

# **Africare Field Manual on the Design, Implementation, Monitoring and Evaluation of Food Security Activities**

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Villagers working with Africare in the Uganda Food Security Initiative preparing a Food Security Calendar  
Photo by Suzanne Gervais

Nigerian Women participating in the Niger Food Security Initiatives activity explaining a Village Map during the Mid-term Evaluation  
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When Africare embarked on the preparation of this manual in 1995, it was in response to requests from field staff for a guide on how to facilitate a process for building the capacity of local communities to improve their food security. Both during the preparation of the manual and in workshops in the period since 1999 when the final draft was issued to the field staff, it has served as the basis for numerous training sessions. Some of this training was organized by the headquarters Food for Development Unit for field staff. The material in the manual was used in many more training sessions in the field, both for project staff, local partners and with the communities where Africare works. This second version, the 2003 edition, incorporates new material resulting from this process. It also has new purposes, including enhancing the effort to create monitoring and evaluation systems that will permit Africare to aggregate the results of food security activities in all its Development Assistance Programs (DAPs). There are currently seven DAPs operating in eight countries. Further, it will guide the effort to enhance implementation and sustainability of activities.

This manual owes much of its content and the format to the principal writer of the initial draft, Suzanne Gervais, who prepared all modules with the exception of module 7. Module 7 on Rapid Rural Appraisal/Participatory Rural Appraisal Methods was drafted by Karen Schoonmaker Freudemberger. Africare staff participated in the preparation of the manual from the inception as Suzanne began her work by reviewing files of Africare's most successful activities in technical areas related to food security. She also made a field visit to Guinea Bissau where Africare's initial P.L. 480 Title II food security activity was underway and to Senegal to observe the Kaolack Agricultural Enterprise Development project. In December 1997 Suzanne facilitated a workshop held in Ghana with field staff from all Africare's food security initiatives operating at that time as well as headquarter staff where the core modules of the manual were presented and discussed. Staff provided insights on data to be included and also identified areas where more information was needed.

Suzanne wrote her modules in French and Karen prepared Module 7 in English. When the draft was complete, Suzanne and Karen then worked together to prepare complete versions of the manual in both French and English. As a result, when the final draft was issued to the field in January 1999, it was available simultaneously in French and English. In the intervening period, the manual was used extensively by field staff in Burkina Faso, Chad, Eritrea, Ethiopia, Guinea, Mali, Niger, and Uganda. It was used much less in Mozambique as it was not available in Portuguese (this version will be translated into Portuguese).

This 2003 edition incorporates feedback from field staff based on their use of the earlier version of the manual, new methodologies of practitioners, and modifications in the approach of Food for Peace. Judy Bryson, Senior Technical Advisor, Food Security for Africare was responsible for editing this version with inputs from Ange Tingbo and Suzanne Gervais. Special mention is made of the contributions from Ahmed Moussa and Gourmar Aboubacrine, Mali project coordinator and monitoring and evaluation specialist respectively, Mohammed Saleh Radjab of the Chad activity, Maman M Laouali, the monitoring and evaluation specialist of the Niger program, Toni Adama, the monitoring and evaluation specialist for the Burkina Faso program, and the Guinea, and Uganda project staff. Last and most important, we acknowledge the contribution of the African participants in Africare food security activities from whom we have learned much more about surviving and thriving under the most difficult of conditions than we have taught to them.

## INTRODUCTION TO THE MANUAL

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### Introduction

Africare's food security interventions seek to sustainably improve the food and nutrition security of populations in Africa. The objectives of these programs are to:

- (1) improve food and nutrition security of local populations and
- (2) increase the capacity of these populations to analyze their situation and to develop and implement Community Action Plans oriented toward improving their food and nutrition security.

Household food and nutrition security means that food is available and accessible to everyone at all times. It also means that all family members receive the care and attention they need to ensure their consumption of an adequate diet. And, it means that there are enough appropriate health services and that the environment is sufficiently healthy so that people are able to secure proper biological utilization of the food that is available. In short, food and nutrition security touches a vast number of issues. It encompasses nearly everything to the extent that these things contribute, whether directly or indirectly to people's good food utilization.

Africare's programs put a particular emphasis on empowerment of local populations and capacity building. If programs are to have a long-term impact, it is critical that people have the skills needed to assess their own situation, to define and prioritize their needs, to devise Community Action Plans, and to put those plans into effect long beyond the period of program involvement.

In order to attain the dual objectives outlined above, Africare's programs (often called Development Assistance Programs or DAPs in the nomenclature of Public Law 480 Title II Food Security activities of USAID/Food for Peace) favor a participatory approach. This approach puts the villagers at the center of the activity process. It emphasizes the development of local capacity to choose, plan, organize, and take the initiative needed to improve food and nutritional security.

Given this approach, Africare's role is most often to catalyze action and then to work in an ongoing partnership with local communities. To this end, programs will often develop participatory training activities that encourage local communities to learn in action. As well,

DAPs encourage communities to draw on their own substantial experience in designing a Community Action Plan and identifying appropriate interventions. Africare may also contribute knowledge based on the technical expertise of its staff or gained from previous activities in order to strengthen the Plan and its likely contribution to improving food and nutritional security. Later in the process, as the Community Action Plans (CAP) are implemented, the program will continue building beneficiaries' capacities, share knowledge and contribute other resources needed to implement the plans. This might involve further training, infrastructure development, seed money to begin activities, etc. Full involvement of the communities in this process is essential. As a final step, the results of activities need to be measured and the results assessed so their implications can be used in the preparation of the next version of the CAP.

The participatory approach makes special demands on DAP staff. It requires both a willingness to work in genuine partnership with local populations and particular skills in facilitation and training. Hence, program staff need to have a good understanding of food security and nutrition issues but also become masters of the participatory approach.

This manual attempts to address both these issues, weaving together issues of participation and food/nutrition security, with the ultimate aim of helping Africare personnel become more effective at planning, implementing, and monitoring and evaluating their program activities. Its principal audience is hence the program administrators, technical advisors, and field workers who intervene directly at the village level. It is also directed, however, to Africare's staff in Washington and the field offices who, while they may not be very involved at the community level, play an important role in DAP design and back-stopping.

## **How to Use This Manual**

The manual emphasizes the understanding of concepts on which the programs are based. Furthermore, it emphasizes the necessity of appropriate information management which will ensure planning of more relevant activities, as well as to ensure more informative monitoring and evaluation. A Module 9 that is under preparation will cover implementation and sustainability of activities.

Theoretical modules are pulled together in Volume I whereas Volume II comprises practical modules.

The practical modules in Volume II are based on the theory presented in Volume I. It is thus suggested that you familiarize yourself with the content of Volume I before attempting to implement suggested activities from Volume II. Volume I could thereafter be used as a reference as needed. Volume II gives a comprehensive presentation of RRA and PRA and offers a guide to their implementation. In addition, it presents guidance for other information management procedures involved in monitoring and evaluating programs. There are certain important impact indicators that Africare has found to be particularly valuable in measuring the results of food security activities. These indicators are to be applied in all food security programs. The methodology for measuring these indicators is discussed in detail. Procedures with respect to other indicators are neither comprehensive or prescriptive. Individual programs will need to determine the indicators best adapted to their individual circumstances. The material provided is intended to assist program staff in this process.

Following is a brief description of the content of each module.

**Volume I** contains 5 modules focusing on theory and concepts of which good understanding can contribute greatly to better program implementation.

**Module 1** presents Africare's particular approach to Food Security programs. It shows the benefits and implications of pursuing the objective of enhancing food and nutrition security of villagers while attempting to increase their capacity to implement self-devised Community Action Plans to improve their living conditions.

**Module 2** presents a chronological sequence of activities to be carried out by the program in regards to collecting and utilizing information, beginning with the preparation of a proposal and ending with the final evaluation of the activity.

**Module 3** presents the underlying concepts of food security and nutrition security with examples.

**Module 4** presents an overview of the participatory approach with an emphasis on the implications of this approach on staffing, site selection and information management.

**Module 5** presents the various components of the information system, information users and their needs for information, and the properties of useful data and indicators for monitoring and evaluation.

**Volume II** is more practical. It has 3 modules concerned with data collection and utilization that can guide your field activities.

**Module 6** first presents the usefulness of the food security framework as a management tool. Then, it guides you through the procedures for developing a food security framework for your program and how to best utilize it for the whole duration of the DAP. There is also a discussion of how the food security framework can be used in developing the Strategic Framework for the DAP and the differences between the two frameworks.

**Module 7** provides a comprehensive view of Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA), the differences between the two as well as their application in the field. It guides you through the methodological principles and the various steps in implementing these techniques. Finally, it provides an introduction to major tools that are useful when working with villagers while collecting and analyzing data relevant to their condition of food and nutrition security. These tools also are very useful to villagers (and the program team) as the basis for devising their Community Action Plans in order to ameliorate their living conditions.

**Module 8** is mainly concerned with information management for monitoring and evaluation. It focuses on 5 topics: (1) how to assemble and utilize information while preparing the DAP, (2) how to develop a monitoring and evaluation system using Africare's standard indicators for measuring impact at the level of Strategic Objectives, (3) how to develop food and nutrition security indicators with the population, (4) how to develop capacity-building indicators with the population and (5) how to integrate the information from different sources and approaches into the program's monitoring and evaluation system.

The Module format of the manual makes it a flexible tool that is easy to update and enhance in order to better fulfill the needs of its users. This will be an on-going process and it is expected that program staff will have an active role to play in providing information for the modifications. At present, a Module 9 is under preparation that will provide additional information concerning the implementation of activities based on best practices found in the various country programs. In particular, it will cover how to support the Community Food Security Committees from their organization through facilitating their evaluation of the results of their CAPs. The module also provides information on how best to build sustainability into DAP activities from the inception of field operations.

The annexes at the end of the document will be added to as materials that are particularly good examples of the various aspects of DAP design, implementation, monitoring and evaluation become available. These include both examples from Africare programs, documents written by Africare staff, and materials prepared by other experts.

## MODULE 1

### AFRICARE'S APPROACH TO FOOD SECURITY PROGRAMS

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#### Introduction

Household food insecurity is a crucial problem in most developing countries, including those in Africa. It is also one of the principal causes of malnutrition among women and children in these countries. At the 1996 World Food Summit, the participating countries agreed that there is food security when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life<sup>1</sup>.

In many countries, more than half the population is at risk of food insecurity at one time or another. Food insecurity is often associated with poverty, but it may also have other causes. In fact, food insecurity most often has multiple causes and these may vary from household to household, from village to village, or from one geographic zone to another, as illustrated by the examples below.

**Example 1:** In the village of Tibila many children suffer from malnutrition during the rainy season. The main cause of this malnutrition is household food insecurity. In this village, there is a shortage of cereal stocks on the local market during the rainy season because local production is insufficient to cover the full year's food requirements of the village and the entire area becomes inaccessible during the rainy season. While there is adequate land in the village, agriculture inputs are expensive and beyond the reach of many producers, resulting in low yields. No one in the

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<sup>1</sup>Rome Declaration on World Food Security and World Food Summit Plan of Action. This document was approved by the Committee on World Food Security at the conclusion of its 22nd Session on 31 October 1996, and pursuant to FAO Conference Resolution 2/95, was submitted to the World Food Summit for adoption.

community stocks sufficient quantities of cereals to last through this hungry season. Hence the principal problem of food security in this community is the seasonal non-availability of foodstuffs.

**Example 2:** In the village of Rouko, the villagers have identified that their food insecurity problems are due principally to the fact that cereal prices increase significantly before the harvest and many households are unable to afford the cereals at these prices. As a result, the poorest households send their children off to stay with their more prosperous relatives and many men leave the community to find work elsewhere. The villagers are aware that their region has fruit trees that could be exploited to increase their revenues. But in order to do this, they would need credit to buy necessary processing equipment and training in how to manage this type of business operation. In this village, then, the problem of food security is principally related to the villagers' constraints which limit their financial access to available foodstuffs.

The problems of food and nutritional security are complex and so, therefore, are their solutions. If programs are to improve the situation, they must have considerable knowledge of the particular situation where they intend to intervene and activities must be planned and implemented in light of this site specific information.

This knowledge comes both from development professionals and from the local community itself. Villagers have particular knowledge of the constraints they face and the opportunities present. They will be able to identify at least some potential solutions and assess their feasibility under local conditions. In the long term, they are the ones who are most greatly concerned by their future and who are best placed to take responsibility for their development. Having said this, however, it should also be noted that many communities have only limited experience in

**Figure 1.1 Programs two levels of activities**

Global capacity-building and empowerment activities



the formal process of analyzing a situation and coming up with a Community Action Plan (CAP) to address clearly defined problems in a particular time frame. One of Africare's concerns is to increase local populations' skills to carry out these planning tasks and to address problems that arise in a timely manner.

#### **Program Activities at Two Levels**

In order to meet its food security and capacity building objectives, Africare's DAPs intervene at two levels. The first concerns the activities of the program

that are oriented particularly toward capacity building while the second involves supporting more focused food security interventions as defined in each community's Action Plan.

Level One DAP interventions focus primarily on participation and capacity building leading to empowerment. Specifically, they might involve training in literacy, in participatory methodologies, management, community development, and in the use of tools for analysis and program implementation. Training in PRA and facilitation of the village's early efforts would be considered a Level One intervention, for example.

Level Two DAP interventions, represented in the diagram as a subset of the Level One program activities, consist of those activities put in place by the villagers themselves, under the auspices of their CAP. This plan will develop from the PRA activities carried out by the villagers to

analyze their situation and come up with appropriate strategies for intervention. At this stage, Africare's intervention might involve supporting the community with information or resources needed to implement the activities that are identified as priorities in the CAP. This might include, for example, helping to develop small commercial activities, improving food storage facilities, assisting with water and soil conservation efforts, providing information about improved food processing technologies, providing information and training on growth monitoring or nutrition education, etc. These Level Two activities have the objective of directly improving food and nutritional security, whereas Level One activities attempt to address food and nutritional security indirectly by empowering local populations with greater analytic and planning skills so that they will be able to more effectively address their own needs.

It should be noted that in many development programs these activities are identified and implemented by DAP staff and consultants. In these cases, it is the program that is "in charge." This contrasts with Africare's approach where it is the villagers who are in charge of implementing their Action Plan. The role of the DAP staff is principally to support the activities of the villagers as a counselor, collaborator, and -- where necessary and appropriate -- contributor of financial resources needed to implement local activities.

### **Follow-Up and Evaluation of DAP Activities**

In order to measure DAP success, it is necessary to evaluate both progress toward the empowerment objective and progress in implementing specific activities set forth in the Community Action Plans. Taken together these activities should improve the situation of food and nutrition security and enhance the population's capacity to manage their situation in the long term.

At the level of DAP management, you will develop a system for monitoring and evaluation that meets your daily needs. However, you also have responsibilities to USAID, as the principal financier of the program, and must take into consideration their reporting requirements as described in the guide they provide all beneficiaries. As outlined in the guide, you are required to report on a certain number of key indicators that are used by USAID to assess the impact of the DAPs it supports. These indicators are described on the Indicator Performance Tracking Table (IPTT) that includes annual targets or mid-term and final targets for each indicator. The IPTT is developed in the DAP design process and revised in the initial year of the DAP (and sometimes at mid-term). It is the primary contract between FFP and Africare concerning the results that are to be achieved from an activity.

At the same time, the populations with whom you work have certain responsibilities as well, and are accountable to the larger community (as well as to the program if they receive assistance). So they also have a need to monitor and evaluate their activities. The role of the program at this level is to work on providing skills to enable the population to effectively carry out these tasks during the life of the DAP and beyond.

### ***Monitoring and Evaluating Capacity Building and Empowerment Activities***

To evaluate the DAP's capacity building and empowerment impact, you need to find out whether the program activities have resulted in the beneficiaries being able to effectively manage the food security situation in their community and decreased their dependence on outsiders in carrying out these tasks. Your system for monitoring and evaluation will need to establish whether the local population is better able to analyze their situation (using PRA tools, for example), whether they are taking the initiative in the development of Community Action

Plans and are following through on their implementation, whether they are more confident in carrying out commercial or social activities that contribute to food or nutritional security, etc. Africare has developed an index of the variables involved in measuring these conditions, called the Food Security Community Capacity Index (FSCCI) that is presented in Module 8.

### ***Monitoring and Evaluating of Activities Defined by the CAP***

It is also necessary to verify whether the CAPs are having any impact on the household food security and nutrition situation in the community that undertakes the plan. If the implementation of the plan seems to have had no impact, or a negative one, the next step is to analyze (with the villagers) why this is the case and then to modify the plans as needed. If, on the other hand, the activities appear to have had a positive impact, then the question becomes why they were so effective and what factors contributed to their success. This will enable the program and the community to build on these successes and to maximize the benefits of any other activities that may be undertaken. Here also, Africare has

### ***Follow Up by the Villagers of Their Own Activities***

The villagers themselves should be asking similar questions to evaluate the impact of their activities in order to adjust their efforts and also to improve their monitoring skills which will be needed whenever they implement activities under a Community Action Plan. They should also be measuring their capacity and determining where improvements need to be made. The FSCCI can be used as a tool for this purpose also.

As can be seen in the discussion above, in the participatory approach, every intervention (including Level Two interventions that are oriented primarily to implementing the village CAPs) in these programs should have capacity building outcomes and an impact on empowerment. It is essential that the DAP not fall into the trap of solving the village's problems for the villagers. Even though this is often the easier path (and may be more effective in addressing food/nutrition security concerns in the short term), this short-cut is likely to be counter-productive in the long-run. There is a grave danger of actually undermining the village's own sense of initiative and problem solving and actually disempowering the population as a result. This, in turn, risks imperiling the sustainability of program results in the longer term.

### ***The Importance of Reporting Capacity Building and Empowerment***

Discussion of capacity building and empowerment activities are to be featured prominently in Africare's Results Reports even though it may be difficult to show any results in the early stages of the activity. By reporting on the activities and their progress, you are showing that your DAP takes this aspect of its intervention seriously. Empowerment and effective participation are often limited to rhetoric in development programs and are given neither the attention nor the investment of time and energy needed to make them effective. It is Africare's seriousness of commitment to these participatory processes that make its programs innovative and, we believe, more effective. As it is expected that your DAP will take these issues seriously and is committed to the approach, systematic reporting of progress (both processes and results) toward both of the primary Africare objectives of food security and capacity building and empowerment should be integrated into all reports submitted on the activity.

## MODULE 2

### TIME LINE OF THE STEPS IN DEVELOPMENT ASSISTANCE PROGRAM (DAP) DESIGN AND IMPLEMENTATION

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Figure 2.1 Timeline of the Steps in DAP Design and Implementation

