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FINAL REPORT
NUTRITION PROGRAM STRATEGY DEVELOPMENT FOR USAID MISSIONS
WITH EMPHASIS ON SUB-SAHARAN AFRICA

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Village health post and community meeting area (under tree) for MCH clinic



Followup home visit of detected malnourished child (in grandma's arms) by CHW(hat);

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I. INTRODUCTION

The Scope of Work included four main objectives:

1. Recommend potential targets of opportunity for nutrition programming.
2. Assist USAID Missions in defining/clarifying their nutrition priorities and in developing/coordinating nutrition strategies.
3. Analyze and present nutrition data from national DHS surveys, and recommend/develop nutrition indicators for DHS II.
4. Critique A.I.D. Child Survival Tier II nutrition indicators and recommend changes/additions if justified.

The implementation of the work order began on July 10, 1989, and due to USAID Mission delays, received two extensions, and terminated on Jan. 10, 1990. It was carried out by the staff of the International Nutrition Unit with assistance from one consultant (B. Mlingi) in Washington, data programmers at DHS/IRD in Columbia, Maryland, and the nutrition counterparts in Liberia (I. Simbeye) and in Uganda (J. Mudusu). Active AID participation included the Office of Nutrition, the HPN and FFP Offices of the Africa Bureau, and USAID Missions in Liberia, Uganda and Kenya.

II. MAJOR DELIVERABLES (included in Annexes A-H)

A. Document: Opportunities for Innovative Nutrition Programming (10/20/89)

B. Identification of missions in Sub-Saharan Africa in which to carry out contextual analysis

1. Matrix of (8) Identification Criteria (9/27/89): Six countries identified: Liberia, Uganda, Zaire, Togo, Malawi, Mozambique and Ghana

2. Responses from the mission cables: Positive-Liberia and Uganda (during the IQC time period); positive (but later in CY1990) Malawi, Togo and possibly Kenya. No response received by ST/N or AFR/TR/HPN from Ghana and Mozambique.

C. Document: Guidelines for the Contextual Analysis of a Country's Nutrition Problems: Toward the Development of a USAID Nutrition Program Strategy (Draft 10/31/89; revision 1/10/90)

D. Trip Reports

1. A Contextual Nutrition Program Assessment in Liberia: Toward a Practical National Nutrition Strategy, Charles H. Teller and Isabel Simbeye, November 27, 1989

2. Nutrition Situation and Program Assessment: Toward a Practical Home-based Food and Nutrition Program Strategy for Uganda, Charles H. Teller and John Mudusu, December 22, 1989

3. Stopover visit in Kenya with USAID/Nairobi, REDSO/ESA and UNICEF/Nairobi, Charles H. Teller, Memo, December 9, 1989

E. Draft Nutrition Activity Plan of Action

1. Outline of a Proposed Nutrition Strategy for USAID-supported projects in Liberia. Chapter V of Liberia Trip Report (see D1)

2. Proposed Plan of Action and Donor Considerations, Chapter V of Uganda Trip Report (see D2)

F. DHS and Nutrition Indicators-related reports

1. The DHS Nutrition Indicators: Potentially Useful Nutrition Indicators from DHS I Data Files; Analysis and Interpretation of Nutritional Data from DHS I and other Sources; and Recommendations of nutrition questions and indicators for DHS II

2. Nutrition Indicators for Country Assessments and Tier II Child Survival Program Monitoring and Evaluation

G. Paper - A.I.D.'s response to the Nutrition Problems of Children in the Developing World. First draft, July 31, 1989; Final draft, January 10, 1990 (Prime author: Norge W. Jerome)

H. Final Report, January 17, 1990

III. LESSONS LEARNED

A. Targets of opportunity

1. Showcase countries - AID nutrition programming would benefit from the concentration of centrally-funded projects in a few countries. These would be projects that were selected based on a Mission food and nutrition strategy, and would be phased in sequentially. For example, child survival nutrition activities need to be complemented by household food security.

2. Multisectoral approaches - Food consumption and nutrition problems can only be addressed through multiple sectors within AID; not only health, but agriculture, forestry, education, rural development, private enterprise, microenterprise, and energy and natural resources. Program complementarity is essential through both multisectoral and community-based actions.

