



# **Successful Community Nutrition Programming:**

**Lessons from Kenya, Tanzania,  
and Uganda**

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## List of Acronyms

ACC	Administrative Committee on Coordination
ADP	Area Development Programme
AECI	Spanish Cooperation Agency
AMREF	African Medical Research Foundation
ANP	Applied Nutrition Programme
BASICS	Basic Support for Institutionalizing Child Survival
BCC	behavior change communication
BCM	breastfeeding, complementary feeding, and maternal nutrition
CAP	community action plan
CBDA	community-based distribution agent
CBNP	community-based nutrition program
CBW	community-based worker
CCF	Christian Children's Fund
CHANIS	Child Health and Nutrition Information System
CHV	community health volunteer
CHW	community health worker
COOIBO	Belgium International Association for Development Cooperation
CRP	community resource person
CSPD	Child Survival, Protection and Development Programme
DANIDA	Danish Agency for Development Assistance
DFID	Department for International Development
EBF	exclusive breastfeeding
ECD	early childhood development
DANIDA	Danish Agency for Development Assistance
FFH	Freedom from Hunger
FGD	focus group discussion
FOCCAS	Foundation for Credit and Community Assistance
GHAJ	Greater Horn of Africa Initiative
GMP	growth monitoring and promotion
GRHRP	Gulu Relief & Health Rehabilitation Project
HAZ	height-for-age z score
IEC	information, education, and communication
IMCI	Integrated Management of Childhood Illnesses
IP	Sustainable Integrated Reproductive Health Services Project
IPPF	International Planned Parenthood Federation
JOICFP	Japanese Organization for International Cooperation in Family Planning
KAP	Knowledge, Attitude, Practice Survey
KCAN	Kenya Coalition for Action in Nutrition
KPC	Knowledge Practice Coverage Survey
MCH	maternal and child health
MICAH	Micronutrient and Health Project
MIHV	Minnesota International Health Volunteers
MINPAK	Nutrition Minimum Package
MIS	management information system
MOH	Ministry of Health
MTCT	mother-to-child transmission (HIV/AIDS)
NGO	non-governmental organization
NID	National Immunization Day
NIS	Nutrition Information Systems

NPAN	National Plan of Action for Nutrition
ORT	oral rehydration therapy
PANS	Participatory Approach for Nutrition Security
PATH	Program for Applied Technologies in Health
PEM	protein energy malnutrition
PET	Participatory Educational Theatre
PRA	participatory rural appraisal
PRE	participatory research and extension
PVO	private voluntary organization
RCQHC	Regional Centre for Quality of Health Care
REA	resource efficient agriculture
REDSO	USAID Regional Economic Development Support Office for East and Southern Africa
SANA	Sustainable Approaches to Nutrition in Africa Project
SARA	Support for Analysis and Research in Africa Project
SCN	Subcommittee on Nutrition
SCSP	Ssembabule Child Survival Project
SITE	Standard Indicator Tool for Evaluation
TANCO	Tanzania Nutrition Coalition
TBA	traditional birth attendant
TFNC	Tanzania Food and Nutrition Centre
TIPS	trials of improved practices
TUFF	Tool Used for Focus
UGANS	Uganda Action for Nutrition Society
UMATI	<i>Uzazi na Malezi Bora</i> Tanzania (Family Planning Association of Tanzania)
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VECO	Vredeseclander COOPIBO
VHD	village health day
VHW	village health worker
WV	World Vision
WAZ	weight for age z score

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## Executive Summary

Learning from success is the most effective and efficient way of learning.

This report brings together the main findings of a series of assessments of successful community nutrition programming carried out in Kenya, Tanzania, and Uganda between 1999 and 2000. The overall aim of the assessments was to identify key lessons, or the main driving forces behind the successful processes and outcomes in these programs. Such elements of success fundamentally have to do with both *what* was done and *how* it was done.

Experience with community-based nutrition programming, as documented in various syntheses and reviews during the 1990s, does show that malnutrition *can* be effectively addressed on a large scale, at reasonable cost, through appropriate programs and strategies, and backed up by sustained political support. In most cases, successful attempts to overcome malnutrition originate with participatory, community-based nutrition programs undertaken in parallel with supportive sectoral actions directed toward nutritionally at-risk groups. Such actions are often enabled and supported by policies aimed at improving access by the poor to adequate social services, improving women's status and education, and fostering equitable economic growth.

Successful community-based programs are not islands of excellence existing in an imperfect world. Rather, part of their success has to do with *contextual factors* that provide an enabling or supportive environment. Some of these contextual factors are particularly influenced by policy, some less so. Contextual factors may include, for example, high literacy rates, women's empowerment, community organizational capacity and structures, appropriate legislation. Nutrition program managers cannot normally influence contextual factors, at least in the short term.

In addition to favorable contextual factors, certain *program factors* contribute to successful programs, such as the design, implementation, and/or management of the program or project, which can, of course, be influenced by program managers. Both contextual and program factors, and the way they interact, need to be identified in order to understand the dynamics behind success.

In 1998, under the Greater Horn of Africa Initiative (GHA1) supported by the United States Agency for International Development (USAID), nutrition coalitions were formed in Kenya, Tanzania, and Uganda. These nutrition coalitions, comprising individuals representing government, non-governmental organizations (NGOs), donors, academic institutions, and the private sector, seek to advance the nutrition agenda both in policy and programming through coordination and advocacy efforts. One of the first tasks of the nutrition coalitions, under the leadership of the Program for Applied Technologies in Health (PATH) in Kenya, the Tanzania Food and Nutrition Centre (TFNC) in Tanzania, and the African Medical Research Foundation (AMREF) in Uganda, was to prepare an inventory of community nutrition programs in their respective countries and identify of better practices in community nutrition programming. Country teams, supported by USAID/REDSO/ESA and LINKAGES/AED, then selected three successful programs in their respective countries based on preestablished "process" and "outcome" criteria.

UNICEF has a long history of promoting and supporting community-based programs in Eastern and Southern Africa and has supported many reviews and evaluations. As part of its continued effort to strengthen community-based programs by learning from new success stories, UNICEF also identified for review a relatively large scale successful program in Tanzania.

Assessments were conducted for each of the 10 programs, using a predefined but open-ended assessment tool. The main *success factors* from the country assessments follow, categorized according to the chronological phase of program development. Not all of the recommended factors can or should be feasibly included in programs.

### **Process Leading to Program Development**

- ✓ Existence of a conducive policy environment with supportive structures and policies amenable to project goals. Programs should either select areas with conducive environments or work to create them before beginning operations. This is important at national and regional levels, but especially at district levels where the project is operating;
- ✓ Understanding by stakeholders of the political, economic and social determinants of malnutrition in the area based on a systematic analysis;
- ✓ Community awareness and commitment to nutrition, either existing or created for the proposed project areas. A general understanding is needed of both the high prevalence and the serious consequences of malnutrition and the availability of low-cost solutions to the nutrition problem;
- ✓ Selection of an appropriate entry point that is responsive to the community's wishes and needs. After assessing the situation, programs should determine the intervention/services desired by the community to complement the nutrition-related activity;
- ✓ Presence of complementary ongoing programs and/or local government structure; and
- ✓ Funding and extra time allocated by donors and program managers for program development.

### **Program Design and Content**

- ✓ Growth monitoring and promotion (GMP) programs that are community or group-based, provide proper feedback and counseling, and ensure information is used efficiently at all levels;
- ✓ Nutrition education related to tangible resources, as behavior change communication, as participatory educational theatre, and as positive deviance approach (maximizing local learning from caretakers who have succeeded in raising well-nourished children despite being from poor households);
- ✓ Advocacy and creation of by-laws to promote nutrition and the activities of the project. Programs should, in cooperation with community members, work to convince decision makers of the importance, feasibility, and cost-effectiveness of investing in nutrition;
- ✓ Credit and income-generating activities for women;
- ✓ Improving care for women and children—via reduction in women's workloads using appropriate technology such as milling machines, solar dryers, and water wells;
- ✓ Capacity development and training for programming staff and community members that is task oriented and part of professional development for staff; and
- ✓ Multisectoral approach adopted in program design to maximize convergence with other relevant programs, such as those that deal with the underlying food, health, and care-related causes of malnutrition.

## Program Management and Implementation

- ✓ Community involvement in program planning and implementation using participatory processes such as the Triple A process, participatory rural appraisal (PRA), participatory research and extension (PRE), participatory approach for nutrition security (PANS), and community representation and voice within program hierarchies;
- ✓ Social groups of varying forms (e.g., women's groups, farmers' cooperatives, and credit associations), either existing or created depending on the context, used as target audiences and implementers;
- ✓ Collaboration with ongoing, complementary programs;
- ✓ Sufficient remuneration, incentives, capacity-building, and professional development for staff provided by programs;
- ✓ Recruitment of dynamic project leaders, transparency and accountability of fund allocation, and donor flexibility to allow programs to adapt as needs arise in communities; and
- ✓ Relevant information shared and used at all levels. Programs should create systems that ensure that nutrition-related (and other) information is not only collected, but communicated and applied to improve interventions and services.

## Evolution, Sustainability, and Scaling up

- ✓ Community commitment of human resources, with active engagement in program;
- ✓ Financial viability ensured by donors, with funding sustained for over 10 years and self-financing in place through revolving loans or community contributions for services;
- ✓ Organizational and legal frameworks established. Programs should support the formation and continuation of community and women's groups. By-laws may be created to ensure program interventions and behavior practices;
- ✓ Preplanning and careful program documentation undertaken early in program. Programs should prepare for later expansion by documenting lessons and planning for growth; and
- ✓ Gradual consultative scaling up in three phases: pilot, expansion, and dissemination.

Many of the above elements of success were apparent in most of the programs, though again not all programs can or should include *all* of these characteristics. It is hoped that careful documentation of these lessons learned in Kenya, Tanzania, and Uganda may prove of benefit to communities, program managers, governmental and non-governmental organizations, and others involved in community-based nutrition programming throughout sub-Saharan Africa and around the world.



# 1 Introduction

This report brings together the main findings of a series of assessments of successful community-based nutrition programs carried out in Kenya, Tanzania, and Uganda between 1999 and 2000. The overall aim of the assessments was to identify key lessons about the successful processes and outcomes in these programs. Such elements of success fundamentally have to do with both *what* was done and *how* it was done.

It is hoped that careful documentation of such lessons may prove of benefit to communities, program managers, governmental and non-governmental organizations, and others involved in community-based nutrition programming in sub-Saharan Africa.

In 1998 under the Greater Horn of Africa Initiative (GHAI) supported by the United States Agency for International Development (USAID), nutrition coalitions were formed in Kenya, Tanzania, and Uganda. These nutrition coalitions, comprising individuals representing government, non-governmental organizations (NGOs), donors, academic institutions, and the private sector, seek to advance the nutrition agenda both in policy and programming through coordination and advocacy efforts. One of the first tasks of the nutrition coalitions, under the leadership of the Program for Applied Technologies in Health (PATH) in Kenya, the Tanzania Food and Nutrition Centre (TFNC) in Tanzania, and the African Medical Research Foundation (AMREF) in Uganda, was to prepare an inventory of community nutrition programs in their respective countries and identification of better practices in community nutrition programming. Country teams supported by USAID/REDSO/ESA and LINKAGES/AED then selected three successful programs in their respective countries based on pre-established “process” and “outcome” criteria.

Once the inventories were completed, the coalitions identified the most successful programs in each country based on pre-established process and outcome criteria. The “process” relates to how a community nutrition program is developed, implemented, and managed, while “nutrition outcomes” may include any of the following: child anthropometry, nutrition-related behaviors (knowledge, attitudes, and practices), and coverage of micronutrient interventions.

As part of its continued effort to strengthen community-based programmes by learning from new success stories, UNICEF also identified a relatively large scale successful programme in Tanzania using similar criteria.

Teams from Kenya, Tanzania, and Uganda then adapted a UNICEF-developed community program assessment protocol for use in their respective countries' context. A literature review on each of the 10 programs was then conducted, after which teams traveled to program sites to observe and conduct a series of key informant interviews and focus group discussions. The data were then analyzed,



(IP-Tanzania)

and country reports were prepared for each of the 10 programs (AMREF 2000a–d; PATH 2000; TFNC 1999a–d). The country nutrition coalitions also compiled summary country reports and conducted feedback workshops to present the results.

The major success factors identified in these country assessments and discussed in detail in this report have been placed in the following four categories, based on the chronological phase of the community nutrition program:

- Process leading to program development, including role of contextual factors;
- Program design and content;
- Program management and implementation; and
- Evolution, sustainability, and scaling up of the program.

Following a historical review of experiences with community-based nutrition programming in the region and elsewhere, the report discusses the findings of the assessment and describes the key elements of success in each of the above categories.



## 2 Lessons from Experience

Experience with community-based nutrition programming has been documented in various syntheses and reviews, particularly during the 1990s. These include the following:

- Three comprehensive reviews carried out by the United Nations ACC/SCN that attempted to unravel the dynamics underpinning success in nutrition—either at a national level or with regard to a specific program (Gillespie and Mason 1991; Jennings et al 1991; Gillespie et al 1996);
- A study of 22 community-based nutrition programs in South Asia (Jonsson 1997) and a review of 8 effective programs in Africa (ACC/SCN News 1997);
- A synthesis of lessons and tools for sustainable community nutrition programming in primarily USAID-funded programs of West Africa (Ndure et al 1999);
- A review of another four African programs by the World Bank (Abosedo and McGuire 1991) and a questionnaire survey of 66 programs in Africa also undertaken by the World Bank (Kennedy 1991);
- A summary of findings from 7½ years of USAID experience in testing consumer- and community-based strategies to improve the nutritional status of women and children through nutrition education and social marketing (Parlato et al 1996);
- A review of community-based programs undertaken before formulation of the UNICEF nutrition strategy (UNICEF 1990); and
- A recent review of successful programs in Asia (Allen and Gillespie 2000).

In sum, experience shows that malnutrition *can* be addressed effectively on a large scale, at reasonable cost, through appropriate programs and strategies, backed up by sustained political support. In most cases, successful attempts to overcome malnutrition were undertaken through participatory, community-based nutrition programs in parallel with supportive sectoral actions targeted at nutritionally at-risk groups. Such actions are often supported and enabled by policies aimed at improving access by the poor to adequate social services, improving women's status and education, and fostering equitable economic growth.



(FOCCAS-Uganda)

As is also demonstrated in this assessment, both contextual and program-specific factors are important. One key condition is adequate institutional capacity and resource commitment to implement broad-based and multifaceted strategies to address the causes of malnutrition within such a supportive policy environment. Because community-based programs are not usually initiated for nutrition alone—communities have broader priorities—means must usually be found to foster multifaceted programs in which nutrition and health activities can be embedded.

## **2.1 Characteristics of a successful nutrition-relevant program**

The main success factors distilled from these reviews relate to both contextual and program-specific factors. Characteristics associated with success between programs and, indeed, across different continents, are surprisingly consistent. Obviously not every factor is required for a program or project to work, but those below do serve as a useful checklist of desired characteristics for a community-based program.

### **2.1.1 Contextual success factors**

- Political commitment, often concretized in the form of explicit nutrition-related goals and operational plans of action or policies;
- Gender equity;
- Community organizational capacity such as women's groups and village development committees;
- Literacy, especially among women;
- Child-friendly culture;
- Leadership, in the form of certain charismatic individuals and/or pro-active local or central government; and
- Convergent, enabling policies and programs—e.g., poverty alleviation policies and women's income-generating programs affecting the underlying and basic causes of malnutrition.