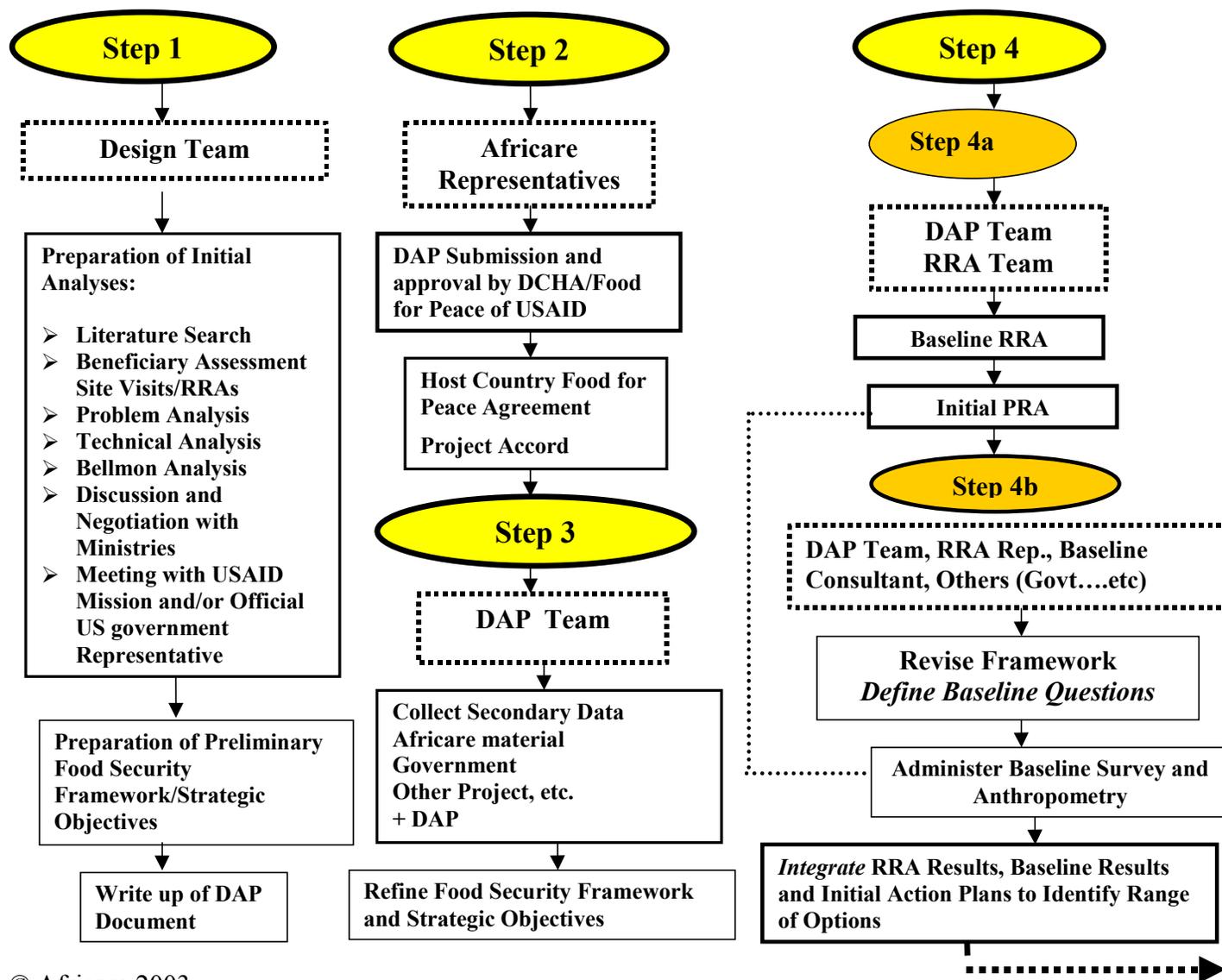
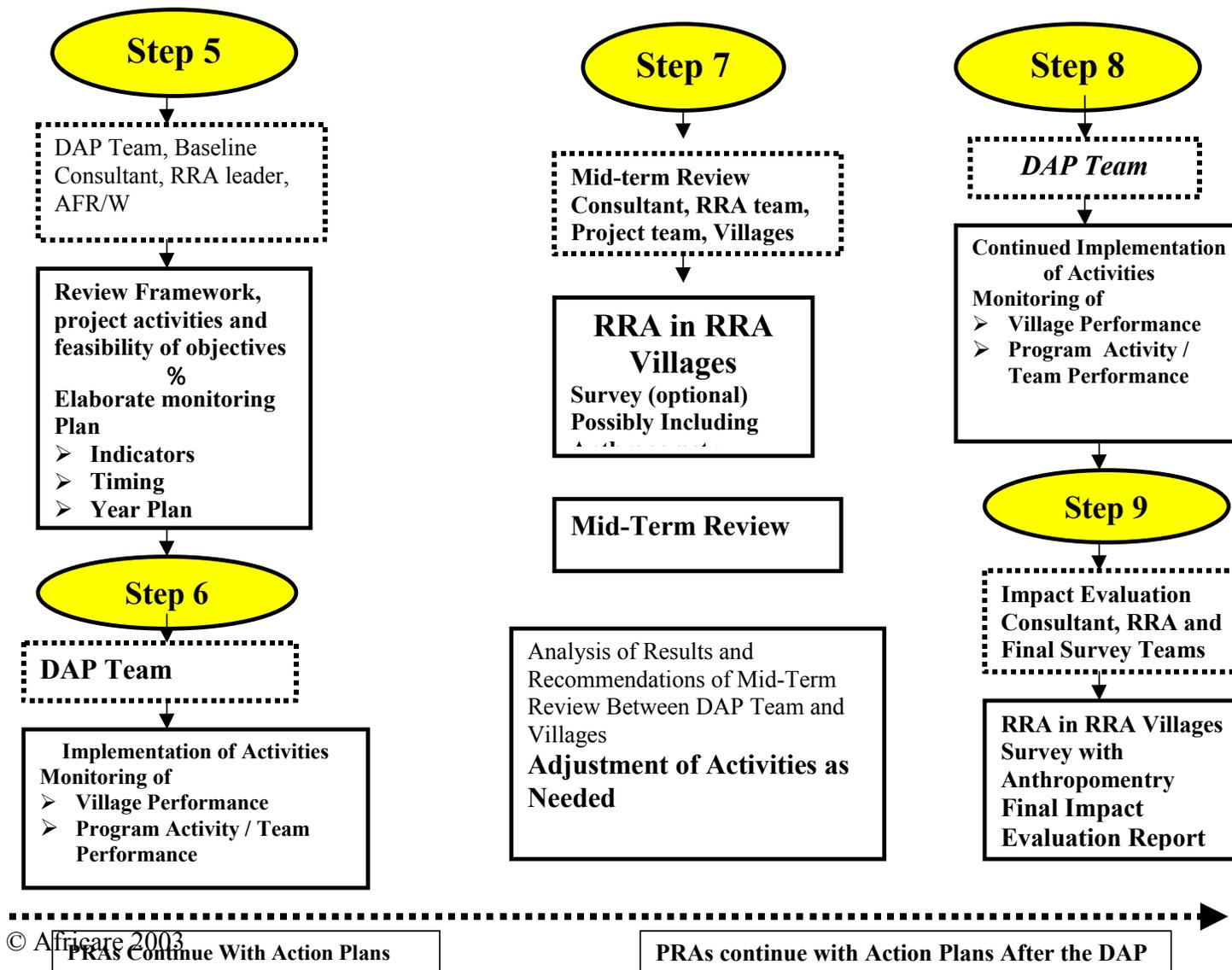
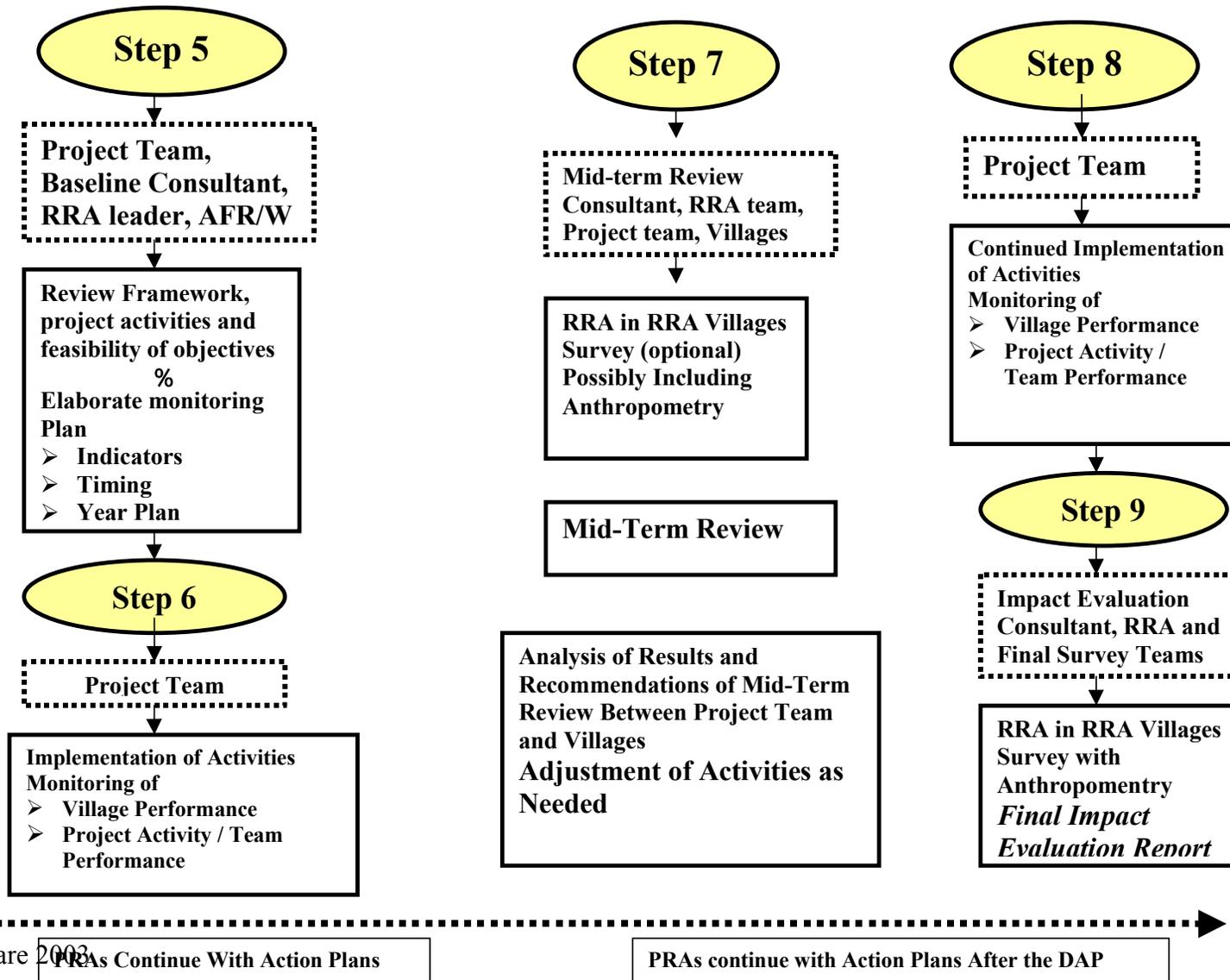


Figure 2.1 Timeline of the Steps in DAP Design and Implementation (Continued)



## Figure 2.1 Timeline of the Steps in DAP Design and Implementation

Figure 2.1 Timeline of the Steps in DAP Design and Implementation (Continued)



## Overview of the Time Line

This module presents a brief summary of each step in the DAP implementation process where information plays an important role. It also identifies the people involved at each of these steps. In the chapters that follow you will find more information about the methods and tools that are mentioned in this time line. This module looks at the whole DAP process, at the order of the different steps, and the information that links the steps between them as illustrated in Figure 2.1. While each DAP team will follow a process something like the one outlined here, it will need to be adapted to the particular situation of the program. A more detailed calendar will then be prepared for how each of the steps will be carried out and how the specific program activities will be implemented.

The approach taken here assumes that DAP planning and implementation will be based on a systematic and critical analysis of the problems of food security in the DAP zone. This, along with the general participatory approach will increase both the appropriateness of the interventions and the sustainability of the results. The need for comprehensive understanding of the problem and the local population's integral participation in the process are the two principal premises that underlie the timeline.

The steps in the time line are the following:

1. Preliminary activities needed to prepare the program proposal (DAP):
  - a. Collection of information from relevant documents and individuals
  - b. Development of the DAP's Food Security causal framework
  - c. Articulation of the Goal, Strategic Objectives and Intermediate Results of the DAP.
  - d. Write up of the DAP
2. Submission and Approval of the DAP and arrangements for Host Government Agreements
3. Preparation for the baseline studies
4. Baseline Studies (RRA and others)
5. Planning the DAP activities and development of a system for monitoring and evaluation
6. Implementation of DAP and monitoring activities
7. Mid term review and any needed adjustments to activities
8. Continued activity implementation
9. Final evaluation

### **Step 1: DAP Design and Preparation of the DAP Document**

#### **Step 1a: Preliminary Activities Needed to Prepare the DAP**

**When:** As soon as Africare begins seriously contemplating developing a food and nutrition security program in a particular country

**Actors:** Africare Washington staff, the in-country Africare representative, consultants, the DAP team (if the proposal follows up an existing activity)

When a program is first contemplated, there are a series of preliminary activities that take place, leading to the DAP. Globally, these activities include:

- A. The gathering of secondary materials
- B. The collection of primary data

### C. Meetings and negotiations with the appropriate authorities

The following types of preliminary activities may take place during Step 1:

- C a review of information that may be found in existing literature or from institutions or organizations working in the field
- C site visits
- C preliminary field studies on food security and nutrition problems and potential solutions to those problems in the area
- C RRA studies on the needs, opportunities and capacities of potential DAP beneficiaries
- C technical studies and analyses
- C the identification of potential partners
- C discussions and negotiations with different ministries in the host country
- C research as needed to conduct monetization activities
- C meetings as needed with USAID officials in the country

This type of activity is necessary to understand the prevailing conditions and to draw up a list of activities that appear to be most relevant to the types of problems identified. RRA and other primary data collection exercises may also serve to establish a baseline of information that can be used later in preparing the problem analysis for the activity.

These preliminary activities will provide you with the information you need to develop the first (and still preliminary) food security framework for the DAP. Once this is completed, you can then draw up the gamut of development activities that will comprise the DAP's portfolio of offerings. This list should be broad and flexible enough so that it responds to the variety of needs that are found in the DAP zone. Each village will, as the program progresses, "customize" the program to its own needs, by identifying their problems and capacities and then the most appropriate solutions.

#### **Step 1b: Drawing Up the Preliminary Food Security Framework and Elaboration of the DAP**

**When:** The preliminary food security framework for the DAP will be developed by the program development team as soon as enough primary and secondary information has been gathered.

**Actors:** The program development team. Others who may participate as needed include: government functionaries, Africare/Washington and country level staff, in-country partners, consultants, etc. For this process to be as efficient and effective as possible, it is generally better to limit the number of actors to 15 or fewer.

This step is divided into three parts.

- A. The development of the preliminary food and nutrition security framework
- B. Identification of the Goal, Strategic Objectives and Intermediate Results
- C. The writing of the DAP

The eventual elaboration of a program of activities and its monitoring system should be based on knowledge of the problems and potential of the zone. In these participatory programs, the specific interventions are likely to be most appropriate when they are based on realities and opportunities identified by the villagers themselves, with the ongoing assistance of the DAP team. The team's capacity to be useful in this process will be largely determined by their

understanding of the situation.

At this stage, the food security framework and the potential DAP activities will be based on all available information, including that collected directly from the villagers in preliminary studies. It should be noted that at this stage of things, the program team will not have been hired since the DAP financing is not yet available, except in the case of DAP renewal or amendment. The DAP team will get involved as soon as it is in place. These new staff members will then amend the initial framework and begin to make it their own. This will be an iterative process, that will be repeated throughout the life of the activity and especially in the earliest phases. As the villagers' participation in the program progresses, everyone's understanding of the food and nutrition security situation will become ever more comprehensive and clearer. As an instrument that reflects the food and nutrition security issues in the DAP, the framework should be continuously updated by the staff and the villagers to reflect the new knowledge produced.

Module 6 discusses the process of developing a food security framework in much greater depth. For the moment, discussions will be limited to the way in which this step fits into the larger timeline.

#### **A. Development of the Initial Food Security Framework**

The first step in this process is to pull together and organize all the information (both primary and secondary) on the nutrition and food security situation in the zone. This data will be used to construct a framework that focuses on the causes of malnutrition and food insecurity at the household level.

Keep in mind that this is really a first draft of a framework that will evolve throughout the length of the DAP as more information becomes available and the food security and nutrition situation itself changes. You will soon see that this framework will be used often at various stages of the DAP: for example, each time that you reconsider the how and whys of the ways the situation of DAP participants has evolved. The framework will help you better understand the linkages between the DAP's activities and the evolution of the situation in the field. It will play an important role in the choice of indicators for the monitoring and evaluation scheme. The following page contains a figure with an extract from the food security framework of the Uganda Food Security Initiative.

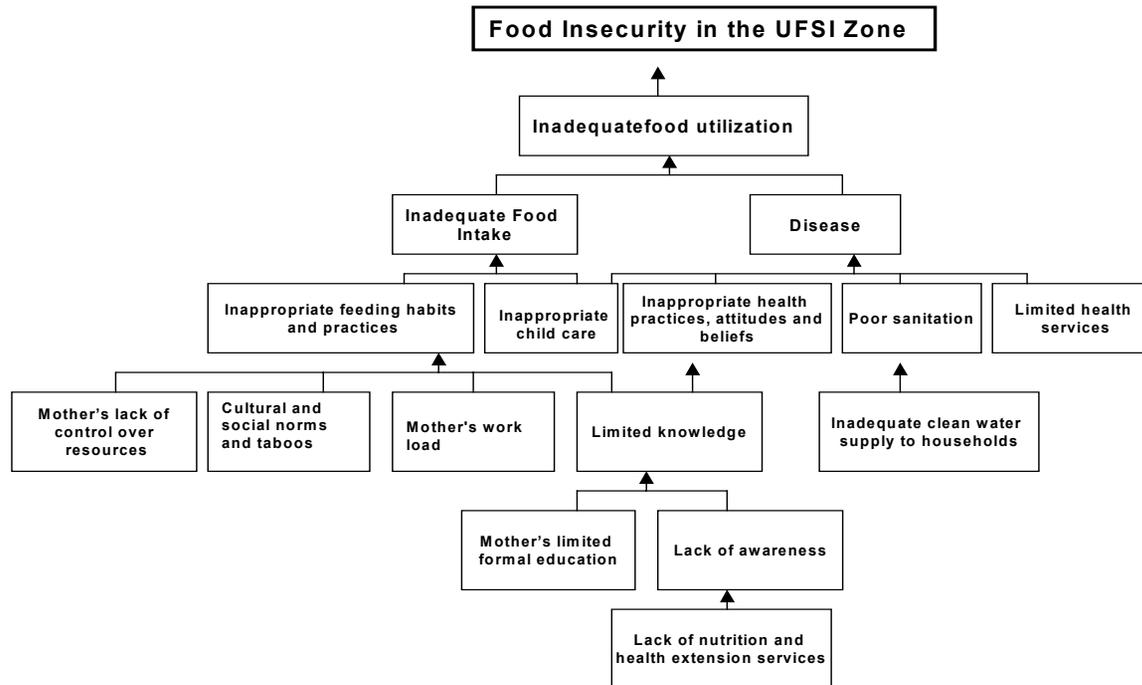
When you begin to prepare the DAP, the food security framework will help to:

- C elaborate the list of potential DAP activities and justify those choices
- C develop the monitoring and evaluation plan

At the beginning of the DAP, the food security framework will help to:

- C assess whether the activities proposed in the DAP are still relevant to the problems as observed in the field
- C determine what information will be needed in the baseline for the DAP

Figure 2.2 Extract of a Food Security Framework



Throughout the duration of the DAP, the framework will help to:

- C develop the protocols for specific studies that may be needed
- C adjust the monitoring plan
- C prepare the evaluations

Thus it is important to begin to draw up the framework as early as possible in the process and to learn how to work with it. After developing the initial food security framework, the DAP design team will use it to articulate the Goal, Strategic Objective and Intermediate Results of the DAP. The process to this point will greatly facilitate the preparation of the problem analysis portion of the DAP. Guidance for preparing the problem analysis drawn from Food for Peace (FFP) Guidelines is outlined in Box 2.1.

### **Box 2.1 Guidance on Preparing a Problem Analysis\***

1. Provide a brief description and analysis of the critical food security problems facing the population in the country and the proposed target area. In this analysis, include or reference appropriate national and local level data that is available on the degree of food insecurity; major determinants of food insecurity (including infectious or water-borne diseases, geo-climatic conditions, natural resource constraints, political and socio-economic conditions, etc.), and the linkage between these factors. Provide data on the geographic distribution of food insecurity in the country to justify the choice of geographic area(s) targeted.

2. Based on this analysis of food insecurity problems, identify the priority technical and geographic areas where development assistance is needed, and the time line for action. Briefly describe the extent to which problems in these priority areas are addressed by USAID/DCHA, Global Mission, World Bank, World Food Program, or other development and community organizations. Note which unmet development needs remain.

3. Among these unmet needs, describe the capacity and relative strengths in your organization for addressing them, technically and geographically. Include a statement regarding the institutional capacity of your organization, and of local partners (if relevant), and the basis upon which this assessment is made.

4. Based on the analysis of unmet needs and identification of your organization's relative capacity to address them, briefly identify the technical and geographic areas that this proposed activity plans to address. All DAPs should address problems of food access, availability, and/or utilization, with priority placed on activities that increase agricultural productivity and/or improve household nutrition.

\*Adapted from Annex A of the P.L. 480 Title II FY 2005 Development Program Policies and Guidelines, Bureau for Democracy, Conflict Resolution and Humanitarian Relief (DCHA)/FFP, November 2003, p3

## **B. Articulating the Goal, Strategic Objectives and Intermediate Results of the DAP**

The development of the Food Security Framework is the first step in the DAP design process. Once it is prepared, it will assist in specifying the Goal, Strategic Objectives (S.O.) and the Intermediate Results (I.R.) needed to realize the objectives. However, there is not a one to one relationship between the Food Security Framework on these elements of this activity. The Food Security Framework is a chain of causality for what is while the Goal, S.O.s and I.R.s are ideals of what is to be achieved by the activity. Initially, the Food Security Framework establishes that

there is a serious Food Insecurity Problem in the area to be covered by the DAP that can be improved through the use of resources such as those available from FFP.

The Goal of Africare's Food Security Initiatives is some variation of : "Substantially Enhanced Food Security for Vulnerable Populations" in the area where the DAP is to operate. There are generally three S.O.s of the DAPs:

1. Improved Community Capacity to Enhance Food Security
2. Increased Agricultural Productivity
3. Improved Household Nutrition

S.O. 1 is essential to Africare's approach to all its development activities that place the communities and their empowerment at the center of what is to be accomplished. S.O.s 2 and 3 are in accord with Africare's approach to food security activities and they are also in compliance with FFP's intention for the use of food resources (see step 4 in Box 2.1).

The Food Security Framework is a very helpful input to the specification of the I.R.s and the articulation of the activities and resources needed to achieve them. By identification of those **causes** which are the highest priority to address, the design team has a starting point for it work. However, at this point, several other factors need to be considered, especially the **assets** and **abilities** present in the communities and the **opportunities** to use them either currently present or to be created by the activity. Consideration is given also to how Africare's capacity can be used to facilitate the process and the interests of communities identified in the initial RRAs. The process essentially follows the sequence laid out in steps 2, 3 and 4 of Box 2.1. but with a greater emphasis on local interests and initiatives than is highlighted in the FFP outline.

At the conclusion of the process, the team members will need to identify the conditions that will be required to determine if the activity has achieved its intended results. In addition, the indicators that can measure the achievement will be specified. As will be discussed in later modules, Africare has developed certain standard impact indicators for this purpose that are incorporated in all DAPs. In addition, there will be other impact indicators and monitoring indicators that relate to the circumstances of the individual DAPs.

With this work accomplished, the design team is ready to begin the process of writing the DAP document.

### **C. Writing the DAP**

The DAP lays out all the critical components of the program, including:

- C the problem analysis incorporating the food security framework
- C the Strategic Objectives and Intermediate Results
- C the activities that are anticipated to improve the nutrition and food security situation as well as those intended to empower the communities in their decision making and planning
- C the detailed implementation plan
- C the Indicator Performance Tracking Table detailing the indicators for measuring the expected results
- C the monitoring and evaluation plan

- C the budget
- C the commodity management plan for any distribution activities such as food for work
- C and any particular arrangements needed for the monetization aspect of the program

USAID provides guidance on how the DAPs will be presented. A copy of the current guidance is provided to the design team by Food for Development as applicable since it is updated annually.

What should be noted here is that Africare's DAPs put a particular emphasis on the full participation of the local populations in all phases of the DAP, including the planning. Below is a discussion of what this implies in terms of flexibility and rigorousness for the DAP.

The overview of DAP activities and the plan for monitoring and evaluation that are set forth in the DAP must provide enough information so that the donor can decide to finance the program (or not). However, the information must be presented in such a way that it does not compromise the flexibility needed by the program staff to implement a genuinely participatory process. The DAP is an essential document that links Africare and its program staff to the donor and it is critical that all the parties involved both understand and agree upon the objectives, approach, and activities that are to be followed.

