.

The current pressing problems in the rural areas, however, require serious consideration of the use of donated or subsidized foods for certain households. In particular, something must be done urgently to break the deleterious cycle that begins with the low quality and quantity of food that is available for pre-school aged children. The households in which the acutely malnourished children live are the poorest households in the country, by any criteria. These households need improved sources of income, improved health access and improved water and sanitation. Consideration should be given to providing management assistance, technical assistance, logistic support, and financial and food resources to any agencies currently working in the critical regions. In some cases the health system may be able to deliver "take home" rations for the whole household as compensation for parents' participation in development activities such as community potable water systems, and well baby programs. Agricultural development programs could also provide food ( or cash for food) to compensate participants in re-forestation programs, in infrastructure development programs, etc.

In all cases these programs should be carefully conceived so as to not distract the intended beneficiaries from their own productive activities. For example, it would be preferable to provide nutritious and energy dense foods through the private retailing system and to provide cash compensation to the participants in developmental activities. The transitory nature of such activities should be clear in their design and in their promotion with the beneficiaries.

#### **4.4 Use USAID's Leverage to Achieve a Broad-Based Consensus About the Importance of the Fight Against Malnutrition**

USAID's economic resources, development assistance, and physical presence give it a unique leverage opportunity to create a nationwide consensus that it is in the whole country's interest to solve the Nation's malnutrition problem. Not only must the future political leadership be made aware of the severity and extent of the problem, but they and the "entrepreneurial sector " must be persuaded that the nutritional problem puts a brake on economic growth. Importantly, the nutrition problem needs to be seen by all as a problem of severe rural poverty and not a problem to be solved by an urban based cheap food policy.

Within the sectoral development programs ,USAID's counterparts in the private and public sectors need to be educated in the nature of the problem and the

importance of malnutrition and poverty as a drag on the development process. A well nourished and healthy work force will greatly enhance the success of the development strategy. Agricultural technicians and health sector professionals need training in nutrition awareness as much as anybody does.

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