### **2.1.2 Program success factors**

Program success factors are again divided into four categories: program development process; design and content; management and implementation; and evolution, sustainability, and scaling up.

#### ***Program development process***

- Awareness of malnutrition (its nature, causes, and consequences). This is often achieved by using growth monitoring and promotion as an entry point, while understanding of causes may be facilitated through development and adoption of an explicit conceptual framework (see below);
- Continual awareness building through communications and social mobilization;
- Recognition of other community priorities, e.g., water;
- Process orientation (e.g., through adhering to the "Triple A" decision-making approach of assessment, analysis, action—see annex 1), along with an outcome orientation (including time-bound goals and intermediate targets);
- Identification of community-level "mobilizers," usually by the community itself, and a clear definition of their role as local change agents;
- Identification of supervisory "facilitators," who may be local primary health care workers or NGO workers and who often cover more than one village or community. NGO workers' involvement as facilitators is often very valuable, but other support structures, including the private sector, may be used;

- Community ownership of process, not just with regard to implementation but concerning all stages of problem assessment and analysis, program design, implementation, and monitoring (i.e., the entire Triple A process); and
- Capacity development emphasis, building on already existing human, economic, and organizational capacity.

#### ***Program design and content***

- Planned actions should originate from a consensus among stakeholders about the priority problems, available capacity, and resources.
- Actions are usually, at least initially, based on strengthening existing capacity and household and community coping strategies.
- An initial process of prioritization and sequencing of a few feasible actions is recommended, rather than all-encompassing, multisectoral, centrally-coordinated action.
- Targeting should be appropriate with respect to objectives, need, and responsiveness.
- Personnel ratios should be appropriate (“intensity” [see below]).
- Job descriptions should be clear, with an emphasis on quality, not quantity—with care to prevent worker overload.
- Both top-down and bottom-up actions may be relevant.
- Communication and education to improve home-based care is usually critical to *preventing* young child malnutrition.
- The program should focus on a limited set of highly specific, do-able behavioral changes.

#### ***Program management and implementation***

- Strong leadership;
- Clear, efficient, action-oriented, management information system, usually including community-based monitoring, e.g., growth monitoring and promotion; and
- Cost consciousness (including people’s time) and clear, visible accounting procedures.

#### ***Evolution, sustainability, and scaling up***

- Sufficient time for community-driven programs to evolve and take root;
- System for scaling up that takes heed of the different forms of scaling up, such as size/coverage of program and number and type of activities;
- Flexibility to adapt to changing situations;
- Sustained and flexible donor involvement and support;
- Partnership building (e.g., community-government partnerships); and
- Ongoing evaluations and operational research with findings communicated externally for advocacy and internally to improve the program.



(SCSP–Uganda)

## 2.2 Program design and content

Although there is no blueprint design, activities that are regarded as “direct nutrition” interventions tend to be similar across countries: growth monitoring and promotion, promotion of breastfeeding and appropriate complementary feeding, communications for behavioral change (nutrition information-education-communication [IEC] or nutrition education), supplementary feeding, health-related services (e.g., deworming and the Integrated Management of Childhood Illness [IMCI] program), and micronutrient supplementation. One distinct variation with important resource implications is whether supplementary feeding is included in the program, how it is targeted, and how long it lasts.

Most reviews of community nutrition programming found that success is not linked to any particular implementation framework, though some studies revealed more specific findings related to particular nutrition issues. For example, the Nutrition Communication Project that documented lessons learned from five large-scale communication programs found that to promote vitamin A, specific foods and practices should ideally be identified with strategies used by the food industry that are highly attuned to supply/cost, taste, convenience, and other consumer preferences. Promoting exclusive breastfeeding,

while discouraging dangerous behaviors such as giving water along with breast milk, is most effective when building on new concepts about breastfeeding. More than any other behavior, complementary feeding requires time-intensive interpersonal contact. Improving maternal nutrition must come from strategies that address a wide range of areas, including women’s social status in the family, household food security, and other issues related to household dynamics (Parlato et al 1996).

Along with program content and organization, coverage, targeting, and intensity are other key considerations. *Coverage* relates to the proportion of the population participating in the program. *Targeting* concerns the degree to which this coverage is oriented toward the most needy among those who are able to respond. For example, despite evidence suggesting that malnutrition is a problem throughout the life cycle, only 6–24-month-old children may be targeted initially, because this is both the most responsive and the most vulnerable age group. Pregnant women will also usually be included, given their relative nutritional vulnerability and the known links between their nutritional status and birth weight.

*Intensity* concerns how many resources are used per participant, expressed either financially as dollars per participant per year or with regard to population and worker ratios, for example, the number of children per community-level worker or mobilizer or the number of facilitators or supervisors per mobilizer. Experience suggests that effective programs expend around \$5–\$10 per participant per year—at least programs that do not include provision of additional food, which approximately doubles the cost (Gillespie et al

1996). With regard to personnel ratios, a 20/20 target has been suggested, whereby one community mobilizer covers 20 households, and one facilitator in turn supervises 20 mobilizers (Tontisirin and Gillespie 1999).

The relationship between intensity and impact is almost certainly not linear. Below a certain resource/capacity threshold, program impact is at best negligible. In other cases, well-conceived programs may be ineffective simply because their coverage is too low to have a broad impact on the problem, or they do not reach those most in need. Large-scale programs have wide coverage but are often poorly targeted, while small-scale programs—often run by NGOs—are sufficiently “intense” to ensure good targeting, yet impact is limited by their low coverage.

### 2.3 The importance of process

Beyond such design issues lie critically important considerations of *how* these activities should be initiated, implemented, managed, and monitored. Indeed, these “how” questions are the main stumbling blocks to realizing the potential of nutrition interventions shown in small-scale, highly supervised efficacy trials.

Experience shows that success in nutrition requires more than just the achievement of certain desirable *outcomes*, such as reduced child malnutrition. It requires that these outcomes be achieved by way of a good *process*. Both the means and the ends are thus important, not least because outcomes achieved to date are unlikely to endure without establishing an appropriate process.

But what is a good process? Increasingly it is defined as one in which participation, local ownership, and empowerment are the driving forces. A focus on process thus aligns with the human rights rationale for action. “Beneficiaries” are considered as subjects of their own growth and development, rather than as passive recipients of welfare-oriented transfers. Where different partners are involved, it is essential to generate a working consensus on the nature of the problem and its main causes before any attempt is made to design solutions.

Top-down, outcome-focused service delivery or nutrition interventions—e.g., micro-nutrient supplementation—have tended in the past to dominate the field of nutrition. Often with limited community ownership and little if any attention to strengthening local nutrition-improving processes, long-term effectiveness is consequently weak and sustainability dubious. Process-focused initiatives, on the other hand, are more bottom up in their emphasis on participation and empowerment. These initiatives are often small scale and supported by NGOs. Most of the 10 programs described in this report adopted a quality-oriented, community-driven approach to nutrition programming. While they may be sustainable and effective, their impact may nonetheless be constrained by their limited coverage. Most successful programs have combined both outcome and process orientations.

Another USAID-supported review of community nutrition programs located primarily in West Africa confirmed the importance of lessons learned in both the “what” and “how” of programming. The review lays out the following five-step approach for establishing programs (Ndure et al 1999):

#### **Step 1: Identifying the key partners involved in the planning and implementation of a community nutrition program**

- Identifying the key partners from the community

- Identifying the key partners from the public and private sectors
- Making intersectoral collaboration work

### **Step 2: Understanding the priority nutrition problems**

- Assessing the nutrition situation
- Analyzing the causes of malnutrition

### **Step 3: Selecting the most appropriate program approach**

- Defining the program goals and objectives
- Determining the key program targets
- Choosing the most appropriate intervention strategy

### **Step 4: Developing the institutional framework for implementation**

- Defining the management and programmatic roles of different partners
- Eliciting commitment of partners to their roles

### **Step 5: Designing an appropriate program action plan**

- Defining program activities and time frame for implementation
- Determining the amount of resources needed

Some other pivotal tools and approaches that were identified by several of the reviews described above also appear in the assessment of 10 nutrition programs of East Africa. These include the Triple A process of decision making, the UNICEF-pioneered conceptual framework of the causes of malnutrition in society, and the USAID-supported behavioral change communication approach. Full descriptions of these tools are provided in annex 1 and in the report that follows.

### 3 Characteristics of Programs in Kenya, Tanzania, and Uganda

The Nutrition Coalitions in Uganda, Tanzania, and Kenya and their assessment teams were asked to identify successful community nutrition programs. The result was a mix of programs with varying emphases (see table 1).

#### 3.1 Program types

The programs are not limited in scope to nutrition, but encompass broad development objectives across many sectors. Only two programs (CBNP/Kenya and MICAH/Tanzania) had improving nutrition and micronutrient status as their primary objectives. Nutrition objectives for the remaining eight programs complement or are even secondary to health, child survival, reproductive health, or microfinance objectives.

Three of the programs in the study can be classified as Child Survival programs: SCSP/Uganda, CSPD/Tanzania, and MICAH/Tanzania. These programs place a high priority on improving nutrition and other health-related objectives. ANP/Kenya and CCF/Kenya include improving nutrition with other community development and health-related outcomes, as does the GRHRP/Uganda, the only emergency program included in the study. IP/Tanzania concentrates on reproductive health but used nutrition as an entry point early on. For the two remaining programs—IFCPP/Tanzania and FOCCAS/Uganda—improving nutrition was neither an objective nor a primary intervention. Because of their perceived indirect effects on nutrition, these programs were selected for the study.

#### Box 1: Program abbreviation key

##### Kenya

ANP Applied Nutrition Project  
 CBNP Community-based Nutrition Programme  
 CCF Christian Children’s Fund Programme

##### Tanzania

CSPD Child Survival, Protection and Development Programme  
 IFCPP Ileje Food Crops Production Project  
 IP Sustainable Integrated Reproductive Health Services Project  
 MICAH Micronutrient and Health Project

##### Uganda

FOCCAS Foundation for Credit and Community Assistance  
 GRHRP Gulu Relief & Health Rehabilitation Project  
 SCSP Sembabule Child Survival Project

**Table 1: Projects in community nutrition assessment**

# Of Projects	Type	Name
3	Child survival	SCSP/Uganda, CSPD/Tanzania, MICAH/Tanzania
1	Reproductive health	IP/Tanzania
2	Community development	CBNP/Kenya, CCF/Kenya
2	Agriculture/food security	IFCPP/Tanzania, ANP/Kenya
1	Microfinance/credit	FOCCAS/Uganda
1	Emergency	GRHRP/Uganda



Annex 3 provides a summary of information on each of the 10 community programs, including name of project and dates of operation; implementing and donor agencies; population coverage; goals and objectives; donor contributions; interventions; and nutrition outcomes.

### **3.2 Implementing agency and donors**

The implementing organization and the donor agency have a direct influence on program interventions, implementation, evolution, and scale up. In only a few cases does an organization both fund and implement the program. More often several layers of agendas seem to influence programming from implementing and donor agencies.

Only two of the programs are carried out by government agencies, though several are in cooperation with government staff. CBNP is implemented by the Department of Social Services within the Ministry of Home Affairs, Heritage and Sports and funded by DANIDA. The Family Planning Association of Tanzania (UMATI) implements IP with JOICFP and IPPF funding. Only CSPD/Tanzania is primarily funded by a multilateral, UNICEF. All of the remaining programs are implemented by NGOs, most with funding from foreign governments: World Vision implements MICAH and the GRHRP, MIHV implements SCSP with funding from USAID and the Canada Micronutrient Initiative, and Vredeseclanden COOIBO (VECO) implements IFCPP from the Belgian International Association for Development Cooperation (COOIBO). AMREF implements ANP/Kenya with funding from the Spanish Cooperation Agency (AECI). Only CCF/Kenya both implements and funds its programs on its own, and FOCCAS is the only program with private sector support.



### **3.3 Location and coverage**

The population coverage and the number of targeted individuals vary across programs, from 16,000 to more than half a million. CSPD/Tanzania, CBNP/Kenya, and IP/Tanzania reach the most beneficiaries, and FOCCAS/Uganda the fewest. Nearly all of the programs target children under five years and women for nutrition interventions, though a few cover a wider age span. IP/Tanzania includes school-age and adolescent boys and girls. IFCPP/Tanzania is one of the few targeting mostly men, though also targets women farmers.

### **3.4 Program costs**

Information on program costs relative to outcomes is invaluable in demonstrating success, yet few systematic cost studies were conducted on these programs. Some however did estimate costs per capita. As stated above, studies have shown that effective nutrition programming requires an annual investment of approximately \$5–\$10 per beneficiary (Gillespie and Mason 1991). ANP/Kenya estimated \$4 per capita annual cost, while the SCSP/Uganda program estimated \$5. CCF/Kenya requires a \$24/month donation (\$288/year) from the sponsor for each school-aged child. One-half of this amount (\$12/month) goes directly to the child and his/her family to pay for education and related costs such as books, uniforms, and some medical costs, while the remaining amount goes into community or group projects and administrative costs.

FOCCAS/Uganda qualifies as one of the most expensive programs included in this study, with US\$1,391,101 budgeted over two years targeting a small beneficiary population of 16,000 women (\$43/beneficiary/year). This is partly due to the financial costs of credit. One of the least expensive programs administratively is CCF/Kenya, with only 20% of expenditures related to administration and the remaining 80% devoted to programming. Other programs (i.e., ANP/Kenya, IFCPP/Tanzania) have kept costs low through cost sharing and working through salaried government staff. In general, though, information is insufficient with respect to both unit costs and cost-effectiveness of programs described in this report.

### 3.5 Nutrition outcomes

Nutrition outcomes in the assessment were defined to include behavioral, anthropometric, and biochemical improvements. Only four programs collected impact data on nutrition outcomes that could be statistically associated with program interventions. Several others had baseline studies but had not yet collected data to demonstrate positive changes in nutritional “outcomes” as a result of programming.

#### 3.5.1 Anthropometry

Relatively few of the programs reported improvements in nutrition outcomes using anthropometric indicators—weight for age (w/a), height for age (h/a), and weight for height (w/h).

- IP/Tanzania reported decreases in moderate underweight nutrition (WAZ < -2) from 44% to 41% and in severe underweight from 7% to 2% over a four-year period based on the District CSPD Baseline Survey in 1995 and the CSPD Annual Report in 1999 (TFNC 1999c).
- GRHRP/Uganda was able to reduce severe wasting (WHZ < -3) from 5% from the Baseline Survey in June/July 1998 to 2% from the GRHRP Nutrition Survey taken in 1999 (AMREF 2000c). Unfortunately, the GRHRP surveys also revealed increases in stunting and moderate wasting.
- CBNP/Kenya showed decreases in stunting and wasting for children under five years.
- The District Annual Review reports of CSPD/Tanzania in 1998 and 1999 showed impressive reductions in underweight malnutrition during this two-year period, reporting a 70% drop in prevalence of moderate underweight (WAZ < -2) and an 80% drop in prevalence of severe underweight (WAZ < -3).

These reported improvements in nutritional status, however, were not shown to be clearly linked to program intervention and may instead, at least partially, reflect secular trends. This major shortcoming needs to be addressed in the design of monitoring and evaluations systems in future nutrition programming.



(ANP–Kenya)

### 3.5.2 Behavior change, knowledge, and awareness

Some programs used the knowledge, attitudes, and practices (KAP) tool and the knowledge, practices, and coverage (KPC) methodologies. These surveys reveal information about breastfeeding practices, current knowledge about nutrition, and nutrition-related behaviors (box 2).