The DAP should therefore present the participatory approach and the local capacity building plan with an adequate explanation of why these are being favored. It should include activities not only directly related to improving the food and nutrition security situation, but also those that will act indirectly through the empowerment of individuals and communities. The monitoring plan should make it clear to the donor that while there is flexibility built into the implementation process, it is also rigorous and attentive to the final DAP objectives.

Because the ultimate form the DAP takes will be determined in conjunction with local populations as they select the activities that are most appropriate in their situation, there is an element of uncertainty regarding the precise activities that will be carried out by the DAP. This can lead to a degree of discomfort on the part of the donors who may feel that this increases the riskiness of the DAP. In fact, with the participatory approach, the emphasis is on the sustainability of the benefits and to the extent that the approach is successful, the risks actually diminish as the population's capacities in planning, implementation, and monitoring of their activities increase. The activities that are specifically directed toward meeting the empowerment objective should be as clearly developed as those that are more quantifiable and should be accompanied by a systematic procedure for monitoring and evaluation.

It is important that:

- C the objectives outlined in the DAP place a particular emphasis on developing the capacity of villagers to analyze their situation, develop action plans, and put them into effect
- C the DAP gives a description of the activities that will be undertaken and gives specific examples, while noting clearly that the specific activities to be carried out in each community will only be determined after the community action plans have been prepared
- C the monitoring plan puts an emphasis on empowerment, training, and the community's implementation of their action plans
- C the indicators proposed to measure progress should refer to overall changes expected in the various domains of DAP activities including capacity-building as well as in the global

food security and vulnerability situation. These will include, for example, utilization of the *Food Security Community Capacity Index* and the various measurements of *Adequate Household Food Provisioning* developed by Africare as well as the anthropometric measures of stunting and underweight of young children. Other more specific indicators related to activities that are to be carried out will be identified for particular DAPs and included on the Indicator Performance Tracking Table (IPPT). The Indicators and Targets included on the IPPT are the conditions that Africare is contracting to achieve in the DAP. They are to be limited in number and focused on the most essential elements in the DAP. Later on decisions may be taken to monitor other indicators once the village action plans have been completed and the specific activities are known. However, these latter indicators will be specified in the Monitoring and Evaluation Plan of the DAP and not on the IPPT.

The DAP's initial Detailed Implementation Plan (DIP) will be developed, laying out the timing of specific activities to be undertaken in the activity. Like the rest of the DAP, the DIP is an official document that specifies the DAP activities and the time they will be carried out and the responsible parties. It is important that this portion of the document is written with an appropriate level of precision so that it maintains the flexibility needed for the local population to play a real role in decisions on the DAP and how it will treat issues of food and nutritional security. At this point, the DIP should deal with the general areas of intervention and the overall objectives of improving food and nutritional security and improving local capacity to manage their food security including the development and implementation of action plans. It should avoid dealing with very specific activities that may or may not be implemented in different communities, depending on the results of the action plans. If the DIP is too detailed it will constrain DAP implementation and limit the amount of adjustment that can take place down the line. It should be a useful tool for managing the program, rather than one that constrains the DAP's ability to implement appropriate and sustainable activities.

## **Step 2. Submitting the Proposal for Financing and Securing Host Country Approval**

**When:** DAPs are submitted to FFP on February 15 of the Fiscal Year prior to their intended start date. This is the current timing specified by DCHA/FFP and is subject to change. The Host Country Food for Peace Agreement (HCFFPA) must be in place either when the DAP is submitted or soon after approval. The country accord is to be negotiated before activities can commence.

**Who:** Africare Washington staff and the Country Office

Once the DAP is written, it will be submitted to DCHA/FFP for financing. Legislation specified that there is a 120 day period thereafter during which USAID is to review the document and identify any issues it has with what has proposed. Both Africare headquarters and field staff will be involved in responding to the issues and in the review sessions. Prior to approval, a HCFFPA must be in place with the government of the host country. If it is not, the relevant USAID Mission or Diplomatic Post (for countries where there is no Mission) must provide assurances to FFP that such an agreement can be concluded shortly after the DAP is approved.

When USAID approves the DAP, Africare will finalize the Program Accord with the government of the host country, make the necessary agreements with the local Food for Peace office, and begin making the appropriate arrangements to monetize American foodstuffs in the host

country. This monetization contributes a significant portion of the DAP financing and once it is underway, the DAP team can be hired. This team will implement the development activities of the DAP while another person, or team, will concurrently oversee the monetization aspects. Where food distribution is included in the DAP, such as through FFW to populations affected by HIV/AIDS, arrangements will be made also for the ordering, arrival and management of those commodities.

**Step 3. Team Building/Refinement of the Food Security Framework and Development of Understanding of the Strategic Framework**

**When:** As soon as the DAP team has been hired

**Who:** DAP team with the participation of country office and possibly backstopping staff from Africare Washington

When the DAP team is operational, one of its first responsibilities is to revise and make necessary adjustments to the DAP's Food Security Framework. In addition to updating the framework, this activity will ensure that all members of the DAP team are on board with the approach and are familiar with food and nutrition security issues in the zone. This will make them more effective in supporting communities as they devise their action plans. This exercise should be approached as a "team building" exercise and used to orient the various technical specialists to the "big picture" of what Africare and its local partners intend to accomplish in the DAP.

Having revised the framework, and developed an understanding of the Strategic Framework of the activity, of the next step is to establish the DAP baseline.

**Step 4: The Baseline**

**When:** At the beginning of the DAP

**Actors:** The people involved will depend on the information gathering methods that are used (see below).

The DAP baseline gives a picture of the food security and nutrition situation before the program begins to intervene. This baseline information has three purposes:

- C to provide a reference point for evaluations that will take place later and attempt to measure how things have changed
- C to enrich and bring up to date the DAP's knowledge and understanding of the local situation so that the DAP can more appropriately respond to needs in the communities served
- C to provide the baseline data for the IPTT and provide a basis for establishing/refining targets to be achieved year by year or by mid-term and final over the life of activity

Two types of studies will take place at this point: participatory studies using the RRA methodology and other studies such as surveys using questionnaires and measuring anthropometrics.

The RRA studies will consist of intensive village level studies that will be carried out with the communities concerned in order to understand the food security and nutrition issues in that community, to identify the principal causes of problems that are identified, and to begin to reflect on potential solutions. At this point only a limited number of village studies will be carried out, but these will be selected to give a sense of the diversity of problems and the range of issues that are likely to be confronted during DAP implementation.

The other component of the baseline will use quantitative methods will consisting primarily of questionnaires administered to a large number of people and looking at social and demographic questions, and economic and agricultural patterns across the region. Anthropometric measurements will permit the DAP to assess the nutritional status of children in the activity zone.

These baseline studies should significantly increase the DAP's knowledge of the area and the issues that are likely to arise during program implementation This information should be used to adjust the activities' list proposed in the DAP and add more specific information where it is now available. The RRA in particular should give a better sense of the types of activities that are likely to be appropriate in the zone and give an idea of where the villages stand at the outset in terms of their analytic, management and planning skills. This knowledge will help to better plan the community capacity building and empowerment activities. With these two types of information in hand, the program will now be better able to anticipate the approach and the activities that will be carried out with the communities over the life of the activity.

The earlier these baseline studies can be carried out, the better since they will represent a more realistic starting point and be of greater use in planning the DAP's interventions if they come early on in the process. The food security and nutrition situation will vary seasonally, however, and this factor must be taken into consideration in choosing the most relevant time to carry out baseline, mid-term and evaluation surveys.. It may be necessary to take anthropometric measures at different times throughout the first year, for example. Whenever these types of studies are carried out, the date of the study should be clearly indicated and any comparisons at a later time should be made of information collected at a similar time of year.

The timeline proposes that the baseline studies be carried out in two phases. The RRAs will be carried out first so that the information from these studies can be used to figure out which questions will be most relevant and appropriate to ask in the questionnaires.

#### **Step 4a. The Baseline RRAs and Initial PRAs**

**When:** In the first months of the DAP, before any interventions begin and before the other baseline studies are carried out

**Actors:** The DAP team, the RRA team, villagers in the communities studied

The initial RRA studies will be carried out in several villages that may be considered to be “representative” of the food security and nutrition situation in the DAP zone. The analysis of this information will allow the DAP to assess whether the activities being considered by the program are likely to be appropriate and to identify others in light of the information gathered in the field. The information will also be used to pull out key questions that can be asked of a much larger population in the quantitative surveys.

With the help of trained personnel, either Africare staff or consultants, you will design the RRAs and Initial PRAs that will be carried out in conjunction with the local communities. This manual discusses these methods in considerable depth in Module 7. Refer to that section for more information on how to set up the RRA baseline studies.

It is important that great care be taken in carrying out these initial RRAs because this activity is the DAP’s introduction to these villages. The atmosphere created during these RRAs will set the tone for all future interactions between the DAP and these villages. During the course of these RRAs the villagers will start a Village Log Book in which they will record the results of studies that take place and their eventual action plan and progress toward its implementation. Villages that do not participate in this baseline RRA/PRA will join the process once the initial baseline studies have been completed. They will move directly into PRA analysis and planning activities (see module 7).

#### **Step 4b. Revise the Food Security Framework, Complete Baseline and Integrate Results to Determine the Relevance and Feasibility of Proposed Activities**

**When:** Once the RRA results are available

**Actors:** Consultants, the RRA team leaders, the DAP team, other people and institutions as needed

After the RRAs are completed, the DAP team, RRA team leaders, and consultants involved in the other baseline studies will discuss the results of the RRAs and revise the food security framework in light of this information. They will then figure out what questions should be asked in the other baseline studies and figure out the best way to pose the questions in light of their knowledge gained in the RRA.

Consultants, in conjunction with the DAP team, will then refine the information gathering protocols. These studies will then be carried out according to appropriate survey design and the information will be analyzed using rigorous statistical methods as needed. It is important that all surveys during baseline (and at mid-term and final evaluation) use similar codes for respondent identifiers throughout all surveys. This is necessary to permit adequate comparative

analysis of within variables in these studies and within studies.

As soon as the results of the RRA and other baseline studies are available (usually 1-3 months after the start of the RRAs), the DAP team, RRA team leaders, consultants, country level and Africare/Washington staff will consult concerning all the information that is available. This will be a good time for representatives from Africare/W to be involved in listening to presentations on the results of the various studies and thinking about their implications for the DAP design. This is the time to review the initial objectives of the DAP, to study the range of activities that was proposed earlier and to add new ones that appear relevant. A determination should also be made whether, given the realities identified in the field, these activities are feasible.

Once the food security model has been revised, you are ready to develop a monitoring and evaluation plan and a DIP for the first year's activities and an outline for the subsequent years over the Life of Activity.

**Step 5: Drawing Up the Monitoring and Evaluation Plan and the Detailed Implementation Plan**

**When:** When the results of the baseline studies have been analyzed and the food security framework has been revised (Note: steps 4b and 5 can both be carried out during the same mission by Africare/W to the field)

**Actors:** The DAP team, consultants, RRA team, with the possible inclusion of a mission of Africare/W staff

The DAP will need to monitor and evaluate its activities on an ongoing basis so that adjustments can be made and the program will have the greatest positive long term impact possible. At this point, the principal approach and activities that the DAP is likely to follow will be clear to everyone and it is time to put together the revised DIP and to come up with a system for monitoring activity implementation. During this mission, the budget will also be reviewed to ensure that it best anticipates the various needs of the DAP. This is particularly important if there have been any significant modifications to the DAP. In short, it is at this juncture that the DAP begins to assume its more final form.<sup>1</sup>

The information will now be available to much more clearly specify which activities will take place and when they will take place in the Detailed Implementation Plan as well as who will be responsible for carrying them out. The DAP team should also begin to consider the phase-out strategy of the activity. It may seem early to do this before field implementation begins, but it is important to start preparing the villages for sustaining activities following the end of the activity from its inception. This will avoid many problems later in the life of the DAP. As time goes on, and the DAP team has more experience with the realities of implementing the DAP in the area, the phase-out plan should be revisited and revised as needed.

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<sup>1</sup>Keep in mind, however, that it is the villagers who will develop the action plans that specify the activities to be carried out in their own villages. The overall DAP plan must remain flexible and open-ended enough so that it can accommodate the variations in village plans.

The DAP's monitoring and evaluation plan will include a list of variables to be assessed on a regular basis using specific indicators that will be tracked on the IPTT. This monitoring will allow the DAP to know whether the activities are moving ahead as expected in the time frame anticipated, if the budgets and expenditures are indeed appropriate for the needs of the DAP, and if there are corrections or adjustments that need to be made. The question of monitoring and evaluation is taken up in greater detail in Modules 5 and 8.

The monitoring plan must be appropriate to the needs of the user. At the village level, there will be a monitoring plan that allows them to keep track of their activities and record the pertinent information in their Village Log Book. At the DAP level, there will be a much more comprehensive monitoring and evaluation plan. This plan will cover everything from capacity-building and sectoral activities to physical infrastructures, and the budget. As much as possible, information from the village level monitoring should feed into the DAP's monitoring and evaluation program. The Africare/W mission will be able to help with the devising of the monitoring and evaluation plan and will need to approve the plan during their field visit.

It is now time to begin the village level activities.

### **Step 6: Introducing the Activities in the Villages/DAP Implementation**

**When:** Immediately after the DIP has been put in place and continuing until the mid-term review

**Actors:** The villagers, PRA teams and the DAP team

Note: Once the villagers are familiar with the PRA methods, they will not need the continued direct intervention of the DAP's PRA facilitator. They will be able to continue independently.

The DAP's activities at the village level will begin with the PRA, with the exception of the villages where RRA studies have already been carried out. It will not be possible to implement all the PRA simultaneously so they will be carried out in a sequential manner according to the implementation plan devised in step 4.

The PRAs to be carried out with the villages are different from the RRAs that are used in the baseline or those that will be used later for evaluation. The RRAs involved limited interventions where a specific set of issues are addressed. The PRAs will be ongoing exercises that involve not only information gathering, but also the training of villagers in the use of the techniques and tools to use in the analysis of information. The issues they will address depend largely on the concerns of villagers and will not be limited by concerns that the facilitator or other outsiders might have. The objective of the PRAs is not merely to gather information, but rather to use this information to manage their community's food security and to devise the Community's Action Plan.

Module 7 on RRA and PRA in Volume II will give you the information needed on various tools and techniques that the villagers may find useful in assessing and analyzing their food security and nutrition situation and their capacities to devise realistic solutions and strategic plans to protect and enhance their food security.

### **Step 7: The Mid-term Evaluation**

**When:** Approximately half way through the period of DAP implementation

**Actors:** DAP team, consultants (preferably those who participated in the base line studies), RRA team leaders, Africare/W personnel

The mid-term evaluation provides the opportunity for all who are involved in the DAP to step back from the daily implement concerns to assess the overall progress of the DAP. This is the time to review whether the objectives the program started with still make sense given changes that may have taken place in the political, economic, or social context in which the DAP is being implemented. It is also the time to review together the DAP's strategy and whether it appears to be successful in accomplishing its objectives. The ongoing monitoring that will have been done by both the villagers and the DAP team becomes especially useful at this time. Depending on the DAP, mini-studies conducted along the way provide new specific and useful information about the context and opportunities for specific activity areas. These can also feed into the mid-term evaluation.

The mid-term evaluation will generally include several RRA studies that will review changes that have taken place in sites selected. Ideally these RRAs should take place in the same villages where the initial base-line RRAs were carried out. Anthropometric measurements may also be taken at this point if it seems that they will add useful information to the analysis. (In some cases it may be too early to make this useful.) The mid-term evaluation can also use various other methods and include different actors. In any case, this evaluation should be planned well in advance. Discussions between the in-country team and Africare/W personnel will enable you to prepare as necessary for this evaluation. Africare has instituted a *pre-evaluation* activity in a number of countries that has proved to be very useful. The DAP team, possibly working with a consultant, reviews the DAP activity and pulls all the necessary documentation together for the review team. This exercise is both helpful for the team and saves time when the actual review is under way.

Following the review, the team together with Africare/W should review the results, and determine what needs to be done to respond to the recommendations of the review. Adjustments may also be made in the IPPT and the DIP for the activity. FFP requires that the results of this assessment be included in the Results Report for the year in which the review takes place. In addition, the review document is submitted along with the Results Report.

### **Step 8: Continued DAP Implementation**

**When:** Immediately after the assessment of the results of the mid-term review and continuing throughout the remaining life of activity

**Actors:** The villagers, PRA teams and the DAP team

Following the mid-term review, the DAP team will continue to implement DAP initiatives together with the villages and local partners. At this stage of the activity, it is important to devise and implement a phase-out strategy for the activity. This will involve withdrawing more and more from operations with the villages and moving more and more to a situation where DAP staff

serve as advisors to the villages. In the final stages, all financial, food and other resources may be withdrawn and the DAP team's role reduced to that of an occasional consultative visit.

### **Step 9: The Impact Evaluation**

**When:** Near the end of the fourth year of the DAP

**Actors:** The DAP team, consultants (ideally those who participated in the baseline studies), RRA team leaders, Africare/W staff

The impact evaluation at the end of the DAP seeks to measure whether the DAP's interventions have had an impact on the objectives it laid out at the start. Evaluation RRAs and surveys including anthropometric measurements will be conducted on the same populations that participated in the initial baseline studies as well as the mid-term evaluation. Other communities may also be included in the final evaluation.

The DAP's impact will be assessed by comparing the situation found at the outset of the activity with that at the end. Other useful comparisons can be made between the populations who participated in the DAP and those who did not. The issue of seasonality must be kept in mind whenever making these types of comparisons. The final evaluation is conducted in the fourth year of the DAP activity to provide information for Africare to use in deciding whether there should be a follow-on activity in the area. The activity might involve the same villages (if more time is needed for them to achieve fully independence in managing their food security situation) or new villages or a combination. It also provides information to be used in writing up any follow-on DAP and for FFP to use in making its review on whether to approve it. This timing further permits adjustments to be made to increase activity impact even at this advanced point in DAP implementation.

### **Other DAP Activities**

It goes without saying that the PRA activities are ongoing during the DAP and are accompanied by training and other program interventions as needed to implement the Community Action Plans. The time-line presented here outlines only the principal points that will define the major steps in DAP implementation. Within this overall framework, the daily and weekly activities of the DAP will be filled in as appropriate.

## MODULE 3

### FOOD AND NUTRITION SECURITY CONCEPTS

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This module deals with fundamental concepts at play in your various DAPs. Having a good understanding of these will greatly enrich your contributions and help you design appropriate intervention as well as monitoring and evaluation schemes.

## Introduction

Food security is a primordial concern at both the village and national level, especially in developing countries. Our understanding of food security issues has evolved considerably since the World Food Conference of 1974 where these concepts were first discussed in an international forum. At that time, the focus was principally on national level food security. This first was taken to mean national food self sufficiency (the country producing enough of its own food to meet the nation's demand). Now, national food security means the country has enough food available, whether produced nationally or imported. However, today, the discussion addresses food security not only at the national level, but also at the community and household levels. As per USAID's definition, household food security means that the household has access to sufficient food so that each member can live a healthy and active life at all times. The concept of access here implies both that the food is available and that the household has the resources needed to obtain it. USAID considers that food security encompasses three important factors : (1) food availability, (2) food accessibility and (3) food utilization.

Another concept related to food security is of considerable importance. This is the notion of nutritional security. Indeed, nutrition and healthy eating programs have existed in both developing and developed countries for a long time. USAID includes nutritional concerns in their approach to food security while giving attention to issues of food utilization. However, the recent interest in food security has generated much discussion on the relationship between nutrition and food security. This has led to a greater understanding of these two concepts, showing how they are linked in a relationship of cause and effect (as will be further explored below) and especially how some factors such as "care" and a "healthy environment" are crucial for achieving good nutritional status.

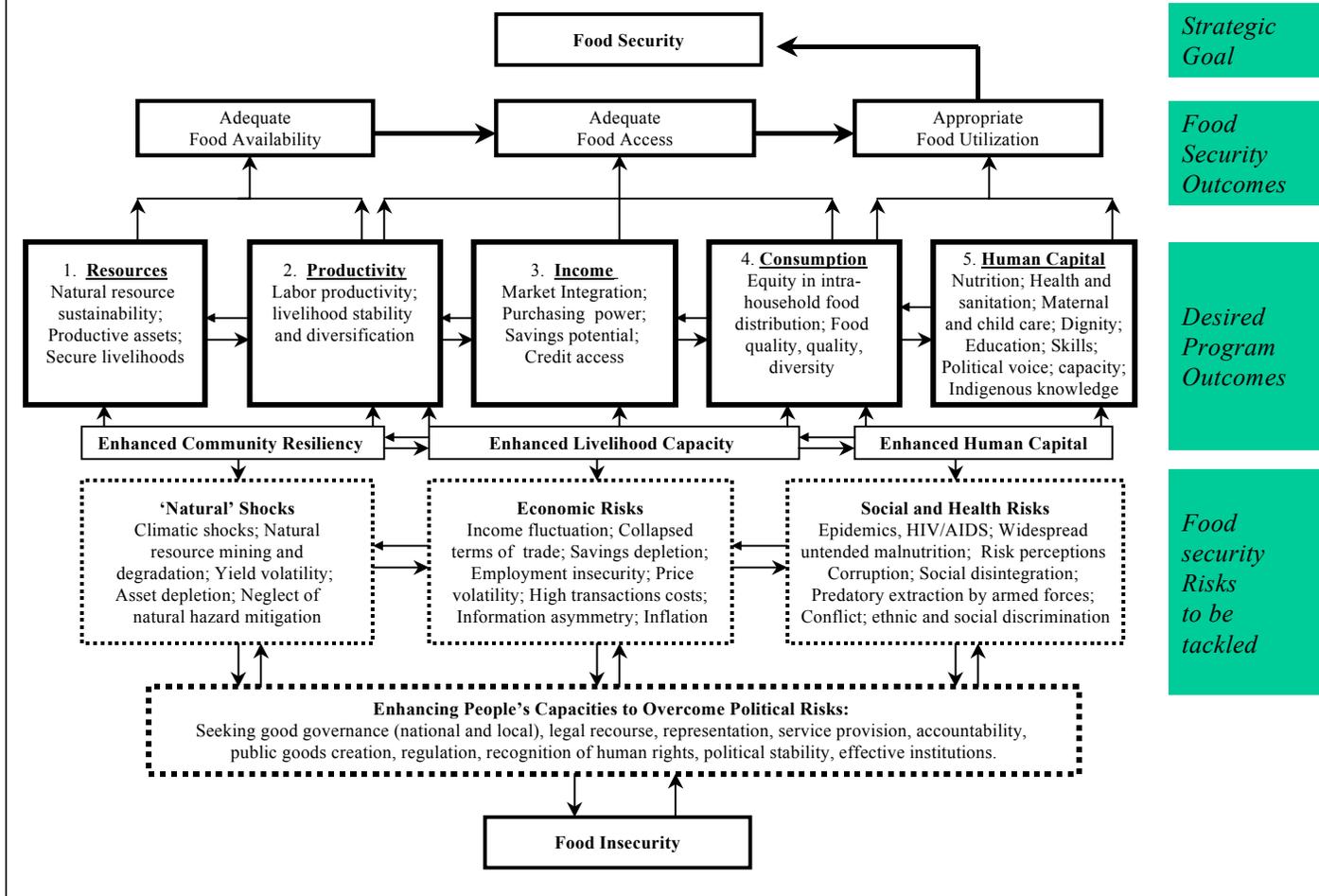
USAID views the relationship between food availability, access and utilization as hierarchical, that is, food availability is a necessary but insufficient condition for food access, and food access is a necessary but insufficient condition for food utilization. Figure 3.1 is drawn from the draft USAID FFP Strategic Plan for Fiscal Year 2004-2008.<sup>1</sup> It provides a food security framework for understanding how these conditions are related. In addition, it portrays the underlying risks that may result in food insecurity. Whether they do or not depends upon a household's resilience. This is the ability to weather a period of food insecurity and reestablish the household's prior food security situation after suffering a shock of some type.

