TRENDS IN NUTRITION, 1965 - 1988
AND
USAID NUTRITION STRATEGY, 1990 - 1994,
EL SALVADOR

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The strategy will target the following groups: children under five years of age, pregnant and lactating women, and women in fertile age (particularly adolescents and young women) among the rural and marginal urban poor.

The major components of the Mission Nutrition Strategy are:

1. Improving Service Delivery and Coverage of the High Risk:
   The Mission will assist the MOH in a re-organization of the 580 rural community health workers into the Community Health Worker Program. These CHW's will be trained to provide integrated MCH services to rural areas. These services will include health and nutrition education (weaning, diet during infection, breastfeeding, vitamin A, hygiene, child growth using growth charts), infectious diseases (diarrhea, ARI, immuno-preventable), basic water and sanitation, vitamin A activities (education, gardens), prenatal care (referral), and birth spacing (referral, education, some direct services).
   Because of continuing inadequacies in rural areas in water and sanitation, the Mission will support a major new initiative to increase the availability of potable water and sanitation to rural households.
   Due to the results of the recent CRS evaluation, food assistance to CARITAS will be phased out early in the period. However, Title II food assistance to the Civic Action Program will continue.

2. Maximizing Resources and Engaging the Private Sector and Other Donors
   The Mission will explore the possibilities for establishing a fee-for-service mechanism within the MOH. In addition, key components of service delivery including logistics and information systems will be improved.
   The Mission will also explore the possibility of increasing private sector service delivery in rural and other high risk areas.
   The Mission and the GOES have also agreed to create a PVO line in the extraordinary budget for PVO activities which would provide support to lactation in urban areas and integrated community developing in rural and urban areas.
   The Mission will also engage other donors in priority areas (the World Food Program to increase food assistance support, and UNICEF in the purchase of vitamin A capsules and vaccines).

3. Measuring Progress
   The Mission will use those indicators currently in the Action Plan to measure progress. Information for these will come from MOH routine data collection and improved MIS, Mission project data, Vital Statistics and Census projections, and periodic surveys as well as Sentinel Area information.
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Executive Summary

A. Introduction:
The purpose of this Strategy paper is to document trends in
nutrition over the past 20 years, describe current programs
related to nutrition, identify constraints and provide a
description of the current Mission nutrition strategy from

B. Trends in Nutrition:
The nutritional status of children under five years of age
improved significantly from 1965 to 1978. However, there has
been only slight improvement from 1978 to 1988. In 1988 an a
recent survey found 15.4% to have moderate or severe
undernutrition (weight for age). An estimated 24% of children
under five also have deficiencies in Vitamin A, associated with
bilateral blindness in young children and with increased risk of
infection. Maternal undernutrition is also a problem, evidenced
by high rates of iron-deficiency anemia and the estimated 10.5%
of births which are low birthweight.

C. Trends in Underlying Factors
Food production increased and unemployment decreased from
1965 to the late 70's. This trend was reversed in the late
70's. From 1978 to 1984-5, production fell and unemployment
increased. In spite of the upswing in employment in recent
years, real wages have continued to fall and are currently at
half their 1978 value. A national dietary survey conducted in
1988 found 70% of children under five to be consuming
insufficient calories, and 16% to be consuming too little protein.

In spite of improvements in morbidity and mortality rates
from diarrhea disease, acute respiratory infections and
immuno-preventable illnesses over the past ten years, these
infectious diseases are still the most important causes of
childhood illness and death in El Salvador. Water and sanitation
coverage of rural areas is estimated at no more than 30% or as
low as 13% if deterioration of systems is taken into account.
Lactation rates, related to the prevention of infection, are
relatively high in both urban and rural areas, however duration
may be shortest among the children of employed women in urban
areas. Recent surveys show a high percentage of women in labor
market, and a high percentage of female-headed households in
urban areas.

Although contraceptive use-rates are high at 47%, birth
rates are also still high and contraceptive prevalence is still
low in rural areas and among adolescent and young women 15-25.
D. **Risk Population**: Highest risk populations are children under five years of age, women in fertile age (particularly adolescents and young women), and pregnant or lactating women from rural or marginal urban areas and from families who are low income, unemployed, landless, subsistence or marginal subsistence farmers.

E. **Current Programs in Nutrition and Nutrition-Related Areas**

The MOH addresses nutrition through prenatal and postpartum care, community education and food assistance (World Food Program). Its nutrition program includes ambulatory care and Rural Nutrition Centers. The programs most successful at providing rural coverage have been the Community Health Worker programs (formerly ARS and PROSAR).

PVO's provide education, food assistance, and water and sanitation services among high risk populations in rural and marginal urban populations. The largest PVO food assistance program has been that of CRS/CARITAS (Title II food).

The Salvadoran Demographic Association (ADS) provides family planning services to both urban and rural areas. Services in urban areas include prenatal and postpartum as well as pediatric care. In rural areas services consist of education and provision of contraceptives.

The informal sector includes popular distributors, vendors, rural pharmacies, and traditional health care providers (curanderos, etc.). This sector is an important source of care, especially for the treatment of infection.

Other donors include PAHO, UNICEF, UNFPA, the World Food Program, UNDP, IDB and regionally and centrally funded AID projects. Together they provide a wide range of programs in and related to nutrition including water and sanitation, family planning, diarrheal disease and immunization.

F. **The Mission Strategy in Nutrition**

The overall Mission strategy is aimed at improving production through macroeconomic adjustment measures. In the long run this is designed to improve the wellbeing of the Salvadoran population as a whole. However, in the short run these adjustments may increase the vulnerability of some risk groups including the rural and marginal urban poor. The Mission Nutrition Strategy is designed to assist these groups through a difficult period, and assist in the adjustment process. The strategy plans to attack the major underlying causes of malnutrition through a broad range of proven public health interventions.

The Nutrition Strategy can also be characterized as a change of emphasis from central institutional support to improved delivery of basic services to the underserved population, especially in rural areas. The Mission will also emphasize maximizing restrained public sector resources and engaging the private sector the further extension of coverage to high risk populations.
A. Introduction

The purpose of this report is twofold. The first is to provide an analysis of nutritional situation in El Salvador over the past 20 years, including a discussion of programs related to nutrition and major constraints to improving nutritional status. The second is to provide a description of the current Mission strategy in nutrition from 1990 through 1994.

B. Nutrition Sector Analysis:


a. Childhood Nutrition

The first nationally-representative data on the nutritional status of children under five years of age in El Salvador is from the mid-60's. Since that time surveys have been conducted at roughly ten-year intervals, in 1976-1978 and in 1988 (USAID, 1981)(ADS, 1988)(CONAN, 1983)(MOH, 1978). Although the many differences in sampling and analysis in these surveys make interpretation of trends difficult and in some instances impossible, a comparison of survey results indicates a significant improvement in childhood nutritional status in El Salvador from 1965 to 1978, with slight improvement over the past ten year period.

Comparison of the anthropometric data was complicated by differences between age groups sampled, urban/rural proportions in sampling, and data collection during different months of the year (fortunately, all included at least some portion of the rainy season, the period of highest incidence of diarrheal disease). Surveys also often analyzed their data a little bit differently, with different percentages of the norm constituting different levels of severity, and different identification of risk groups. From 1965 through 1978, anthropometric data was originally analyzed using Gomez criteria (Annex B, Tables 2, 4, 5 and 7). In the early 80's the Central American Nutrition Institute (INCAP) re-analyzed this data using improved reference measures (NCHS, Z scores)(INCAP, 1985). The recent 1988 survey data was also presented using the NCHS Z score criteria (Annex B, Tables 3, 6 and 8). This report presents both Gomez and Z score breakdown of data from each survey as a comparison of these results indicates some inconsistencies which are not readily explained including, for instance, the reversed positions of the Gomez and Z score analysis of the 1965 and 1976 data, and the large drop in scores from 1976 to 1978.
For purposes of this report, however, the NCHS Z score method is used as the basis of analysis. This method divides undernutrition into severity according to standard deviations below the mean with -1 to -1.9 s.d. the equivalent of mild, -2 to -2.9 s.d. the equivalent of moderate, and scores lower than -3 s.d. below the mean the equivalent of severe undernutrition.

Weight for height is an indicator of acute undernutrition or wasting and is especially sensitive to sudden changes in the nutritional environment. In Central America acute undernutrition is often highest during the rainy season (from May through October) and is associated with acute diarrhea or dysentery. Weight for height data from El Salvador (Annex B, Tables 5 and 6) shows a significant improvement from 1965 to 1978, as the percentage of children with moderate or severe undernutrition fell from 14.3% to 1.1%. The recent nutrition study, however, shows a slight increase in prevalence among children under five in El Salvador from 1978 to the present as the percent of moderate plus severe has risen to 2.3%.

Chronic undernutrition or stunting, caused by repeated bouts of acute undernutrition or by a continuously poor nutritional environment, is measured by adequacy of height for age. Unlike the weight for height data discussed above, height for age data from El Salvador (Annex B, Tables 7 and 8) indicates a substantial improvement for the full 23 year period from 1965 to 1988. The results of these studies show the percentage of children with moderate or severe height for age inadequacies to have fallen from 53% in 1965 to 44.9% in 1978 and to 26.8% in 1988.

Weight for age (Annex B, Tables 2, 3 and 4) is used as an overall indicator of nutritional status, representing a combined measure of children with growth stunting due to chronic undernutrition (height for age) and children with weight loss due to sudden, acute undernutrition (weight for height). According to this measure the nutritional status of children under five in El Salvador improved significantly from 1965 to 1978. During this period the percentage of children with moderate or severe weight for age deficiencies fell from 30.1% to 17.9%. Since 1978, however, the percentage of children with moderate or severe deficiencies has fallen only slightly to 15.4%. When mild undernutrition is taken into account, there has been no significant change in children's nutritional status since 1978 (Annex B, Tables 2 and 3).