3. The INPF and international donor agency collaboration - In the food and nutrition field, UNICEF, WHO, World Bank, FAO and World Food Program are the key collaborators who, through the ACC/SCN and international meetings, must coordinate their strategies and programs. The International Nutrition Planners Forum, supported by AID, has a definite advantage in that third world nutrition leaders and decision-makers can present their priorities to the donors without undue political and institutional interference. The last three meetings of the INPF have been very successful in laying out priorities in primary health care, diarrheal disease and community nutrition programs.

4. New target groups - most nutrition programs have been focused on infants and mothers, but malnutrition is a generational phenomenon and predates the pregnancy. Inclusion of teenage women as a target group can help to address the serious problems of maternal malnutrition and low birth weight, as well as goiter and iron-deficiency anemia. The teenager is also a key caregiver in the family and her training can have immediate benefits in the food-handling, hygiene, and child care that effect young-child malnutrition.

5. Nutritional management of infection - While most emphasis has been placed on dietary management of diarrhea, a big killer which interacts with malnutrition is malaria, and its incidence has increased greatly in the past few years. In fact, nutritional management of both diarrhea and fever should not be separate programs, but integrated with infant and child feeding and growth monitoring/promotion programs.

6. Nutri-business - This new approach was well received in the African countries visited (Liberia, Uganda and Kenya). Private sector food industries are very common, and they can be supported to achieve greater efficiencies by (a) generating local employment and income; (b) increasing the nutritional value of local foods and food products; and (c) expanding production, marketing and distribution of local food and food products.

B. Nutrition Program Priority and Strategy Development Field Support

1. Policy dialogue with the Mission Director and key program officers - It is important to present data on the food and nutrition situation to the decision-makers at the Mission

level, particularly if a CDSS is being planned. If development projects are in the planning stage, their respective directors should be briefed. Project support areas, such as human resources development, training, policy dialogue, information systems, etc., should not be overlooked.

2. Timing in the program development cycle - Missions are more amenable to consider nutrition program development if there are new people in key positions, if a CDSS is being planned, if a new bilateral is in the PID stage, and if there are local currencies available that need to be spent, among others.

3. Reputable and influential national institutions and nutrition counterparts - Much more can be accomplished with follow-up assured if the AID nutrition consultant has this type of counterpart. Professional and direct personal contacts with these counterparts can help to persuade the Mission to consider its role in addressing the food and nutrition problem. The perception of in-country institutional capacity to carry out the recommendations is important because many Missions think that nutrition programs are hard to carry out. Nutritionists per se are often in weak institutional positions and need the support from Agriculture, Development and Economic sectors as well as from Health.

4. Community-based approaches and involvement of PVOs - The dual problems of Missions being short-handed and Ministries having inadequate outreach to the neediest communities make it imperative in most countries to enlist collaboration from U.S. and local PVOs/NGOs. They can develop sufficient capacity to train community health workers and mothers in the often labor-intensive process of assessing nutritional problems, analyzing them and taking appropriate actions. Umbrella groups of PVOs often provided certain efficiencies in terms of technical backstopping for such training (eg., CHAL in Liberia, CBHC in Uganda).

5. Development of a special guide for assessment - The "Guidelines for the Contextual Analysis of a Country's Nutrition Activities: Toward USAID Mission Nutrition Program Strategies" by our consultant Dr. Betty Mlingi were developed specifically for use by the LTS consultant, USAID technical officers and national nutrition counterparts. It presents the new AID Nutrition Strategy's three-prong approach of Child Survival and Development Interventions, Household Food Security, and Nutribusiness. It was found to be more useful for the nutrition counterparts than for the generalist USAID technical health and agricultural or program officers. Thus two separate versions of the Guidelines should be considered: a shortened version for USAID officers and the more detailed technical document for those actually performing the contextual assessment.

6. Importance of contextual, situational and local level analyses - In both Liberia and Uganda, it was important to go directly to the county and district level and identify the agro-ecological and cultural differences in the determinants of malnutrition. In Liberia, for example, greater energy expenditures of the mother compared to the father in agricultural tasks is more important in the Southeast than in the Northwest; in Uganda, the increase of rice cultivation in the East has been mainly for sale as a cash crop whereas the increase in maize production in the Central Region has been mainly for home consumption. Generational differences were noted, also: focus groups with middle-aged Ugandan grandmothers indicated that they had spent much more time in feeding and care of their children than their daughters did with their grandchildren. Young mothers now must obtain more cash income than did their mothers for basic necessities such as salt, sugar, and school fees.