In the pages that follow, we will try clarifying these concepts, giving examples that will help you understand them and especially how they apply to the analysis of the situation where you work. We then invite you to build a food security framework for your DAP that lays out the causes of food and nutrition insecurity in your zone of intervention. Module 6 in Volume II takes you, step by step, through a process to design such a framework for your own DAP.

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<sup>1</sup>Webb, Patrick and Rogers, Beatrice, *Addressing the "In" in Food Insecurity*, Occasional Paper No. 1, USAID, Food for Peace, February 2003, p. 6.

**Figure 3.1: An Expanded Conceptual Framework for Understanding Food In-security**



The food and nutrition security (F&NS) framework that you will be developing will be useful throughout the length of the program. It will facilitate understanding the causes of the problems in the activity zone and how the DAP can best contribute to resolving them. Your framework will shed a most relevant lighting to your interpretation of results from the various DAP's studies, monitoring, and evaluations during the whole course of the program. As a bonus, the professional skills that this exercise develops have been found by practitioners to be most useful when it comes to planning, and designing monitoring and evaluation schemes applicable to any type of program.

There are many different types of interventions that could be used to address food insecurity. In the *Food Aid and Food Security Policy (FAFSP)* of May 1996. FFP established that food aid resources can be used for activities to enhance agricultural productivity and/or household nutrition. In most cases, Africare's Food Security Initiatives involve both types of interventions and work to establish positive linkages between them in the Community Action Plans. The FAFSP remains an important component of the new FFP Draft Strategic Plan and will continue to inform Africare's approach.

### **Africare's Mandate under Food Security DAPs funded by USAID**

Africare's food security DAPs, financed by USAID, attempt to improve the situation of food availability, accessibility, and utilization.

There are many aspects to these three elements and they will be treated in greater depth below. In particular, it should be noted, however, that the third element, good utilization of food, is partly dependent on both of the first two elements, food availability and food accessibility, and more.

In reality, the good utilization of food depends on a whole series of factors, beginning with the health status of the food consumer and the food's safety and nutritive quality. Food safety and nutritive quality depend in turn on food preparation practices and the way the food has been stored. Storage and preparation practices depend on the food handlers' and preparers' knowledge of nutritional practices. In addition, especially where young children are concerned, good utilization of food depends on food consumption practices, which depend in large part on the care and attention children receive from their care givers. Finally, good food utilization by the body relates to the health status of the individual. This depends in turn on such factors as how the individual manages sickness, on whether he/she has access to primary health care, and whether he/she inhabits a healthy environment and has access to potable water. In brief, for food to be utilized properly by the body, the body needs to be in a health state that enables it to take advantage of this food and the food consumed must be of sufficient quality and quantity.

All factors that influence this utilization are generally grouped into three categories: (1) food access and food availability (by most people this is referred to as food security), (2) adequate care, and (3) access to health services and a healthy environment.

Food utilization thus depends on a large number of factors. As a result, attempts to improve food utilization can include a vast number of different activities.

One can say that good utilization of food corresponds generally to what is getting to be the newer consensus about nutritional security while the availability and accessibility of food correspond most closely to the common notion of food security. One could say that USAID funded DAPs that approach the issues of food utilization, availability, and accessibility are therefore addressing issues of nutritional security. USAID actually includes both concepts in their expanded framework of food security/insecurity (Figure 3.1).

Program interventions should thus be oriented toward improving living conditions with resulting improvements in food intake and the nutritional status of household members. This logic is behind USAID's recommendation that DAPs use indicators, among others, that record growth stunting as measured by height for age to evaluate DAP impact.

### **Household Food and Nutrition Security**

The World Food Summit, held in Rome in November 1996, produced the following definition of food security.

*Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life<sup>2</sup>.*

There is as yet no "official" corresponding definition of nutritional security. For our purposes, however, we can define it as people's ability to maintain their good nutritional status, thanks to an adequate intake of nutrients and a satisfactory state of health that permits the effective utilization of these nutrients. A good nutritional status is a necessary condition for the normal development of the individual, including his or her capacity to perform work, and generally to lead an active and healthy life.

Let us review the three conditions that are necessary to assure nutritional security, or adequate nutrient intake and good health:

1. Access to food, which is to say both the physical and financial access to food (also called food security)
2. Access to care, which is to say the provision of sufficient care to ensure especially that young children, pregnant women, and other vulnerable populations (e.g. the elderly and handicapped) are both well fed and in good health
3. Access to health services and a healthy environment.

**Access to food** comprises everything that touches on the household's ability to obtain adequate food supplies. This includes questions related to markets and their functionality, the transfer of food between zones of surplus and those that suffer deficits, agricultural production,

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<sup>2</sup> *ROME DECLARATION ON WORLD FOOD SECURITY AND WORLD FOOD SUMMIT PLAN OF ACTION*. World Food Summit, Rome, November 1996.

sources of revenue, and the quality and diversity of available foodstuffs. Weaknesses in any of these factors can seriously jeopardize a household's food security.

**Access to care**, especially to vulnerable household members, concerns everything that touches the way people are fed or taken care of. Knowledge, beliefs, income, and time are all examples of the types of factors that affect whether people receive the care that they need.

**Access to adequate health services and a healthy environment** concerns everything that is related to health services and the hygienic quality of the household environment. This includes, for example, the proximity, quality, and financial accessibility of health services, the availability of vaccinations, access to potable water, the cleanliness of the living area (a clean courtyard that does not contain human or animal wastes or other dangerous objects, the access to latrines, the proper disposal of household wastes, clean air, etc.), and the knowledge and use of sanitation practices.

From this we can see that while food security (as the access and availability of food) is necessary to achieve nutrition security, it is not by itself sufficient. Nutritional security also depends on these other issues related to care, health services, and the environment.

In the following section, we will develop more fully critical issues related to two of the three essential components of nutrition security. These are *food security* and *care*. The third component which relates to the access to quality health services and to a healthy environment is quite straight forward and will not be further developed here. This is not to diminish however its essential character in determining the nutrition security of people.

### **Critical Issues Related to Food Security**

Among the issues that are most important to understanding the concept of food security are

- (1) the availability of food (in sufficient quantity, quality, and diversity)
- (2) the financial means to access food
- (3) access to food at all times (the temporal dimension of food security)
- (4) household resilience in the face of shocks

These issues will be addressed here in turn.

#### **1. The Availability or Physical Access to Food**

Food availability refers to the physical presence of enough food as needed. This also implies that the foods that are available offer sufficient nutrient diversity to meet the nutritional needs of the population. Finally, the available foods should be of an acceptable quality, both in terms of their sanitary condition and their cultural acceptability by the population.

*National and Local Food Availability.* Food availability can be measured at either the national or the local level. On the national level, this means that there is enough food to cover the needs of the entire population at all times. National availability is assured by a combination of production, imports, and food aid (where it exists).

The food monetization aspects of Africare's DAPs can contribute to national level food availability by increasing the overall availability of certain foods. But Africare's development activities are more likely to intervene at the community and household levels. At these levels, they are concerned with all aspects of food and nutrition security.

On the local level, food availability implies that a sufficient quantity of food is available locally to feed all people in all the households in the locality. Households must access food either through their own production or on the local market.

*Diversity, Quality and Safety of Foodstuffs.* Together, the available foodstuffs must offer all the nutrients needed to assure a healthy diet. Households must thus be able to easily find food from all the food groups. These foods must also be safe for consumption, meaning that they are not contaminated in any way.

*Cultural Acceptability.* The cultural acceptability of foodstuffs refers to people's preferred consumption patterns. Certain foods may not be considered to be "acceptable" by a given population. These foods may be either imported or local in origin. When households confront a period of heightened food insecurity, they may consume foods that are not normally considered acceptable as a last resort (e.g. certain wild leaves). Food consumption patterns that include these "unacceptable" items are an indicator of serious problems of food insecurity.

Unfamiliar or foreign products may not correspond with local consumption preferences. Even if these are made available to households, they will not contribute to food security if people choose not to use them.

*Periodic fluctuation of food availability.* Food availability may fluctuate in time as related to the agricultural calendar. Indeed, food may be less and less available as one moves away from the harvest season. In many communities, there may be no specific strategy put in place to prevent stock shortages.

In light of the discussion above, we can see that among the principal issues to be considered when efforts are made to improve food availability are the following:

- u whether there is sufficient quality food available to cover local needs (whether by production or on the market)
- u whether the food available offers sufficient diversity to meet the population's nutritional needs
- u whether food availability can be stabilized over the year.

*Potential DAP activities to deal with Food Availability Problems.*

There are numerous program activities that can contribute to the availability of food. Among these are those that increase production of food or encourage the diversification of crops, improvements in transportation and processing of foods, and the strengthening of markets.

Monitoring of these interventions should be done in such a way that their impact on the diverse aspects of food availability outlined above can be evaluated.

## **2. Financial Access to Food and the Ability of Households to Procure Food That They Do Not Produce**

The fact that foodstuffs are available and can be physically accessed does not guarantee that they are financially accessible to all who need them. The problem of financial access is most severe in households that are the weakest in socio-economic terms.

It should also be noted that the concepts of food quality and cultural acceptability apply to financial access just as much as they do to physical access. If among all the foods that are available, the only ones that the poor can afford are those that are of low quality or are culturally unacceptable, then the problem of food access persists.

Financial access to food means that every person can, at all times, get hold of the food she or he needs. Households can access food in many ways, including

- u producing it themselves
- u buying it with their revenues
- u exchanging other goods they produce for foodstuffs
- u getting it as a gift

In order to access food through home production, the household or individual must be able to mobilize the means of production needed to produce the food. This includes fertile land, agricultural inputs such as seed and fertilizer, agricultural extension services, etc.

Access via purchases paid for out of household revenues means that the family or individual must have access to an adequate source of revenue, either by selling his/her own products or animals or by income from paid labor of some type.

Some households access food by means of exchanges, which can include trading one type of food for another (such as grains for milk) or non-food items (such as straw or wood) for food. Food may also be obtained by gifts and loans.

Some forms of food acquisition, such as food aid and charity toward the poorest are not necessarily considered to be “desirable” strategies. They are, rather, temporary coping mechanisms used in times of severe food insecurity. While these may contribute to a family’s food security, they are considered to be indicators of a situation of insecurity.

Among the principal means by which food access can be improved are the following:

- u increasing access to the means of production needed for agricultural and livestock production
- u diversifying and enhancing sources of revenue for the household and, especially, women
- u stabilization of revenues throughout the year
- u good management of financial resources
- u stabilization of food prices during the year and across different years.

### *Potential DAP Activities*

DAP activities to address food access constraints include developing income generating activities (both farm and off-farm) and price stabilization for basic foodstuffs.

The resolution of such fundamental problems as access to land and the equitable distribution of resources are critical to long-term food security but few DAPs have attempted to deal with these thorny issues.

Monitoring of program interventions that seek to improve financial access to food should allow some evaluation of their real impact either on making food more affordable (by diminishing or stabilizing prices) or by increasing people's income so that they can afford the food that is put on the market.

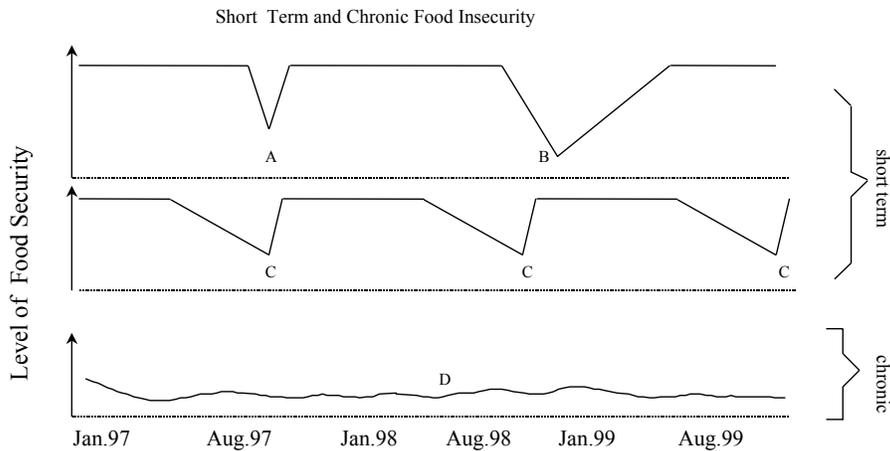
### **3. The Temporal Dimension of Food Insecurity**

Food availability often fluctuates in relation to the agricultural calendar. The further one gets from the previous harvest, the fewer foodstuffs are available since at this time the food stocks will be nearly exhausted and often there has been little planning to deal with the shortages of locally produced foods on the market.

People's access to income or other resources also change with time, whether from one season to another, or from year to year. The time variable is a critical consideration in food security and it should be taken into consideration in both planning of action and in their evaluation.

Let us now scrutinize the many facets of the temporal dimension of food security. We will distinguish between short term and chronic food insecurity.

**Figure 3.2 Short Term and Chronic Food Insecurity**



A , B = temporary short term food insecurity  
 C = cyclical short term food insecurity  
 D = chronic food insecurity

We begin by considering short-term food insecurity. Short-term food insecurity can be either (1) temporary or (2) cyclical (fig.3.2).

Temporary food insecurity refers to the situation where families confront an unexpected crisis that puts them at risk of not being able to meet their food needs for a limited period of time. The type of situation that might result in such a bout of short-term temporary food insecurity includes a family member being temporarily laid off work, an unexpected medical expense, or the loss of an animal due to illness or theft.

If these bouts repeat themselves in a regular fashion, we call them cyclical (rather than temporary) situations. Food insecurity that is related to seasonal variations (e.g. the hungry season when families regularly expect to confront hunger as they wait for the new harvest) is a typical case of a cyclical but short-term problem. Cyclical food insecurity is usually more easily predicted than temporary food insecurity because it generally follows a sequence of known events such as decrease in food stocks, a periodical seasonal job release after harvest, etc...

Chronic food insecurity occurs when households are continuously at risk of not being able to cover the food needs of their members. This might be the case of a family that does not have access to fertile land or faces other handicaps limiting their production. Chronic food insecurity is most often linked to poverty.

### *Potential DAP interventions linked to temporal aspects of food insecurity*

The various temporal problems outlined above have different causes and different consequences. The choice of DAP interventions will thus vary in relation to the type of insecurity that is encountered and its causes. In the case of chronic food insecurity, it may be essential to develop stable sources of revenue. If the insecurity is temporary, it may be more important to develop buffering strategies. This might include the diversification of production to reduce the risks linked to any one activity, commercialization of part of the crop to permit savings, or the diversification of income sources.

The questions that should be asked and the information needed for monitoring and evaluation will be different depending on whether the insecurity is temporary or chronic. In any case, you should aim at or be able to:

1. monitor the number of households in any one of these situations
2. prevent more households from getting into a chronic food insecurity situation
3. decrease the number of households that do suffer from chronic or cyclical food insecurity

#### **4. The Issue of Household Resilience**

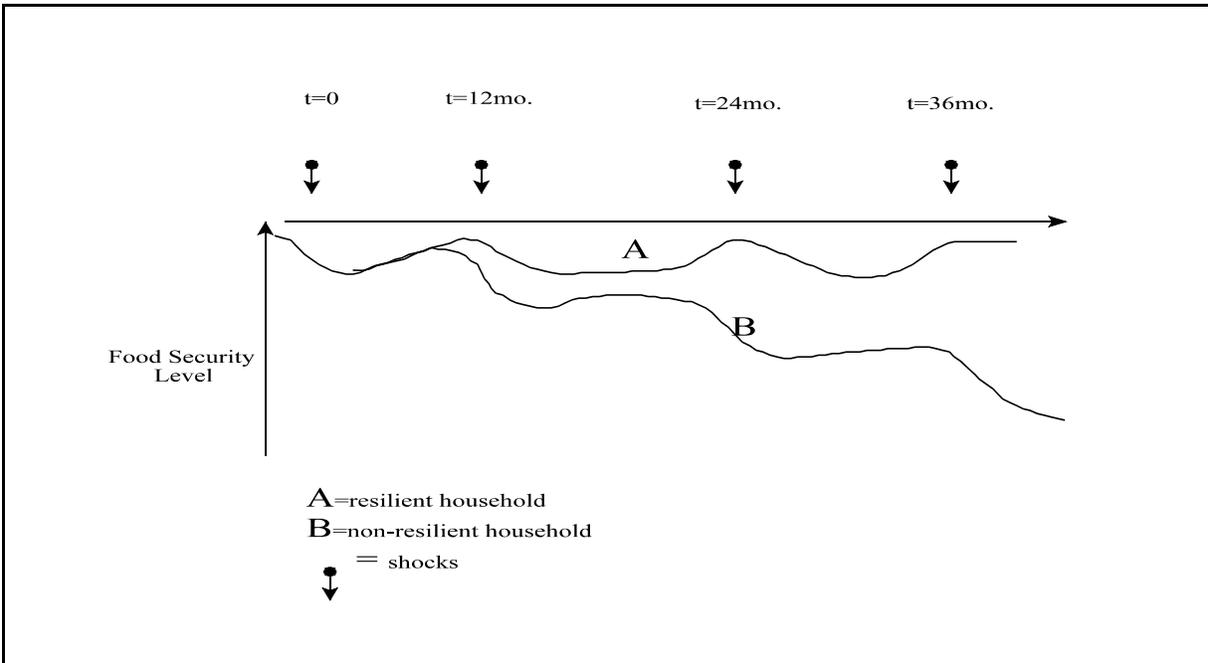
Resilience is one of the most interesting factors to look at when assessing the impact of an intervention on a household's food security. The resilience of a household refers to its ability to recover from a shock and to return to the level of food security it had before the shock (fig.3.3). We can think of this concept in terms of a rubber band that is stretched, but then returns (or doesn't) to its original form.

We can consider shocks as "risks" to the household and household's assets as "insurances" to counteract the risks. For most households, insurance is held in the form of assets that can be disbursed either to prevent a bad situation from arising or to deal with it when it occurs. Examples of household assets include a job and the income it brings in, fertile land, abundant labor, livestock. Risks include such factors as serious illness, the loss of animals to disease or theft, and poor rainfall.

Households that have lots of insurance can use these means to mitigate the effect when they are hit by a shock. A family that owns livestock, for example, can sell an animal to pay for a needed prescription without having to cut back on food. A family that owns no animals and has no other easily disposed of assets may have to go into debt to purchase the medication or use money that otherwise would be used to purchase food, thereby reducing their consumption for a period of time.

The more severe the shocks and the more frequently they occur, the more the household is likely to have to use up their insurance, possibly even exhausting their options. Resilience refers to their ability to re-constitute their various forms of insurance once the crisis is over. The poorer the family, and the fewer their assets, the more vulnerable and less resilient they are to shocks. Since they have fewer forms of insurance, they use them up more quickly and end up in even greater insecurity than before. The diagram below shows a resilient household which can recover its food security after a shock and a non-resilient household that gets into deeper and deeper food insecurity after each shock.

#### **Figure 3.3 Household Resilience**



When confronted by a series of shocks, most households adopt a series of behaviors that are carefully calculated to protect their resilience. The first behaviors to be put in place are generally those known as “adaptive behaviors” whereby one can trade an animal for grain or invest more time in their trade and less in their fields because the climate may be bad and they foresee a bad harvest.. Once all the possibilities for adaptive behavior have been exhausted, they then turn to “destitution behaviors”. Destitution behaviors are those where the household is generally selling their productive assets such as female animals, farming tools or their land. These are rather irreversible moves as compare to trading one’s assets or one’s time allocation. Once families turn to destitution behaviors, they are moving into a crisis situation since they are taking measures that will make them less able to weather the next set of shocks. By looking at a household’s behavior in the face of shocks, it is possible to assess their level of vulnerability <sup>3</sup>. This in turn can give clues to the most appropriate way to assist these families to improve their food security.

As one can see, household resilience integrates the temporal dimension of food security and the intensity of the shocks. The more severe the shocks the more difficult it is to for households to overcome them and this gets only more difficult if these shocks get repeated.