In order to clarify changes over the 1978-88 period, further analysis of the 1988 data was conducted for this report. Table 4 presents this analysis. Variables presenting difficulty in comparison of surveys were controlled for, yielding comparable figures for changes in undernutrition among children 6-59 months of age in rural areas of El Salvador. This more controlled analysis confirms the slight improvement over the past ten years. Unfortunately, the original data from previous surveys was not available for this report.
b. Maternal Nutrition and Low Birthweight

The nutritional status of women of childbearing age is related to maternal mortality, and to childhood undernutrition through fetal undernutrition and low birthweight. According to hospital statistics, 10.5% of hospital births in El Salvador are of low weight (under 2500 gms) (Sanchez Alfaro, R.A., 1983). Maternal undernutrition has been found to be related to 31% of low weight births (Noyola, 1985).

Maternal undernutrition is due to a series of factors including short birth intervals and long periods of lactation causing maternal depletion, young maternal age, household food insecurity and inadequate patterns of intra-familial food distribution, and lack of proper prenatal care. Iron-deficiency anemia, one measure of maternal undernutrition, is high in El Salvador. A 1978 study found 43% of pregnant women to have some degree of anemia (hg of less than 12 g/ml), 14% with levels which were moderate or severe (hg of less than 10/100 ml)(UNICEF, 1987). A recent study on maternal mortality found anemia to be the most important associated factor (MOH, 1989).

c. Vitamin A

According to survey data from 1965, 1976 (MOH, INCAP, 1986), and 1988 (ADS, 1988) vitamin A deficiencies among preschool children continue to be of concern. A comparison of the results of these three studies shows some improvement in serum retinol levels over that period: in studies from 1965 and 1976, a third of preschool children had serum deficiencies of less than 20ug/dl, while 25% were reported deficient in 1988. However, the percentages of deficiency are still high, making severe vitamin A deficiency the probable first cause of bilateral blindness among young children. Even mild deficiencies of Vitamin A are also of concern as they have been found to increase vulnerability to infection and therefore risk of acute or chronic protein-calorie undernutrition.

2. Populations at Highest Risk

The recent 1988 survey as well as the surveys conducted ten years earlier, found undernutrition to be most prevalent in rural areas and among children 12-24 mos. of age. The only exception to this pattern was acute undernutrition (weight for height) among infants. Both 1978 and 1988 surveys reported higher rates of acute undernutrition among children under 12 months of age in urban areas, due at least in part to reduced prevalence and duration of lactation.

Unfortunately, most anthropometric surveys do not include a cross-analysis of those factors which are hypothetically related to nutritional status and so little quantitative data exists to substantiate correlations between variables. Economic status, educational level and recent displacement are the exceptions. The 1988 survey (ADS, 1988) developed an index of socio-economic
status which was found to be inversely related to undernutrition. The 1978 survey found undernutrition to be more prevalent among children from families whose head of household had under two years of formal education. A study of the displaced in 1985 also found more undernutrition in families with less than one literate family member, as well as among those recently displaced (within two years) (USAID, 1984).

The association of other variables to undernutrition is less clear. The 1985 survey of the displaced found more undernutrition among families with a female head of household, however the 1978 survey found no difference between households headed by males or females. The 1978 survey found undernutrition to be more prevalent among those taking their water from wells, rivers and rain rather than pipes; the 1985 study of the displaced found no association between water source and undernutrition.

3. Trends in Underlying Factors

Although the exact relationship between variables may not be quantified in El Salvador, undernutrition among young children in Central America is generally considered to be due to a complex interaction of factors including the family's ability to produce or purchase the food they need, educational status, the prevalence and severity of infectious disease, short duration of lactation and inadequate weaning practices, and issues related to birth spacing and family size including maternal undernutrition and low birthweight.

a. Household Food Insecurity

1. Producing Food

Populations at highest risk of undernutrition are both directly and indirectly affected by trends in food production. Those who sell their produce are affected through price changes as well as changes in the cost of production, all who work in the agricultural sector are affected through changes in the demand for labor, and all who purchase food are affected by changes in the price of food.

The period of improving nutritional status, 1960 through the late 70s, was also a period of strong economic growth in El Salvador. The agricultural sector experienced rapid expansion as production of staples as well as export crops increased in both area planted and productivity per hectare. This expansion was accompanied by favorable farm prices and an increase in the purchasing power and standard of living of farm families (USAID, 1988).

After 1978, a combination of internal and international factors caused a steep economic decline which only began to be reversed in 1984. From 1978 to 1987, the period of only slight
improvements in nutritional status among children, real farm prices fell, production costs went up, and agricultural production decreased. As farmers became unable to purchase inputs (fertilizer, insecticide, for example) in the same amounts and conflict in the countryside increased, there was a decrease in the production of staples as well as export crops. As a result of agricultural sector decline, total food supplies per capita decreased 20% from 1978-9 to 1985-6. (USAID, 1988)

Since 1984 there has been a slight improvement in per capita production, however farm prices remain depressed due to inflation and economic policies which favor imports over stimulation of internal production. As a result, the purchasing power of farm families remains low, agricultural production and demand for labor in agriculture are depressed, lack of foreign exchange and inflation continue to make production expensive, and food prices remain high (USAID, 1988).

2. Purchasing Food

As noted above, from the 1960s to the late 70s El Salvador experienced strong economic growth. Beginning in the late 70s, however, the economic decline resulted in an increase in unemployment from 4% to over 11% in 1984. Since 1984, unemployment has fallen to an estimated 9.1% nationally (USAID, 1988).

Recent relatively low and improving unemployment figures are deceptive, however, if wages are not taken into account. Mission figures report an increase in annual wages at current prices over this period, however when adjusted for inflation, real wages were found to have fallen dramatically since 1978. According to these estimates, the 1988 purchasing power of the annual wage is a little more than half of its 1978 value (USAID, 1988). Even during the 1985-88 period when employment rates improved, real wages continued to fall.

Just as employment at low wages does not guarantee wellbeing, so unemployment has been found to be related to poverty. A study conducted in metropolitan San Salvador in 1986 (USAID, 1986) found unemployment to be highest among the lowest income families. Nearly a third of all unemployment reported in the metropolitan area was accounted for by low income households (earning less than 400 Colones per month). Unemployment among these was estimated at 20-30%.

Another finding of importance was the high rate of employment among women reported recent studies of urban areas. Estimates of female participation range from 46-49% in San Salvador (USAID, 1986) to 35% in urban areas overall (MIPLAN, 1988). Rates remained high for urban women of childbearing age (USAID, 1986). Possible reasons for these high rates include a shortage of male workers, the high percentage of urban female-headed households (reported to be 30.5% in 1988), or the effect of low wages on increased labor force participation per household.
High rates of female participation in the labor force are of interest from a nutritional perspective for several reasons. Multiple wage-earners in a household increase the purchasing power and nutritional possibilities for the household. However, female participation also entails costs to the family which include changes in childcare patterns, most important of which may be changes in breastfeeding and weaning behavior.

3. Food Consumption

According Mission figures (USAID, 1988), agricultural production data and demographic information indicate that the daily per capita consumption of calories fell 24% from 1978-82, while more expensive protein consumption fell 36% over the same period. However, these estimates do not take into account subsistence production and other sources of food including informal exchange and hunting or gathering.

A recent national nutrition survey (ADS, 1988) found the average child to be consuming 92.5% of needed calories while protein consumption was sufficient on the average. As in most developing countries, nutrient deficiencies in El Salvador are primarily in calories rather than protein. In cases of calorie deficiency, however, the body will sacrifice protein to fill caloric needs, converting protein into calories in order to meet bodily requirements. The net effect of this process is protein deficiency even though sufficient protein has actually been consumed.

Although consumption figures based on the mean show only mild deficiencies, high levels of consumption among some children mask the low consumption levels of the rest. When distribution around the mean is taken into account, another picture emerges. According to the same, 69% of children under five years of age are consuming too few calories, and 16% are consuming inadequate amounts of protein. Those children with calorie deficiencies alone are candidates for growth retardation and weight loss, while the children at highest risk of severe undernutrition are those whose diets are insufficient in both calories and protein.

Some of the food consumption deficiency found in this survey was related to economic status. According to a 1988 urban household study (MIPLAN, 1988), 31.8% of urban families live in conditions of poverty (generally defined as more than 50% of total income needed to purchase the basic food basket) and 29.2% live in extreme poverty (defined as total income insufficient to purchase the basic food basket).

Some dietary deficiencies among children may also be the result of infection or beliefs. Consumption data from the recent nutrition study shows food distribution patterns within the family to favor the child in protein but not in calories. Whereas 61% of families were found to have calorie deficits, 70% of children were consuming inadequate amounts; however while 26% of families consumed inadequate protein, only 16% of children...
under five were not receiving the protein they required. Low calorie consumption among children may be due to the effects of illness and nausea on demand, or on supply factors of intra-familial distribution related to beliefs.

b. Infection:

1. Diarrheal Disease

Childhood undernutrition is also closely related to the incidence, duration and severity of diarrheal disease. Severe diarrhea causes a sharp drop in a child's weight as foods consumed are not properly absorbed, foods may be culturally restricted, and nausea may cause the child to refuse food even if it is available. This acute undernourished condition brought about by diarrhea makes the child more vulnerable to subsequent infections, and more likely to die in spite of adequate rehydration therapy (Rhode and Northrup, 1986).