7. Participatory assessment approaches - Working with counterparts, not only at the national level but also at the district/county and community levels, is extremely important in both field assessments. The district-level Medical Director/Officer and his MCH and Community Health Department staff, and the District Home Economist and Agricultural Extension Officer, as well as PVO and project-management staff were involved in the problem-posing, the needs-identification, and the planning of our field visits. At the community level, the most appropriately trained and organized persons or groups available were consulted. They not only identified their most common problems but were able to delve into their causes, prioritize them, and suggest alternative solutions. In Liberia, valuable information was obtained and discussed with the Sub-district Health Advisory Committees, village chiefs, and the Community Health Teams. In Uganda, the Resistance (Development) Committees at the Parish and community levels, and their Women Farmers and Widows Sub-committees, were invaluable sources of both information and ideas. Here, also, a local "technical" advisory group at the sub-Parish level was identified composed of teachers, social workers, midwives, farming leaders, market women, church ministers and PTA leaders. The more these types of groups are involved in the beginning stages, the more committed they are to change, and the more sustainable the project effectiveness. We have already received a letter directly from one of the Ugandan villages (Nakabululu, Luwero District) that "your advice and guidance in the health care of children and in the methods of preventions of diseases in our rural community was very welcome."

8 Household Food Security (HFS) as an objective of agriculture and integrated rural development programs - None of the USAID projects in the three countries visited (Liberia, Uganda and Kenya) had incorporated explicit HFS objectives in their project portfolios. When it was explained to the project officers with charts and figures exactly what HFS was and how it could be measured, there was a lot of interest generated within

the Mission and with technical counterparts, particularly in Home Economics Sections of the Agricultural ministries.

C. Nutrition Indicators

1. Clarification of objectives - There is confusion between use of nutrition indicators for population-level assessment and planning, for individual level program screening, and for project monitoring and on-going evaluation. The Missions use them mainly for CDSS assessments, while projects, particularly child survival projects, mix their program and individual-level uses. The Tier II Child Survival Indicators, which are to be used mainly for assessment and evaluation, do not include a nutrition program coverage or use indicator. The present Tier II nutrition indicators of anthropometry (underweight 12-23 mo.), duration of breastfeeding, and appropriate feeding practices are not the best available ones for contextual nutrition assessments, and recommendations for their modification/change are included below.

2. User-friendly interpretative presentations for general development staff - The production of colorful graphs and figures have been far more useful than the conventional descriptive statistical tables. Presentation of the data in trend or time-series, and in comparative perspective, is usually requested: sub-national, interdistrict/county, and cross-national with neighboring countries. It is essential to focus clearly on the major issues and be sensitive to mission uncertainties. For example, a highly placed Mission program officer in Liberia was not convinced that malnutrition was indeed relatively high until he saw graphs of comparable nutrition data from other West African countries. Surrogate indicators for malnutrition, such as child mortality, are often more available for trend analysis. The graphic presentation of trends in the mortality rate for children 1 to 4 years of age (from retrospective survivorship questions) was useful in our discussions in both Liberia and Uganda; the lack of much decline in the past 15 years as compared to other African countries was very noticeable. Moreover, explaining the process and significance of undernutrition and the meaning of the cut-offs facilitates interpretation. For example, graphically presenting the steepness of growth retardation by month throughout the first year of life generates more response than bar charts which aggregate the results by broad age groups.

3. Analysis of available nutrition data from existing surveys - Special tabulation and analysis of existing nutrition-related data generated by AID-supported surveys is an efficient use of scarce resources, but it should be carried out by experienced nutrition analysts. Demographic and health specialists tend to present nutrition indicators as if their meaning is self-evident (eg., stunting = chronic undernutrition), and limit their "nutrition" indicators to anthropometry,

exclusive breastfeeding, and age at introduction of weaning foods.

4. The significance of stunting is not well understood - Development specialists tend to understand terms such as malnutrition, undernutrition and, particularly, acute malnutrition (or wasting), in a more medical context. The indicator of stunting is often questioned as to its relevance as a condition in and of itself (i.e., Is it so bad to be small?). As the United Nations states: "It is the factors associated with the process of becoming small, not the state of being small, that are of real concern. . . Although the small individual may be healthy at a particular time, the conditions that have caused this smallness are basic deprivations, including poor diet and ill-health, frequently due to poverty." (ACC/SCN, 1989) It should be explained that stunting is a very important and useful social development indicator, a summary of maternal and childhood experience of social, economic and environmental deprivation, household insecurity and disease. It is also more useful to discuss these multiple causes of stunting than the possible functional consequences (school performance, work capacity), because many other factors come into play. Some of these issues should be addressed further by the A.I.D.-supported Nutrition CRISP.