Food security interventions should contribute to maintaining or strengthening a household’s resilience and therefore its ability to deal with shocks. A more resilient household is a more food secure household. Increased households resilience is therefore an extremely valuable criterion to

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<sup>3</sup> Office of Arid Land, 1991

use in assessing the success of a food security intervention because resilience is so intimately related to a family's ability to assure its food security over the long term.

Within food security DAPs, resiliency can best be addressed at the household and at the community level, depending of the type of shock. Hence, it can be measured at these levels. Communities that have identified the risks to food insecurity they are facing can address them in many ways, for example by monitoring the situation and increasing their preparedness, in developing crisis responses through relief and reconstruction (including food for work) where appropriate, and with activities that promote smoothing consumption such as cereal banks, community kitchens, etc...

Households can also increase their resiliency through better preparedness such as better planning of staple consumption including that for festivities and by better budgeting, adopting enhanced economic behaviors relative to the selling and buying of assets and foodstuffs at more favorable periods, etc. Through RRA and PRA techniques, the population together with the DAP staff, can assess the risks they are facing and identify current households and communities' capacities to face them. Depending on the context, these can relate to climatic, economic, health, agricultural productivity, markets and political conditions, etc. After their identification, the population can then determine best actions to take to enhance their resiliency. That information constitute the basis for the measurement of changes with respect to resiliency. The Webb and Rogers paper cited in footnote 1. has a very useful section devoted to managing risks and opportunities. A copy of the paper can be downloaded at [www.fantaproject.org](http://www.fantaproject.org).

Use of RRA and PRA techniques make it possible to discuss these issues with villagers and to get a better understanding of their assessment of the situation and how it may have changed. To the extent possible, DAPs should try their best to assess this element of food security and to develop better measures that can be used to evaluate the impact of programs on this most important aspect of household well-being.

## **Critical Issues Related to the Adequate Care of Family Members**

While food availability and accessibility contribute to food security and thereby to nutrition security, it must be remembered that individual members of a household may have special needs and these must be taken into consideration in assessing the nutrition security situation. Let's here discuss issues related to adequate care, the second of the three determinants of nutritional security.

Children and pregnant and nursing women have particular needs that are associated with the rapid development of the fetus and young child. People with illnesses may also have special nutritional needs in order for their bodies to most effectively battle the disease and reconstruct damaged tissues.

The following section will review some of the care needs of the vulnerable members of the households and show how the lack of adequate care can put them in a state of nutritional insecurity, sometimes in spite of an overall household food security condition.

### **1. The Needs of Young Children**

Children are more sensitive than adults to their environment whether related to hygiene, food, emotional stress, etc. They require special care and attention. If their needs for care and attention are not met, their nutritional security can be put at risk, due either to declines in their food intake or in their health status.

It is at birth that human beings have the greatest need for food that is highly concentrated in nutrients. At the same time, newborns have only tiny stomachs that can accommodate only very limited quantities of food. The need for a highly concentrated and uncontaminated food source makes breast milk the only recommended food source for babies until they reach the age of about 6 months.

After the age of six months, babies require some complementary source of food to accompany the breastmilk. This complementary food source must also be uncontaminated and rich in nutrients, however. At this stage, the best food source (aside from the breastmilk that they should continue to consume) is an enriched semi-liquid porridge. These porridge are generally made from cereals. Since cereals are bulky foods that are not highly concentrated in energy, the porridge needs to be enriched with fat and protein. This can be done by adding a small amount of any of these nutrients from any source that is available to the household. Depending on the area, some of the following ingredients will be easy to find and combine : peanuts or oil seeds; animal milk or coconut milk; beans, lentils, or peas; eggs, meat, or fish; a small spoonful of oil, butter, peanut butter or margarine.

In addition to their special needs for nutrient rich foods, children from 6 to 36 months also need to eat more often than older children and adults. Typically they should eat five or six times a day so that their smaller stomachs can absorb enough nutrients to meet their needs to grow to their full potential and to stay healthy.

In practice, this means that children often need to be actively encouraged to eat and that their portion of the common bowl needs to be set aside. It may even be necessary to add certain of the above nutrient rich foods to the child's portion to assure that his/her nutritional needs are fully met. Children who don't eat often enough or who have trouble competing for food in the common bowl are lacking physical access to the food that they need because they lack the necessary care from their care takers to ensure their proper feeding. This leads to a situation of nutritional insecurity. If their nutritional needs are not met this will result is childhood malnutrition, a situation that is unfortunately very common in many parts of the world.

The rates of malnutrition (measured as 2 standard deviations below the norm of weight for age) of children under 5 in developing countries was estimated at 26.7% in 2000, down from 37.4% in 1980. The rate for Africa as a whole was 28.5% but this figure was heavily influenced by conditions in North Africa where the rate was 14%. Looked at separately, the rates for Western Africa and Eastern Africa were 36.5% and 35.9% respectively. While these rates were lower than those for South Central Asia (43.6%) what was most worrying about the situation in these

areas of Africa is that unlike all other locations, the rates are increasing. It is projected that the rates will be a full five percentage points higher by 2005 than they were in 1995.<sup>4</sup>

This shows how essential is the care component to ensure the child's nutritional security. It also points to where a program can either intervene or watch for a negative side-effect if they aim at ensuring nutrition security and promoting good food utilization.

## 2. Pregnant and Nursing Women

Pregnant and nursing women need to consume a well balanced diet that is complete in both macronutrients (carbohydrates, proteins, and fats) and in micro-nutrients (vitamins and minerals). These nutrients are essential for both the normal development of the fetus and for the production of breast milk of sufficient quality and quantity. In the absence of adequate nutritional intake during this critical period, the health of both mother and fetus/child are at risk.

It is not uncommon to find that, within a household, women may be more nutritionally insecure than men. This occurs due to the failure of one or more of the three conditions to achieve nutrition security:

- u Women's *food security* may be independent of that for the rest of the household. They may be responsible for assuring their own food security and be unable to do so.
- u Women suffer from a lack of *care* that may be due to a lack of knowledge of their nutritional needs or to food taboos which restrict their diet especially when they are pregnant and nursing.
- u Women often suffer from a lack of *access to health services*, particularly during their pregnancies (which may occupy a significant period of their adult lives).

Adequate care to pregnant and nursing women include their adequate diet and possibilities to rest as needed. These may depend on the women and other household decision-makers' knowledge and on the household's socio-economic state.

The DAP interventions can either contribute directly to the care component and/or make sure that they do not produce a negative effect on the determinants of care to these women. Of particular concern are the income generating activities for women and the gender focused activities. These must be carefully designed (and monitored) so they do not have a negative effect on women's access to adequate care.

## 3. Other Vulnerable Individuals

Individuals who are recovering from sickness or a serious wound have increased nutritional needs as they build or rebuild damaged tissues.

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<sup>4</sup>United Nations Administrative Committee on Coordinatorion/Sub-Committee on Nutrition in Collaboration with International Food Policy Research Institute, *The World Nutrition Situation, January 2000*, p.10.

Some areas may also comprise a high percentage of handicapped people which have a high risk of being extremely poor. They are the least likely to participate and to benefit from the DAP unless specific efforts are made to account for them. Two issues may be of particular concern here: (1) their individual vulnerability to food and nutrition security, and (2) the burden they may impose on their household and its impact on the household's food security.

The rates of HIV/AIDS infection is another very important factor in both nutritional demands and food insecurity. The individuals require good nutrition to maintain themselves and to withstand the side-effects of any medication for their illness (and opportunistic infections) that may be available to them. These requirements will place a drain on household resources as well result in a loss of productivity of the individuals, especially if they are adults. For example, a recent analysis posted November 18, 2003 on the food security page of [www.developmentgateway.org/](http://www.developmentgateway.org/) found that the agricultural labor force in Namibia would be reduced by 26% by 2020 from the 1985 level. Many other African countries, especially those in Southern and Central Africa will suffer losses close to those of Namibia.

RRAs at the time of baseline can capture useful info on the nature, the extent and the severity of these problems. This can guide your judgement as to the best way in which the DAP should or can account for these difficulties in its intervention or during monitoring.

#### **4. Intra-Household Food Distribution**

The distribution of food at the household level is critical to determining the food intake of various members of the family. To ensure nutritional security, food distribution must be done so as to meet the needs of each individual. In many cases, this is not the criteria that is used in distributing food. Instead families may follow traditions that distribute food according to social status or other criteria that are not based on need.

Here, a special attention can be put to monitoring the food allocation in households that are beneficiaries of food distribution interventions such as school lunches, food for work and supplemental feeding to children and to pregnant and lactating women. Often times, direct beneficiaries of external food sources see their home ration decrease. Then the net effect of the intervention is decreased or may even fall in the negative.

#### **5. Issues of Knowledge Related to Adequate Care**

Problems of nutritional insecurity are often aggravated by the lack or inadequacy of care provided to those who are most vulnerable. Typical nutrition security issues related to care include good weaning practices and special care to pregnant and nursing mothers, even if this means to give them privileges, in order to ensure that they get an adequately balanced diet that covers all their needs.

For example, women and children particularly may not receive "adequate" care because persistent food taboos, traditional eating practices that are not based on sound nutritional information, and/or the lack of nutrition knowledge, etc. can prevent them from accessing the proper food or enough of it or may promote unhealthy behaviors. Problems of this nature are those we consider related to care adequacy.

## **The Relationship Between Nutrition Security and Food Security**

Nutritional and Food Security are linked in a dynamic relationship in which cause and effect operate in both directions between availability, access and utilization as is demonstrated by Figure 3.1. Food insecurity may cause nutrition insecurity by imposing constraints to the quality and quantity of food that is consumed. However, nutrition insecurity can jeopardize food security or exacerbate food insecurity since when people are nutritionally insecure their labor capacity is diminished and they are likely to be less productive in their work (whether producing food or revenues). In addition, nutrition insecurity may lead to health problems that cause families to spend more on medicine and health care with a resulting reduction in the amount of money available to be spent on food purchases.

This dynamic shows that even though food security is a determinant to nutrition security, nevertheless, a condition of nutrition insecurity, due to any of its three underlying causes can have a negative effect on food security, thus drawing the household into a vicious cycle of insecurity and poverty.

## **The Perspective of Villagers on Food and Nutritional Insecurity**

In general, villagers will be more likely to recognize and describe food insecurity than nutritional insecurity (even if they don't use these terms to describe their situation). While people generally recognize when they are food insecure, they may not even know that they are at nutritional risk.

Food security is more often discussed at the household level rather than at the individual level. However, we have seen that food insecurity can also be an issue for the individual household member (ex. specific women or children) who may be at risk even though the general household situation is quite positive. On the other hand, nutritional security is a concept more often dealt with at the individual level.

Various RRA/PRA tools and techniques can be used to explore the nutritional and food security situation of households and individuals. Even if the respondents do not identify their situation with these terms, the concepts above should help the field agents in their analysis of the situation with the villagers and in the design of their action plans to effectively address the problems that arise during the discussions. In analyzing these situations, the villagers' knowledge of their situation and practices can be combined with the field agents' knowledge of nutrition and food security concepts to provide the fullest and most complete analysis of the situation. Both types of information are invaluable and the challenge is to put the two sides together in a way that leads to the most effective action plans.

## **In Summary**

To sum up, both the scientific and development communities now recognize that while availability and access to food are important determinants of an individual's nutritional status, they cannot by themselves guarantee nutritional security. Access to adequate care and health services as well as a healthy environment are other important determinants of nutritional security.

This underlines the importance of distinguishing between the concepts of food and nutritional security. Using these concepts correctly will enable us to better understand how the various constraints faced by households affect their well-being and to determine which DAP activities can have the greatest impact on the situation.

If, for example, childhood malnutrition is not the result of food insecurity, but rather due to a lack of care and the care giver's ignorance of good weaning practices, it only makes sense to focus on these problems. A DAP that sought to address the problem by promoting income generating activities for these children's mothers might actually end up making the situation even worse. These activities could result in women having even less time to spend with their children and there would be no change in knowledge or improvement in weaning practices unless the DAP also includes a component for this purpose.

If, on the other hand, the area has been bombarded with nutrition education workshops but the mothers in question don't have the resources needed to acquire the ingredients that are recommended to make improved porridge, then additional nutrition education lectures will be of little use. In this case, a focus on income generating activities for household members may be the most appropriate intervention while not neglecting the fact that adequate care is absolutely needed at the same time.

In working on these issues, it is important to keep in mind:

- u the distinction between food security and nutrition security
- u the principal causes of each
- u the interrelationship between the two phenomena.

In all cases, the principal objective should be to use this information to develop interventions that are most likely to have a positive impact in solving people's problems related to food and nutrition security. In Africare's programs this generally means that components focusing on both will be included in the activity and positive actions will be taken to assure that the necessary linkages are between the two.

### **Examples of Nutritional Insecurity and its Various Causes**

In order to develop activities that contribute to household food and nutritional security, it is necessary to understand how the various situations of household members might affect their food and nutrition security. This knowledge also forms the basis for any evaluation of the DAP's impact.

The examples below show different cases (1) of nutrition insecurity due to the failure of either one or more of the three essential conditions to achieve it, and (2) cases of nutritional insecurity of some household members within an otherwise food secure household.

## **Two Examples of Nutrition Insecurity Due to Food Insecurity or to Lack of Adequate Care**

### **Example 1: Nutritional Insecurity due to a Lack of Diversity in the Diet**

A household that consumes a very monotonous diet may be at risk of nutritional insecurity because their diet, while satisfactory from a caloric point of view, does not include sufficient quantities of needed nutrients such as vitamins and minerals, or proteins and fats. Thus while people may feel as though they have enough to eat, the diet is inadequate for good health. This situation may arise because the household does not have access to nutrient rich foods (either they are not available or people cannot afford them). This problem would fall under the category of *food insecurity*. If this situation arises because the household lacks knowledge about good dietary practices and chooses not to consume the foods that are available and accessible, then the problem is rather related to the category of *inadequate care*.

### **Example 2: Nutritional Insecurity of Young Children who do not Receive Appropriate Weaning Foods**

Children between the ages of 6 and 12 months who are not given food to complement their breast milk consumption or who are given foods that are not sufficiently rich in nutrients are at high risk of nutritional insecurity. To find a solution to this problem, it is necessary to understand whether the lack of appropriate feeding is caused by a lack of adequate care, for example the lack of knowledge of best practices and negligence, or by a lack of food security, for example their lack of resources to obtain foods they would like to give their children, or by the unavailability of appropriate foods.

### **Example of Nutritional Insecurity Caused by Lack of Care and/or Inadequate Health Services or an Unhealthy Environment.**

People who suffer from diseases that affect their appetite, their ability to digest foods, or their absorption of certain nutrients are at risk of nutritional insecurity. This often happens, for example, with children who suffer from repeated attacks of diarrhea. These children are nutritionally insecure and even at high risk of mortality. In the case of diarrhea, nutritional insecurity may be traced back to the failure of any of the three essential conditions to nutrition security. Hence, children may contract this infection by their consumption of contaminated food or water, or because of the unhealthy environment in which they live (e.g exposure to animal feces). These two conditions often arise in a context where inadequate attention is devoted to their consumption patterns, to sanitary practices, and their general care. The lack of access to adequate health services may also have contributed to their nutritional insecurity since once infected, they could not access the care and medication to help them recover.

Diarrhea presents a good example for conditions where many factors act in concert to worsen a situation. This is called the synergistic effect and is often found between an infectious condition and an inadequate diet. This synergistic effect produces a worse off condition than the cumulation of the factors involved and it leads to malnutrition and growth retardation or to serious health condition and death.

## **Example of Nutritional Insecurity Caused by Inadequate Intra-household Food Distribution**

In some traditions, it is culturally acceptable (and even encouraged) for men to have a privileged position in the household and, in particular, in the distribution of foodstuffs. They are often the ones who are allocated more meat and other high status foods (which are frequently more nutrient rich than the rest of the meal). When this leads to a situation where women and children are deprived of the nutrients they need, we speak of a maldistribution of food resources at the household level. This phenomenon is also associated with a lack of care and inattention to the needs of these “lower status” individuals. This situation leads to nutritional insecurity and eventually to malnutrition if the lack of access to better quality foods results in nutritional deficiencies for women and/or children with unmet dietary needs.

**MODULE 4**  
**PARTICIPATION**

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**Introduction**

Africare’s food security DAPs adopt a participatory approach as the one that is most likely to achieve their double objectives of (1) improving the food security and nutrition situation and (2)empowering local populations to better solve their own problems over the longer term. While it is easy to speak of a participatory approach, it is often difficult to know exactly what these words mean in practice. This module offers definitions of what is meant by participation in this context and then looks at how the approach will be applied, in practice, in Africare’s food security programs.

**What is Meant by a Participatory Approach?**

There is by now considerable evidence suggesting that participation is a critical factor in the success of development activities. As a result, agencies have, increasingly, adopted a participatory orientation. Their approaches are anything but standard, however, suggesting that there are as many ways to implement participation as there are groups committed to doing so.

Table I shows how three different groups of observers of the development process have categorized different kinds of participation. They all place community decision making at one end of the participation scale. This is sometimes known as “interactive participation” where the community takes an active role in defining activities and determining how they will be carried out. Moving toward the other end of the scale, we find that populations are less and less involved in decision making, and instead are consulted, or merely provided information for

decisions that are made by others. This type of participation is often called “passive participation.”

The purpose of such topologies of participation is not to judge the different approaches as more or less valid, but rather to distinguish between them. The appropriateness of each type of participation will depend on the community, the situation, and the kind of results that are expected from the process. The different approaches will also make different demands on the executing agency in terms of time and money. The more the DAP seeks the interactive participation of the population (in the choice of activities, administration of the budget, etc.) the greater the investment that is likely to be necessary in capacity building and empowerment. The pay-off to this investment is to be reflected in the sustain ability of the results of any activities that are carried out.

**Table 4.1 Three Ways of Looking at Participation**  
(the lower in the table the more participation is interactive)

Topology 1	Topology 2	Topology 3
Passive Participation		
Participation in information giving	Information	
Participation by consultation	Consultation	
Participation for material incentives		Cheap Labor
Functional participation		Financial inputs Contract obligation
Interactive Participation	Deciding together	Community participation in decision-making
Self Mobilization	Acting together Supportive of local initiatives	
Ref. Jules Pretty et al.	Ref. David Wilcox	Ref. Lyra Srinivasan

Africare’s approach to participation in its food and nutrition security activities is oriented primarily toward supporting local community initiatives. In particular, the agency seeks to enhance the community’s capacity to analyze its situation and to define, carry out, and eventually evaluate its own action plan with the goal of improving the local situation. This is to say, Africare is working toward a more interactive participation by local communities.

The basic principles of interactive participation, as described in IIED’s Trainer’s Guide<sup>1</sup>, may be

<sup>1</sup>Jules Pretty, Irene Guijt, John Thompson, Ian Scoones: Participatory Learning and Action: A Trainer’s Guide. London: IIED, 1995, p. 56-57

summarized as follows:

*A defined methodology and systematic learning.* The focus is on cumulative learning by all the participants, which include both professional trainees and local people.

*Multiple perspectives.* A central objective is to seek diversity, rather than simplify complexity.

*Group learning process.* The approach assumes that the complexity of the world will be revealed through group analysis and interaction.

*Context specific.* The participatory approach must be sufficiently flexible to be adapted to diverse conditions and actors. Variants of the methods are encouraged.

*Facilitating experts and stakeholders.* The approach is concerned with the transformation of existing activities to try to improve people's situation. The role of the external "expert" is best thought of as helping people to carry out their own study and so achieve something.

*Leading to change.* The process of joint analysis and dialogue helps to define changes which would bring about improvement and seeks to motivate people to take action to implement the defined changes.

The empowerment of local populations to develop and implement Action Plans to improve their food and nutrition security in the short and long term suggests that they must play a central role in deciding which activities will be carried out in their community. A principal role of the DAP is thus to help the population develop the skills needed to make decisions that are useful and fair and to give them the tools to evaluate their own progress. This requires a substantial investment in developing organizational skills as needed to carry out these tasks.

The approach promoted here is based on the assumption that communities learn best by doing. It avoids, therefore, separating out the empowerment training from other DAP activities and carrying out one set of food security initiatives and another set of parallel empowerment activities. Instead the community gains experience by analyzing its food security situation, planning and implementing the activities needed to address priority concerns, and then evaluating their impact. All of this takes place within the context of the PRA.

During this process, the community will therefore undertake the following tasks:

1. Carry out a situational analysis of their food security and nutrition status
2. Describe the situation in operational terms
3. Analyze the causes and consequences of problems identified
4. Identify their strengths and weaknesses to address the situation and achieve the desired goals
5. Identify potential solutions
6. Prioritize and select most appropriate solutions
7. Draw up a Community Action Plan
8. Implement the Plan
9. Monitor the implementation of the Plan

10. Evaluate whatever actions are undertaken
11. Revise and add to the plan as necessary

Many of these tasks involve the community's use of information, whether collecting information about their situation, analyzing it, or using it for planning purposes. PRA provides the communities with tools to carry out these various tasks, as described in Module 7.

The empowerment of local populations to better manage their food security and nutrition situation implies building capacity in a range of skills that goes beyond the technical skills related to cultivation, constructing dikes, marketing produce and other activities stemming out of their Action Plans. Often, as communities acquire these skills, they also develop new perceptions about themselves and what they are capable of accomplishing. The following list suggests some of the areas in which communities may develop their skills and the DAP can assess progress toward its capacity building objective.

- skills in collecting and analyzing information about their situation and in interpreting the results
- a sense of commitment to meeting clearly defined food and nutritional security objectives
- growing social awareness
- increasing independence in decision making
- greater ability to manage collective ventures
- skills in planning
- skills in problem solving
- ability to carry out an action plan
- greater sense of initiative
- skills in negotiation and conflict resolution
- increasing self confidence
- emergence of new and stronger leadership

This type of participatory approach seeks to unleash a development process that is as important and intended to be more sustainable than the immediate concrete improvements in food or nutritional security. This is why the empowerment objective of these DAPs is given the same importance as improvements to food security and nutrition.