In the past ten years diarrhea-related mortality rates have improved in El Salvador, due at least in part to the recent efforts in oral rehydration by the MOH and major donors. However, diarrhea remains the leading cause of illness and death among young children after the first six months of life. In the 1976-80 period, the percent of diarrhea disease accounted for by children under five years of age increased from an already high 60% to 80%. (Ministry of Health, 1985)(ADS, 1988).

2. Respiratory Infections:

Over the past decade gains have also been made in mortality related to acute respiratory infections. This gain is in part related to improved vaccination coverage, particularly in pertussis. However, ARI continues to compete with diarrheal disease as the principal cause of childhood illness and death after the first few months of life. Indeed, MOH hospital figures show an increase in the number of ARI cases from 1986 to 1987. As with diarrheal disease, ARI is associated with fetal and childhood undernutrition and young age.

3. Immuno-preventable Illnesses:

As a result of recent donor-coordinated efforts in the public sector, vaccination coverage in El Salvador has improved dramatically over the past ten years. The most recent national survey found coverage rates to range from 68% to 84% in children under five years of age (ADS, 1988). As with diarrheal disease and ARI, the vaccine-preventable illnesses are associated with childhood undernutrition. If current low incidences of these illnesses are to be maintained, vaccination efforts must continue to be supported.

4. Water and Sanitation

The amount of childhood morbidity and mortality directly attributable to water and sanitation is impossible to estimate.
However, serious water and fecal-borne illnesses found in El Salvador include measles, diphtheria, typhoid, hepatitis, and diarrheal diseases due to parasites, pathogenic bacteria and viruses.

According to a recent survey on water and sanitation coverage (ADS, 1988), rural water coverage has not improved since 1984, remaining near 30%. Another recent assessment (WASH, 1988) estimated a much lower rural coverage figure of 13.5%. The difference between these study estimates may be due to differences in criteria, as the WASH report took into account not only the presence but also the quality of rural water systems. In order to clarify this issue the Mission will conduct a rural water coverage survey in the near future. The FESAL study found urban water coverage to be much higher at 82% (metropolitan San Salvador was 98.9%).

Recent information on sanitation reports 94.9% coverage of the urban population (98.5% for metro San Salvador), and 62.9% coverage for rural areas (ADS, 1988).

5. Lactation
The lower rates of diarrheal disease found among children under one year of age in a 1986 study were shown to be related to continuing lactation (Ministry of Health, INCAP, 1986). Fortunately, the average child in El Salvador enjoys a relatively long period of lactation, and therefore protection from early protein-deficient weaning and infectious disease (ADS, 1988). A recent study found 96% of rural women to have breastfed their last child for an average of 18 months. Breastfeeding is slightly less prevalent and of shorter duration in urban areas, however rates are still high as 93-95% reported having breastfed their last child for an average of 15-16 months.

c. Issues Related to the Family

1. Fertility and Family Size:
Although fertility rates and average family size in El Salvador have decreased over the past twenty years, rates are still high (ADS, 1988). According to the most recent survey in family planning, total fertility rate (TFR) has remained steady at 4.6 for the past three years. By the time a Salvadoran woman is 40-44 years of age she has had an average of six live births. Rates are highest for women in rural areas where an average woman has had 7.4 live births by the time she is 40-44 years old, and TFR is estimated to be 5.6 (ADS, 1988). In spite of out-migration, population growth rate remains at 2.5% per year (USAID, 1989).

Large households place great economic pressure on the family, with high dependency ratios, decreased percent of the family budget for food, and decreased food available per capita. High population growth rates bring these same pressures to bear on the national level.
2. **Birth Spacing and Family Planning**

Repeated pregnancies also take their toll on maternal nutritional status, increasing the risk of low birthweight and perinatal mortality. Indeed, perinatal mortality is the first cause of death in El Salvador (MOH, 1985).

Fortunately, use of contraceptives for both birth spacing and termination of childbearing is high in El Salvador. According to a recent survey (ADS, 1988), use-rates among fertile women in union have doubled since 1975 from 21.3% to 47% in 1988. Sixty percent of women not wanting to get pregnant were found to be using some form of modern contraception. Use of contraceptives was highest in urban areas and strongly correlated with female labor force participation.

3. **Adolescents and Young Women:**

Of some concern is the high rate of fertility and low use of contraceptives among adolescents and young women. The average age at which a woman is in union in El Salvador is 20 years of age. However, 24% of women 15-19 years of age interviewed were in union at the time, and 27% were pregnant (ADS, 1988). This group is particularly at risk of maternal undernutrition and their children are at risk of fetal undernutrition and low birthweight.

4. **Female-headed Households:**

The very high percentage (30%) of female-headed households reported in the recent urban study (MIPLAN, 1988) is also of concern, as children from these households may suffer not only from changes in childcare and breastfeeding patterns but from low per capita food availability due to the low wage status of women in El Salvador.

C. **Country Program, USAID and Other Donors**

1. **Ministry of Health and Other Public Sector Providers**

The Ministry of Health has traditionally addressed nutrition problems in El Salvador through prenatal and postpartum care, food assistance to pregnant and lactating women and children under five years of age and through community education. The Ministry of Health joined other countries in the Region in the PAHO-sponsored "Bridge to Peace" plan in 1984, designed to bring external resources into the Region in support of projects which address critical problems including that of maternal and child undernutrition. Since then, support from PAHO, UNICEF and donor countries has been focused on immunization and diarrheal disease, factors indirectly related to nutrition.

The nutrition program per se of the Ministry of Health is currently based on ambulatory care and a system of Rural Nutrition Centers supervised by a nutritionist in each region of
the country. The ambulatory care portion of the program provides supplementary food (rice, beans and milk in dry form) from the World Food Program, nutrition education, and growth monitoring for children under five years of age and women who are pregnant or lactating. The Rural Nutrition Centers are more targeted, providing special supplementary food, early stimulation and family education to those children between two and four years of age which the regular program of growth monitoring has identified as severely undernourished. The Centers rely heavily on the community health workers of the Ministry for follow-up with the family of each child.

Two MOH programs have been particularly successful at extending rural service coverage. These are the Rural Health Aides (ARS) and the Rural Health Program (PROSAR) which were combined into the Community Health Worker Program in January 1989. There are currently 580 of these rural Community Health Workers in El Salvador providing simple curative care, immunizations, outreach services and community education.

According to the most recent Child Survival plan (MOH, 1987), the Ministry's future goals in nutrition include: improving the nutritional status women and children; strengthening the growth monitoring program; improving access to services through the use of PVOs; increasing activities in early childhood stimulation; revising and integrating norms in MCH; providing Vitamin A supplements through the vaccination campaigns, regular MCH programs and through fortification of food; promoting family gardens; and continuing supplementary food to children under five.

In addition to MOH programs, food assistance to women and children has been provided in the public sector through the National Commission for Assistance to the Displaced (CONADES), through the Civic Action Program (CONARA) and for primary school children through the Ministry of Education. Donor support for these programs has been provided by USAID and the World Food Program.

2. Private Voluntary Organizations

There are an estimated 60 local and internationally-funded private voluntary organizations in El Salvador. Fourteen of these provide curative and preventive services in nutrition or nutrition-related topic areas. The principal PVO's working in health and nutrition in El Salvador are the following: Project Hope, OEF International, World Relief, Save the Children, Center for Breastfeeding Support (CALMA), Foster Parents Plan, Life Ministries, International Rescue Committee, Catholic Relief Services and its local counterpart CARITAS, World Vision, the Lutheran Church, and the Iglesia Bautista Emmanuel.

Most PVO projects are implemented in geographical areas and among populations of highest risk whose access to MOH facilities
is limited. Most are also designed around an integrated community development model which utilizes community volunteers and provides a wide range of services both directly and indirectly related to improving nutritional status including food assistance, nutrition and hygiene education, and provision of water and sanitation.

Those private sector agencies with the largest programs in food assistance is Catholic Relief Services (CARITAS) which provides food assistance and education to high risk women and children in rural and marginal urban areas. Donor support for this program has been provided by USAID.

As a result of the Child Survival initiative, there has been increasing coordination of private sector activities with those of the Ministry of Health over the past few years. In keeping with the national Child Survival Plan which encourages coordination of activities with the private sector, an Inter-sectoral Committee was formed with the participation of 30 private agencies and the Ministry of Health in order to exchange information on programs and standardize norms.

3. The Salvadoran Demographic Association

The Salvadoran Demographic Association is a private institution supported by local funds and international donors. Programs are currently supported with funds from IPPF, the U.S. and other donor countries. The Demographic Association also provides services directly and indirectly related to nutrition including family planning, reproductive health, child health, prenatal care, pediatric care, sexually transmitted diseases, social marketing and communications, and research in population. Programs are coordinated with public, private sector and international institutions and implemented through a central office in San Salvador. There are urban clinics in the metropolitan area and in other departments, and contraceptive distribution posts in rural areas. Services in the rural areas are provided by community volunteers staffing distribution posts and community educators or "multipliers". Complete family planning and reproductive health services are provided in the four urban clinics, while attention to the rural areas consists primarily of provision of contraceptives, education and referral.