Based on KPC studies in 1994 and 1996, SCSP/Uganda reported an increase in exclusive breastfeeding rates from 65% to 100% and an increase in early initiation of breastfeeding from 3% to 40%. Mothers reporting that vitamin A should be added to complementary foods increased from 3% to 25%, and mothers reporting that oil and sugar should be added to complementary foods increased from 3% to 68%.

Focus group discussions conducted for the assessment indicated that the program had increased awareness and knowledge of nutrition. Most parents and caretakers participating in the study understood what it meant for a child to be in the “red” on a growth chart. Food taboos, widely apparent before the project, have diminished in program communities. Significant improvements in behavioral outcomes were reported, especially for exclusive breastfeeding, breastfeeding frequency, early initiation of breastfeeding, improved complementary foods, and increased feeding frequency. Parents reported increased attendance at growth monitoring and promotion (GMP) sessions, TBA-assisted births, and health facility visits. The quality of complementary foods was also reported to have improved through increased variety, better hygiene, and the addition of micronutrient-rich foods.

### 3.5.3 Other outcomes

Reductions in infant and childhood mortality were viewed as an improved nutrition-related outcome. In IP/Tanzania, discussions with community leaders suggested that 9 of the 11 severely underweight children identified in the GMP program had been saved as

#### Box 2: Knowledge, practice, and coverage (KPC)

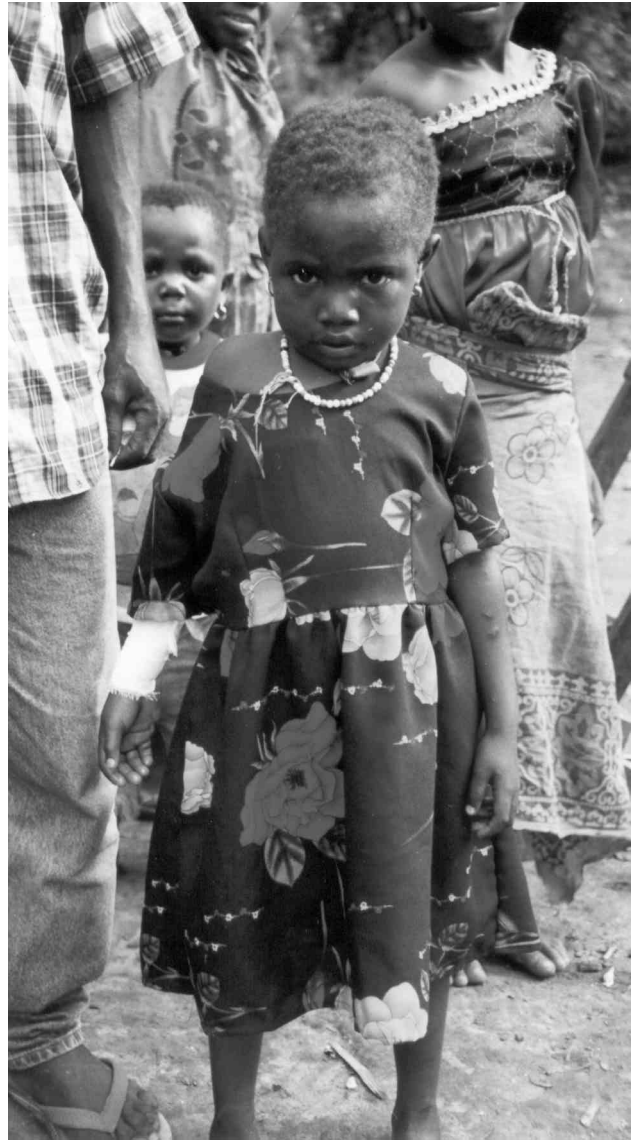
The Child Survival Support Program (CSSP) of the Johns Hopkins University, with support from USAID, developed the knowledge, attitudes, and practices (KAP), later to become the knowledge, practices, and coverage (KPC), in an effort to facilitate PVO assessments of Child Survival programs. The current survey *KPC2000+*, which uses a 30-cluster sampling methodology, contains 15 modules that track behaviors and yield indicators related to child health. Each of the following modules corresponds to the child survival technical interventions:

- |   |  |
|---|--|
| 1a. Household Water and Sanitation                    | 4d. Acute Respiratory Illness                    |
| 1b. Respondent Background Information                 | 4e. Malaria                                      |
| 2. Breastfeeding and Infant/Child Nutrition           | 5a. Prenatal Care                                |
| 3. Growth Monitoring and Maternal/Child Anthropometry | 5b. Delivery and Immediate Newborn Care          |
| 4a. Childhood Immunization                            | 5c. Postpartum Care                              |
| 4b. Sick Child  | 6. Child Spacing                                 |
| 4c. Diarrhea  | 7. HIV and Other Sexually Transmitted Infections |
|   | 8. Health Contacts and Sources of Information    |

<http://www.childsurvival.com/kpc200/kpc200.cfm>

result of programming interventions. CSPD/Tanzania reported a reduction in infant mortality rates by 18% and in childhood mortality by 44% over a one-year period from district annual review reports in 1998 and 1999 (UNICEF 1999).

As discussed later, all 10 of the programs reported related improved outcomes in other sectors: water and sanitation, crop production and diversification, reproductive health/contraceptive use, women's solidarity, and financial viability of households.



(IP-Tanzania)

## 4 Process Leading to Program Development

The assessment explored the conditions that existed before the design and implementation stages within program areas, i.e., initial problem situation (nutritional status, determinants of malnutrition), initial capability/resource situations (role/participation analysis of key stakeholders, resource/capability analysis), and policy and programmatic environment. The objective was to identify key lessons in this essential process leading to program development. Notably, programs rarely exhibit all these characteristics. Yet too often insufficient time and resources are devoted to this critical first phase of program development.

The following success factors are related to the process leading to program development:

- ✓ Existence of a conducive policy environment, especially at district levels;
- ✓ Understanding by stakeholders of the political, economic and social determinants of malnutrition in the area based on a systematic analysis;
- ✓ Community awareness and commitment to nutrition, either existing or created for the proposed project areas;
- ✓ Appropriate entry point responsive to the community's wishes and needs;
- ✓ Presence of complementary ongoing programs and/or local government structure; and
- ✓ Funding and extra time allocated for program development.

### 4.1 Conducive policy environment

A common finding across several program assessments was that a conducive policy environment at all levels, from district to national, is essential to successful community nutrition programming. Programs in Tanzania, especially, emphasized this factor. If policies promoting nutrition did not exist in program areas, they were often created during the life of the project. The SCSP/Uganda program attributed part of its success to a change in policy. Ssembabule had been a subdistrict of Masaka District but in March 1997 became its own district with its own governance systems. Decentralization brought services and resources closer to people and facilitated the interventions offered by MIHV. Another benefit of the project operating within the Ssembabule administrative boundaries was that the enclosed homogeneous communities responded in similar ways to program interventions. IFCPP/Tanzania also successfully chose to operate in a context where district policies and government were amenable to project goals.

National policies may be less important than district-level policies that have a greater and more immediate impact on communities and programs. For example, the *Entandikwa* National Poverty Reduction Scheme in existence in Uganda for three years was not perceived to have facilitated program implementation, though it was designed to address many of the food security determinants of malnutrition in the area (e.g., by providing loans to peasant farmers and unemployed, promoting land ownership, and encouraging mixed farming).

### 4.2 Assessing and analyzing the nutritional situation

Most of the programs included in the assessment applied nutrition conceptual frameworks, indicating organized analysis of the determinants of malnutrition in program areas

at some level. Various tools were used to gather insight into the sociocultural and economic reasons for nutrition problems in the area—for example, FOCCAS/Uganda used the KAP tool and SCSP/Uganda, the KPC tool. Some programs used the Triple A process of assessment, analysis, and action (see annex 1). Assessment and analysis of the nutrition situation by the community members themselves is the preferred approach, albeit one for which allocated time and resources are rarely sufficient.

*“Mothers who deliver at night wait until the next morning to initiate breastfeeding, when water is available and the mother can bathe and clean her nipples”*

(FGD mothers—Labongo-gali)

Focus group interviews during the assessment showed that many program staff felt that cultural practices played a large role in determining nutritional status of households. For example, before CCF/Kenya programming, some believed that breast milk could become sour or hot if a mother stayed in the sun too long. “Cleanliness of the breast” was cited in many East African programs as a barrier to breastfeeding. This is also an issue in the early initiation of breastfeeding after delivery when there is no available water.

The programs assessed in Tanzania found that several people believed malnutrition was caused by *zongo* (witchcraft). Others believed that curses from deceased ancestors or from mothers practicing sex during lactation caused malnutrition. Households were reported to have contacted traditional healers (*Mganga* or *Fundi*) for treatment. Food taboos, a common occurrence in the region, were addressed and dispelled by several of the programs. Pregnant mothers and children in Morogoro District, where IP/Tanzania is operating, were prohibited from eating liver and eggs for various reasons.

In only a few cases did a positive cultural belief facilitate the design and implementation of programs. CSPD/Tanzania cited the value placed on milk by Masai communities.

Socioeconomic determinants were also assessed, primarily by examining household food security of program areas. Programs later responded to these determinants with income-generating activities to help families afford and buy foods (as well as other goods and services) for improving nutrition. In the political and economic spheres, macro-level determinants were not included in the program assessments.

### 4.3 Selection of an entry point

Several of the assessed programs cited the selection of an appropriate entry point as a success factor in their programming. Determination of an appropriate entry point should be

*“Masai community related milk with health of calves. They believed that if calves were not given milk they die. This belief has made them value breastfeeding and, therefore, colostrum was given to their infants”*

(FGD Samaki Maini and Nronga villages)

made during the phase before program design or during the process leading to program development. Once the political, economic, and social context is understood, an implementing agency, together with the community, selects the problem deemed most pressing to address first. Though only 3 of the 10 programs identified the selection of an entry point as an element of success, there is evidence that all of the programs are addressing priority problems of the commu-

nity, whether or not these problems are directly related to nutrition.

In the MICAH/Tanzania program, general experience showed that actions producing quick and positive results were the most convincing and attractive. MICAH chose to strengthen basic MCH services, upgrade school buildings, build teaching facilities, and form groups for income-generating activities. Program managers suggested that the quick results created trust within the community and ensured continued participation. ANP/Kenya also made efforts to select an entry point that was meaningful to the community. Because lack of clean water was a serious problem in Kibwezi, where ANP planned to operate, installation of water wells was integrated into program design from the beginning.

Interestingly, IP/Tanzania used nutrition and parasite control as the entry points to introduce reproductive health initiatives. This strategy might be attributed to significant awareness of nutritional problems in the region created by the operation of CSPD for over 10 years in the same region as IP/Tanzania.

#### 4.4 Complementary ongoing programs and/or local government structure

The success of a program may be enhanced where complementary programs are providing other relevant inputs and services in the program area. This is especially apparent in the Ileje Food Crop Production Project (IFCPP)/Tanzania. Many projects in the area aim to improve nutrition. As discussed below, the IFCPP program does not offer direct nutri-

tion interventions itself and relies completely on others (CSPD and DFID) to provide health services. IP/Tanzania also benefited from complementary programming of CSPD, in operation since 1985.

Few programs included in the assessment, however, can depend on the comparative advantage of other programs, which mostly do not exist.

#### 4.5 Pre-project funding and time

To adopt the elements of success identified for this phase of program development, pre-project funding and time are needed. Sufficient time must be allowed to undertake proper assessments with the

community to create a joint understanding among all stakeholders about the nutrition problems and determinants. To gather quantitative data and qualitative information on the sociocultural and socioeconomic conditions, time and resources are necessary.

*“The whole process of project conceptualization—i.e. needs assessment, problem analysis, choosing strategies and planning action—requires adequate time and resources to facilitate active community participation. Donors and implementing agencies should be prepared to provide prefunding as an investment in good project planning. The benefits of such investment far outweigh inherent risks.”*

(SCSP/Uganda)



## 5 Program Design and Content

Consensus is growing on the most critical technical issues for nutrition programs (annex 2). These issues are contained in both the BASICS Nutrition Minimum Package (MINPAK) and the Regional Centre for Quality of Health Care (RCQHC) Nutrition Essentials Package, but how to integrate these packages into a program effectively needs to be better understood.

The 10 programs included in the assessment emphasize the following issues from these technical packages: improving breastfeeding practices; improving the quality of complementary foods; and increasing micronutrient intake (through food and supplements). Maternal nutrition and complementary feeding practices are included to a lesser degree.

The main interventions and associated lessons learned include the following:

- ✓ Growth monitoring and promotion (GMP) programs that are community or group-based, provide proper feedback and counseling, and ensure information is used efficiently at all levels;
- ✓ Nutrition education related to tangible resources, as behavior change communication, as participatory educational theatre, and as positive deviance approach;
- ✓ Advocacy and creation of by-laws to promote nutrition and the activities of the project;
- ✓ Credit and income-generating activities for women;
- ✓ Improving care for women and children—via reduction in women’s workloads using appropriate technology such as milling machines, solar dryers, and water wells;
- ✓ Capacity development and training for programming staff and community members, which is task-oriented, and part of professional development for staff; and
- ✓ Multisectoral approach adopted in program design to maximize convergence with other relevant programs, e.g., those that deal with the underlying food, health, and care-related causes of malnutrition.

### 5.1 Growth monitoring and promotion

The effectiveness of improving nutrition through GMP programs, which may be costly and difficult to implement properly, has been a source of controversy. One fact became clear from the assessment: most (8 of 10) “nutrition” programs currently use GMP as the centerpiece of nutrition programming. Given the continuing interest and investments already made in GMP, programs could increase effectiveness enormously by making a few suggested adjustments. Lessons from the past (box 3) need to be internalized. The assessment identified the strengths and weaknesses associated with GMP interventions.

*“There is reason to believe that there is interest in growth monitoring in addition to what is expressed in the FGDs, and that the current failure of the community-based GMP activity is due more to the way it is conducted than to lack of interest.”*

(ANP/Kenya)

Adding *community-based* GMP to facility-based GMP increases effectiveness considerably. CSPD/Tanzania holds village health days (VHDs) every three months at schools, day care centers, and so on. The VHDs are announced at churches, mosques, and schools in advance to increase attendance. Health education provided during these village health days includes demonstrations of improved complementary foods. SCSP/Uganda and

**Box 3: Lessons from growth promotion programs**

- Programs should be community- or neighborhood-based and aim for universal coverage.
- Monitoring of weight for the individual should begin at birth and be done monthly for the first 18–24 months.
- Child caretakers should be involved in the monitoring.
- Adequate growth (weight gain) rather than nutrition status should be the indicator for action, by itself or combined with other easily obtained information about the child's condition.
- A growth chart should be used to record the child's growth progress to make his/her growth status visible to the child caretaker.
- An analysis of the causes of inadequate growth is required and should lead to clear and feasible options for action.
- Negotiation should take place with families, guided by tailored recommendations on what they can do to improve their children's growth.
- Follow-up should be done.

World Bank 1996

MICAH/Tanzania also hold GMP monthly at health facilities and once every three months at the community or even hamlet levels. Focus group discussions from the IP/Tanzania assessment reported that caretakers found it easier to communicate with and receive feedback from community-based workers than health facility staff.

*"GMP is still linked to immunization. Few mothers appreciate its value and discontinue with it after the age of six [months]. Thus, most children weighed are under six months of age, the period when the risk of malnutrition is the least"*

(SCSP/Uganda)

Children in the GRHRP/Uganda program are weighed and measured every two weeks. One suggestion arising from the ANP/Kenya program was to have *group-based GMP*. Existing women's groups could be trained and equipped to conduct weighing of their own and others' children.