The dual DAP objectives require evaluation of both types of results at the same time. The DAP needs to assess progress toward community empowerment, as well as changes in the food security and nutritional status of the population. Guidelines for how this may be done will be offered in Modules 5 and 8.

## Site Selection in the Participatory Approach

Having good participatory methods is not enough to make these approaches work. It's also important to choose "good communities" in which to implement them. The choice of sites will be based on such factors as need and the likelihood that any efforts that are undertaken will succeed. The needs of the population will be determined in relation to the DAP's food security framework which will, in turn, be based on information gathered in RRA studies and surveys. For its part, the likelihood of success will depend on whether the resources of the DAP match the needs of the community as well as the population's interest in participating and the skills they bring to the process.

There is no automatic guarantee that a population will want to engage in a participatory process or that they will have the skills needed to carry it out successfully. Some communities will simply not be interested in investing the time and effort needed to make this approach work. Some communities will be able to demonstrate that they are well suited to carrying out these approaches by showing how they have confronted and resolved problems in the past. In other communities there may be major blockages to this type of community mobilization. Such blockages may either be socio-cultural (e.g. ethnic or religious conflicts, highly hierarchical structures where participation is not valued by the leadership, weak village leaders) or geographic (e.g. vast distances between households and limited mechanisms for communication, massive outmigration, physical inaccessibility to the community and its members).

Finally, communities will have their own "participation histories" that you will want to know before beginning to work with them. This will enable you to identify the starting point for the process in terms of their organizational situation and planning capacity (a baseline of sorts) and also assist in identifying people, institutions, and organizations with whom you can begin to work most effectively.

Throughout the DAP, it will be important to work with the local population not only to analyze information about their food security and nutrition situation, but also to reflect on the process they are carrying out. These discussions may address issues such as:

- what the participants feel they have learned from various exercises
- brainstorming of key issues that were worked on during each session
- identification of problems that have been resolved as well as those that are still outstanding.
- Identification of capacity building needed to manage their food security and reduce their vulnerability

This type of discussion is important not only for the community but also for DAP staff since one of your tasks is to monitor progress toward the capacity building objective. Discussions of this type will provide important indicators of whether both the knowledge and the capacity of the population has increased through their work with the DAP. Capacity building is measured not only in terms of improvements to food security and nutrition but also (and especially) in terms of long term capacities to assess and manage issues that affect households, groups or the whole community, including planning, implementing plans, advocating, finding resources, etc.

It is important to keep in mind that communities may make progress in developing these

analytic, planning, and management skills without all ending up at the same level of competence. Progress depends on what the population's skill level was at the outset and should be measured from that point.

### **The Role of DAP Staff in the Participatory Process**

The role of DAP staff is not the same in this type of activity as it would be in a more "classical" project where the emphasis is largely on technical objectives and material outcomes. Rather than managing physical resources and infrastructure development, the task is to support and work in collaboration with the local population as they develop action plans to improve their food and nutritional security. This includes:

- encouraging the development of technically appropriate activities that can effectively address problems of food and nutritional security and supporting the population's efforts to implement these activities
- encouraging and supporting the villagers as they develop their skills in managing their food and nutrition situation and their capacity to effectively use PRA methods
- promoting the capacity of the population to engage in analytic discussions and to resolve conflicts between individuals and between competing ideas.

The disciplinary and sectoral skills (credit, health, agriculture, education, nutrition) that staff bring to the DAP are critically important. But equally important are aptitudes in:

- discovering, promoting, and finding ways to effectively use local knowledge and expertise in the development of DAP activities
- promoting and respecting decision making by the local community
- building a relationship of collaboration and mutual respect with the local communities.

The attitude of the outside facilitator is essential to building an effective learning process that leads to community empowerment. The general aim is to increase the community's confidence in solving its own problems and to develop the local leadership needed to guide and sustain the process over the longer term.

### **Skills and Characteristics of DAP Staff**

The responsibilities accorded to DAP staff under the participatory approach require a special set of skills and characteristics. The importance of analytic and management skills cannot be underestimated. In addition, however, the staff member will need knowledge of and experience in participatory techniques that are used by the community to collect, analyze, and interpret information about their food security and nutrition situation. They will also need to understand well the food security and local capacity building frameworks on which Africare is basing its

approach to these DAPs. Module 7 of this manual presents information on the PRA approach. The more familiar you are with this method the better able you will be to adapt the approach to the specific needs of the communities where you work. In addition, a paper on the framework for local capacity building in food security activities was prepared for Food Aid Management by Suzanne Gervais. This paper is a useful reference that is included in the Annex.

In addition to knowledge about the methods to be used, certain personal characteristics are essential for the successful implementation of this approach. These include, for example,

- a personal commitment and enthusiasm toward the participatory approach
- a sense of humility (and lack of arrogance) concerning one's own knowledge and limits
- an ability to recognize and promote others' strengths (especially within the community groups with whom you work)
- an outgoing and pleasant personality
- a belief that development and empowerment of local populations is possible
- a respect for local populations and their aspirations.

Let us now turn to practical aspects of information management by the local community.

### **What is Participatory Information Management?**

It is clear that if DAPs are to be successful and to have a significant impact on household food and nutrition security, there is a need for good quality information about many different aspects of the problem, including food production and distribution, consumption, and management or behaviors such as mother and child food practices. Information about these issues can be gathered in many different ways. These ways may be more top down or more participatory, meaning that the local populations themselves are involved in the collection, analysis, and use of information. They may be more qualitative or more quantitative. Quantitative information is that which can be reported using numbers and is often quite specific: "32% of the population between the ages of 18 and 36 months are malnourished according to measures of arm circumference." Qualitative information is usually more descriptive and can often provide a richer level of detail that cannot be captured in numeric reporting.

Methods that are more quantitative in their approach include surveys and anthropometric measures such as arm circumference, weight for age, etc. Whether these methods are top-down or participatory depends on how they are carried out. A top down approach would bring in "experts" to measure children's arms and compile the information, usually for a report that never gets back to the village. The same methodology could as well be used by the local population themselves, however. One approach would be for mothers to measure their own children's arm circumference and to record the information. Another might be to train neighborhood representatives to measure and record children's status.

Methods that are more qualitative in their approach include RRA, PRA, focus groups, anthropological observation, etc. While these approaches tend to be more participatory in their orientation, this is not necessarily the case and there are certainly greater and lesser degrees of local participation in the way they are implemented. We can compare an RRA, for example, in which the research team is comprised entirely of outsiders and the report is to be used for

academic purposes with an RRA that includes local representatives on the team and puts an emphasis on making sure that information is systematically shared with the local community.

It often seems as though practitioners of qualitative and quantitative methods are at odds and even competing with one another since they spend considerable time and effort in disparaging one another's methods. The authors of this manual believe that this is counterproductive, especially given the general lack of good information from all sources. Qualitative and quantitative methods are different both in their approach and in the kinds of information they are best suited to collecting. The key to gathering information effectively and efficiently is to match the type of methodology with the kind of information that is needed for each different type of user.

Surveys, for example, are often best for gathering straightforward, non-sensitive information from large numbers of people in a way that permits broad comparisons across a large sample. A survey could be used in several regions of a country for example, to find out basic differences in consumption patterns, activities carried out, household social structures, etc. Surveys are less effective at getting information about more sensitive or complex issues, such as in-depth knowledge about true benefits from some activities and their utilization, child care, identity and practices of food insecure persons within households, etc. This is where a qualitative method like RRA can be more effective because it can probe to find out why people make certain decisions or engage in certain behaviors and use a variety of methods to cross-check sensitive information.

Given these differences in quantitative and qualitative methods, it makes sense to consider them as complementary, rather than competing, approaches. If a DAP is establishing a baseline, for example, it will probably want to use a combination of techniques. The survey could be conducted on a large number of people, for example, to gather information about how many people engage in certain behaviors or present certain characteristics. The qualitative method (RRA or PRA) would then take a much smaller sample and go into greater depth. It can bring explanations to behaviors and reveal characteristics of the people or of their environment which were perhaps unknown before and therefore which could not be studied quantitatively in a survey. It can be useful to think of the survey as a way of getting largely descriptive information about what people are doing, with the advantage that it can rather easily be administered to a large sample. RRAs or PRAs are limited to a very much smaller sample, but have the advantage of being able to go into considerably greater depth, focusing especially on why people do what they do and the multitude of constraints and incentives they face.

Module 7 will present you RRA / PRA techniques while in Modules 5 and 8 you will find how to monitor and evaluate these processes and how to integrate information from the RRA / PRA and that from the DAP-level monitoring system.

## MODULE 5

### AN INTRODUCTION TO THE DEVELOPMENT OF INFORMATION SYSTEMS AND THEIR USE IN THE MANAGEMENT IN AFRICARE DAPS

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### Introduction

DAPs face an enormous challenge as they absorb data from various situations and try to turn these tens of thousands of observations into information that will be useful in decision making. Over the course of a food security and nutrition program, information will be collected in the field and pulled together from diverse sources, then analyzed, organized, and used in a multitude of ways. These activities all fall under the rubric of information management.

Information is necessary to:

(1) know something about, better understand, and analyze different situations and (2) increase the relevance of activities that are to be carried out.

The information system thus comes into play at each stage of the program, whether at the very beginning when DAP activities are first elaborated, during the course of the activity when it is needed to ensure that implementation is going as planned, or at various times when evaluations are carried out to assess the activity's impact.

Information is useful not only for the DAP staff, but also for many other users, whether participating communities or donors. Each of these groups has to make decisions that should, ideally, be based on information that is both relevant and accurate. In order to be of use, this information must also be available at the right time and be presented in a way that makes it easy to understand and to use. This means that DAPs will collect different types of information and present them in different ways depending on the needs of various users.

How, then, do the DAP staff and the villagers go about generating and presenting all this information for these different uses and users? This is the topic that will be treated in this module. Module 8 provides practical guidance on its implementation. The modules are organized as follows :

#### **Module 5 : Concepts in information management**

1. Information Systems
2. Information Users
3. Information
4. Indicators

#### **Module 8: Practical Guidance**

1. Documentation necessary to draw up the DAP
2. The development of indicators needed for monitoring and evaluation
  - Identification of indicators of vulnerability by the villagers
  - Identification of empowerment/capacity building indicators by the villagers
  - How to put together a monitoring and evaluation system

## CONCEPTS IN INFORMATION MANAGEMENT

### The DAP Information System

The need for information continues throughout the life of the activity. Even before DAP has been elaborated, information has played a critical role. The initial idea for the program evolves out of secondary information and specific studies that Africare may have commissioned. In the time-line this part of the information system falls under the category "Preparation for the DAP." Once the DAP has been drawn up, a preliminary version of the monitoring and evaluation system is proposed to donors. The purpose of this preliminary stab at a monitoring/evaluation system is to show how Africare and the DAP team will assure the efficient and effective implementation of the program and how they will go about verifying that the DAP has indeed met its objectives.

The DAP information system includes all the information that concerns the program. Information gathering may begin long before the DAP ever gets underway and continue well beyond the program's termination date. For the purposes of this manual, which is oriented particularly to the needs of program personnel, the focus is primarily on those monitoring and evaluation systems that will be in place during the actual period of activity implementation.

**Preparation for the DAP.** This chapter does not address the theoretical issues concerning DAP preparation which are discussed in the time line chapter. However, in Module 8 you will find some practical guidance for gathering the information that needs to inform and, in some cases, be included in the DAP.

**DAP Monitoring and Evaluation: Inputs, Outputs, Results, and Impacts.** In order for a DAP to meet its objectives, it is critical that it has an effective system for monitoring progress and evaluating impact. This system will include both establishing a baseline and putting mechanisms in place to assess change and determine impact. Figure 5.1 lays out the relationship between these different parts of the information system.

The situation that exists before the intervention of the DAP is found at the left of the figure. This is the base line information which serves as the reference point against which all further changes will be measured. At the far right of the figure, we find the impacts or changes which have taken place due to the program intervention. These are described and measured using an impact evaluation. Because the impact is measured from the baseline, these two sets of

information are closely related. The interventions (otherwise known as the DAP) are found in the middle of Figure 5.1. The DAP can be seen as an ensemble of *inputs* such as goods, services, technologies, and financial and human resources. These are injected into a given situation by Africare (and its partners) in order to implement specific activities. These activities transform inputs into *outputs*. Outputs may take the form of products, services, buildings, people trained, etc. This transformation of inputs into outputs then produces *results*. The results of one or more activities may then change the base-line situation. Changes (whether for better or worse) from the base line situation that can be attributed to the activities of the program activities are called *impacts*.

Often one set of activities must be completed before another set can be put in place. This is especially common where there is training or construction that must take place before other activities more directly related to the objectives of the program can occur. In such a case, the first set of inputs produces a certain number of outputs that in turn become the inputs to the next round of activities.

The first series of activities may already begin to have an impact on the population. Even if the program is not fully completed, there are may be early evidence of an impact in the areas where activities were first begun. These are known as *intermediary results*. These intermediary results are often associated with higher level intermediate results of the DAP since change is likely to take less time at this level than in the Strategic Objectives.

It is important to keep in mind that a DAP may have unanticipated impacts, and sometimes even negative ones. All changes in the population, the environment, production, etc. must be considered if they can be linked to program activities. The DAP's final impact evaluation usually takes place at the end of the program (even though there may well be effects that outlive the DAP or that only surface after it is gone.)

*Inputs may include:*

financial resources, staff, physical infrastructures, materials, training, credit, etc.

*Outputs may include:*

X cultivated hectares, 28 management committees for oil presses, the construction of 25 tubewells, 400 participants in literacy classes, 30,000-50,000 francs of revenue per participant, reimbursement of 95% of credits provided, etc.

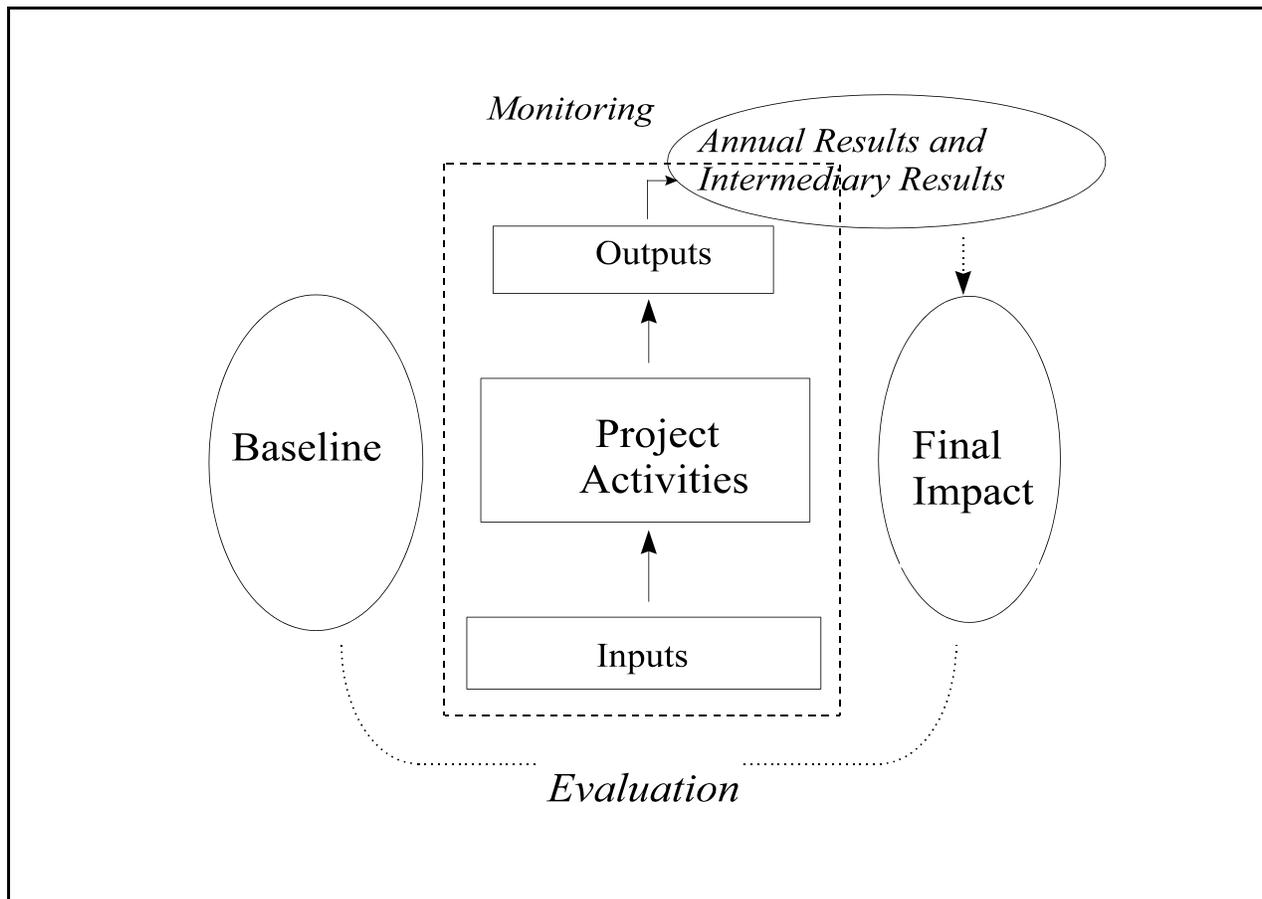
*Results may include:*

The production of x tons of millet and y tons of maize, 10,000 people with access to potable water, 200 people who can read and write simple instructions, 35 associations that have produced a profit from commercial activities, etc.

*Impacts may include:*

A 50% increase in the amount of cereals available during the rainy season, the shortening of the hungry season by three months, reduction from 30 to 20% in the number of stunted children, the establishment of a network of food security committees, an increase in the number of entrepreneurs, improvement in the management of small businesses, a 30% increase in the number of villages with easy access to health services, etc.

**Figure 5.1** Elements of the M&E system



Can one really distinguish between outputs, results, and impacts? Indeed it can be very difficult to determine which category certain observations should be placed in. In general, outputs are directly related to inputs and to the activities of the DAP. Outputs are usually specific products such as the construction of 50 kms of roads. These products can be directly measured and don't have to go the next step in assessing the effect of the product on transport, people, agricultural production, health, etc.

If the outputs are directly related to the inputs, the results are generally linked to the intermediate results of the DAP or to the Strategic Objectives of each individual activity (as opposed to the program as a whole). Where the output counts the product, the results measure whether the activity was a success or failure.

For their part, impacts are linked to the fundamental objectives and the ultimate goal of the DAP. Impacts are generally concerned with larger issues than results. Keep in mind that there may be impacts from DAP activities that are not linked to the DAP's objectives. This most often occurs in the case of unanticipated impacts that were not previewed in the program design.

These concepts can be illustrated by the following example:

A DAP has an **activity** to conduct literacy training. 400 people are trained in this activity. The immediate objective of the training (a sub-objective in terms of the overall DAP) is to train the participants to read instructions in order to enhance their chances of finding employment. **Inputs** to this process include the trainers, materials that are prepared, classroom that is constructed, etc. The 400 participants can be counted as **outputs** of the activity. But of these 400 people, perhaps only 300 actually learned to read and write instructions. The **result**, then, is that 300 people are functionally literate at the end of the training. The direct effect of the training is to increase the skills of these 300 people. There may be several **impacts**: an increase in the demand for jobs, a decrease in the level of unemployment, an increase in the purchasing power of the households involved, etc. Negative impacts might include: a reduction in the labor available for farming, increasing unemployment (by increasing the number of people seeking work), increasing rural-urban migration, etc.

We can see from this example that while the results tend to be directly related to the DAP sub-objectives, the impacts are more affected by the context in which the activity takes place. If the DAP is based on a well conceived food security framework, it is more likely that the activities will end up having a positive impact since many of these contextual issues will have been thought out well in advance. The social, economic, or political context may change, however, over the course of the program. This is one reason why it is so important to conduct a mid-term assessment. Another reason for doing a mid-term assessment is that it will help the program to capture any intermediary impacts that may be occurring. Intermediary impacts are most likely in DAPs where the development activities are well underway by the midpoint of the program. They are less likely when the first round of activities are preliminary ones (training or construction) that are needed before the actual development activities can begin. In such cases, there may be many results, but few actual (even intermediary) impacts by the time the mid-term assessment takes place. However, road construction is a particular example for having potential intermediary impacts on the environment.

To distinguish between these categories, it may help to ask the following questions:

Is the observation

1. linked to one of the DAP's Strategic Objectives (*impact*) or to an Intermediate Result (*result*)?
2. a direct product of the activity (*output*) or a larger, more broader reaching effect (*result*)?
3. an indication that there has been a significant change from the baseline situation? (*impact*)
4. tied to a phenomenon near the top of the food security framework (Strategic Objective) or lower in the framework (a cause of the main problem and probably an Intermediate Result)?
5. one that was anticipated by the DAP or not?

Box 5.1 and Table 5.1 illustrate the sequence of inputs, outputs, results, and impacts of the nutrition component in the Dinguiraye Food Security Initiative (DFSI) in Guinea. The DFSI operated from FY 1996 through FY 2000. A successor DAP is now in operation, the Guinea Food Security Initiative (GNFSI) that is operating in additional districts within Dinguiraye and is now expanding into the adjoining province of Dabola.

### **Box 5.1: The DFSI in Guinea**

Strategic Objective 1. of DFSI aimed to achieve the impact of reducing child malnutrition as measured by weight for age of children under 3. This was to be achieved by establishing a growth monitoring and promotion program at the village level, increasing capacity of the Ministry of Health, and enhancing the relationship between the two. . Let us take this example apart, using the monitoring and evaluation definitions set forth above.

In the beginning, Africare, in collaboration with local government officials, facilitated the establishment of Community Development Committees. Under the decentralization policy of the government, District Development Committees were in place. Training was provided so that the members of these committees could take on additional roles. The committees identified two volunteers per district, a man and a women, to be trained to serve as CV (this number was later increased in larger districts). Africare, the local public health workers, and the villages invested money and human resources in the training of 74 CV. In addition, scales and cooking equipment were provided. These investments, whether in money, staff, volunteer time or equipment, are the inputs.