4. Informal Health Sector Providers

The informal sector is an important source of health care for much of the Salvadoran population. Providers include popular distributors, vendors, rural pharmacies and traditional health care providers including traditional birth attendants and healers of various kinds. Recent community studies in El Salvador in maternal-child health have found self-help and traditional healers to be important sources of treatment for diarrheal disease, associated with undernutrition (Ministry of Health, INCAP, 1986) (Ministry of Health, INCAP, 1987)
5. **Other Donors**

Major donors to health and nutrition in El Salvador, mentioned briefly above in connection with public health providers, include the United Nations organizations PAHO/WHO, UNICEF and UNFPA and their donor countries, the World Food Program, UNDP and IDB, USAID/Washington centrally-funded projects, and USAID/ROCAP, the Regional Office on Central American Programs (for detail on projects, see Annex B):

a. **PAHO/WHO**

Projects through PAHO/WHO are supported by Holland, Chile, Belgium, West Germany, Spain, Italy, UNDP and the Inter-American Development Bank. They are primarily indirectly associated with nutrition and include support projects to the Ministry of Health (systems strengthening, training, program development - rural outreach and child growth and development - essential drugs and infrastructure), malaria prevention projects, and water and sanitation projects.

According to interviews with PAHO/Washington and the PAHO/INCAP representative in El Salvador, PAHO plans to continue support to health and nutrition in El Salvador over the next five years. Whereas the last few years have focused on training of central and regional-level personnel, PAHO feels that the local-level implementation of programs should now be emphasized. In the area of nutrition, PAHO will emphasize the importance of fortifying foods with essential vitamins and minerals lacking in the basic diet, particularly vitamin A, iron and iodine. Expected investment over this strategy period is US$3.0 million.

b. **UNICEF**

UNICEF donors include Italy, Canada, France, Belgium, Japan, Sweden, the United Kingdom, Norway, Canada and Spain. Funding from these sources supports a large Child Survival project through the Ministry of Health in immunization and ORT, a project on integrated child development, aid to the displaced, earthquake relief, sanitation, and a project on women in development.

The current Child Survival project, which provides all of the vaccines (except polio) and some rehydration salts to the Ministry of Health, is being phased out and will end in 1990. In 1991 UNICEF plans to continue in maternal-child health with the MOH, however emphasis will shift from technological interventions (vaccinations, ORS) to an integrated development, community-level orientation called "Education for Peace" which stresses nutrition, community participation, social communication and mass media, and water and sanitation. A proposal in the area of rural maternal care is also being considered for El Salvador. In the past year, UNICEF has assisted the MOH in the development and implementation of a surveillance system based upon a sentinel area concept. To date two surveys using this system have been
conducted. It is hoped that this system will provide high quality serial data for use in programming and evaluation. Expected investment is US$5.0 million over the strategy period.

c. UNFPA

Unlike UNICEF and PAHO, UNFPA projects are not funded by specific donors. Major donors to UNFPA are Japan, Canada, Germany, Denmark, Norway, Switzerland, Sweden and the United Kingdom. UNFPA priority areas are: data collection (census, vital statistics), maternal-child health, education in population, population policy, family planning, women, and communications. Current projects involve: 1) the training of teachers and development of school curriculae with the Ministry of Education, 2) training of population experts within Ministries and other institutions, 3) training of community workers in population, small income generation, literacy and maternal-infant health through the Ministry of Agriculture, 4) support to rural community educators of the Ministry of Health in formation of community groups and education in all areas of Child Survival, and 5) technical assistance to the Ministries in demographic and populations studies and policy development. Expected investment is US$3.0 million over the strategy period.

d. World Food Program

The World Food Program provides food assistance through six projects working with the Ministries of Health, Education, Public Works and Agriculture and the National Committee for Assistance to the Displaced (CONADES). Projects include maternal-child supplementary feeding, nutrition education, school feeding, and food for work associated with agrarian reform areas, income generation (displaced), soil conservation and agroforestry, infrastructure and agricultural diversification (displaced). Expected investment is US$10.0 million per year over the strategy period.

e. UNDP and IDB

Over the period of this strategy, the UNDP and the Inter-American Development Bank will invest primarily in rural aqueducts and provision of water and sanitation to metropolitan San Salvador. The expected investment over this period is US$100.0 million.

f. USAID/Washington and ROCAP

USAID/Washington provides consulting assistance in water and sanitation, and health services reconstruction. USAID/ROCAP provides assistance to maternal-child health and food assistance programs in donor and regional coordination, policy development, program planning, research and evaluation through the Nutrition Institute of Central America and Panama (INCAP).
6. USAID/El Salvador, Current Support

USAID/El Salvador supports an integrated approach to health and nutrition through both public and private sectors (for detail on projects and funding, see Annex B). Projects currently include: a) institutional development and support to the MOH, b) support to PVO MCH activities, c) extension of family planning services through the MOH and the private sector, and d) a Title II food distribution program (due to phase out by 1990).

Through these programs, the Mission supports nutrition activities which include the promotion of breastfeeding, training and community education in infant feeding and growth monitoring, and food assistance to pregnant and lactating women and children under five, the displaced and institutions (orphanages and homes for the aged).

Mission activities in nutrition also include attention to important underlying factors including diarrheal disease, immunizations, family planning, maternal undernutrition and the family-level inability to purchase and produce food. Support in the area of maternal nutrition consists of food assistance as well as prenatal, postpartum and primary care projects through both public and private sectors. Family-level food insecurity is addressed through the private sector in small income-generation projects, projects in agricultural development, literacy, vocational training and jobs programs.

D. Implementation Problems and Constraints in Nutrition

1. Health Sector Constraints

Some constraints to improving the nutritional status of children in El Salvador are common to the health sector in general. These may be grouped and summarized as follows:

- Economic constraints: Reduction of MOH budget as a proportion of the public sector budget and in real terms, high hospital costs, lack of alternate sources of financing.
- Weaknesses in public and private health delivery systems: Inadequate management and administration, inappropriate allocation of human and capital resources (focus on expensive tertiary care, extensive use of physicians, focus on urban areas), centralization, fragmented and outdated information systems, weaknesses in the distribution and maintenance of drugs, supplies and equipment.
- Problems associated with donors and donor-funding: Reduced attention to regular programs, an uneven focus on project-specific topics and population groups, verticality in implementation of projects, frequent changes in funding priorities.
- Socio-political conflict and population coverage: Low coverage of high risk populations related to the inappropriate distribution of sector resources, poverty and lack of education,
and conflict which has caused widespread population displacement, primary care facilities to be closed in some areas, and has made provision of health care difficult to impossible some regions of the country.

2. Constraints in the Area of Nutrition
   In addition to the major constraints affecting the health sector overall, specific constraints affecting nutrition projects are the following:

   - limited support for nutrition programs within both public and private health sectors
   - verticality and lack of integration of nutrition with other elements of MCH
   - underlying factors related to the incidence of undernutrition including: a) poverty and household food insecurity (the inability to purchase or produce enough food), b) infectious diseases, c) family-related issues including lack of birth spacing and family size

3. Impact of Economic Adjustments
   Macro-economic adjustment measures including exchange rate adjustment, removal or targeting of food subsidies, restraint of public expenditures, lowering of tariff and non-tariff barriers and increased interest rates are currently under consideration by the Mission and the GOES. These measures are designed to stimulate production and improve economic growth, benefiting all sectors in the long run.

   In the short run, however, these adjustment measures may entail an increase in the vulnerability of some population groups. Indeed, a recent analysis of trends in mortality and life expectancy supports this possibility as just such a short-run decline in well-being was found to have occurred during the economic crisis experienced throughout Central America in the early 80's (Table 1, Annex B)(USAID, 1988). From 1950 through the late 70's, crude mortality, infant mortality and life expectancy improved steadily in El Salvador. In the first few years of the 80's, however, all three rates worsened briefly before resuming their gradual pattern of improvement in 1983-85. Costa Rica has also reported this brief worsening of infant mortality rates during the same period of economic crisis (USAID, 1987).

   Although a thorough study and documentation of the economic links connecting policy changes to each high risk group was not possible in the time allowed for this report, some consideration of the experiences in other countries in light of the health and
nutrition situation in El Salvador indicated a probable increase in the high risk status of women and children from the following groups:

- subsistence and marginally subsistence farm families
- families of low-income employed, unskilled or semi-skilled workers
- families of the unemployed

E. Priorities for Assistance in Nutrition

According to the preceding analysis of trends in morbidity and mortality, constraints, programs and donor plans for the future, the following are the priorities for assistance to El Salvador in the area of nutrition:

- Principal deficiencies:
  - protein calorie
  - iron
  - vitamin A

- Highest risk population groups:
  - children under five years of age, especially those 0-24 mos. of age
  - women in fertile age, especially young women 15 - 24 yrs of age, and women who are pregnant or lactating

- Principal characteristics:
  - rural, marginal urban
  - subsistence or marginal subsistence farmers
  - low income or unemployed
  - low educational status

- Priority areas for programming:
  - strengthening peripheral service delivery
  - increasing use of paraprofessionals
  - integration of MCH projects
  - infectious disease programs (diarrhea, ARI, immuno-preventable illnesses)
  - support to lactation (urban, working mothers)
  - birth spacing and family size
  - health and nutrition education (including growth monitoring)
  - Vitamin A projects
- improved prenatal care
- improving the information and logistics systems (MOH)
- improving management and administration (MOH)
- maximizing use of health sector resources
- improving food production
- improving purchasing power

F. The USAID/El Salvador Strategy for Nutrition

1. Changes in Focus:
The Mission Strategy in nutrition to date has been based on a set of interactive interventions. Projects have included institutional strengthening and support to the Ministry of Health, support to PVO MCH activities, extension of family planning services, and a Title II food distribution program. In light of the recent data in nutrition, household insecurity and consumption which shows little improvement over the past ten years, as well as the concern over the impact of macroeconomic adjustment measures on the highest risk populations in the short run, the Mission has decided to shift the emphasis of its strategy to reflect those priority areas described in the previous section of this report:

a) decrease emphasis on systems-strengthening and:

- improve peripheral service delivery in high risk areas through the public and private sectors
- increase use of paraprofessionals
- promote a more integrated approach to MCH

Because public funds in the health sector have declined both as a percentage of the total public budget and in real terms due to inflation, and in keeping with Mission macro-economic adjustment plans to contain public sector spending the Mission has also decided to:

b) stress maximizing scarce public resources through exploration of cost recovery mechanisms, involving the private sector in provision of care, and engaging other donors.