Attendance varies across the programs. When GMP is linked to an immunization schedule, attendance falls dramatically after six months. In Kenya attendance was linked to efforts made by CHWs to bring caretakers to GMP.

Feedback and counseling following the weighing and measuring of a child was repeatedly cited as crucial to the success of GMP. Traditional birth attendants (TBAs), community-based distribution workers (CBWs), and village health workers (VHWs) all make home visits and conduct site analyses after GMP in the CSPD/Tanzania program. IP/Tanzania supported and strengthened the GMP of CSPD. In addition to the VHWs and TBAs, community leaders and village health committees make follow-up visits. IP's GMP program is viewed as extraordinarily participatory at all levels—household, hamlet, village, and ward—and fundamentally derives from the Triple A cycle (UNICEF) of the project, as does that of the MICAH program.<sup>1</sup>

*"A quick review of CHW monthly reports from the last few months in Mbooni found that attendance varied from 10% to 60% of total children under five years in different communities. Low attendance was attributed to inactivity of the CHWs, although there may be other factors."*

(CBNP/Kenya)

<sup>1</sup> The social structure (10-cell unit) of Tanzania is particularly conducive to contacts at the household level. During the country's socialist regime, the government helped to ensure that the 10-cell leaders visited households of malnourished children (e.g., as per the Iringa program).

Often GMP programs have no feedback loop from health workers to mothers/caretakers. Though GRHRP/Uganda has a very organized GMP, using a double entry system (measurements recorded in a registry book and on the child's health care), there is no interaction between VHWs and mothers. The CBNP/Kenya assessment found GMP to be primarily a weighing and recording exercise.

Very often GMP information is fed into broader national information systems with no follow up. For example, the MOH divisional office feeds GMP data into the Child Health and Nutrition Information System (CHANIS) in Kenya, a clinic-based data surveillance system intended for use by district and regional planners. Summary statistics are forwarded to headquarters, but further action is rarely taken.

Fees associated with weighing and measuring appear to be another potential deterrent to effective GMP programming, especially in poorer communities. IP/Tanzania charges approximately \$.06 for each weighing; CBNP/Kenya charges \$.07-\$0.13 per weighing. Fees are charged in ANP/Kenya as well, and were reported to reduce attendance. In addition to the strain on household budgets, the lack of accounting for the fees charged creates distrust within the community. Therefore, the economic situation of the community should help determine whether a fee is charged and the amount. In communities where a fee is charged, indigent families should be exempt from the costs. Transparency is also recommended in the communities in how the fees will be used (i.e., purchasing supplies or transport costs).

In sum, GMP programming should be structured to include the following aspects: community or group-based, linked to adequate counseling and feedback to caretakers, actions taken at all levels based on information collected, and weighing and measuring services offered without cost or at a cost appropriate for households' economic status.

## 5.2 Nutrition education

Some form of nutrition education is provided in nearly all of the 10 projects. The assessment identified particular models of imparting knowledge and changing behavior that go beyond the usual didactic, top-down approach.

*"The team did not observe any feedback being given to the mother or caretaker, even in cases where the child had a health card and where the child was found to be malnourished. The lack of follow up of underweight children and non-attendees, [and] inadequate nutrition education and counseling were among problems pointed out during the refresher training of CHWs."*

(CBNP/Kenya)

*"Through discussions with key informants, it was pointed out that the data generated during VHD, particularly those related to growth monitoring, were used to sensitize and mobilize parents to take the leading role in improving the condition of their children. Based on data generated, the VHWs were able to advise parents on appropriate actions to be taken. It was said that by plotting the weight of a child on a MCH card, parents were able to monitor the growth pattern of their children. The color of the card was self-explanatory to enable the parents to understand whether the child was malnourished, even for illiterate parents. It was further reported that the card was a simple tool for initiating triple 'A' cycle between parents and health workers or VHWs"*

(MICAH/Tanzania)

Nutrition education sessions are generally undertaken by community workers (e.g., VHWs and TBAs) with caretakers in different venues (e.g., women's groups, village health days, credit associations, and GMP). In the

CCF/Kenya program, social workers visit homes or focus groups to provide health and nutrition education. For MICAHA/Tanzania, CSPD/Tanzania, IP/Tanzania, ANP/Kenya, and CBNP/Kenya, VHWs are responsible for providing nutrition education, along with TBAs and staff nurses. FOCCAS/Uganda includes nutrition education in its weekly education sessions for the credit associations/village banks. Many use food demonstrations to improve complementary feeding practices and diets.

Emphasis on *behavior change communication (BCC)* appears in some of the programs, though there is no systematic approach to nutrition BCC. The GRHRP/Uganda assessment states, *"In an attempt to impact positive behavioral change in child practice, the project has concentrated on capacity building."* Community health workers (CHWs) and volunteers (CHVs), TBAs, and mothers are trained using the MOH training package. CHWs and CHVs then monitor behavior change through regular home visits, and, where there are deficiencies, they organize health education sessions for the whole community. MICAHA/Tanzania promotes positive behaviors through support of gardening activities and food production, community education, and distribution of posters. MICAHA/Tanzania and others also recommend providing nutrition education together with tangible resources for nutritional improvement (e.g., seeds, improved livestock, and vitamin A and iron capsules). Box 4 describes a BCC strategy that has evolved from community programs supported by the Academy for Educational Development (AED).

#### **Box 4: Behavior change communication (BCC)**

BCC is a programming methodology becoming popular across many different sectors. The Academy for Educational Development (AED) has worked extensively in this area, most recently for improving nutrition. For example, LINKAGES/AED has demonstrated results in the early initiation of breastfeeding, exclusive breastfeeding, appropriate complementary feeding, and maternal nutrition applying BCC methodologies in programs in Madagascar and Ghana. The BCC strategy includes the following:

- Quantitative baseline and endline surveys;
- Formative research: interviews, focus groups discussions, observations, 24-hour recalls, etc., conducted to understand local feeding and dietary practices and identify simple changes in practices that are affordable and culturally acceptable;
- Trials for improved practices (TIPS): trials to determine practices most likely to be tried by mothers and adopted over the long term;
- Strategy design: plan completed by counterparts and partner institutions that includes target audiences and messages and strategies for each audience;
- Community-based approaches: working through home visits, community mobilization techniques, mother-to-mother support groups, and volunteers;
- Promotion of local foods;
- Materials and media development;
- Training and capacity building on technical content and counseling skills: NGOs, government personnel, and community-based workers; and
- Monitoring and evaluation.

*Academy for Educational Development 2000*

A recommended element of success coming from CBNP/Kenya for nutrition education, sensitization, and mobilization of the community is *participatory educational theatre (PET)*. CBNP trained PET groups of men and women who had some previous experience in drama and performing arts. These groups perform drama, puppetry, or songs they have developed on social and health themes and engage the audience in dialogue about the stories or situations portrayed. The PET groups are not receiving the compensation or incentives they desire, but as a result of their experience, the groups are being recruited by NGOs, business, and so on to develop dramas on other topics. For example, CARE-Kenya contracted the PET groups to perform a drama on the theme of HIV/AIDS.

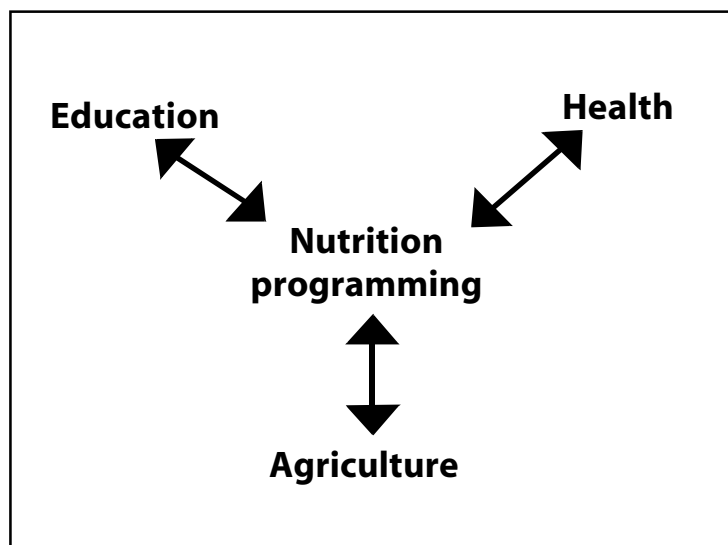
A few of the programs also use a form of *positive deviance approach* to nutrition behavior change—that is, maximizing local learning from caretakers who have succeeded in raising well-nourished children despite being from poor households. The CCF/Kenya program encourages selected role models within *focus groups* to provide nutrition education to the other members of the group. GRHRP/Uganda, among others in the assessment, train selected mothers from the community to offer food demonstration sessions. During the sessions, mothers teach others about preparing complementary foods and about child survival strategies, including appropriate breastfeeding and complementary feeding practices.

In sum, the lessons learned with regard to nutrition education at the community level are to provide tangible resources along with education, focus on nutrition behavior change communications, and use innovative techniques such as participatory educational theater and/or the positive deviance approach.

### 5.3 Adopting a multisectoral approach

Because malnutrition is a multisectoral problem, solutions need to be sought from several sources. All 10 programs have incorporated various sectors into program interventions or collaborated with other programs addressing these sectors within the same populations. The second strategy is more difficult in practice, and most programs seemed to have opted for incorporating several sectors into their own implementation plans. Many programs appear to focus on one sector (e.g., Micronutrient and Health Services Project or Integrated Reproductive Health Services Project or Applied Nutrition Project), but closer examination shows a wide array of interventions in education, health, agriculture, and so on.

Nearly all the programs address *food production and agriculture* because agriculture is a source of livelihood for most of the populations served. The overall aim of IFCPP/Tanzania is to improve small-scale farmers' living standard through increased food production. To address other dimensions of the nutrition problem, IFCPP relies on CSPD/Tanzania. The Kenya programs promote organic farming as well as general food production.





(SCSP—Uganda)

Another intervention used by several programs and identified as a lesson learned in the assessment is the *promotion of drought-resistant crops and locally available materials and foods*. Ssembabule/Uganda has succeeded in promoting micronutrient-rich foods through a food-based approach. Several schools, communities, women's groups, and households in the project area now maintain small gardens for the purpose of production and consumption of micronutrient-rich foods.

*Health-related interventions* are widely apparent in the community nutrition programs. *Malaria control*, a need strongly expressed by many communities, was incorporated into most programs. The review of IP/Tanzania identified *parasite control* as a critical element in community nutrition programming. Hookworms are widely prevalent in the program areas, causing high rates of morbidity related to malnutrition. Interventions to address problems having to do with *water and sanitation* were also widely used by the programs assessed. One health issue noticeably still absent from programs is HIV/AIDS. Given the severity of the problem in the region and the synergistic relationship with nutrition in populations, additional efforts seem necessary in this area.

Interventions in the *education sector* are also common. IP/Tanzania, in cooperation with NGOs such as World Vision/Tanzania, works to improve education and literacy levels. The assessment team observed the impact of these efforts in the requests made by community members for teams for newspapers and printed materials to read. CSPD/Tanzania addressed and improved literacy rates in its project areas.

With regard to child development, CCF/Kenya has established *Early Childhood Development (ECD) Centres*—attached to public schools and/or community-based—for children under five years. CCF provides food for school lunches to the Centres. The ECD Centres in the CCF program have resulted in observed improvements in psychomotor skills and intellectual development of the children, improved hygiene practices by children, and additional time for mothers to work in the *shambas* (small plots of land) or on other income-generating activities. Women have demonstrated their appreciation for the ECDs through monetary contributions to costs of operation. CSPD/Tanzania has also established day care centers and even some institutionalized preschools attached to primary schools.

## 5.4 Advocacy

Advocacy efforts are closely related to information and communication campaigns. Advocacy can be carried out within communities and by communities to a larger audience. Ssembabule/Uganda established advocacy groups using peer groups, clubs, and associations to reach a critical mass with key messages. Drug shopkeepers, TBAs, and others are forming their own associations to lobby for recognition and systematize their activities.

The project has also been successful at national advocacy efforts. In 1997, the project pioneered the linking of vitamin A supplementation with national immunization days (NIDs). In 1998, MIHV broadened the scope of activities during NIDs to include iron supplements to mothers and antihelminthics for children over one year.

*"People are now better equipped to vocalize their needs."*

(SCSP/Uganda)

Efforts made in Tanzania to advance nutrition agendas in the policy realm have resulted in the creation of by-laws to protect caring practices. The IP/Tanzania program initiated the formulation of by-laws. The Hai District Council where CSPD/Tanzania operates has also enacted several by-laws as a mechanism for sustaining the program, including the Hai Maternal and Child-Care by-law of 1995 aimed at empowering communities to run village health days.

## 5.5 Income generation

Responding to community demand, 5 of the 10 programs in the study included a credit or income-generating activity component in their nutrition programming, the premise being that household access to food could be improved through income-generating activities.

FOCCAS/Uganda, supported by Freedom from Hunger, implements its effective credit with education model (see box 5). Community-level credit associations (village banks) composed of approximately 40 persons and organized into solidarity groups of 4 to 7 women were first created. The solidarity group members then received loans starting at about \$44. Annual market interest rates (around 12%) are charged, and 5% of the original loan is expected to be saved in 16-week loan cycle. The solidarity groups meet once a week to repay loans and to participate in education sessions provided by the FOCCAS field agents. During these sessions, banking and business development lessons are provided, as are health, nutrition, and family planning lessons on such topics as



(FOCCAS-Uganda)



### Box 5: Nutritional impact of credit with education

Since 1989 Freedom from Hunger (FFH) has been working with local partners in developing countries to develop and implement a *credit with education* strategy. In an effort to demonstrate positive program impact, FFH, together with the Program in International Nutrition, University of California-Davis, carried out evaluation research on the Lower Pra Rural Bank Credit with Education Program in Ghana.

Four categories of impact were examined in two data collection rounds (1993 baseline and 1996 follow-up): child nutritional status, mothers' economic capacity, women's empowerment, and mothers' adoption of key child survival health/nutrition practices. Women with children under three years from 19 communities were placed in three categories: 1) program participants of at least one year, 2) nonparticipants in program communities, and 3) residents in control communities selected not to receive the program for the period of the study.

Significant impacts were documented in women's economic capacity (i.e., increases in nonfarm monthly income: \$36 for participants, \$18 for nonparticipants, and \$17 for residents in control communities) and women's empowerment (increased self-confidence and vision of the future and improved status and networks in the community). Though status improved *in the community*, women participants did not achieve significantly greater bargaining power or status *within the households* (i.e., in decisions regarding number of household investments—clothing, medicine, agricultural inputs—or home improvements).

Impact on health and nutrition practices was also achieved. Participants reported significantly greater positive change than nonparticipants and/or residents in control communities in the following nutrition-related practices among other health and hygiene practices:

- Giving newborns colostrum;
- Introducing liquids and first foods (in addition to breast milk) closer to the ideal age of about six months;
- Not using feeding bottles;
- Enriching the traditional complementary food (*koko*) with bean/cowpea, egg, fish, groundnut, milk, and palm oil; and
- Enriching Weanimix (a complementary food promoted and distributed by the Ministry of Health) with fish powder.