One activity was the training of the CVs. The output, then, is the 74 trained CVs. Another activity is establishment of village growth monitoring and nutritional education. The output is that villages are equipped to carry out growth monitoring and promotion and nutrition education.

The results were that children up to age 3 were identified and weighed monthly. Cooking demonstrations of improved weaning foods were carried out in public locations. Nutritional messages were transmitted in discussions between the CV and mothers and also through songs and role playing. These resulted in mothers learning what they needed to do to improve the diets of their children over 6 months old. Similarly, the CV promoted a variety of other improved health and nutrition behaviors such as proper feeding during diarrhea and vaccinations for their children. Mothers were also encouraged to seek health services for themselves during pregnancy and to improve their eating practices.

An impressive range of intermediate impacts resulted from these initiatives as is illustrated on Table 5.1 The Final impact is the reduction in the malnutrition of children less than 3 (measured by weight for age) from 31% recorded in the baseline survey to 22% in the final survey

Sources for Table 5.1 and Box 5.1 are the Baseline and Final Surveys of DFSI, DAP documents and the Final Evaluation carried out by Helga M. Morrow and Susan Gannon.

**Table 5.1 Major Components of the DFSI Monitoring and Evaluation System**

Objective	Sub-Objective	Input	Output	Results	Intermediary Impact	Final Impact
Improved Nutrition Status for Women and Young Children	Establishment of a Village Based Growth Monitoring and Promotion Program	<p>Training Program</p> <p>\$xx</p> <p>74 CVs</p> <p>xx health agents</p> <p>Africare DAP staff</p> <p>Weighing scales and cooking equipment</p>	<p>74 trained CVs</p> <p>Communities equipped to carry out growth monitoring, nutrition education and cooking demonstrations</p>	<p>CV carry out a census of children 0-23 months and weighing sessions monthly in their communities</p> <p>Cooking demonstrations and songs provide mothers with information on improved weaning practices for infants</p> <p>Mothers taught new feeding practices for children 0-23 months with diarrhea</p>	<p>children weighed in the last four months increased from 14.3% at baseline to 75% at mid-term and 90.2% in the final evaluation</p> <p>Mothers with children over 6 months providing appropriate weaning foods increased from 60% to 81%</p> <p>Children 0-23 months who were ill with diarrhea in the last two weeks fed appropriate foods increased from 22% at baseline to 64% at final</p>	<p>Reduction in malnutrition (weight for age of children &lt; 3 years old) decreased from 31% at baseline to 22% at final</p>
	Reinforcement of the Capacity of the Health Services	<p>74 CV</p> <p>DAP staff</p> <p>Ministry of health agents</p>	<p>CV motivate mothers to take their children to health centers when indicated and go for pre-natal services for themselves</p> <p>Village committees identify how they can assist families to acquire health services when needed</p>	<p>Increase in women's attendance at prenatal classes and use of other health services</p> <p>Increased attendance by children at vaccination sessions</p>	<p>Women who reported eating less when they were pregnant declined from 50.7% during the baseline to 39.4% during the final survey</p> <p>Food taboos for pregnant women had decreased</p> <p>immunization rates for measles, which was 25.2% for the baseline, increased to 63.4% by the final survey,</p>	

Note: A complete monitoring and evaluation system should include specific indicators and units for each notation in the table, with explanations of how the indicator will actually be measured.

**The Differences between Monitoring and Evaluation.** DAP *monitoring* involves the ongoing recording of information from periodic (e.g. monthly) reviews that are carried out by program staff at all levels. The purpose of such monitoring is to ensure that (1) DAP inputs and resources are being used effectively in the implementation of planned activities, (2) work plans are being carried out and DAP outputs are being produced according to plan, and (3) all necessary steps are being taken to obtain satisfactory results from the program. Monitoring is concerned with inputs, activities, outputs, and results.

Monitoring is a management tool that facilitates effective and efficient implementation. Because monitoring provides information quickly, DAP staff and villagers will be able to respond by correcting problems as they arise and will, where necessary, be able to make immediate adjustments to operational plans.

*Evaluations*, on the other hand, are occasional exercises that are carried out in order to assess the relevance, efficiency, and effectiveness of DAP activities and to determine the impact of those interventions on the overall objectives of the program.

The *mid-term evaluation* takes a look at all the information available about the DAP, from the base line and inputs, to the outputs, results, and impacts up to the time when the evaluation takes place. This information is used to reflect on the DAP's progress and to plan the next steps. If there is evidence of intermediary impacts, these will be assessed at this point. The mid-term evaluation enables the DAP managers and the local population to add (or subtract) activities, to reorient the general approach, and to otherwise make adjustments that are needed to ensure that the DAP meets its objectives.

The *final impact evaluation* assesses the effects of the DAP through the fourth year of implementation. DAP impact is defined as any change (improvement or deterioration) from the situation that existed before the arrival of the program that can be attributed to its existence. Since impact evaluations are based on a comparison with the situation before the DAP began, it is essential that the DAP have a good set of baseline data and final survey data of similar quality. Final evaluations for Title II programs are conducted in the fourth year of five year programs so the information will be available should any follow-on activity be prepared and when FFP is considering the new proposal. While this schedule does not allow the final impact of the DAP to be known precisely, it does allow for adjustments to increase impact even in the final year of a program.

Table 5.2 highlights the similarities and differences between monitoring and evaluation.

**Table 5.2 A Comparison of Monitoring and Evaluation**

Monitoring		Evaluation	
		Mid-term	Final
Daily or periodic review of the delivery of inputs and the production of outputs in relation to the DAP plan	<b>Definition</b>	Exercise carried out approximately half way through the DAP to assess the efficiency and effectiveness of the DAP's approach and its implementation, to review the relevance of the objectives, and to make adjustments in planning as needed to assure that the DAP meets its objectives.	Assessment of the DAP's impact(s) on the population as well as the efficiency and effectiveness of the approach taken and its implementation
Increase the efficiency and effectiveness of DAP activities	<b>Objective</b>	Assess DAP progress at its mid-point in order to make adjustments as needed to meet objectives	Determine the impact of the DAP on the population and identify lessons of this experience that can inform further DAP designs  May also be used to determine the need to continue the DAP and the form that any prolongation should take
Local communities DAP coordinating team Africare/W USAID (via annual reports)	<b>Principal Information Users</b>	Villagers DAP team Africare/W USAID Other interested parties (e.g. government officials)	Villagers DAP team Africare/W USAID Other interested parties (e.g. government, other NGOs, etc.)
Inputs  Activities  Outputs  Annual results  Problems  Villager and team satisfaction with the DAP	<b>Focus</b>	Relevance of objectives Likelihood of meeting objectives Results Intermediate impacts Stakeholder satisfaction Future needs	Achievement (or not) of DAP objectives Anticipated and unanticipated impacts Stakeholder satisfaction Lessons learned
Annual Activity Plan  Budget  Food Security Framework  Strategic Framework	<b>Information Needed to Prepare for Information Collection and the Interpretation of Results</b>	Food Security framework Strategic framework IPTT Evaluation protocols (PRA and other studies)	Food Security framework Strategic framework IPPT Evaluation protocols (RRA, surveys and other studies)

Monitoring		Evaluation	
		Mid-term	Final
Village F&NS Log books	<b>Secondary Sources</b>	Village F&NS Log Books Monitoring Forms for various activities Prior studies	Village F&NS Log Books Monitoring forms for various activities Prior studies
Meetings, discussions with villagers, other observations that are recorded on activity monitoring forms	<b>Methods for Collecting Primary Information</b>	Surveys RRA Meetings, discussions between evaluators and DAP team	Surveys RRA Meetings, discussions between evaluators and DAP team
Villagers (Community monitoring)  Field staff and PRA teams  DAP supervisors  DAP coordinators	<b>Who Generates the Information</b>  (The more participatory the process, the more all these actors are regularly involved at all stages of information gathering and analysis)	Villagers RRA team Survey team DAP team Consultants	Villagers RRA team Survey team DAP team Consultants
In all participating villages  DAP headquarters	<b>Where the Information is Gathered</b>	In a sample of participating villages Maybe in non-participating villages DAP headquarters	In a sample of participating villages Maybe in non-participating villages DAP headquarters
Monthly, quarterly, annually	<b>Frequency</b>	Half way through the DAP	One year before DAP ends

**Monitoring and Evaluation at the Village Level.** When a village develops its own action plan during the PRA process, it creates its own “DAP.” This program deals with important problems of food security and nutrition and has an infinite time frame to the extent that one hopes, at least, that the villagers will continue to address these concerns over the long term (and not just during the lifetime of the Africare program). As managers of their own action plan and any activities that result from it, the villagers will need to be involved in monitoring its implementation and the efficient and effective use of resources and inputs. They will also wish to evaluate whether their action plan is taking them where they want to go and whether the activities are indeed having an impact on the food security and nutrition situation of the target population (as defined by the villagers themselves).

Whether a monitoring system is used by villagers or by Africare DAP staff, its objectives and general operating principles will be basically the same. There are some differences, however, namely:

- different methodologies will be more appropriate depending on the level at which the information is being collected, analyzed, and disseminated
- the topics to be pursued or variables to be studied may vary according to the user group

- the information will probably be used in different ways

While much of the information collected by the villagers will be of use to the DAP staff, the reverse is not necessarily true. That is, the DAP will undoubtedly collect quite a bit of information that is of little or no use to particular villages. Monitoring of DAP finances, for example, will be of little interest to a given village. However, Africare's monitoring and evaluation systems are to be designed so that the information collection and analysis processes provide information useful at all levels of the DAP and especially at the community level. To the maximum extent possible, the villages' monitoring systems should feed into the DAP's larger monitoring and evaluation system. While villages may not be interested in aggregated information on progress in implementing a literacy program across the whole program, for example, they should be involved in collecting and analyzing the information with respect to their village, and any lessons learned from the broader experience should be discussed with them.

### **Who Uses the Information and What Information Do They Need?**

An Information System does nothing but waste time and money if the information that is gathered is not useful to someone. But in order for it to be useful, it must respond to the specific needs of any potential users.

The principal users of information will be those people who are responsible for making decisions in the program. When information is accurate, relevant, and available when needed, it can contribute to making decisions that are more carefully thought out and more appropriate to the issues at hand. In addition to these decision makers, there will be other consumers of the information such as government officials with responsibility for the program, policy makers, academic researchers, etc.

The principal decision makers in Africare food security DAPs are:

- the villagers
- the DAP team and in-country partners
- Africare/Washington staff
- the donor (USAID)

The types of decisions that will have to be made include the choice of activities to be undertaken in the villages, the time of year to hold trainings, the selection of individuals to participate in the trainings, whether adjustment are needed in DAP planning, whether financing should be extended, etc.

Table 5.3 starting on page 5.16, presents key information users and summarizes the principal decisions that they will be responsible for making. The table also give examples of the information that may be useful in making these decisions and when it must be available to be of use. The last column indicates the part of the information system that will generate this information.

The needs of various users are clearly different. These needs vary according to the nature of the information required, the time when it is needed, and the way in which it is gathered and presented.

**The Villagers.** Villagers are primarily in need of information that concerns their own village, their local environment, and their Action Plan since most of the decisions that they are responsible for making will be at the most local level. Using PRA methods, they will gather and analyze the information they need throughout the life of the DAP. As a part of this process, they will develop a simple monitoring system that will assess progress toward achieving their Action Plan and will assess the food security and nutrition situation in their community. This type of monitoring will, ideally, prove useful to the community well beyond the life of the DAP.

The frequency with which information will be collected, analyzed, and disseminated depends on where the village is in the process of implementation. At the beginning, nearly all the interactions between DAP staff and the village will be in the context of gathering information that is needed to put together the Community Action Plan. This information will also serve as the baseline. At a later point, attention will be not so much on drawing up the Action Plan as on monitoring activities that are already underway. The frequency of monitoring will depend on the exact type of activity and when decisions must be made in order to move ahead with planning. As the community's planning skills become more developed, their number of interactions with the program will diminish. Their system for monitoring both the implementation of their Action Plan and their Food Security and Nutrition situation will prove valuable for evaluating the impact of the DAP and facilitating communications between the villages and outsiders.

Useful information for surveillance of the FS&N situation is collected systematically and on a regular basis. For example, over a three month period the price of basic foodstuffs may change significantly and the number of malnourished children may vary significantly. The frequency with which such information should be collected depends on how sensitive available indicators are and the types of actions that can be taken in response to the information that is collected (see Module 8.) The villagers will also find it useful to undertake some type of impact evaluation at the end of the DAP and beyond.

**The DAP Team.** The DAP team needs specific, detailed, and regular information about all aspects of the program so that it can be managed as efficiently and effectively as possible. Information that allows the staff to better understand what is happening with the beneficiary population is especially important since this is the key to assuring that the DAP's activities and the villages' Action Plans are indeed contributing to improving the food security and nutrition situation of the population.

As information becomes available, the staff will use it to adjust their programming, prepare quarterly reports, inform interested parties of the program's progress, etc. It is critical that, on one hand, the DAP staff collects all the information they need, while, on the other hand, they avoid drowning in unnecessary details.

The information to be collected by the DAP on the ensemble of its activities will be different from what happens in a particular village. The DAP staff needs information from all the villages where the program intervenes as well, sometimes, as from other villages that are not participating in DAP activities. The staff needs to keep an eye on the overall budget and the budget of each activity, as well as the progress of each participating village. They may wish to compare what happens in various villages or what results from similar Action Plans in order to better understand the strengths and weaknesses of various approaches. In such cases, comparable information will need to be collected from different communities.

Most of this information falls into the monitoring part of the information system and will probably be collected and reviewed monthly. Information which focuses on the overall management, the general program approach, and its impacts on the population will be dealt with in the mid-term or final evaluation. This information will be used by the team, local partners and the Africare/Washington staff to make adjustments in the overall direction of the DAP and, in the case of the final evaluation, to help the DAP team better understand the linkages between the DAP's objectives, the way it was implemented, and its impact on beneficiaries.

It is important to underline here that the information that the DAP team will need for its own management purposes will be more detailed and include more variables (issues to be followed) and indicators (specific items to be measured) than what most other users will need. In preparing program reports that will be submitted to others, the staff will want to summarize, aggregate, or select information in such a way that it meets the users' needs without providing extraneous material.

**Africare Headquarters Staff.** Headquarters staff needs information that provides a general overview of what is happening and is thus less detailed and less frequent than what is needed by the field staff. They are most interested in the DAP's progress in implementing activities, how well it is being managed, whether food security, nutrition, and capacity building objectives are being met, and what the program needs in terms of technical support. Information provided in quarterly reports and email correspondence is generally sufficient for these purposes, along with occasional visits to the field and annual reports.

The mid-term and final evaluations are of particular importance to headquarters because they take a larger view of the DAP and its progress. These evaluations are doubly useful because the information is used by Africare/W staff both to suggest adjustments as needed in the DAP already underway, but also to inform Africare's future endeavors in the field of food and nutrition security .

In addition, Africare/W staff's visits to the field become much more effective when information relevant to the visit and any issues to be covered circulates between Washington and field staff well before the mission leaves home.

**The Donor (USAID).** The donor is not interested in the daily details of DAP implementation. Rather, its concern lies primarily with the intermediary and final impacts of the DAP and on its efficiency (the relationship between effectiveness and cost). It needs this information to:

- O continue its annual financing of the DAP using Title II and other resources (food commodities, monetization, 202 (e) funds, other donor funding, etc.)
- O evaluate whether the DAP is contributing to the USAID mission's global strategic objectives for that country
- O compare the results of various food security and nutrition DAPs that it finances in order to determine the relevance and value of these programs and to figure out how it can better support them
- O demonstrate to the US Congress that the monetization of American food aid is having an impact on the food security situation in developing countries.

Since the donor is concerned with larger strategic and geographic concerns, it requires that information be provided using standard and quantifiable indicators that will permit information to be compared across sites. The Food for Peace Strategic Plan for Fiscal Year (FY) 2004-2008 has a single strategic objective: "Food insecurity in vulnerable populations reduced." To measure the achievement of this objective, DAPs with nutrition objectives will be required to report on changes in anthropometric measures. DAPs with agricultural productivity measures will report on impacts that indicate household food consumption has improved. Modules 7 and 8 will discuss how Africare will meet these requirements and integrate them with its overall monitoring and evaluation system.

**How Can you Anticipate the Specific Needs of Information Users in Your DAP?** Ideally, before setting up the information system, the DAP should meet with various users in order to assess their needs and incorporate these into the system. In most cases, these issues will be addressed, at least indirectly, in the preparation of the DAP. USAID's needs, for example, are clearly laid out in the Title II Guidelines for Development Activity Proposals that are updated annually and forwarded to the field offices by FFD. As for Africare headquarters, their needs will be spelled out in the monitoring-evaluation plan that is included in the DAP and through various discussions with the field staff. The DAP team will discuss its needs -- and adjust the information system accordingly -- during regular staff meetings.

This leaves us with the challenge of figuring out the information needs of the local population. Their concerns should be solicited from the moment they begin participating in the DAP. As they are trained in PRA methods, the villagers will become more aware of the possible uses of information and the utility of conducting periodic evaluations throughout the life of the DAP. It is essential that the monitoring and evaluation system that is presented in the DAP have enough flexibility that it can respond to villagers' needs (which will be refined after the DAP is operational) and effectively integrate whatever information they generate as the process gets underway.

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<sup>1</sup>For further information about the relevance of various indicators, see the section on indicators below.

**Table 5.3 Information Users and their Needs**

<b>Users</b>	<b>Uses (Decision or Action)</b>	<b>Useful Information for the User</b>	<b>When the Information is Needed</b>	<b>Part of the Information System that will be Used</b>
Villagers	Decision to participate in the DAP	Information about the DAP and Africare	Before the decision to participate in the DAP	Baseline RRA
	Analysis of the situation  Identification and prioritization of solutions	Village profile (social organization, history, links to the outside, resources, etc.), problems and strengths of the village, food security and nutrition situation, list of potential solutions, etc.	At the beginning of their involvement in the DAP and from time to time during DAP implementation and beyond	PRA  Village Level Monitoring
	Develop and implement an Action Plan	Results of the solution prioritization, availability of human and financial resources to implement the plan	In preparing the Action Plan	PRA
	Adjust the implementation of the Action Plan	Progress to date in implementing the plan and any difficulties encountered	During the implementation of the plan	Village Level Monitoring
	Revisions of the Action Plan	Information about how previous activities affect the FS&N situation  FS&N situation  Information about available human and financial resources	After implementation of the first Action Plan before preparing the next one	PRA
	Monitor the food security situation	Indicators of vulnerability  FS&N indicators  Calendars	Information should be available and accessible at any time to those who need it to carry out village activities  Can be revised a few times yearly according to how much change takes place and the needs of other users (NGOs, government, etc.)	Village Monitoring System for FS&N

<b>Users</b>	<b>Uses (Decision or Action)</b>	<b>Useful Information for the User</b>	<b>When the Information is Needed</b>	<b>Part of the Information System that will be Used</b>
DAP Team and local partners	Keep the food security framework up to date	Causes of food insecurity and nutritional problems in the area  Results of DAP activities  Activities of other actors and their results	From the time the DAP is elaborated until the end of the DAP	Preparations for the DAP  PRAs  DAP Monitoring  Evaluations
	Selection of communities to participate in the DAP	Knowledge of the situation in the area, needs, the desire and capacity of the population to participate, who the other development actors are and what they are doing	From the beginning of the DAP, as early as possible before beginning more detailed analysis and planning with the villagers	Preliminary surveys  RRA  Other baseline surveys
	Develop village activities with the community	FS&N situation in the area, needs, desires, and capacity of the local population; Community Action Plans; Available resources (Adjusted DAP and food security I framework)	At the beginning of the DAP, after analysis of the baseline information, before or as communities are selected for participation, throughout the length of the DAP	RRA PRA DAP monitoring Village Level Monitoring
	Plan and monitor the use of financial resources	Budget, expenses, expenditures  DAP results or outputs  Number of beneficiaries  Accounting for action plans	Monthly  Bi-annually  Annually	DAP monitoring  Village Level Monitoring
	Preparation of progress reports and annual plans	State of DAP advancement, expenditures, implementation problems, results to date, needs and satisfaction of the population	Quarterly  Annually	DAP monitoring  Village Level Monitoring

<b>Users</b>	<b>Uses (Decision or Action)</b>	<b>Useful Information for the User</b>	<b>When the Information is Needed</b>	<b>Part of the Information System that will be Used</b>
	Adjust the DAP implementation (extend the coverage, amend the approach of a given activity, attract other partners, etc	Specific information about the implementation of each activity, money spent, etc., problems in implementation, staffing issues, progress on empowerment issues, budgets and financial reports, preliminary indication of DAP impact, participant satisfaction.	Monthly monitoring  Before the mid-term evaluation  When needed to carry out specific studies	RRA baseline studies  Monitoring  Mid-term evaluation  Focused surveys as needed
	Determine the impact of the DAP	Information showing changes that have resulted from the DAP in various areas related to DAP objectives including, in particular, the food security and nutrition situation and the villagers' capacity to analyze their situation and develop action plans	At the end of the DAP and beyond	RRA and other base line studies  Impact evaluation
Africare HQ	Develop the DAP and submit to donors	Profile of the DAP area  Food security and nutrition situation  Population needs and potential	Before looking for financing	Preparatory work for the DAP
	Program of DAP activities with the field staff	DAP  Needs and capacities of local communities available resources  RRA Baseline information on potential activities	At the start of the DAP, after selecting communities, throughout the DAP	RRA and other baseline studies PRA
	Monitor, approve, and adjust DAP implementation	DAP progress and difficulties encountered, financial records, satisfaction and further needs of stakeholders, team and local government DAP, periodic reports, Results Report and Resource Request	Semi-annually or annually Before leaving on field missions	DAP monitoring, mid-term evaluation

<b>Users</b>	<b>Uses (Decision or Action)</b>	<b>Useful Information for the User</b>	<b>When the Information is Needed</b>	<b>Part of the Information System that will be Used</b>
	Report results to donor	Implementation records, achievement of DAP objectives, disbursement status, unusual situations, annual results reports, mid-term evaluations, Results Report and Resource Request	Annually, at mid-term and end of DAP	DAP monitoring, mid-term evaluation, final evaluation
	Extend DAP coverage, extend or reduce the length of the DAP	implementation results, financial records, food security and nutrition situation, needs and capacity of the population, satisfaction of the stakeholders	At the time when the DAP is being amended or extended	DAP monitoring, PRA, village level monitoring and log books, mid-term or final evaluation
USAID	Decision to finance the DAP	DAP that describes: issues in the area, the food security and nutrition situation, proposed activities, monitoring plan, the target population, the length of the DAP, needed resources, partner agencies	When the DAP is submitted	Preparation for the DAP, the DAP
	Approve annual plans and budgets	Implementation progress, achievement of objectives to date, Resource Requests and budget Annual results report	Results Report by Nov. 15 after the end of each FY, Resource Request by January 15 for following FY	DAP monitoring
	Approve the host country's strategic objectives plan	Specific DAP objectives, how the DAP objectives will contribute to the mission's objectives Objectives' achievements to date	Annually and for the five year plan	DAP monitoring, mid-term evaluation, final evaluation
	Comparison of FS&N DAPs financed and determine their relevancy, Improve the financing of FS&N DAPs	DAP impact on the population. Cost/benefit analysis of DAPs	Before revising their DAP proposal policies	Impact evaluations

## **The Properties of Information**

Decision makers will use information that they deem to be credible if it is available when they need it. In this section we look at the properties of information that make it more or less useful to decision makers.