5. Anthropometric and feeding data are necessary but not sufficient nutrition indicators - Data on the frequency of feeding and type (and quality) of infant foods are of more nutritional relevance than the age at introduction of a "weaning" food. Factors such as child care and food hygiene, and feeding during illness are important to know in order to make a good analysis. The key is to interrelate these with food accessibility, purchasing power, female work load and other social, economic, and cultural variables. Descriptive figures such as those included in the Contextual Analysis Guidelines (Annex C) have been useful in discussions with the Missions and other development counterparts.

6. Importance of analyzing the anthropometric data on children month-by-month in the first year of life - Instead of grouping the data on children under 1 year of age together as is often the custom, when the data are disaggregated during the first year of life, the steepness of the increase in stunting and underweight is dramatic. This permits identifying the months during which growth retardation occurs and when the steepest increases occur. It helps identify more precisely age-specific target groups for programmatic intervention. It has led us to detect that the major process of stunting and malnutrition commences early in life -- often by the third month -- and progresses rapidly in the first year of life. Thus the resulting prevalence is higher after this, based on the cumulative process.

7. Steep growth retardation in the first year of life as a new phenomenon - This needs more research, for there is some indication that this may be a recent phenomenon in the rural areas. In communication with the ACC/SCN (Mason, 1/9/90), they feel it could be extremely important to investigate whether this shift to an earlier age of onset of growth failure is "real". We also need to know why some countries' retardation patterns flatten out in the second year of life and others keep declining (eg., Dominican Republic vs. Guatemala, respectively).

IV. RECOMMENDATIONS FOR NUTRITION PROGRAM STRATEGY DEVELOPMENT AT THE USAID MISSION LEVEL

1. PROMOTE MULTISECTORAL FOOD AND NUTRITION POLICIES AND STRATEGIES, AND INCORPORATE HOUSEHOLD FOOD SECURITY OBJECTIVES IN RELEVANT PROJECTS

Child Survival Programs are too limited to address the food consumption and nutrition problem in most countries. Mission directors and their CDSSs have greater latitude in addressing the problem through support of multiple policies and sectors. An effective way to bridge the gap between health and agriculture is through the concept of household food security which speaks the same language for both sectors. The gaps between food production and its biological utilization can be identified more clearly at the household level. Physical and socioeconomic access to appropriate and quality food and its intra-household management, as well as child care, are essential to good maternal and child nutrition and development.

2. INCORPORATE COMMUNITY-BASED AND EMPOWERMENT APPROACHES IN PROJECT DESIGNS

The contextual assessments and review of centrally-driven vs. community-driven nutrition and development programs in both the literature and this project demonstrates the critical importance of developing district and local-level analyses of the food and nutrition situation and appropriate actions. Effective community mobilization is essential for nutrition programs to succeed. Community empowerment enables people to identify their own needs, search for solutions, and actively participate in follow-up actions. Two types of groups are key resources: trained, experienced leaders who are accountable to the community and who have the basic skills needed for development project management, and women's groups that can serve as multipliers in a process of learning/sharing.

3. SUPPORT PVO/NGOs AS NECESSARY PARTNERS WITH GOVERNMENTS AND COMMUNITIES IN REACHING THE NEEDIEST WITH NUTRITION PROGRAMS

With the economic crises in Africa and Latin America, and much political and civil instability, many governments are less capable of reaching their undernourished populations than before.

Coordinating and umbrella groups of international and local PVO/NGOs are willing and able to help, but need technical, managerial, and financial assistance. USAID should consider supporting these groups in coordination with government policies, norms and procedures.

4. DEVELOP REGIONAL NUTRITION FIELD SUPPORT PROJECTS AND TARGET RECEPTIVE MISSIONS

Country food and nutrition profiles can identify countries most in need; and assistance in CDSS development can help Missions prioritize the food and nutrition problem. Central and regional-level technical assistance will usually be needed to transform CDSS priorities into programs and projects and central resources should be focused on those few countries that document the need and willingness to follow-up.