The Credit with Education program documented improved nutritional status using anthropometric measures. The mean height-for-age z-score (HAZ) for participants' one-year-olds was almost 0.3 greater than the baseline HAZ of future participants' one-year-old children. The mean HAZ for children in control communities was 0.2 less for the same period of time. No impact on women's nutritional status as measured by body mass index (BMI) was found, however.

breastfeeding promotion, infant and child feeding, birth timing and spacing, diarrhea treatment and prevention, and immunization

Changes in behaviors related to initiation of breastfeeding, exclusive breastfeeding, and quality of complementary foods are reported to have resulted from the training provided by FFH and FOCCAS. Women also claim that more resources are available now to purchase better foods for their families. Other outcomes may indirectly improve nutrition as well. The program has also improved women's solidarity and organizational capacities.

Other programs participating in the assessment are supporting “merry-go-rounds,” a popular model of asset-building and credit security used by social groups in East Africa. Each participating member of the group contributes a predetermined amount per month and has a turn to use the pooled amount on priority needs approved by the group. The pooled resources also serve as insurance against emergencies.

ANP/Kenya provides loans to women’s groups through “merry-go-rounds,” as well as technical assistance and inputs such as improved goat breeds and seeds in support of income-generating activities. IP/Tanzania supports income-generating activities (dairy goats, fish ponds, sewing machines, milling, and carpentry) of program participants through groups. Ssembabule/Uganda assists women’s groups such as MAWODA in such areas as rearing goats, making cheese, and growing coffee. CSPD/Tanzania, among others, does not have its own credit component but networks with NGOs that offer income-generating activities.

## 5.6 Improving care of women and children

Efforts made by programs to reduce women’s workload may improve women’s and young children’s nutrition by allowing more time to breastfeed and undertake proper complementary feeding practices.

Several programs in the assessment addressed this issue by introducing labor-saving technologies such as water wells, milling machines, and solar dryers. ANP/Kenya strove to reduce workload by minimizing distances to water source, promoting and providing assistance in animal traction, and assisting women in income-generating activities. IP/Tanzania introduced solar dryers and milling machines to reduce time spent by women walking to mills and searching for vegetables during the off season. IFCPP/Tanzania constructed shallow wells and installed water pipes and milling machines. Efforts were also made to create awareness about women’s workload through public meetings, mass media, newspapers, and radio.

One effective approach to reducing women’s workload was the FOCCAS/Uganda credit financing strategy. With the extra revenue coming in from businesses, women are now hiring others to carry out activities they themselves would normally undertake,

*“Apart from being engaged in business, women had a lot of work involving the household, such as cooking, washing clothes, collecting firewood, collecting grass for feeding cows, fetching water, and much more. This contributed to low child feeding frequency and sometimes resulted in erratic breastfeeding during the day”*

(CSPD/Tanzania)



(IP-Tanzania)

such as collecting water and digging gardens. They also claim that the weekly credit association meetings provide them with rest from domestic work.

## 5.7 Capacity development and training

All 10 programs in the assessment have training components, and several approaches to training have been identified as desirable in community nutrition programming. The SCSP/Uganda program developed *task-oriented* training modules for community volunteers. An individual's skills and interests are evaluated and corresponding tasks and training are assigned. National training guides and curricula are replaced by training adapted to fit the needs of the community and the abilities of the volunteers.

Training in MICAH/Tanzania, in contrast, is based on Ministry of Health guidelines and protocols. Emphasis in training VHWs and TBAs is on growth monitoring, family planning, and disease control. Counseling mothers with malnourished children is included, as is data reporting. Women's and youth groups are also trained by program staff on topics related to income-generating activities. MICAH places great importance on the ongoing professional development and continuous training of its own staff as well. Regular seminars and workshops are held to build particular skills and knowledge, and further incentive is provided for staff to continue working with the program.

IP/Tanzania and CSPD/Tanzania recommend training all stakeholders at all levels of implementation. At the village level, community-based distribution agents (CBDAs), village health committees, village government representatives, and local steering committee members were all trained to acquire various skills. At the ward level, training was offered to the ward executive officer, ward development committee, and some of the extension staff, and at the district level, training and sensitization seminars were offered to district leaders.

Field agents from FOCCAS/Uganda are trained using well-developed, standardized curricula in particular topical areas developed by FFH. Field agents then train credit groups during weekly meetings held throughout the loan cycle. Women are expected to repeat lessons learned the following week in skits, songs, or discussion. IFCPP/Tanzania also offers an innovative approach, in which farmers can participate in "look and learn visits" to other farms through the Farmers Training Centres established by the project. Several of the programs build capacity within local administrative structures. For example, ANP/Kenya trains extension workers in food production, managing systems, seed banks, and livestock breeding.

In sum, training should be task-oriented for community volunteers, provide ongoing professional development for program staff, be offered to all stakeholders at all levels, and, as far as possible, include hands-on components such as "look and learn" visits.

## 6 Program Management and Implementation

The key success factors for this phase of a program's evolution, listed below, address *how* a program should be implemented and managed to achieve its objectives.

- ✓ Community involvement: Involve the community in program planning and implementation using participatory processes such as:
  - Participatory assessment, analysis, and action (Triple A process);
  - Participatory rural appraisal (PRA);
  - Participatory research and extension (PRE);
  - Participatory approach for nutrition security (PANS); and
  - Community representation and voice within program hierarchies.
- ✓ Social groups of varying forms (e.g., women's groups, farmers' cooperatives, and credit associations), either existing or created depending on the context, employed by the project as target audiences and implementers;
- ✓ Collaboration with ongoing, complementary programs;
- ✓ Sufficient remuneration, incentives, capacity building, and professional development for staff provided;
- ✓ Recruitment of dynamic project leaders; transparency and accountability of fund allocation; program flexibility and adaptability allowed by donors as needs arise in communities; and
- ✓ Relevant information shared and used at all levels.



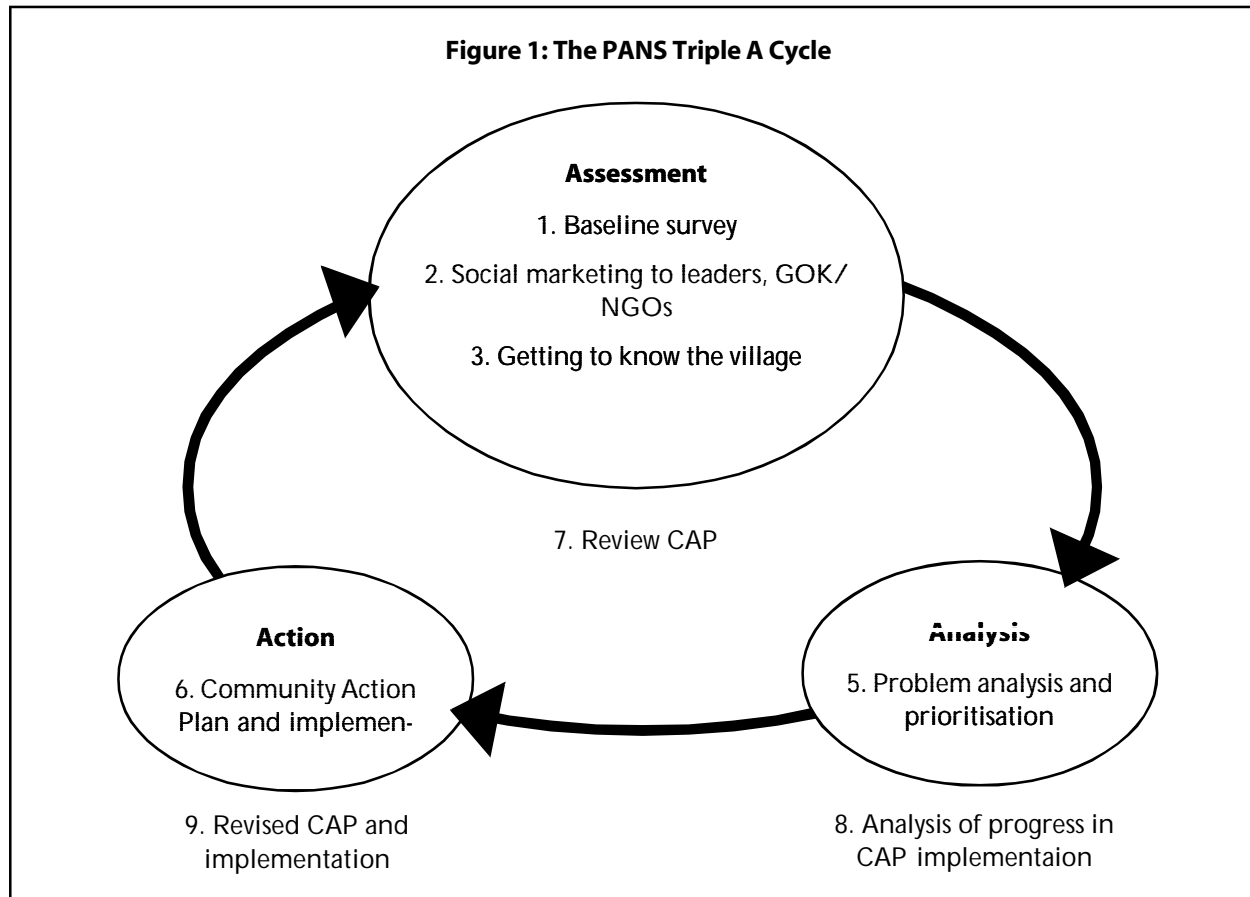
(FOCCAS-Uganda)

### 6.1 Community involvement

By definition the programs included in the assessment involved communities in program implementation. What needed to be understood, however, was how the programs endeavored to accomplish this. In all 10 of the country program assessments, community involvement was identified as a critical programming element, mostly with respect to problem identification, planning, and implementation.

For programs applying the Triple A approach to nutrition programming, community involvement appears most readily in the “analysis” and “action” stages of the cycle. Most programs admitted the relative lack of involvement of communities in the “assessment” and “program planning” phase. This was attributed to the lack of funding and time provided for this initial stage. Communities, however, were involved in analyzing problems, presenting proposed activities to address the problems, and taking action to alleviate them. To complete the cycle, communities reassess the problem and thus evaluate the chosen solution.

CBNP/Kenya uses the participatory approach for nutrition security (PANS). A PANS team established in each community includes CBNP members, local government officers, and community representatives. The team sensitizes the community to the PANS and begins gathering data through village mapping, a village transect, farm sketches of poor and successful farms, seasonal calendars, an historic timeline, social and economic trend lines, institutional analysis, gender analysis focusing on division of labor, and focus group discussions on nutrition. Data are presented to the whole community and discussed. The community then ranks problems identified and develops community action plans



(CAPS). CAPS are later evaluated to achieve objectives. The plans are then revised and implemented again.

IFCPP/Tanzania uses a similar approach—participatory research and extension (PRE)—that involves identifying the problem, looking for solutions, trying out the solutions, and evaluating the results. Some programs apply the participatory rural appraisal method (PRA).<sup>2</sup> In CSPD/Tanzania, community members select community-based workers, plan development activities, and mobilize resources within the community.

Community representation within program hierarchies was also considered crucial to program success in the study. The MICAH project divided areas of operation into clusters called Area Development Programmes (ADPs). Each ADP has a committee of representatives from all villages implementing project activities. ADP committees have five subcom-

<sup>2</sup> Participatory rural appraisal (PRA) is a collection of tools/methods used to collect information from community members about a range of issues, from community organization and structures to traditional beliefs and working practices. These methods may include community mapping, seasonal calendars, venn diagrams, three-pole sorting, pocket voting, matrix sorting, story with a gap, and community action plan (Ndure et al 1999).

mittees that monitor project implementation (agriculture, health, water, education and financial control, and audit). CCF/Kenya places all parents of sponsored children into Focus Groups that develop activity proposals with support from program staff. The proposals are submitted directly to the CCF office for funding approval. CBNP/Kenya works through the following community-based committees: village health committees, village water committees, social welfare committees, and school committees.

## 6.2 Working through groups

Consensus among many programs in the assessment and others in sub-Saharan Africa is that working through social groups is an effective strategy for program implementation. Some programs advocate working through existing groups, while others have been equally successful in creating groups for program purposes. Many groups are formed for economic reasons, such as the credit associations of FOCCAS/Uganda or the “merry-go-rounds” of CCF/Kenya or ANP/Kenya. Other groups emerge as sources of support and solidarity, such as *Kanini Kaseo* of ANP/Kenya or MAWODA women’s development association of Ssembabule/Uganda. Some exist for information exchange and networking, such as the Farmers Groups in IFCPP/Tanzania. Finally, some groups are formed for the sole purpose of channeling program interventions, such as the Focus Groups of CCF/Kenya or PRE Groups in IFCPP/Tanzania.

The *Kanini Kaseo* (“small is beautiful”) is a dynamic women’s group associated with ANP/Kenya. The women joined together to ease the transition to a new environment after being forcibly resettled in Muuni. ANP/Kenya began working with the group, primarily through extension workers. The workers provide technical assistance and education on agricultural production, seed bank development, improved livestock breeding, and health and nutrition. ANP also provides loans to the women’s groups. *Kanini Kaseo* (Group A) helped to form and train a second group (Group B) in the area. Group B is operating without any support from ANP/Kenya to pool resources for its own seed bank, start a group *shamba* and purchase improved breeds of goats and chickens. Group members also extend their solidarity and assistance to community members in need outside the group.

The *Focus Groups* of CCF/Kenya serve as a case study of building capacity in “democratic processes.” CCF organized parents of sponsored children into groups of 15 from the same “neighborhoods.” Each group has a formal structure with a chairperson, secretary, and treasurer. These positions rotate among all members of the group. Other members are designated to be educators in various areas such as nutrition and family planning, and are responsible for training other group members. The Focus Groups meet once or twice a month and send one representative to the zonal committee meetings of the project



(ANP–Kenya)



(SCSP–Uganda)

to present minutes from meetings and various issues. Some issues and proposals are referred to management committee meetings for CCF funding consideration. Social workers attend some, though not all, *Focus Group* meetings to provide information and guidance on CCF policies, regulations, and procedures.

IFCPP/Uganda also created groups for program implementation and transfer of skills. Farmers were organized into participatory research and extension (PRE) groups to reach all farmers in the region and encourage a

bottom-up approach. Farmers and extension workers in each group used the PRE four-step process: 1) identify major problems, 2) find possible solutions, 3) try out different identified solutions, and 4) evaluate outcomes of the trial.

Other programs provided services and skills-building interventions through groups, as discussed in other sections: village banks and solidarity groups of FOCCAS/Uganda, farmers groups of IFCPP/Uganda, and various associations and groups in Ssembabule/Uganda.

### 6.3 Coordination with ongoing programs

Coordination and collaboration with ongoing programs varied greatly among those included in the assessment. NGOs tended to operate more in isolation than government programs, though this was not always the case. For example, the country assessment report of CCF/Kenya does not describe any systematic cooperation with other programs in the area. GRHRP/Uganda, managed by the NGO World Vision, works together with other World Vision projects in the area.

In contrast, some programs rely heavily on their cooperation with other programs to improve nutrition outcomes, offering services based on comparative advantage. IFCPP/Tanzania provides inputs in the food production/availability sector, while CSPD/Tanzania addresses the health and behavior aspects. IFCPP/Tanzania also cooperates with the district council in the region, in part because it was initially a joint venture with the Ileje District Council, Community Development Trust Fund, and COOPIBO. The district council provides extension workers and transport facilities such as vehicles and fuel.