The target populations for this strategy are also in keeping with the priorities listed above:

- the rural and marginal urban poor
- pregnant and lactating women and children under 5 years of age
- women in fertile age, especially those 15 - 24 years of age
a) Improving Service Delivery and Coverage of the High Risk:

In order to improve the delivery of essential services and extend coverage to high risk groups, the Mission is assisting the MOH in the establishment of a new division called the Community Health Program. This new division will bring the 580 rural paraprofessionals from the previous ARS, PROSAR and Project Hope projects and place them under one project where they may be trained in all areas of MCH. These rural Community Health Workers will become the implementing arm for nutrition and related programs in high risk communities, extending improved services into high risk households. Through this program, special emphasis will be given to the most important priorities for improving nutritional status:

health and nutrition education:
- nutrition education to women's groups which focuses on weaning, appropriate foods during diarrhea and ARI, support to lactation, vitamin A rich foods, hygiene, child growth and development using growth monitoring charts

infectious disease programs:
- assistance in vaccination of children, referral and promotion of vaccinations
- diarrhea disease control activities including diet, prevention of dehydration through use of ORS/ORT, hygiene education and basic interventions in water and sanitation including provision of latrines and repair of water systems
- research in ARI designed to assist with program design

vitamin A activities:
- vitamin A projects including the distribution of supplements purchased by other donors and nutrition education

improved prenatal care:
- and improved prenatal care coverage through referral of pregnant women to MOH services, distribution of prenatal vitamins, and coordination of activities with the midwife training program of the Ministry

birth spacing and family size
- maternal undernutrition and depletion related to the need for family planning to encourage spacing of children, referral for family planning services

The Mission will also continue to assist the MOH in improving basic systems which are integral to improved service delivery on peripheral levels in urban and rural areas. These
are also designed to remove basic constraints to improving nutritional status:

- improving the information and logistics systems
- improving management and administration

**birth spacing and family size**

As the Mission recognizes the importance of family size and birth spacing as an underlying factor in maternal–child health and nutrition, support to El Salvador's family private sector planning program will also continue with a similar increased emphasis on provision of services to those populations identified in the most recent survey as high risk and underserved. A new emphasis will be placed on women 15 - 24 years of age.

**water and sanitation**

Because of the important role played by water and sanitation as an underlying factor in child health and nutrition, and the results of recent analysis showing a decline in rural water coverage, the Mission will expand its support in this area through a major initiative in rural water and sanitation.

**food assistance:**

According to the recent CRS evaluation (USAID, 1988), children receiving food assistance had rates of undernutrition which were the same as children who did not receive that food. This is a common finding among studies of food aid as the food is targeted to those children or families whose nutritional environment or status is the worst. As a result of this aid, the nutritional status of those children is improved, reaching levels which are similar to those of the general population. The results of this CRS evaluation, however, and Mission concerns about creation of dependency in beneficiaries as well as the need to consolidate Mission portfolio, have led the Mission to discontinue support to the CRS food distribution program early in the Strategy period.

Food assistance will continue to the army's Civic Action Program (CONARA) whose food is directed towards those areas of the country most affected by conflict. Food from the Civic Action Program will also be available for immediate reaction to disasters.

**b. Maximizing Resources and Engaging the Private Sector and Other Donors**

During this period, the Health Sector will also assist overall Mission goals in the area of macro-economic adjustment and in extending coverage by:

- maximizing use of health sector resources
- exploring ways of engaging the private sector in delivery of health care to high risk populations.
3. Measuring Progress

Up until recently, measuring changes in health and nutrition in El Salvador was extremely difficult. With the exception of occasional survey data, analysis had to depend on service-based information. As MOH personnel analyzed all data by hand, these service-based statistics were generally not available until at least 2 or 3 years after the fact, and were extremely limited in depth and usefulness. This lag in information prevented its use in program evaluation and development, much less epidemiological surveillance. This obvious lack of usefulness of the data provided by the field to the central MOH offices caused a further devaluation of the importance of information on all levels. For this reason, and other outside of the scope of the health sector (under-reporting, uninformed registry of causes of death, lost records, for example), the data generated by this system was of questionable quality and of limited use.

Over the past several years the health sector has experienced an increase in sources of information, complexity and utility of data and improved quality and frequency of information. USAID has supported not only several national surveys, including the recent contraceptive prevalence and nutrition surveys (ADS, 1988), but also the improvement of the information system within the MOH. The information which is a result of this effort should improve service-statistics not only in nutrition, but in all related areas. The Mission has also supported the strengthening of a research unit within the MOH which is producing specific studies whose information is needed for project development and evaluation. In the past year, UNICEF has also funded the development of a surveillance system in MCH based on a sentinel area model which should be an important source of time series data for programming and impact evaluation. USAID/Washington has also implemented an annual data collection effort for monitoring the progress of projects in Child Survival, all of which impact directly or indirectly on nutritional status. This tracking system includes information on project inputs, outputs and selected impact measures.

The following is a list of those indicators which will be used by the Mission to measure progress in nutrition and related areas. Indicators are listed by original source of data. The projected and actual impact figures for each indicator, listed in the most recent Action Plan, are in Annex B of this report.

a. Ministry of Health routine data collection, improved MIS:

- No. of child health visits to AID assisted clinics
- No. of prenatal visits
- No. of ORS packages distributed to health facilities
- No. of cases of diarrhea reported by the MOH
b. Mission project data:
- No. of people served by new potable water systems under AID-supported programs
- No. of persons served by new sanitation services under AID-supported programs

c. Vital statistics, census projections:
- Annual rate of population growth
- Crude birth rate (no. of live births)

d. Periodic surveys, Sentinel area system information:
- Percent of couples using contraception
- CYP
- Percent of population with access to clean drinking water
- Percent of population with access to adequate sanitation
- Percent of population with access to primary health care services
- Infant mortality rate
- Child mortality rate
- Vaccination coverage of children 0-12 mos. with measles, DPT, and polio
- Undernutrition (Gomez III or percent less than -3 s.d. below the mean)

4. Donor Coordination
The Mission's decision to increase emphasis on service delivery and extension of coverage in high risk areas is in keeping with recent strategies developed by other major donors, including those of PAHO and UNICEF. This increased emphasis on local-level programming by all donors makes coordination in nutrition and nutrition-related areas imperative if duplication of programming and gaps in service delivery are to be avoided.

The Mission will assist the MOH, as the official government entity responsible for the health care of the Salvadoran population, to take a leading role in coordinating donor assistance. Although donors come to the MOH with specific priorities and projects in mind, this does not preclude the MOH from decision-making regarding the adequacy of these projects in terms of content and potential coverage, their potential impact on regular programs, and the Ministry's capacity to absorb and implement project activities. Once the MOH has taken a more active role in donor coordination, the future role of the MOH should include an analysis of needs for assistance and solicitation of donor funds rather than the current MOH position of relatively passive acceptance of donor-initiated programming.
An example of this more active role for the MOH is the recent establishment of a committee made up of MOH representatives and representatives of private voluntary organizations working in health in El Salvador. This committee has succeeded in coordinating programming, norms and joint training in many topic areas related to nutrition.
References:

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(1985) Anuario Estadistico, Direccion General de Estadisticas y Censos
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(1986) Proyecto de Intervenciones para Eradicar la Deficiencia de Vitamina A en El Salvador
(1987) Informe Final Sobre Los Estudios Antropologicos en Supervivencia Infantil y Comunicacion Realizados en Cuatro Comunidades de el Salvador

Ministry of Planning:

(1979) Encuesta de Hogares de Propositos Multiples
(1988) Health and Nutrition Strategy for Central America and Belize


USAID/PPC (1987) The Socioeconomic Impact of Macroeconomic Adjustment

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<th>infant death rate (per 1,000 live births)</th>
<th>life expectancy at birth</th>
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<td>50</td>
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Sources:
- U.S. State Dept. (1981) Background Notes: El Salvador
### Table 2
Trends in Nutritional Status of Children 6-59 Mos. of Age
*Weight for Age, Gomez*
*El Salvador, 1965 - 1978*

<table>
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<tr>
<th>Year/season</th>
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### Table 3
Trends in Nutritional Status of Children under 59 Mos. of Age
*Weight for Age, NCHS Z Scores*
*El Salvador, 1965 - 1988*

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### Table 4
Trends in Nutritional Status of Rural Children 6-59 Mos. of Age
*Weight for Age, Gomez*
*El Salvador, 1978 - 1988*

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### Table 5
**Trends in Nutritional Status of Children 6-59 mos. of Age**

**Weight for Height, Gomez**

El Salvador, 1965 - 1978

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**Sources:**


### Table 6
**Trends in Nutritional Status of Under 59 mos.**

**Weight for Height, NCHS Z Scores**

El Salvador, 1965 - 1988

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<td>1978/rainy</td>
<td>1109</td>
<td>26/74%</td>
<td>6-59</td>
<td>10.7</td>
<td>0.9</td>
<td>0.2</td>
<td>11.8</td>
</tr>
<tr>
<td>1988/rainy</td>
<td>1899</td>
<td>48/52%</td>
<td>0-59</td>
<td>13.6</td>
<td>2.0</td>
<td>0.3</td>
<td>15.9</td>
</tr>
</tbody>
</table>