5. INITIATE NUTRITION PROGRAM INTERVENTIONS EARLIER IN THE LIFE CYLCE, FROM 0-3 MONTHS FOR INFANTS, AND IN ADOLESCENCE FOR MATERNAL NUTRITION

Our preliminary findings from the DHS I analysis of very early onset of infant growth retardation in both height and weight suggests the futility of many nutrition programs which wait until the child is already stunted. Since the steep declines begin in the 3-5 month old age group, the program must deal in a preventive way prior to onset. Subsequent in-depth analysis might be able to tease out the breastfeeding, bottle-feeding, illness and child-care factors involved. For countries and sub-regions where the declines continue into the second year of life, dropping large numbers of children after completing their immunizations is unwise. Very early malnutrition also suggests maternal deprivation, and these problems should be addressed prior to motherhood. Both country assessment teams were convinced of the necessity of working with teenage girls because they are usually (1) the child caregivers, (2) the food and water handlers, and (3) co-farmers. They are at an age where they seem eager to learn new behaviors and work in an organized group.

6. CONSIDER MODIFICATION OF THE TIER II-III CHILD SURVIVAL INDICATORS FOR USE IN NATIONAL ASSESSMENTS

There is general dissatisfaction with the nutrition indicators in Child Survival Monitoring system. Countries need to be sensitized to the need for more appropriate and programmatically useful nutrition-related indicators. While changing these would entail a long, internal AID process, for purposes of national nutrition assessments (eg., for CDSSs and PIDs) we suggest the following be considered (most will be acceptable for international comparison purposes):

a. The anthropometric indicator (-2 SD underweight, 12-23 months) should be moved to Tier III. A desirable additional indicator is % low birth weight or size at birth. (For pregnant women, an arm circumference indicator is adequate if weight-for-height is not feasible.)

b. Height-for-age (stunting -2 SD) is the preferred indicator for national nutrition survey assessments; it is a better summary social indicator of deprivation and its determinants are more readily identified and subject to development programs; preferred indicator is change in % stunting, 3-11 months to 12-23 months. This measures the steepness of the stunting during the critical first two years of life.

c. Weight-for-age can be substituted for height-for-age in those countries where the latter is not feasible, and particularly where wasting is a significant problem (some African and Asian countries).

d. A coverage or program-use indicator should be substituted for anthropometry in Tier II. Suggested indicator for children 0-24 months is % of registered children under two who attended at least two growth monitoring/promotion sessions in the past 12 months, or benefited from other nutrition activities. (Suggested indicator for pregnant women is % supplemented with food and/or iron-tablets.)

e. The breastfeeding or appropriate infant feeding practice indicator should be divided into two: (1) % of children at four (completed) months of age "fully" breastfed (including water or juice), and (2) % of children 6-11 months who regularly eat mushy or solid foods.

A table of minimum and desirable additional Tier II and III maternal and infant indicators is included in the report (Annex F.2).

7. IMPROVE THE NUTRITION INDICATORS FOR THE DHS II SURVEY

Taking into account operational feasibility, cost, country interest and length of interview, the DHS II project should consider the following changes from the DHS I survey instrument (some changes have already been approved for DHS II):

a. Expand the age range for infant anthropometry down from 6 or 3 months to 0 months.

b. Take maternal anthropometry, preferably height; if not feasible, then consider arm circumference especially for pregnant women to assist in predicting low birth weight.

c. Ask feeding questions of the non-breastfed children, also.

d. Obtain principal foods eaten in last 24 hours by all children under two years of age (by ticking precoded response categories; it wasn't coded in DHS I).

e. Do a sufficiently large sample (ideally need 50 children at each month in the 0-23 month age range) with anthropometry to permit greatest possible agro-ecological, socio-cultural and age disaggregation, and identification of programmatic target groups.

f. Ask additional socioeconomic questions of status, wealth, and access to food resources so that indexes of causal and associated factors can be constructed. Pretest household food security questions (eg., existing household stocks of the basic, young-child staple food).

The Office of Nutrition should consider "buying into" DHS II if some of these changes are made in the core survey (so as to permit sufficient contextual analyses; see point five above). In-depth nutrition modules should also be considered in several "showcase" countries if the Missions are committed to buy-into and follow-up on the findings.