IP/Tanzania and CSPD/Tanzania, often called “sister” projects, also collaborate closely. IP joined forces with CSPD after IP had been in operation for many years to strengthen its nutrition interventions, including the GMP program. The assessment team noted that the two projects are so closely integrated that beneficiary populations are unsure of the origins of project activities and inputs. Although it is not clear why programs in Tanzania seem to be collaborating most effectively among the three countries, some reasons are apparent. The small size of the donor community makes communication and co-

operation easier. Also, use of a commonly accepted conceptual framework of the causes of malnutrition in the country is widespread among programs in operation. And finally, the coordinating role played by the Tanzania Food and Nutrition Centre (TFNC) among nutrition programs could be another reason for this effective collaboration.

## 6.4 Staff remuneration and incentives

Community-based workers need adequate remuneration or incentives, whatever form these take. This was particularly true for the Kenyan programs. Community resource people (CRP) in CBNP/Kenya are volunteers. Although they receive training, which is intended to serve as an incentive, the dissatisfaction and turnover of CRPs indicates that it is insufficient. The TBAs in these communities are paid directly by their clients.

In several projects, provision of equipment and transport for community workers suffices as remuneration. In the IP/Tanzania program, for example, CBDAs and VHWs receive bicycles and pumps, uniforms/shoes, raincoats or umbrellas, diaries, and register books. IFCPP/Tanzania gives village extension workers bicycles and ward extension workers motorcycles for transport. In addition, both receive a nominal fee payment. CSPD/Tanzania found that poor remuneration of VHWs did in fact result in their dropping out, declining GMP activities, and poor quality of community-based GMP data. In sum, the context must be evaluated before determining appropriate staff remuneration and other incentives.

## 6.5 Leadership

Effective, dynamic leadership was frequently cited as an element of success. Financial management and transparent accountability were issues for many programs. A lack of trust exists in some programs where these transparencies are absent. Flexibility and timeliness in fund allocation for activities outside the budgeted activities was also valued. GRHRP/Uganda project officers are able to approve up to 3 million Tshs (approximately \$3,750) to handle problems that arise.

*“The quick response of the donor and regular supervision to the project area also create confidence and mutual working relationship”*

(GRHPP/Uganda)

## 6.6 Information systems

All 10 program assessments called for information to be exchanged more readily at all levels. The CCF/Kenya program provides an effective model for monitoring and information sharing. Information entered on family cards (including parents' knowledge, primary health care indicators, and year of enrollment) is fed into the Standard Impact Tool for Evaluation (SITE). The SITE, which is updated annually and sometimes semiannually or quarterly, summarizes these data on one page and provides the status of the population at each project site. The data collected on the SITE are analyzed at all levels of the program—Focus Group, zonal committee, project management committee and office, and the national office. Red flags are raised where SITE data indicate problems. Actions are subsequently prioritized and targets set. Another one-page format for listing priorities and interventions, called the Tool Used for Focus (TUFF), facilitates selection of the priority intervention. This allows the project to maximize effective use of time and other resources. Several programming staff participating in the assessment indicated that while program information is fed into national information systems, action is taken or follow-up response is received very infrequently.



## 7 Evolution, Sustainability, and Scaling up

A community nutrition program may also be examined with respect to its future prospects in the community and beyond. The assessment identified the following lessons learned pertaining to sustainability and scaling up or replicability of program models:

- ✓ Community commitment of human resources, with active engagement in the program;
- ✓ Financial viability ensured by donors, with funding sustained for over ten years and self-financing in place through revolving loans or community contributions for services;
- ✓ Organizational and legal frameworks established, including community and women's groups; by-laws created;
- ✓ Preplanning and careful program documentation undertaken early in program; and
- ✓ Gradual consultative scaling-up in three phases: pilot, expansion, and dissemination.

### 7.1 Sustainability

A program may be deemed successful by virtue of its improved outcomes in the short term, but such effects may not endure, particularly if there are deficiencies in the *process* through which they were achieved. Process factors are critical for sustained success and should be assessed to capture the totality of change. Process relates most importantly to

the means through which changes are occurring in people's power, capabilities, and behaviors. Participation, ownership, and empowerment are important aspects of such a process and for long-term sustainability. If real sustainability is to be taken seriously, then the process through which nutrition improves should be seen as part of the ultimate goal, not just the means.

Creating sustainability in nutrition programming may mean that more time is required. Certain problems may be solved rapidly with top-down, vertical, and outcome-focused programming, yet such changes may prove to be

transient and cosmetic in the long run. Ultimately the aim should not be to produce a sustainable program or project, but rather to create and sustain nutrition-improving *processes*. Fostering ownership must be integral in these processes. If a project or program is to be truly successful, then it needs to become part of the way of life, embedded in routine behaviors and actions.

Consideration should be given to sustainability during the planning and implementation stages. The following factors were found in the assessments to be particularly impor-



(ANP–Kenya)

tant: human resource commitments, financial viability, and organizational and legal frameworks.

First, *human resource commitment*. Being community-based and drawing on community members for staffing and volunteers helps to ensure this commitment. All 10 programs have engaged communities to the point of ownership and created a willingness to continue program activities. Capacity building and training of CHVs, TBAs, CBDAs, VHWs, and so on is an investment with sustainability payoffs. Notably, human resource commitment is highly dependent on the other two factors, financial viability and organizational/legal structures.

The second factor, *financial viability*, is probably the most critical. The ideal is to be ultimately nonreliant on donor funding. But this may require *longer-term resource commitment from donors* to ensure continuity of activities and livelihood security of staff. CBNP/Kenya, for example, has received funding from the Danish government since 1979, completing three project phases. IF CPP/Tanzania has also had over 10 years of consistent donor support from COOPIBO. Recognizing that it cannot support IF CPP indefinitely, COOPIBO has taken steps to institutionalize the program in the region. It has assisted VECO to acquire its own NGO status, and worked very closely with the Ileje District Council to build capacity and commitment over the long term. Both of these programs have benefited from not having to spend time searching for follow-on funding.



(ANP–Kenya)

*Self-financing* is the long-term goal of a program. FOCCAS/Uganda provides the best example of this. FOCCAS established operational systems and credit associations during a pilot phase. The recovery rate on loans is almost 100%, with collection of 12% interest per 16-week loan cycle, ensuring that the program pays for itself and eventually grows.<sup>3</sup> During the expansion phase, the program established additional credit associations to achieve financial self-sustainability and perfected its operational systems. FOCCAS expects sustainability to be achieved three to five years after start-up in most areas.<sup>4</sup> Other mechanisms for self-financing have been put in place by other programs. Community members in the IP/Tanzania program contribute to water and health funds. They reported to assessment teams their willingness to continue contributing for services provided to improve their health. However, villagers called for more transparency in the use and amount of funds collected for this to continue. Considerable contributions in labor from communities are made in the CSPD/Tanzania program for construction and rehabilitation of structures and roads as well as financial contributions.

<sup>3</sup> Caution may be required in interpreting the 100% recovery rate and the financial viability of women. Anecdotal evidence is beginning to be collected that women may be borrowing from friends and relatives to pay back loans, thereby incurring additional debt.

<sup>4</sup> Although financial viability seems possible, the sustainability of the nutrition education session remains in question largely because capacity is still lacking in field agents, and partnerships with other programs have not been prioritized.

*“Although it is not only the effect of one project, it was found that families recognized nutrition as a right to any member of the community, especially children”*

(IP/Tanzania)

The final factor essential for sustainability is the *organizational and legal frameworks* established to continue program activities. Several of the programs in the assessment worked through existing or newly created community groups, most of ten women’s groups. This strategy not only provides effective delivery of services, but also increases the likelihood of continuation and institutionalization of services and activities. Ssembabule/Uganda supported MAWODA, the women’s development association that has now inspired other local

groups to launch their own income-generating activities and request assistance from donors. The Kanini Kaseo Group A has assisted several more women to form Group B, which receives no assistance from ANP/Kenya. Instead, the group is self-sustaining with contributions from members and support from Group A. This phenomenon has occurred in several other programs, where groups have spawned other groups to form and mobilize for action and funding. CSPD/Tanzania has inspired the creation of a new NGO called *Hai Gender Initiative* and several others during the life of the project.

In the Tanzania programs in particular, by-laws have been put in place aimed at sustaining programs and household behavioral changes. The Hai District Council 1990 has enacted several by-laws, including the Hai Education Trust Fund, the Hai Maternal and Child-care Service by-law (described above), the Hai District Water Source Conservation by-law, the Universal Primary Education Fund, the Environmental by-law, and the Forty Percent of Developmental Levy. In the IP/Tanzania program, village governments actively enforce nutrition-relevant actions and have established by-laws to ensure that children are taken to clinics for immunization and growth monitoring. In combination with other efforts in the country, these by-laws have instilled a sense of nutrition as a right.

## 7.2 Scaling up

Understanding how a program evolves helps to provide insights into its dimensions today and its likely future. An interesting commonality among several of the programs was the transformation of relief activities into development. Many projects were initiated to serve severely malnourished children through rehabilitation programs but in recent years have begun phasing out these activities. For example, CBNP/Kenya currently operates only 3 of its original 11 nutrition rehabilitation centers and will phase these out by the end of this project phase.

Another similarity in the evolution of many of the programs is the transition of top-down to bottom-up approaches to nutrition programs. Communities have become gradually more involved. Many programs continue to emphasize the food-based determinants of malnutrition, and, consequently, programs in the agriculture sector concentrating on food production. Yet, there is clearly growing recognition of the multisectoral nature of malnutrition problems, reflected in the inclusion of health, water, and sanitation components in programming.

Inputs from the agricultural sector and activities related to food production and handling led to the adoption of the food cycle model of planning nutrition programs. Consequently, food production, processing, quality control, and food development received considerable attention. But the unisectoral nature of the model limited its utility. Carefully planned nutritional surveys also revealed the socioeconomic-related causes of malnutrition that the food cycle model was not addressing. In the process, the multisectoral and multidisciplinary nature of the problems of malnutrition became evident.

A more recent trend is to integrate programs with interventions intended to address micronutrient deficiencies. Most programs in the assessment have some component dedicated to improving micronutrient status of populations. More attention is needed, however, to assess the micronutrient problems in the region and find effective programming options. Another area in which programs will likely evolve and replicate is nutrition and HIV/AIDS, e.g. concerning nutrition care and support, mother-to-child transmission (MTCT), and the food and nutrition security implications of the pandemic's spread.

Most of the programs participating in the assessment have at some stage scaled up operations, some more than others. GRHRP/Uganda, for example, has replicated both its Gulu Food Security Project and Gulu Relief and Health Rehabilitation Project in the neighboring district of Kitgum, which faces similar problems of insurgency and displacement. Phase III of CBNP/Kenya was titled a demonstration phase in which the University of Nairobi Applied Nutrition Programme was contracted to implement the pilot program using participatory approaches (PANS and PRA). PANS was piloted in 26 communities served by the Mbooni center in Makueni District, Eastern Province. The model was then replicated, with modifications, in 15 additional communities. During Phase IV of the program, the Department of Social Services proposes to replicate the model in 228 communities over the next five years, with three communities per division in each of the 14 districts where CNNP is located.



(IP-Tanzania)

FOCCAS/Uganda, again, provides a useful model for sustainability and scaling up. One of the objectives of the program is *"To develop, implement, and document a replicable credit with education system, including organization and training systems as well as credit delivery and management systems using the FFH Burkina Faso Credit with Education program as a model"* (FOCCAS/Uganda). As described above, FOCCAS/Uganda began with a two-year pilot phase and later expanded within the pilot zone, creating more credit associations and perfecting the operational system, with the objective of achieving financial self-sufficiency.

In sum, the processes for sustaining relevant activities and scaling them up to maximize impact require preplanning and careful documentation before and during operations.

## 8 Conclusions

The key success factors from the country assessments have been identified and categorized according to the chronological phase of program development.

Similar to other reviews in Asia and Africa, this assessment has emphasized understanding the *processes* involved, or the “how” questions of program development, implementation, and expansion. Several important content-related (“what”) factors were also highlighted—for example, the particular characteristics that determine the effectiveness of growth monitoring and promotion programs that continue to be used in nutrition programming in East Africa. Particular forms of nutrition education, such as nutrition behavior change communication and participatory community theater, were found to be successful. Such models of nutrition programs merit further analysis for their direct association with nutritional outcomes.

Another important conclusion is that both *contextual factors* and *program-specific factors* are relevant and important. The degree to which program implementers can influence the context is limited, at least in the short term. A two-pronged approach is thus called for—first, to catalyze the development of programs where the context is favorable and, second, to devote more efforts to fostering the enabling contextual factors—through advocacy and social mobilization at all levels.

While there was sufficient evidence to suggest that these programs were successful in broad terms in relation to their objectives, the *monitoring and evaluation components* in general were not strong. This is a common problem with community-based nutrition programming—a problem that has to do in part with the difficulties in measuring nutrition-relevant outcomes and attributing them to specific program activities. Also, insufficient resources are committed to determining impact. Adequate budget lines need to be dedicated to evaluation and to the development and maintenance of action-oriented management information systems.

Other gaps between recent research evidence and program practice need also be addressed. For example, many of the programs target children under five years of age using nutritional status as an indicator. If growth failure is to be prevented, then activities

should be focused on the first 12–18 months of a child’s life, with growth velocity being tracked. Among the various strategies to promote optimum breastfeeding and complementary feeding practices, *capacities* should be developed to enable such caring practices. The food bias seems to linger in several of these programs, despite strong evidence showing the importance of care- and health-related causes of malnutrition. There does, however, appear to be a positive trend toward recognizing and acting on the nonfood causes.

The lessons that were learned from these assessments and in-



(SCSP–Uganda)

cluded in this report could now be applied at several levels of policy and programming and used by a wide array of audiences: donor agency executing organizations (governmental and non-governmental), communities, and policy makers. The lessons could be used as

- Programming guidelines for NGOs and government staff designing new initiatives;
- Policy guidelines for investments in a country-level effort to improve nutrition; and
- Motivation for additional work on monitoring and evaluation efforts linking interventions with nutrition outcomes and documenting particular programming models.

Ultimately, it is hoped that careful documentation of these lessons may prove to be of benefit to communities, program managers, governmental and non-governmental organizations, and others involved in community-based nutrition programming in the sub-Saharan Africa region.

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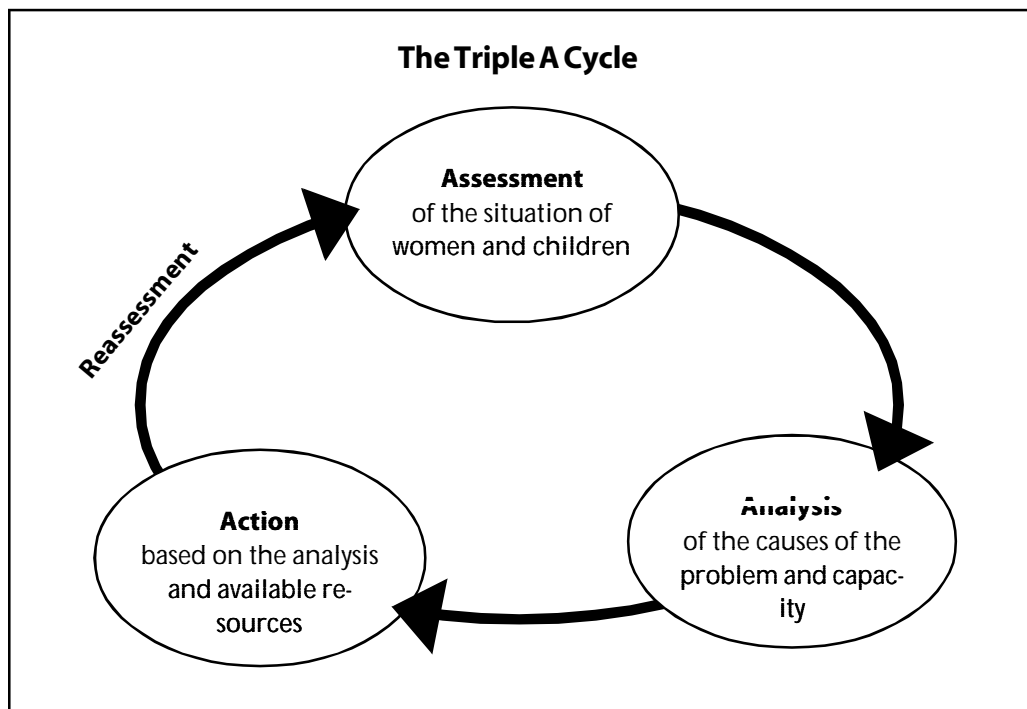
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## **Annex 1: The Triple A Cycle and Conceptual Framework of the Causes of Malnutrition**

The Triple A Cycle is essentially a sequential problem-solving, decision-making process of assessment, analysis, and action that individuals and communities undertake in their daily lives for many different reasons. When each step in the process is clearly articulated, appropriately focused action can be undertaken to deal with complex problems such as malnutrition. The Triple A has been described as no more than “common sense,” but it is much more: it is an explicitly democratizing tool that, when institutionalized, helps to avoid premature decisions made on actions without a clear consensus among stakeholders on the main causes of the problem. Through each iteration, the Triple A cycle helps to improve the relevance, focus, and targeting of actions.