**Sources:**

Table 7
Trends in Nutritional Status of Children 6-59 mos.
Height for Age, Gomez
El Salvador, 1965 - 1978

<table>
<thead>
<tr>
<th>Year/season</th>
<th>cases</th>
<th>urb/rural</th>
<th>ages</th>
<th>mild</th>
<th>moder.</th>
<th>severe</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965/rainy</td>
<td>578</td>
<td>unk.</td>
<td>6-59</td>
<td>37.2</td>
<td>28.3</td>
<td>15.8</td>
<td>81.3</td>
</tr>
<tr>
<td>1976/rainy</td>
<td>782</td>
<td>unk.</td>
<td>6-59</td>
<td>36.1</td>
<td>27.8</td>
<td>13.0</td>
<td>76.9</td>
</tr>
<tr>
<td>1978/rainy*</td>
<td>1109</td>
<td>26/74%</td>
<td>6-59</td>
<td>65.4</td>
<td>19.5</td>
<td>6.4</td>
<td>91.3</td>
</tr>
<tr>
<td>1978/rainy</td>
<td>3676</td>
<td>25/75%</td>
<td>6-59</td>
<td>42.4</td>
<td>23.2</td>
<td>6.7</td>
<td>72.3</td>
</tr>
</tbody>
</table>

* The breakdowns differ slightly in this study from the others: severe is defined at <85% in this study while the others use <80%; moderate is defined as 85-89.9% in this study while the others use 80-89.9%; the mild category is the same in all studies above.


Table 8
Trends in Nutritional Status of Children Under 59 mos.
Height for Age, NCHS Z Scores
El Salvador, 1965 - 1988

<table>
<thead>
<tr>
<th>Year/season</th>
<th>cases</th>
<th>urb/rural</th>
<th>ages</th>
<th>mild</th>
<th>moder.</th>
<th>severe</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965/rainy</td>
<td>578</td>
<td>unk.</td>
<td>6-59</td>
<td>27.8</td>
<td>27.0</td>
<td>26.0</td>
<td>80.8</td>
</tr>
<tr>
<td>1976/rainy</td>
<td>782</td>
<td>unk.</td>
<td>6-59</td>
<td>30.9</td>
<td>27.2</td>
<td>16.5</td>
<td>74.6</td>
</tr>
<tr>
<td>1978/rainy</td>
<td>1109</td>
<td>26/74%</td>
<td>6-59</td>
<td>31.9</td>
<td>28.4</td>
<td>16.5</td>
<td>76.8</td>
</tr>
<tr>
<td>1988/rainy</td>
<td>1899</td>
<td>48/52%</td>
<td>0-59</td>
<td>32.5</td>
<td>19.5</td>
<td>7.3</td>
<td>59.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topic and project title</th>
<th>Agency</th>
<th>Activity and amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diarrheal disease:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>519-0300 Community-based integrated rural development (1985-90)</td>
<td>Save the Children</td>
<td>$365,280 for training and education, promotion of home-based ORT, medical treatment of DD, referral to MOH</td>
</tr>
<tr>
<td>519-0281 Health and jobs for displaced families (1982-88)</td>
<td>CESAD/Project Hope/</td>
<td>$1,298,820 for distribution of ORS, training and education, primary care, home visits</td>
</tr>
<tr>
<td></td>
<td>World Relief/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CONADES</td>
<td></td>
</tr>
<tr>
<td><strong>Immunizable illnesses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>519-0300 Community-based integrated rural development (1985-90)</td>
<td>Save the Children</td>
<td>$243,520 for vaccinations, training and education</td>
</tr>
<tr>
<td>519-0281 Health and jobs displaced families (1982-88)</td>
<td>CESAD/Project Hope/</td>
<td>$1,298,820 for vaccinations, for training and education, immunization campaigns, fixed immunization centers</td>
</tr>
<tr>
<td></td>
<td>World Relief/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CONADES</td>
<td></td>
</tr>
</tbody>
</table>
Table 9 (cont.)
Current USAID Assistance to Child Survival in El Salvador
by Risk Area*
(amounts represent LOP funding from all sources)

<table>
<thead>
<tr>
<th>Topic and project title</th>
<th>Agency</th>
<th>Activity and amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>High risk births:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>519-0300 Community-based integrated rural development (1985-90)</td>
<td>Save the Children</td>
<td>$182,640 for TBA training</td>
</tr>
<tr>
<td>519-0281 Health and jobs for displaced families (1982-88)</td>
<td>CESAD/Project Hope/</td>
<td>$649,410 for contraceptives, training and education, prenatal care, counseling,</td>
</tr>
<tr>
<td></td>
<td>World Relief/</td>
<td>dispensary and home-based care</td>
</tr>
<tr>
<td></td>
<td>CONADES</td>
<td></td>
</tr>
<tr>
<td>519-0329 Maternal and child health promotion (1986-89)</td>
<td>CALMA</td>
<td>$110,000 for training and health education</td>
</tr>
<tr>
<td>519-0210 Population Dynamics (1985-1990)</td>
<td>Ministry of Health, Social</td>
<td>$10,000,000 for commodities and technical assistance and general support for</td>
</tr>
<tr>
<td></td>
<td>Security Inst., Hospital of the</td>
<td>population activities</td>
</tr>
<tr>
<td></td>
<td>Nat. Administration for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telecommunications, ADS</td>
<td></td>
</tr>
<tr>
<td>519-0275 Salvadoran Demog. Association (1984-89)</td>
<td>ADS</td>
<td>support to the Contraceptive Social Marketing program, medical services, research</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and training, information education and communications</td>
</tr>
</tbody>
</table>
Table 9 (cont.)
Current USAID Assistance to Child Survival in El Salvador by Risk Area*
(amounts represent LOP funding from all sources)

<table>
<thead>
<tr>
<th>Topic and project title</th>
<th>Agency</th>
<th>Activity and amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nutrition/ growth monitoring:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>519-0300 Community-based integrated rural development (1985-90)</td>
<td>Save the Children</td>
<td>$730,560 for equipment, training and education, growth monitoring, food assistance to young children, promotion of breastfeeding</td>
</tr>
<tr>
<td>519-0281 Health and jobs for displaced families (1982-88)</td>
<td>CESAD/Project Hope/ World Relief/ CONADES</td>
<td>$9,741,150 for food assistance, training and education, growth monitoring projects, promotion of breastfeeding</td>
</tr>
<tr>
<td><strong>PL 480 Title II</strong></td>
<td>Catholic Relief Services (CARITAS)/</td>
<td>MCH feeding, food to institutions including orphanages, food for work/income generation, infrastructure in urban areas</td>
</tr>
<tr>
<td></td>
<td>Directorate of Community Development (DIDECO)</td>
<td>food for work in marginal urban areas, income generation, infrastructure in urban areas</td>
</tr>
<tr>
<td></td>
<td>Armed Forces Civic Action Programs (CONARA)</td>
<td>food assistance as a part of civic action program in conflictive zones</td>
</tr>
<tr>
<td>Topic and project title</td>
<td>Agency</td>
<td>Activity and amount</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------</td>
<td>---------------------</td>
</tr>
<tr>
<td>519-0329 Maternal and child health promotion (1986-89)</td>
<td>CALMA</td>
<td>$209,000 for breastfeeding promotion, training and education</td>
</tr>
<tr>
<td><strong>Other Child Survival:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>519-0300 Community-based integrated rural development (1985-90)</td>
<td>Save the Children</td>
<td>$4,566,000 for water and sanitation, primary health care and community dispensaries, housing, vector control, training of community health workers, agricultural development, small enterprise development, literacy, leadership training</td>
</tr>
<tr>
<td>519-0281 Health and jobs for displaced families (1982-89)</td>
<td>CESAD/Project Hope/World Relief/OREF Intl./CONADES</td>
<td>$49,355,160 for primary health care, epi surveillance, micro-enterprise projects, agricultural projects, housing and infrastructure, vocational training and jobs programs, malaria, acute respiratory infections</td>
</tr>
</tbody>
</table>
Table 9 (cont.)
Current USAID Assistance to Child Survival in El Salvador
by Risk Area*
(amounts represent LOP funding from all sources)

<table>
<thead>
<tr>
<th>Topic and project title</th>
<th>Agency</th>
<th>Activity and amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>519-0308 Health systems support</td>
<td>Ministry of Health</td>
<td>$45,000,000 for strengthening of logistics, improvement of basic health services delivery, policy and program planning, management</td>
</tr>
<tr>
<td>(1986-91)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>555-0999 Private sector health care</td>
<td>-</td>
<td>$9,000,000 to develop private sector health insurance</td>
</tr>
<tr>
<td>(1990-95*)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Information and breakdown of topics taken from USAID/Washington Child Survival Tracking System reports for 1987 (ARI not broken out in this format).
Table 10
Other Health and Nutrition Projects in El Salvador
by Donor Agency
as of November, 1987
(amounts in US$ 000)