Another essential requirement of this process is full participation. Community ownership is fundamental to sustainability, but ownership does not only mean a role in implementation; it means pro-active involvement at all stages in the Triple A, from problem assessment to monitoring and evaluation (reassessment).



- *Assessment:* The Triple A cycle starts with assessment, whether it is the mother who assesses the growth of her child, the community that assesses the nutrition situation, or the Ministry of Health that assesses trends in infant mortality rates. The decision to assess is dependent on awareness and commitment. The quality of the assessment is dependent on existing views concerning the nature of the problem. Awareness, commitment, and views depend on the information available and the capability to understand it.
- *Analysis:* After an initial assessment of the situation, analyses of positive and negative processes follow. The causes of malnutrition may be complex. Some are general, oth-

ers are very context specific. It is likely that the whole exercise will be more successful if it is done by a combination of people who live with or very close to the situation under review and people who are trained and experienced in such analysis. In addition to the causes of malnutrition, the quantity and quality of existing and potential resources and capacity must be analyzed.

- *Action:* Based on this analysis of causes, and an assessment of available and potential resources, actions can be designed and implemented. However, most situations change, and many will not necessarily improve with the first set of actions. The first actions may, nonetheless, contribute to a new situation that is conducive to other actions that were not feasible before.
- *Reassessment:* After the situation has been assessed and analyzed and actions have been implemented, it is necessary to reassess the impact of the actions taken and to reanalyze, taking into account this change. This process will then lead to further actions, which are likely to be more effective and better focused because they are based on a better understanding of the problems and on practical experience gained. Monitoring and evaluation are processes of reassessment—the former for management purposes and the latter to assess the degree of overall success or failure of the project.

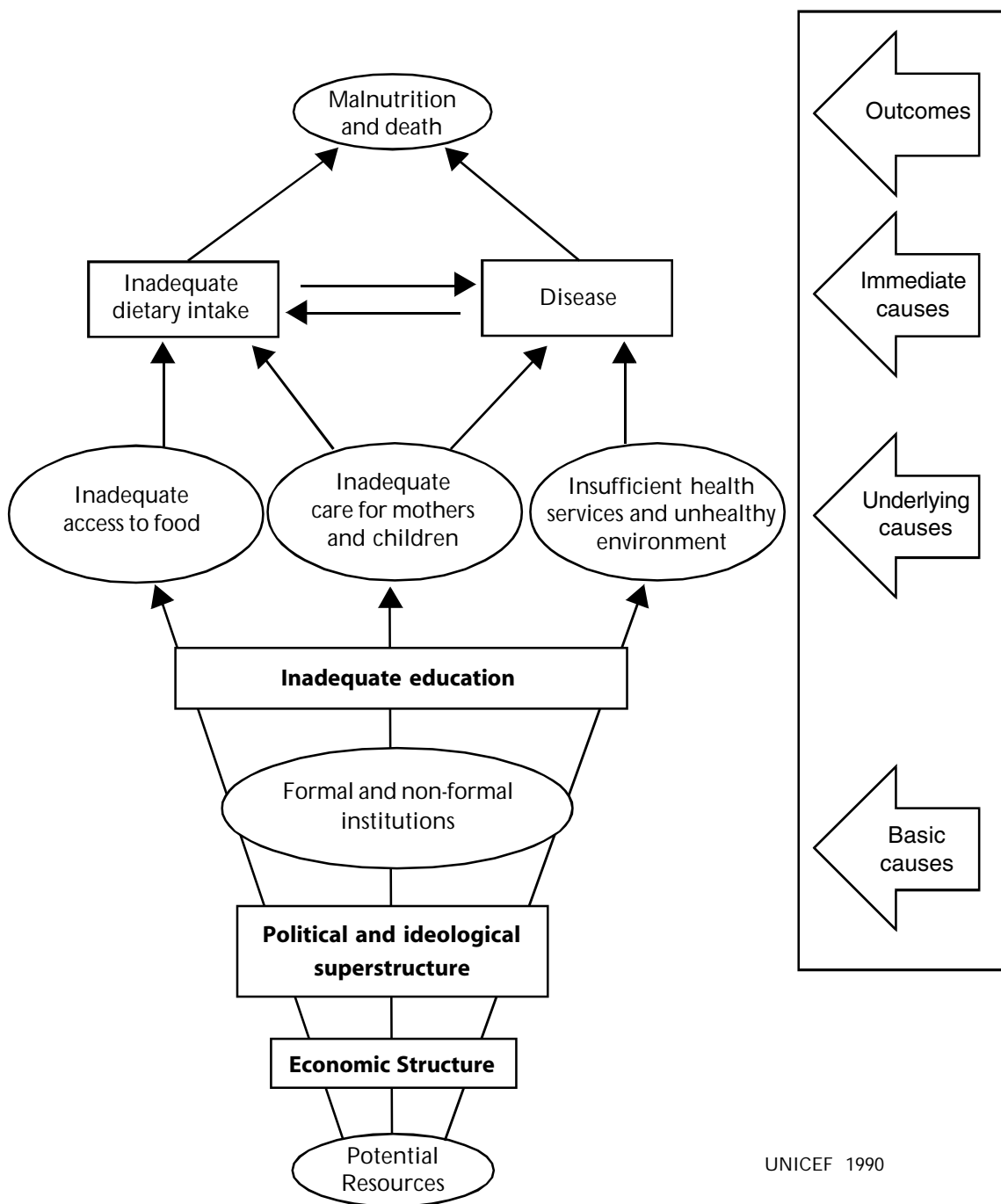
Assessment, analysis, and action are all dependent on current views of the nature of both the nutrition problem and existing positive and negative processes in society. People may agree on the existence of a problem based on visible and dramatic manifestations such as severe malnutrition, but they may disagree on the causes of the problem. If there is disagreement on what causes the problem, there is probably also disagreement on actions that should be taken to alleviate it. An explicitly formulated **conceptual framework** will help identify and explain both positive and negative processes contributing to the current nutrition situation.

The conceptual framework can serve as a guide in decisions about what should be assessed, how causative relationships should be identified and analyzed, and what objectives should be set for the actions selected. It is a “pair of glasses” to guide us in what to look for.

The following criteria are desirable for the development of a conceptual framework:

- Clearly show how various processes in society affect the situation of children and women, particularly malnutrition.
- Facilitate identification and analysis of the causes of the situation and, at the very least, include a set of hypotheses about which are the most important causes.
- Accommodate the potentially multisectoral nature of the situation by being comprehensive enough to accommodate all possible main determinants, but also facilitate reduction to the most important determinants in a given context.
- Facilitate a dialogue among people of different professions, which helps to guard against the common tendency to assess and analyze a situation according to professional, institutional, or personal preconceptions or even biases.
- Facilitate consideration of the time dimension (history, seasonality, and etiology).
- Accommodate analysis of processes at different levels of society, desegregating data according to geographic areas, age, sex, and socioeconomic groups.
- Be easy to popularize and thus facilitate communication, training and mobilization.

### Conceptual framework for the causes of malnutrition in society



In a given context, the initially formulated conceptual framework will change and become more focused as reassessment, reanalysis, and so on take place. Such refinement should be achieved through a broad-based consensus-seeking process.

The key assumptions of the framework are the following:

- Nutritional status is an outcome of processes in society.
- Malnutrition is a result of immediate, underlying, and basic causes occurring hierarchically.
- The necessary conditions for nutritional well-being (nutritional security) are access to food, adequate care of children and women, and access to basic health services, together with a healthy environment.
- The potential for fulfilling three of the necessary conditions (food, health, and care) for nutritional security is determined by availability and control of resources (human, economic, and organizational).
- The choice and use of resources in efforts to achieve the necessary conditions for nutrition security are influenced by education.
- The availability and control of resources are determined by previous and current technical and social conditions of production and political, economic and ideological/cultural factors.

## Annex 2: Nutrition Packages

### **The Nutrition Essentials Package**

#### **Health Sector Strategy to Improve Infant, Young Child, and Maternal Nutrition**

##### *Essential Actions*

The Health Sector Strategy adapts and builds on the one developed by the BASICS Project in 1997. The strategy focuses on a package of **essential actions** at the health facility and community levels to improve the nutrition of pregnant and lactating women and children under two years of age. Other components of the strategy include quality assurance, monitoring and evaluation, capacity building, and advocacy.

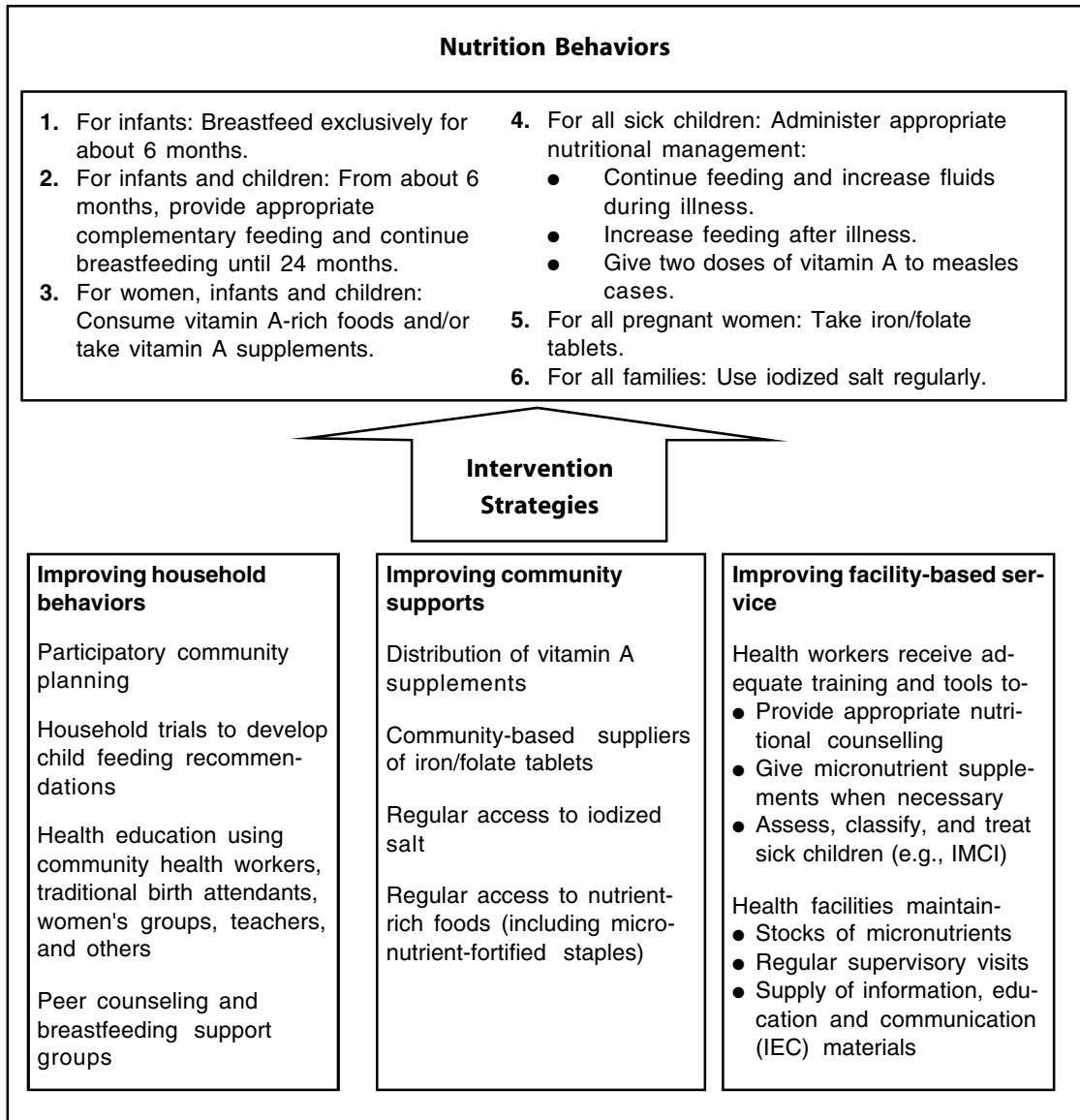
The essential actions, detailed in tools and papers developed for the strategy, are based on existing evidence of their feasibility and effectiveness in improving child and maternal survival, health, and nutrition. They can occur during six contact points (antenatal, delivery and immediate postpartum, postnatal, well-baby and immunization, sick child, and family planning). To guide and remind health care providers of these actions, LINKAGES/AED supported the development of a wall chart and nutrition job aids for regions with high and low HIV prevalence. Six orientation modules (one for each health sector contact point) are available to inform, prepare, and motivate health workers to implement these actions. Each module can be completed in two to two-and-a-half days.

##### **Ten Priority Outcomes**

The objective of the essential actions is to achieve ten priority outcomes to improve infant, young child, and maternal nutrition.

1. Prevention and treatment of malaria during pregnancy in endemic areas
2. Prevention and treatment of hookworm infection during pregnancy in endemic areas
3. Adequate food intake during pregnancy and lactation
4. Adequate micronutrient intake (particularly iron) during pregnancy and lactation
5. Exclusive breastfeeding for about the first six months
6. Adequate complementary feeding starting at about six months, along with continued breastfeeding to 24 months and beyond
7. Adequate intake of iodine (iodized salt) by all members of the household
8. Adequate intake of vitamin A by all women, infants, and young children
9. Appropriate nutritional care of sick and malnourished children
10. Birth spacing of three years or longer

## The Nutrition Minimum Package Intervention Strategy



The MINPAK approach is being implemented in five African countries through integration with routine maternal and child health activities.