<table>
<thead>
<tr>
<th>Donors and Projects</th>
<th>Local</th>
<th>External</th>
<th>Total</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. PAHO/WHO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Services:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconstruction, remodeling health units, San Jacinto and San Miguelito (Holland)</td>
<td>35</td>
<td>350</td>
<td>385</td>
<td>-</td>
</tr>
<tr>
<td>Reconstruction of health units, Delgado and Mejicanos (Chile)</td>
<td>5</td>
<td>50</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>Substitution of the health unit, Cuscatlancingo (Belgium)</td>
<td>24</td>
<td>240</td>
<td>264</td>
<td>-</td>
</tr>
<tr>
<td>Human Resources:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational formation of public health personnel (Spain)</td>
<td>960</td>
<td>20</td>
<td>980</td>
<td>-</td>
</tr>
<tr>
<td>Water and sanitation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of potable water and sanitation to high risk populations (UNDP)</td>
<td>350</td>
<td>900</td>
<td>1,250</td>
<td>-</td>
</tr>
<tr>
<td>B. IDB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction of rural aqueducts</td>
<td>7,000</td>
<td>21,000</td>
<td>28,000</td>
<td>-</td>
</tr>
<tr>
<td>Río Lempa project to provide water to metro San Salvador</td>
<td>9,400</td>
<td>92,500</td>
<td>91,900</td>
<td>-</td>
</tr>
<tr>
<td>C. UNICEF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Survival:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Survival (EEC, Italy)</td>
<td>4,588</td>
<td>4,588</td>
<td>1987-90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5,028)</td>
<td>(5,028)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated child development (Canada)</td>
<td>54</td>
<td>54</td>
<td>1987-88</td>
<td></td>
</tr>
<tr>
<td>Displaced family (Canada)</td>
<td>262</td>
<td>262</td>
<td>1987-88</td>
<td></td>
</tr>
</tbody>
</table>
Table 10 (cont.)
Other Health and Nutrition Projects in El Salvador
by Donor Agency
as of November, 1987
(amounts in US$ 000)

<table>
<thead>
<tr>
<th>Donors and Projects</th>
<th>Local</th>
<th>External</th>
<th>Total</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women in development (France)</td>
<td>10</td>
<td>10</td>
<td>1987-</td>
<td></td>
</tr>
<tr>
<td>Emergency (displaced) (Belgium, Japan, Sweden)</td>
<td>36</td>
<td>36</td>
<td>1987-</td>
<td></td>
</tr>
<tr>
<td>Rehabilitation (UK)</td>
<td>19</td>
<td>19</td>
<td>1987-</td>
<td></td>
</tr>
<tr>
<td>TA to NGOs (earthquake)(Norway)</td>
<td>50</td>
<td>50</td>
<td>1987-</td>
<td></td>
</tr>
<tr>
<td>Relief and rehabilitation (Spain)</td>
<td>4</td>
<td>4</td>
<td>1987-</td>
<td></td>
</tr>
<tr>
<td>Basic sanitation, latrines (Spain)</td>
<td>159</td>
<td>159</td>
<td>1987-</td>
<td></td>
</tr>
<tr>
<td>General funds (UN)</td>
<td>582</td>
<td>582</td>
<td>1987-90</td>
<td></td>
</tr>
<tr>
<td><strong>D. Other Country Donors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control of growth and development in CS (Italy)</td>
<td>12,000</td>
<td>2,677</td>
<td>14,677</td>
<td></td>
</tr>
<tr>
<td>Development of a program in rural community hlth (W. Germ)</td>
<td>140</td>
<td>1,400</td>
<td>1,540</td>
<td></td>
</tr>
<tr>
<td><strong>E. UN World Food Program</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition education and suppl. feeding for at-risk groups</td>
<td>12,300</td>
<td></td>
<td></td>
<td>1985-89</td>
</tr>
<tr>
<td>School feeding program</td>
<td>10,500</td>
<td></td>
<td></td>
<td>1984-89</td>
</tr>
<tr>
<td>Rural housing and community infrastructure</td>
<td>3,900</td>
<td>3,900</td>
<td>1986-91</td>
<td></td>
</tr>
<tr>
<td>Displaced persons rehab. assistance</td>
<td>3,900</td>
<td></td>
<td></td>
<td>1987-89</td>
</tr>
<tr>
<td>Soil conservation and agro-forestry activities</td>
<td>5,500</td>
<td></td>
<td></td>
<td>1988-93</td>
</tr>
<tr>
<td>Rehabilitation of basic infrastructure and agricultural diversification</td>
<td>-</td>
<td></td>
<td></td>
<td>1988-92</td>
</tr>
</tbody>
</table>
Table 10 (cont.)
Other Health and Nutrition Projects in El Salvador
by Donor Agency
as of November, 1987
(amounts in US$ 000)

<table>
<thead>
<tr>
<th>Donors and Projects</th>
<th>Local</th>
<th>External</th>
<th>Total</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>F. UN Fund for Population Activities (UNFPA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCH and nutrition in primary care within the MOH</td>
<td>2,000</td>
<td></td>
<td>1987-92</td>
<td></td>
</tr>
<tr>
<td>Population education with the Ministry of Education</td>
<td>205</td>
<td></td>
<td>1988-91</td>
<td></td>
</tr>
<tr>
<td>Training of population technicians</td>
<td>200</td>
<td></td>
<td>1983-88</td>
<td></td>
</tr>
<tr>
<td>Population education with the Ministry of Agriculture</td>
<td>57</td>
<td></td>
<td>1986-88</td>
<td></td>
</tr>
<tr>
<td>Population policy</td>
<td>405</td>
<td></td>
<td>1986-90</td>
<td></td>
</tr>
<tr>
<td>G. USAID/Washington</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accelerated Immunization program</td>
<td>250</td>
<td>1,100</td>
<td>1,350</td>
<td>87-91</td>
</tr>
<tr>
<td>REACH Health services reconstr. (monitoring only)</td>
<td>12</td>
<td></td>
<td>12</td>
<td>to date</td>
</tr>
<tr>
<td>WASH water project assessment</td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H. USAID/ROCAP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral rehydration, growth monitoring and education (through INCAP)</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical support to food assistance programs (through INCAP)</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 11
Current and Estimated USAID/El Salvador Obligations Related to Nutrition
FY90-94
(amounts in US$ 000)

<table>
<thead>
<tr>
<th>Health Projects</th>
<th>No.</th>
<th>Source of Funding</th>
<th>estim. LOP</th>
<th>FY90</th>
<th>FY91</th>
<th>FY92</th>
<th>FY93</th>
<th>FY94</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVO/OPG (Save the Children)</td>
<td>519-0999</td>
<td>HE</td>
<td>1,500</td>
<td>900</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Family Health Services</td>
<td>519-0363</td>
<td>POP</td>
<td>12,000</td>
<td>4,200</td>
<td>4,000</td>
<td>3,800</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Family Health Services</td>
<td>519-0363</td>
<td>HE</td>
<td>7,000</td>
<td>4,150</td>
<td>2,850</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pop. and Health Activities</td>
<td>519-0363</td>
<td>POP</td>
<td>15,000</td>
<td>-</td>
<td>-</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Child Survival</td>
<td>519-</td>
<td>HE</td>
<td>6,400</td>
<td>3,000</td>
<td>2,000</td>
<td>1,400</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Health Activities</td>
<td>519-</td>
<td>HE</td>
<td>15,000</td>
<td>-</td>
<td>-</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Potable Water</td>
<td>519-</td>
<td>HE</td>
<td>15,000</td>
<td>-</td>
<td>-</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Source: DPP/USAID/ES
Table 12
Current and Estimated Amounts Available in Local Currency for Health and Population and PVO Activities
El Salvador FY90-94
(amounts in US$000,000)

<table>
<thead>
<tr>
<th>Category</th>
<th>FY 90</th>
<th>FY 91</th>
<th>FY 92</th>
<th>FY 93</th>
<th>FY 94</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Health and Population*</td>
<td>25.3</td>
<td>22.2</td>
<td>10.6</td>
<td>9.5</td>
<td>8.2</td>
</tr>
<tr>
<td>B. PVO (amts. designated for health)</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

* Amounts based on approximately 14% of total LC available each year during this period.

Source: DPP/USAID/ES
3. Spreading the Benefits of Growth

ACTION PLAN FY 1989 - 1990

OBJECTIVE No. 8: INCREASE ACCESS TO VOLUNTARY FAMILY PLANNING SERVICES

1. COUNTRY DEVELOPMENT TRENDS INDICATORS

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</thead>
<tbody>
<tr>
<td>A. Annual Rate of Population growth</td>
<td>2.8</td>
<td>2.7</td>
<td>2.6</td>
<td>2.6</td>
<td>2.5</td>
<td>2.45</td>
<td>2.4</td>
</tr>
<tr>
<td>B. Percentage of couples using contraception 1/</td>
<td>45%</td>
<td>47%</td>
<td>48%</td>
<td>48%</td>
<td>50%</td>
<td>51%</td>
<td>52%</td>
</tr>
</tbody>
</table>

2. A.I.D. PROGRAM PERFORMANCE INDICATORS

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>A. Crude birth rate 2/</td>
<td>37</td>
<td>36</td>
<td>35</td>
<td>36</td>
<td>35</td>
<td>34</td>
<td>33</td>
</tr>
<tr>
<td>B. CYP (in 1000) 2/</td>
<td>315</td>
<td>320</td>
<td>365</td>
<td>370</td>
<td>395</td>
<td>415</td>
<td>470</td>
</tr>
</tbody>
</table>

1/ 1985 actual: all other figures are estimates projected from the 1978 and 1985 Demographic Health Survey. A new Demographic Health Survey will start in May, 1988.

2/ Figures are estimates based on service statistics and Demographic Health data.
### 2. A.I.D. PROGRAM PERFORMANCE INDICATORS 1/

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>A. Number of persons protected against major diseases under A.I.D. - supported programs ('000)</td>
<td></td>
<td></td>
<td></td>
<td>5,600</td>
<td>5,800</td>
<td>7,000</td>
</tr>
<tr>
<td>Diarrhea disease</td>
<td>5,378</td>
<td>5,488</td>
<td>NA</td>
<td>5,700</td>
<td>5,800</td>
<td>7,000</td>
</tr>
<tr>
<td>Malaria</td>
<td>4,195</td>
<td>4,325</td>
<td>NA 4,440</td>
<td>4,600</td>
<td>4,700</td>
<td>4,852</td>
</tr>
<tr>
<td>B. Number of people served by new potable water systems under A.I.D. - supported programs (annual increments 000)</td>
<td>NA</td>
<td>NA</td>
<td>NA 80</td>
<td>300</td>
<td>400</td>
<td>440</td>
</tr>
<tr>
<td>C. Number of persons served by new sanitation services under A.I.D. - supported programs (annual increments 000)</td>
<td>NA</td>
<td>NA</td>
<td>NA NA</td>
<td>125</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>D. Number of civilian amputees fitted with lower limb prosthesis</td>
<td>NA</td>
<td>NA</td>
<td>NA 351</td>
<td>250</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>E. Number of Civilian Amputees treated in U.S.</td>
<td>NA</td>
<td>NA</td>
<td>NA 35</td>
<td>10</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>F. Number of handicapped served through ISRI ('000)</td>
<td>NA</td>
<td>NA</td>
<td>NA 4</td>
<td>5</td>
<td>5.5</td>
<td>5.5</td>
</tr>
</tbody>
</table>

1/ These figures differ from those provided previously; MOH now has more complete tabulations.
2/ Figures for CY 87 will not be available from the GOES until May 1988.
3/ Result of Pilot Program only; major activities begin in 1988.
**OBJECTIVE NO. 9: IMPROVE HEALTH AND HEALTH SERVICES**

1. **COUNTRY DEVELOPMENT TRENDS INDICATORS**

   A. Incidence of Malaria
      Number of cases reported by MOH ('000)
      Malaria slide positivity rate (%)
      
      |-------|------|------|------|------|------|------|
      | Actual| 33.5 | 23.5 | 30   | 13.0 | 13.0 | 13   |
      | Proj  |      |      |      |      |      |      |
      |       | 21.9 | 13.5 | 18   | 6.3  | 6.3  | 5    |
      |       |      |      |      |      |      |      |

   B. Diarrhea
      Number of cases reported by MOH ('000)
      
      |-------|------|------|------|------|------|------|
      | Actual| 159.2| 133.1| NA   | 140.0| 135.0| 130  |
      | Proj  |      |      |      |      |      |      |
      |       |      |      |      |      |      |      |

   C. Percent of population with access to clean drinking water
      Urban
      Rural
      
      |-------|------|------|------|------|------|------|
      | Urban | 77.1 | 75.9 | NA   | 78.0 | 80.0 | 82   |
      | Rural | 14.6 | 20.1 | NA   | 24.0 | 26.0 | 28   |
      |       |      |      |      |      |      |      |

   D. Percent of population with access to adequate sanitation
      Urban
      Rural
      
      |-------|------|------|------|------|------|------|
      | Urban | 57.3 | 55.9 | NA   | 58.0 | 60.0 | 62   |
      | Rural | 32.0 | 35.2 | NA   | 37.0 | 39.0 | 41   |
      |       |      |      |      |      |      |      |

   E. Percent of population with access to primary health care services
      Urban
      Rural
      
      |-------|------|------|------|------|------|------|
      | Urban | 65.0 | 67.0 | NA   | 70.0 | 72.0 | 74   |
      | Rural | 55.0 | 57.0 | NA   | 60.0 | 62.0 | 64   |
      |       |      |      |      |      |      |      |
OBJECTIVE No. 10: REDUCE INFANT AND CHILD MORTALITY

1. COUNTRY DEVELOPMENT TRENDS INDICATORS

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</thead>
<tbody>
<tr>
<td>Infant mortality rate</td>
<td>51.3</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>49</td>
<td>48</td>
<td>47</td>
</tr>
<tr>
<td>Child mortality rate</td>
<td>26</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>24</td>
<td>24</td>
<td>23</td>
</tr>
</tbody>
</table>

Source: Salvadoran Demographic Health Survey, 1985

2. A.I.D. PROGRAM PERFORMANCE UNDER MISSION INDICATORS

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Child Health Visits 1/ to A.I.D. assisted clinics</td>
<td>1.1</td>
<td>1.4</td>
<td>1.7</td>
<td>1.7</td>
<td>2.0</td>
<td>2.3</td>
<td>2.5</td>
</tr>
<tr>
<td>(per 1,000 live births)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prenatal visits</td>
<td>883</td>
<td>914</td>
<td>1,000</td>
<td>1,000</td>
<td>1,500</td>
<td>2,000</td>
<td>2,500</td>
</tr>
<tr>
<td>A.I.D. assisted Vaccinations (Percentage of vaccinated children less than 1 yr.) 2/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>71</td>
<td>75</td>
<td>80</td>
<td>75</td>
<td>80</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>DPT</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>53</td>
<td>55</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Polio</td>
<td>54</td>
<td>60</td>
<td>65</td>
<td>65</td>
<td>70</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>ORS packages distributed to health facilities (000)</td>
<td>1,900</td>
<td>1,500</td>
<td>3,000</td>
<td>2,000</td>
<td>2,500</td>
<td>3,000</td>
<td>3,500</td>
</tr>
<tr>
<td>Malnutrition (Gomez III)</td>
<td>5.0%</td>
<td>5.0%</td>
<td>5.0%</td>
<td>4.0%</td>
<td>3.5%</td>
<td>3.0%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

1/ Per enrolled child.
2/ Percentage of target population.
NUTRITION STRATEGY STUDY

(Scope of Work)

A. OBJECTIVE

In order to address the problem of child malnutrition in El Salvador through a multi-faceted approach, AID requires a nutrition strategy study. In order to conduct this study, the Contractor will perform the following tasks and provide a report of findings as called for herein.

B. TECHNICAL TASKS

1) Consult with AID/W, WFP El Salvador, USAID/ES/HPN, and appropriate representatives of MOH and other health agencies regarding nutrition strategy and nutrition related programs in El Salvador.

2) Review and assess relevant documents dealing with activities in nutrition. These will include the Child Survival Strategy, CDSS, the PL 480 Title II Food Assistance Strategy, the CRS Nutrition Program Evaluation, the FESAL 88 Nutrition component, and the Norton Report on Agricultural Exports.

3) Review and describe the nutrition strategies and programs of the MOH, Salvadoran PVOs and other donors.

4) Discuss the past, present and future mechanisms for monitoring nutrition status.

5) Describe the AID interventions to date and their relation to those of other agencies. Discuss evaluations of those interventions.

6) Describe the planned USAID/ES strategy and its relation to those of other donors.

7) Identify possibilities for improving donor coordination and distribution of information.

8) Describe how progress will be measured under the new strategy and the different data sources for tracking this strategy.
C. ADMINISTRATIVE TASKS

1) The Contractor will meet with USAID/HPN on a weekly basis to discuss conclusions and recommendations from each on-site interview conducted. The results of these interviews will be incorporated into the final report.

2) The Contractor will provide a draft strategy report within 10 days after arrival in El Salvador for USAID/HPN review and comment. The report will include:
   a. Executive Summary.
   b. Table of Contents
   c. Description of methodology used
   d. Discussion and analysis of topics called for above under technical tasks
   e. References and supporting tables
   f. Copy of the Scope of Work

3) The Contractor will consider and incorporate USAID comments into the final report. This report, which is due within three working days following receipt of USAID comments, must be submitted in English, 10 copies, to USAID/HPN.
Methodology

February 15 - March 4, 1989: San Salvador

An initial meeting was held with Dr. John Naponick, Director of HPN, Mr. Richard Thornton, Deputy Director of HPN, and Mr. Gerald Pouchet, Food For Peace Officer, to discuss the drafting of the Nutrition Strategy.

Documents pertinent to development of a nutrition strategy were reviewed (see references in this document) including survey results, agricultural sector reports, economic sector reports, the Child Survival Strategy, the Country Development Strategy, the CRS evaluation and the Action Plan.

Information previously collected by the contractor for the Child Survival Strategy from extensive interviews with key personnel from the Ministry of Health and the Maternity Hospital, UNICEF, PAHO/INCAP, as well as representatives of the Salvadoran Demographic Association, Save the Children, CALMA, World Relief, Foster Parents Plan, Ministerios para Vida, the International Rescue Committee, and the UN Family Planning Association was reviewed.

Additional interviews were also conducted with Mr. Mike Wise from the Mission Agriculture Office, Mr. Juan Buttari from the Economic Office in the Mission and several persons from DPP.

Meetings were also held with Mr. Rolando Godoy, principal investigator for the recent maternal-child health and contraceptive prevalence survey (FESAL, 1988) and the recent nutrition survey. As a result of these meetings, additional data analysis was conducted to determine changes in children's nutritional status since 1978.

During the development of this Strategy, the contractor worked closely with Dr. Guillermo R. Toledo, assistant Population Officer and Mr. Kevin Armstrong, Population Officer, and had frequent meetings with Dr. John Naponick and Mr. Richard Thornton, Director and Sub-Director of HPN.

A draft of the Nutrition Strategy paper was presented to key personnel at HPN on Monday, February 27. Relevant sections of the Strategy were also reviewed with Mr. Wise and Mr. Buttari in Agriculture and Economic Offices of the Mission. The draft was reviewed and returned to the author the next day.

From February 28 to March 3rd, the comments and concerns expressed by the reviewers were incorporated into the draft which was put into final form and given to HPN (10 copies, English) on March 3rd before departure from the country the next morning.

VS/0744v