*Source: Tina Sanghvi & John Murray. Improving Child Nutrition through Nutrition: The Nutrition Minimum Package, BASICS, 1997.*

## Annex 3: Summary Information Of 10 Community Programs

Name of Project (Operating Dates)	Implementer and Donor Agencies	Population coverage	Goals/Objectives	Donor Contributions (approximate) US\$	Nutrition and Related Interventions	Nutrition and Related Outcomes
Applied Nutrition Program, Kenya (1986–present)	African Medical and Research Foundation (AMREF) <b>Donor:</b> Spanish Agency for International Cooperation (AECI)	49,000 inhabitants in Makindu and Mito, Divisions of Makeni District	<b>Goal:</b> “Child health status improved in Makindu and Mito Divisions of Makeni District.” <b>Purposes:</b> “1) Nutritionally vulnerable households using appropriate skills and technologies for promoting livestock, crop production, and income generation; 2) Accessibility to safe drinking water increased at household level; 3) Mothers using appropriate technologies to improve feeding practices for children under 5 years.”	NGOs and foundations (1986–1994): \$60,000 per year; EU and IFAD (1994–96): \$100,000 per year. Spanish Agency for International Cooperation (1998–2000): \$380,000 per year. Approximately \$4 per capita per year.	*GMP—project trained 116 CHWs and TBAs to do GMP in 18 centers * Women’s Groups, support for improved food production (drought-resistant crops; initiation and maintenance of seed banks; systems management; and distribution of loans through “merry-go-rounds”) <b>Related:</b> Water (pipelines), sanitation, food production, livestock, diarrheal disease management, etc.	* Breastfeeding more frequently and longer (but still not EBF) * Complementary food diets improved, more variety. Improved food hygiene practices <b>Related:</b> Improved sanitation. Malaria (67% in last 4 weeks); cough 91.2%; and diarrhea (5 %). Crop diversification.
Christian Children’s Fund Programme Kenwa Child and Family Project in Kiambu, Kenya (1995–present)	Christian Children’s Fund (CCF) <b>Donor:</b> CCF	38,000 children throughout the country	Among several health objectives: “To reduce rate of malnutrition of under-fives and their siblings from 20% to 0%.”	\$12 or more per child by sponsors until age 15 yrs, but benefits whole family. 20% administrative costs, and 80% program. Costs minimized with few vehicles (3), facilities and equipment.	* Early Childhood Development Centres with food provided * Nutrition education by social workers to households and focus groups * GMP * Focus groups (15 parents and social worker) decide interventions most needed. “merry-go-rounds” <b>Related:</b> interventions in health, education, sanitation, water, food production	* Improved knowledge and awareness of kwashiorkor and marasmus * Improved behavior; EBF for 5–6 months instead of 1–2 months * Improved diets to include balanced meals, micronutrient rich foods (kale) * Feeding frequency from 2-3 times a day to 4-5 times a day

Name of Project (Operating Dates)	Implementer and Donor Agencies	Population coverage	Goals/Objectives	Donor Contributions (approximate) US\$	Nutrition and Related Interventions	Nutrition and Related Outcomes
Community-Based Nutrition Program, Kenya (1997–present)	Government of Kenya, Department of Social Services under Ministry of Home Affairs, Heritage and Sports <b>Donor:</b> DANIDA	Inhabitants in Mbooni Division (pilot), Kisau Division of Makueni District	<b>Development Objective:</b> "Welfare of families improved in the CBNP service areas." <b>Purpose:</b> "Malnutrition among children under five years of age in CBNP reduced."	DANIDA contributions Phase I-II (1980–1994): \$187,000 per year. Phase III (94–99): \$670,200 per year. GOK contribution \$156,000 per year About \$95,000 per community for 5 years. Next phase \$30,000 per community.	<ul style="list-style-type: none"> <li>* GMP</li> <li>* Training (through CRPs) in health and nutrition, organic farming, and water protection</li> <li>* PANS Nutrition Information System and Community Actions Plans (CAPS). Triple A cycle</li> <li>* Participatory educational theater (PET). Project trained troops to perform drama, puppetry, or songs on social and health themes.</li> </ul>	<ul style="list-style-type: none"> <li>* Mothers keep babies (6-12 months) with them; take babies to farm. Begin giving complementary foods 4-6 months.</li> <li>* More mothers use TBA for deliveries. Longer birth spacing.</li> <li>* Use variety of foods for children; measured portions given to children.</li> <li>* More mothers using GMP sessions.</li> </ul> <p><b>Related:</b> Alcoholism down. Hygiene practices improved.</p>
Child Survival, Protection and Development Programme in Hai District Tanzania (1987–present)	Government of Tanzania <b>Donors:</b> UNICEF and District Council	250,000 inhabitants living in Hai District	Overall objective: "To alleviate malnutrition and improve the livelihood of people." Specific objectives among others: ** To improve water and environmental sanitation; * To improve the knowledge and understanding of community members regarding normal growth pattern of young children; * To monitor growth of children at household level."	\$3.21 per child per year. \$614,000 from UNICEF 1997-99 Hai District Council contributions for children and women: 1999: \$2,922 1998: \$2,750 1997: \$3,343	<ul style="list-style-type: none"> <li>* Training and establishment of 2 VHWs per village; 65 health posts established</li> <li>* VHW conduct GMP give health and nutrition education and demonstrations.</li> <li>* Institutionalized day care centers and preschools</li> <li>* <i>Moto wa Hai</i> (Hai Child) booklets for caring practices of children 0–6 years</li> </ul> <p><b>Five integrated projects:</b> water and environmental sanitation, health services, maternal and child health (deworming, ORT), household food security (irrigation, diary cattle breeds), and project supervision and management <b>Related:</b> Literacy; HIV/AIDS transmission</p>	<ul style="list-style-type: none"> <li>* District annual review reports between 1988 and 1999: W/A dropped 70% for children under 80% of standard W/A; 80% for children under 60% W/A. Infant mortality reduced by 18%; childhood mortality reduced by 44%.</li> <li>* Improved colostrum, breastfeeding practices</li> <li>* Improved feeding frequency and quality of complementary foods.</li> </ul> <p><b>Related:</b> * Improved water situation, food security, literacy, sanitation. * Positive impact on knowledge, attitude, and commitment of decision makers at household and community levels.</p>



Name of Project (Operating Dates)	Implementer and Donor Agencies	Population coverage	Goals/Objectives	Donor Contributions (approximate) US\$	Nutrition and Related Interventions	Nutrition and Related Outcomes
Ileje Food Production Project, Tanzania (1989–present)	Vredeseclanden COOPIBO (VECO) Donor: Belgium International Association for Development Cooperation (COOPIBO)	106,000 inhabitants in Ileje District, Mbeya Region	<p><b>Aim:</b> “To improve small-scale farmers’ living standard through increased food production.”</p> <p><b>Specific goal:</b> “* To increase production of food crops in sustainable way through use of Resource Efficient agriculture (REA) technique, through use of locally available resources whenever possible, and strengthening the organizational skills of small holder farmers.”</p>	<p>1997: \$77,000 Proposed expenditures in District Council pay for extension worker salaries</p> <p>1998: \$91,000 District Council worker salaries</p>	<p><b>Food security interventions:</b></p> <ul style="list-style-type: none"> <li>* Training related to agriculture extension at Ileje Training Centre. “Look and learn visits” to share knowledge among farmers.</li> <li>* Community participation in building Farmers Service Centre, in planning activities: oxen mechanization, farm trials, farmers days, seminars, and training</li> <li>* Farmers organized by project into groups (PRE Groups); advisory committees for each group share experience through MVIWAI network—farmers communication network</li> <li>* Installation of water taps</li> </ul>	<ul style="list-style-type: none"> <li>* More foods available: paddy, maize, beans, potatoes, finger millet.</li> <li>* Increased production of maize.</li> <li>* Expanded use of fertilizers, good cereal storage technologies, and irrigated agriculture.</li> <li>* Improved livestock.</li> </ul>
Micronutrient and Health Project (MICAH), Tanzania (1997–present)	World Vision Donors: USAID, World Vision	197,767 inhabitants. 3,250 under 5 years old 9 regions in Korogwe and Handeni Districts	<p><b>Objectives:</b> “* To reduce the prevalence of micronutrient deficiencies through increased access to and intake of micronutrients, particularly vitamin A and iron;</p> <p>* To reduce prevalence of diseases that affect micronutrient status (diarrhea, parasites, and vaccine preventable diseases);</p> <p>* To build local capacity for delivery systems to improve micronutrient status.”</p>	<p>US\$4,400,000 per year.</p> <p>Seventy-two development projects in the regions of Tanzania benefiting 2 million</p> <p>Approximately \$2.2 per capita per year.</p>	<ul style="list-style-type: none"> <li>* GMP</li> <li>* Community members trained to be VHWs and TBAs.</li> <li>* Nutrition and health education being provided by VHWs, TBAs, and staff nurses</li> <li>* Improve school and health facilities and accessibility to health services</li> <li>* Community-based nutrition rehabilitation</li> <li>* Promotion of nutrition essentials, positive behaviors</li> </ul> <p><b>Related:</b> Linked to Area Development Programme (ADP) in which agriculture, water, education, and health projects being implemented</p>	<ul style="list-style-type: none"> <li>* Severe underweight prevalence reduced from 25% to 10% in Mzundu dispensary</li> <li>* Awareness among community members about children in “red” on growth chart</li> <li>* Villages each with 2 trained VHWs and 4 or more TBAs</li> <li>* More pregnant women seeking MCH services at health facility, mobile services, and from trained TBAs</li> <li>* Colostrum being given; children eating more frequently; food taboos disappearing</li> </ul> <p><b>Related:</b> Maize seeds, cassava cuttings and pesticides to community. Vegetables improve household incomes. Toilets in 50%–70% of household, compare with 20% at outset of project.</p>

Name of Project (Operating Dates)	Implementer and Donor Agencies	Population coverage	Goals/Objectives	Donor Contributions (approximate) US\$	Nutrition and Related Interventions	Nutrition and Related Outcomes
Sustainable Integrated Reproductive Health Services Project (IP), Tanzania (1999)	Family Planning Association of Tanzania UJMATI <b>Donor:</b> Japanese Organization for International Cooperation in Family Planning (JOICFP)	590,037 inhabitants in 3 regions of Kilimanjaro, Morogo, Mwanza Adolescent girls and boys, schoolchildren, and children under 5 years	Objective: "To improve accessibility and provide sexual and reproductive health information and services to underserved rural and peri-urban population through multipronged community based service delivery approaches."	1998: \$170,000	<ul style="list-style-type: none"> <li>* GMP (follow-up visits, advisory services)</li> <li>* Behavior change (reduce women workload, breastfeeding child feeding)</li> <li>* Control of micronutrient deficiencies (home gardening)</li> <li><b>Related:</b> * Promotion of family planning services through CBDAs</li> <li>* Disease control such as intestinal worms through mass deworming and improvement of latrines.</li> <li>* Income-generating activities (dairy goats, fish ponds, sewing machines, milling, carpentry)</li> </ul>	<p>Severe underweight: 7% (1995) to 1% (1999) Moderate underweight: 43.7% (1995) to 40.6%</p> <ul style="list-style-type: none"> <li>* Most pregnant women and some men attending clinics</li> <li>* Increase in use of contraceptives by both men and women</li> <li>* Awareness that breast milk alone suffices for 4 months; importance of colostrum; children need more meals; restriction of foods because of taboos decreased</li> </ul> <p><b>Related</b></p> <ul style="list-style-type: none"> <li>* Reduced women's workload (milling machine, deep wells for water installed, mortar and pestle, solar dryers to preserve fruits)</li> <li>* Food security, health, water, education, family planning, housing, roads improved.</li> </ul>
Foundation for Credit and Community Assistance (FOCCAS), Uganda (1996–present)	FOCCAS <b>Donor:</b> Freedom from Hunger (FFH)	16,000 targeted women in Mbale and three other districts	* Develop a self-sustaining credit with education program through organization and provision of credit services and education services to women. * To develop methods, materials, and management systems for nutrition and economic education for credit association members. * Other related credit education objectives	Year 1 ('98): \$655,000 Year 2 ('99): \$956,879 Approximately \$40–\$60 per beneficiary per year	<ul style="list-style-type: none"> <li>* Loans starting at \$44 given to women in solidarity groups of 4-7. Market interest rate (12%) charged; 5% expected to be saved per 16 week loan cycle</li> <li>* Credit with education sessions offered over loan cycle. Topics of education include:                         <ol style="list-style-type: none"> <li>1) Breastfeeding promotion;</li> <li>2) Infant and child feeding;</li> <li>3) Birth timing and spacing;</li> <li>4) Diarrhea treatment and prevention;</li> <li>5) Immunization</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>* Increased consciousness of care-giving practices</li> <li>* Colostrum to their newborns.</li> <li>* Mothers breastfeed within first hour of birth</li> <li>* Awareness of types of porridge and when to begin giving complementary foods</li> </ul> <p><b>Related:</b> Women's solidarity and community action. Women's financial viability and self-sufficiency.</p>

Name of Project (Operating Dates)	Implementer and Donor Agencies	Population coverage	Goals/Objectives	Donor Contributions (approximate) US\$	Nutrition and Related Interventions	Nutrition and Related Outcomes
Gulu Relief & Health Rehabilitation Project (GRHRP), Uganda (1996–present)	World Vision Donors: World Vision, USAID	24,306 in 5 relief camps of project targets internally displaced populations and hosts in Omoro and Kilak counties in Gulu district.	"1) Improve PHC in IDP camps in Kilak and Omoro counties, 2) Increase institutional capacity of community health services, 3) Facilitate IDP to have access to improved and safe water and sanitation facilities."	Year 1: \$291,630 Year 2: \$223,117 Year 3: \$247,717	* GMP of under 5s, W/A charts on health cards * Nutrition education for mothers of malnourished children * Demonstration gardens * Supplementation of vulnerable and/or undernourished children and moms using local foods * Deworming of all children in camps every 6 months	* Five feeding centers established targeting 3,500 mild to moderately malnourished children * Reduction in malnutrition. Severe weight for height from 5% (1998) to 2% (1999) * GMP established in 5 camps * Demonstration gardens established in each camp * Community capacity built through service training of community service providers, meetings, and regular supervision <b>Related:</b> Improvements in water and sanitation (protected springs, wells drilled, latrines, rubbish pit), deworming, immunization, food security
Ssembabule Child Survival Project (SCSP), Uganda (1993–present)	Minnesota International Health Volunteer (MIHV) Donors: USAID, Micronutrient Initiatives through PATH/Canada	6,500 infants 26,700 children 1–5 years 30,900 women Baganda and Banyankole ethnic groups in Kasangati county.	Increase from 39.3% to 50% the proportion of infants breastfed within one hour of birth. Increase from 35% to 45% the proportion of children age 20–23 months who are still breastfed. Increase from 39.6% to 50% the proportion of mothers reporting consumption of animal protein and other protein-rich foods.	Nutrition activities only (1996-2000): \$295,586 total \$73,896 per year (nutrition) Total Child Survival Project: \$1,333,334 \$333,333 per year Per capita expenditure per year \$5	* Vitamin A interventions: 240 teaching/resource gardens, demonstration gardens at every health unit, at number of schools, at TBAs' homes and community organizers' home * Gardens at women's or groups' homes * Seeds and seedlings provided, and subsequently sold to colleagues * Training to community volunteers, TBAs, immunizers * VAC distribution at immunization clinics, outreach, and NIDS * Women's groups trained on nutrition and provided goats for milk and meat, rabbits for meat <b>Related:</b> Drought-resistant crops, goat and rabbit production, food preservation, processing, and storage, caring practices (make toys from banana fibers, cotton pieces, etc), health, water, and sanitation, malana nets, HIV/AIDS	* EBF from 65% to 100% up to 4 months * Infants breastfed within 1 hour of birth, from 35% to 40.4%; within 8 hours, from 16% to 66.7% * Proportion of mothers reporting that oil, sugar should be added to complementary foods, from 3% to 67.6% * Proportion of mothers who report vitamin A-rich foods should be added to complementary foods, 25.5%