To be useful, information must be:

1. Valid
2. Relevant
3. At a level that is useful
4. Perceived as credible
5. Available when needed
6. Obtainable at some reasonable cost

### **1. Validity**

Information is valid when it is generated from valid indicators; that is, when the indicators measure what they say they are measuring (see page 5.3).

It will be easier to determine whether indicators are valid or not when there is a good food security framework that clearly lays out the causes of food insecurity and malnutrition in the DAP zone.

### **2. Relevancy**

Information is relevant when it has meaning in terms of the DAP, the situation, the area, etc. and is directly related to decisions that need to be made.

In order to make a decision about what type of training the DAP will offer, for example, relevant information would include the needs for training, the likelihood that the training will be put to good use, the cost and quality of training, the best time to hold it, the population that is most likely to benefit from training, etc. An example of information that would be of dubious relevancy in this situation would be simply providing a list of trainings offered by others in the region. Such information would be of limited relevancy and would certainly be insufficient to make a good decision about what trainings the DAP should offer or support.

### **3. The Level of Precision and Complexity**

The level of precision and complexity of any information must be appropriate to the decision maker and his/her needs.

To evaluate the impact of different agricultural technology programs on food production, for example, USAID asks for information on yields expressed in kilos per hectare and requires that this information be collected using representative random sampling. Villagers evaluating the impact of these same technologies would probably prefer that the information be provided in terms of the number of buckets of grain that they might get out of a certain sized field. While this information may be less precise, it would be more useful and more understandable to the user population. This type of locally measured information is not useful to USAID because it does not allow information to be easily compared across DAPs.

#### **4. Perceived Credibility of the Information**

To be credible in the eyes of the user, information must be coherent and appear plausible. If you use the food security framework (or at least a part of it) to present the information, it is more likely that the decision maker will be able to follow the argument that is being made and be able to interpret the results. The framework will also help to define the links between the information being provided and any decisions that need to be made.

An experimental station may produce results showing yields that increase from 400 kg/ha to 1600 kg/ha. While these results may be possible under experimental conditions, they may not be in line with common knowledge of yields in the region which show even the best farmers getting something like 1000 kg/ha. To be plausible, such information would have to include convincing evidence that these yields had not only been obtained experimentally but that they were transferable and obtainable on a broader scale.

When we speak of the plausibility of the information, we mean whether it makes sense to the user. Usually this implies that the information being provided is compatible with the user's prior knowledge. A health worker, for example, may find information that the level of severe malnutrition is higher than the level of moderate malnutrition to be implausible because it does not in any way correspond with the logic of epidemiology.

When information is implausible, it often means that there is a problem with the way the information was collected, recorded, analyzed, or interpreted. It may also mean that the indicators were poorly selected. If this is the case, it will be important to correct the problem and revise the information (if necessary) before disseminating it more widely.

In some cases, information that is true may be perceived as implausible when it is contrary to the biases of the user. This may happen with participatory research because it looks at a situation from a perspective that may not be part of the experience of outside researchers. Where such apparently implausible information is generated, it is important that extra efforts be made, first, to triangulate in order to ensure its accuracy and, then, that additional steps are taken to persuade the users to take the information seriously and to reassess their own opinions accordingly.

## **5. The Availability of Information When It Is Needed**

It goes without saying that information that is not available when it is needed will not be used. Information leads to a decision that leads to action. Working back, then, from the action (which may be related to a seasonal need or some other time factor), we know that there is always a delay between when a decision is made and when the action takes place. This lag time needs to be considered in figuring out when a timely decision needs to be made. There is another lag between when information is made available and when the decision is actually made. This lag also needs to be calculated in order to determine exactly when information is needed in order to start the process that leads to the timely implementation of the eventual action.

A village plan, for example, may call for putting a cereal bank in place in order to increase the availability of basic grains when the area becomes inaccessible during the rainy season. In order to be useful in planning these cereal banks, information about the demand for cereals, cost, and transport options must be made available long before the roads become impassable since the purchase and transport of grain may take several months.

## **6. The Cost of Information**

Producing and disseminating information is an expensive proposition. But the consequences of acting without information or with poor quality information can be even more costly. These consequences are not restricted to financial costs; other unsatisfactory results may include such dangers as undermining the confidence of the local population, reducing their motivation to participate, increasing dependency on outsiders, and -- in some cases -- even serious conflict.

Taking these dangers into consideration, investing in information makes sense. To avoid wasting resources, however, it is critical that careful consideration be given to how the information will be used before beginning to collect it. It is crazy to collect information, no matter how simple, if it is not going to be used by someone.

The choice of methodology and of sampling have an immediate impact on the cost of information. Here are some other considerations to keep in mind in thinking about information costs:

**Careful supervision of information collection can “save” the process.**

In the case of anthropometric measures, it is important that a note be made of the gender of the child being measured because there are different norms for the weights and heights of boys and girls of the same age. If this information is lacking, the whole study becomes unusable.

If it is difficult to obtain accurate information about the age of children, it is better to choose a method that doesn't require this information than to gather erroneous data. Arm measures, for example, may be less precise but at least they won't generate information that has to be discarded.

- u The costs generally increase as the degree of complexity and level of precision goes up
- u One way to reduce costs is to make sure that a given study gathers all the information needed by the DAP that can be collected using that method (keeping in mind, of course, constraints related to the personnel needed to look at particular issues, the time of year that is most appropriate to gather information, etc.)
- u Use of DAP field staff to collect information where appropriate may reduce costs below what employing outsiders would entail
- u Adequate training and supervision is essential to collecting good quality information and ensuring that it will not have to be discarded later when errors are found; cutting corners on training may actually end up wasting more resources than it saves
- u While information gathered by RRA and PRA methods is often considered to be less costly, using these methods correctly does involve significant expenditures
- u If information can be used for multiple purposes, there is no need to carry out parallel studies that merely duplicate efforts and increase costs. Information collected in a PRA whose principal purpose is village planning may also be useful for monitoring and quarterly reports, for example.

### **Properties of Indicators**

Indicators are “tools” used to measure things such as food security, poverty, revenue levels,

production, technology adoption, progress in implementing a DAP, etc.

Some indicators are **direct**. That is, they report directly on the outcome we are looking for, such as the *number of farmers using a new technology*. This indicator can give us direct information about the adoption levels for this technology.

In most cases, however, it is hard to find direct indicators. Few farmers are able to answer a question like, “what is your annual revenue?” Poverty is another concept that cannot be measured directly. Food security may be difficult to measure directly. In this case, one must either devise a composite indicator, an indirect indicator, or a proxy.

**Composite indicators** put several indicators together and aggregate them using a scoring system. USAID’s Famine Early Warning System aggregates short, medium, and long term indicators into an index of vulnerability to food insecurity for the Sahel. Villagers may also develop their own vulnerability index using PRA methods (see Module 8).

**Proxy indicators** are those that, while they do not measure directly, are closely correlated with the variable of interest. Many DAPs, for example, assess poverty using an indicator such as whether the family owns a radio or a bicycle or by observing the use of housing materials such as thatch or aluminum roofing. These indicators serve as proxies for poverty.

The quality of the indicator determines the quality of the information that is gathered using it. In selecting indicators it is important to pay attention to:

1. validity
2. relevance
3. sensitivity
4. specificity

## 1. Validity

An indicator is considered “valid” when it actually measures what it says it measures. It is easier to determine the validity of a direct indicator than a composite or proxy. The two examples below illustrate the cases of a direct indicator as well as valid and invalid indirect indicators.

### **Example 1**

Weight for age can be a direct indicator that measures the success of a nutrition program whose objective is to increase children’s weight by X grams a day. The same indicator may be a proxy when used to measure the impact of a micro-credit program whose objective is to increase women’s revenues. The objective of this DAP is not to increase the weight of children but rather to increase the food security of households receiving credit. Since weight gain of children is often associated with increases in consumption level and these, in turn, are related to increases in income, the weight for age measure can serve as a proxy for the food security of households receiving credit. In justifying the use of this indicator, one must be able to show (using the DAP’s food security framework) how children’s weight gain

is expected to increase as a result of increases in income.<sup>2</sup> Then, it is also necessary to show how this actually happens in the case of this program. This analysis must also consider other factors that might have an influence on the children's weight change and that could invalidate the use of this indicator. And finally, it is always a good idea to review prior experiences (whether other programs, scientific studies, etc.) to see whether there are other proxies that have proven to be effective in similar situations. Height for age, for example, is known to be a better indicator for measuring the impact of development programs than weight for age because it is less sensitive to short term shocks and is usually well correlated to general conditions of well-being.

### **Example 2**

Two schools have low attendance rates. In one school, the problem is due primarily to poverty whereas in the other it is due to the distance that children must travel to go to school. A school feeding program is instituted in both places. The evaluators decide to use reduction in absenteeism as a proxy to measure the impact of the school feeding program. The indicator is a valid proxy in the case where poverty is the principal cause of non-attendance because giving children a meal provides an economic motivation to go to school. In the other case, where distance is the primary factor, absenteeism is not a valid proxy because feeding the children at school doesn't affect the distance to school.

This example illustrates the importance of referring back to the food security framework of the DAP in order to select indicators and verify their validity.

## **2. Relevance**

An indicator is relevant to the extent that it produces information that is useful in terms of

- the Strategic Objectives and Intermediate Results of the DAP
- the decisions that have to be made by the information users.

By carefully studying the food security framework and the Table of Information Users you will be better able to identify indicators that are relevant to their needs.

Food Security and Nutrition covers a vast number of issues. The indicators that are relevant will depend on the local situation. Practical suggestions for identifying locally relevant indicators are provided in Module 8.

## **3. Sensitivity**

Sensitivity refers to the ability of an indicator to detect changes in the phenomenon under observation. The more sensitive an indicator is, the more it is able to capture information about even slight changes in the situation. High sensitivity is not always desirable. It depends on how the information will be used. We say that the level of sensitivity must be appropriate to the degree of precision that is required.

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<sup>2</sup>In the case of anthropometric measures that are widely used and have been amply studied, there is lots of information available on their appropriateness and effectiveness in different situations.

#### 4. Specificity

The specificity of an indicator is a measure of the extent to which it changes only in response to a particular factor and is not influenced by other things.

Weight for age, for example, is an indicator that reacts to many different factors. Weight may fluctuate considerably due to diarrheal disease or shortages in food consumption. Even if this indicator is quite sensitive, it is not very specific to a particular cause.

Both sensitivity and specificity depend on the context. The amount of cereal in the household granary may be a very specific indicator of food security if the granary is the only source of food and revenue. The more sources of food and revenue the family has, however, the less specific cereal stock is as an indicator of food security. As a general rule, the more sensitive an indicator is, the less specific, and vice versa.

A table such as the one below can be helpful in analyzing the properties of indicators. You can work with the DAP team to fill in the table, asking yourselves questions like: "What factors is this indicator most sensitive to?" "Is this indicator specific or might it also react to other factors?" etc.

**Table 5.4 Grid Displaying the Properties of Various Indicators**

Indicator	Validity	Relevance	Sensitivity	Specificity	Observations

There are no ideal indicators and certainly none that can be applied across the board. It is important to make deliberate and carefully considered choices in deciding which indicators are the most appropriate in a given situation. This choice will be based on the food security framework and on scientific and empirical information, all of which will be assessed in the context of the users' needs. It should be noted that some of the empirical information about what indicator makes the most sense will be gathered in the villages where the DAP takes place.

For the baseline study, the mid-term evaluation, and the final impact evaluation, you will probably be working with consultants. This means that each DAP team member does not have to be a specialist in evaluation techniques. The more you know about these issues, however, the more you will be able to work effectively with outside specialists. The DAP team is in the critical position of bridging the gap between local communities and the external evaluators and will have more knowledge about the program than anyone else. This is particularly important in assessing the relevancy of any indicators that are proposed.

Monitoring (as opposed to evaluation) is primarily the responsibility of the DAP team. As such, it will be entirely up to you to develop tools that will be useful. Some pointers for doing this will be provided in Module 8.

## MODULE 6

### HOW TO DEVELOP FOOD SECURITY FRAMEWORK AND A STRATEGIC FRAMEWORK FOR YOUR DAP

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#### Introduction

This Module presents the process of designing the Food and Nutrition Security Framework and the Strategic Framework that occurs in the initial stages of DAP design. In addition, the framework is to be reviewed and amplified in the early stages of DAP implementation as part of the team building exercise for the program team. This exercise will help all staff to “see” the big picture. It is important for technical specialists in agriculture promoting production of Vitamin A rich crops, for example, to be aware of how what they are doing will ultimately improve the nutritional situation of young children. It will also clarify how agricultural and nutritional specialists need to work together to make this happen. The framework should also be examined in relation to the information on the situation in individual communities as it will help to determine what factors need to be emphasized in particular places.

Preparation of the Food Security Framework is a first step in preparing the Strategic Framework of the DAP that will also be discussed in this section. Throughout DAP implementation and in the mid-term review and final evaluation, these frameworks will need to be reviewed and modified as needed to achieve maximum results from the DAP.

### **A. What is a Food and Nutrition Security Framework**

In order to have an impact on food and nutrition security, it is necessary to understand (1) what factors caused the situation of food or nutrition insecurity and (2) the route by which these various causes have an impact on the food and nutrition situation. With this information in hand, the DAP will be in a good position to identify appropriate interventions and to target those interventions so that they will be as effective as possible.

The framework that is proposed here offers a model that organizes the causes of food and nutrition insecurity into a particular hierarchy : the causes are placed below and their effect above. It will allow the program decision-makers to come up with a series of hypotheses<sup>1</sup> about (1) how various factors influence the DAP area’s food and nutrition situation and (2) how the causal factors are themselves related.

The causes of a problem may be more or less direct. Take, for example figure 6.1 below that is portraying a case of malnourished children.

- These children were malnourished (box 7)
- because of their households being food insecure (underlying cause in box 5).
- They did not produce enough food this year (box 4)
- because they ran out of seeds and other inputs (boxes 2 -3).
- They lacked the revenue to buy these (box 1).

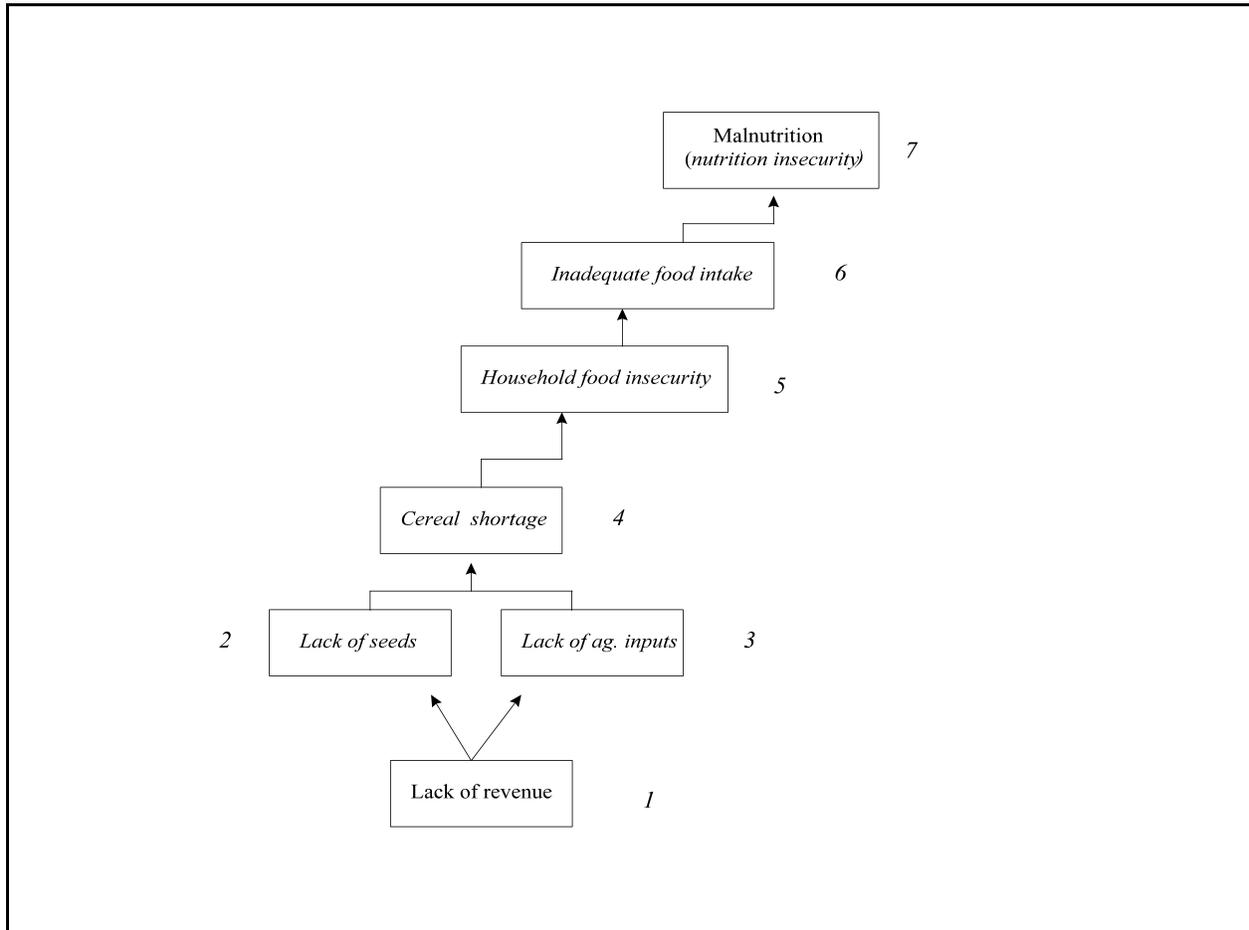
In this example, the lack of revenue is a direct cause of the inaccessibility of seeds and other agricultural inputs, a more distant cause of the cereal shortages and an even more remote or indirect cause of food insecurity. Finally it is an even more remote cause of the malnutrition suffered by children in the compound. However, you and the villagers in this situation need to know this mechanism in order to design proper action plans and to monitor and evaluate their

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<sup>1</sup>We speak here of hypotheses because, at least at the beginning, there is no expectation that the information being used to create the framework will come from rigorous scientific studies in which there is proof of cause and effect. Instead, the program team will use information from secondary information and, eventually, on data that is collected from village sites. They will fit this information into a model that reflects their analysis of the most plausible scenarios for the causes of food and nutrition insecurity where they work.

effect later on.

**Figure 6.1 Example of a Conceptual Framework for a Nutrition Insecurity Situation**



Thus, the framework of food and nutrition security in a DAP is a diagram with, at the top, nutrition security (or a specific manifestation of nutrition insecurity as in the figure above). This is called the “dependant variable” because nutritional security depends on all the other factors that are arrayed below it.

In putting together the food and nutrition framework of your DAP, you not only shed light over factors that cause food and nutrition insecurity in the area but by the same token, you refine your knowledge and understanding of the environment and of the problem which the program will need to tackle as you share this amongst the group of participants.

The best way to work through the creation of a food security model such as the one presented here is to ask the question, “What causes this or that situation?” From the discussion, then, it will be possible to organize the answers into a chain of causes, beginning with those that are the most direct and moving down through the causes of the causes and then their causes.

Since food insecurity is one of the causes of nutrition insecurity, as the framework develops this

will provide the opportunity to explore all food insecurity causes moving backwards from those that are most direct to those that are deeper and less immediate.

Later, when it is time to determine the Strategic Objectives and Intermediate Results of the DAP, you will this framework will help you identify the range of activities that will have the greatest impact on improving the overall situation. For example, one might be addressing the problem of food losses. The Food Security Framework that starts with the malnutrition situation will lead you to the full development of the causes of the problem of food losses. The bonus is that it will enable you to put this specific problem (and eventually its potential solutions) in a broader perspective. This in turn may provide more options for solutions and will help you in monitoring potentially confounding or adverse factors to the expected results.

## **B. The UNICEF Framework: a Basic Conceptual Framework for Exploring Causes of Malnutrition**

This section presents the framework used by UNICEF to analyze the causes of malnutrition and mortality among women and children in developing countries. This framework is also widely used by development agencies and governments in many parts of the world. It is presented here in order to show how a causal framework can be used to study these issues. It cannot be applied directly to a specific program since it needs to be modified to reflect the realities of any particular situation. It does offer, however, a useful starting point for organizing information and ensuring that the right questions are asked from the very beginning.

Whoever moderates the discussions for the preparation of the food security framework for your DAP should be very familiar with the UNICEF framework. This will facilitate his or her guidance of the discussion and, especially, the organization of the hierarchy of causes into those that are more or less direct.

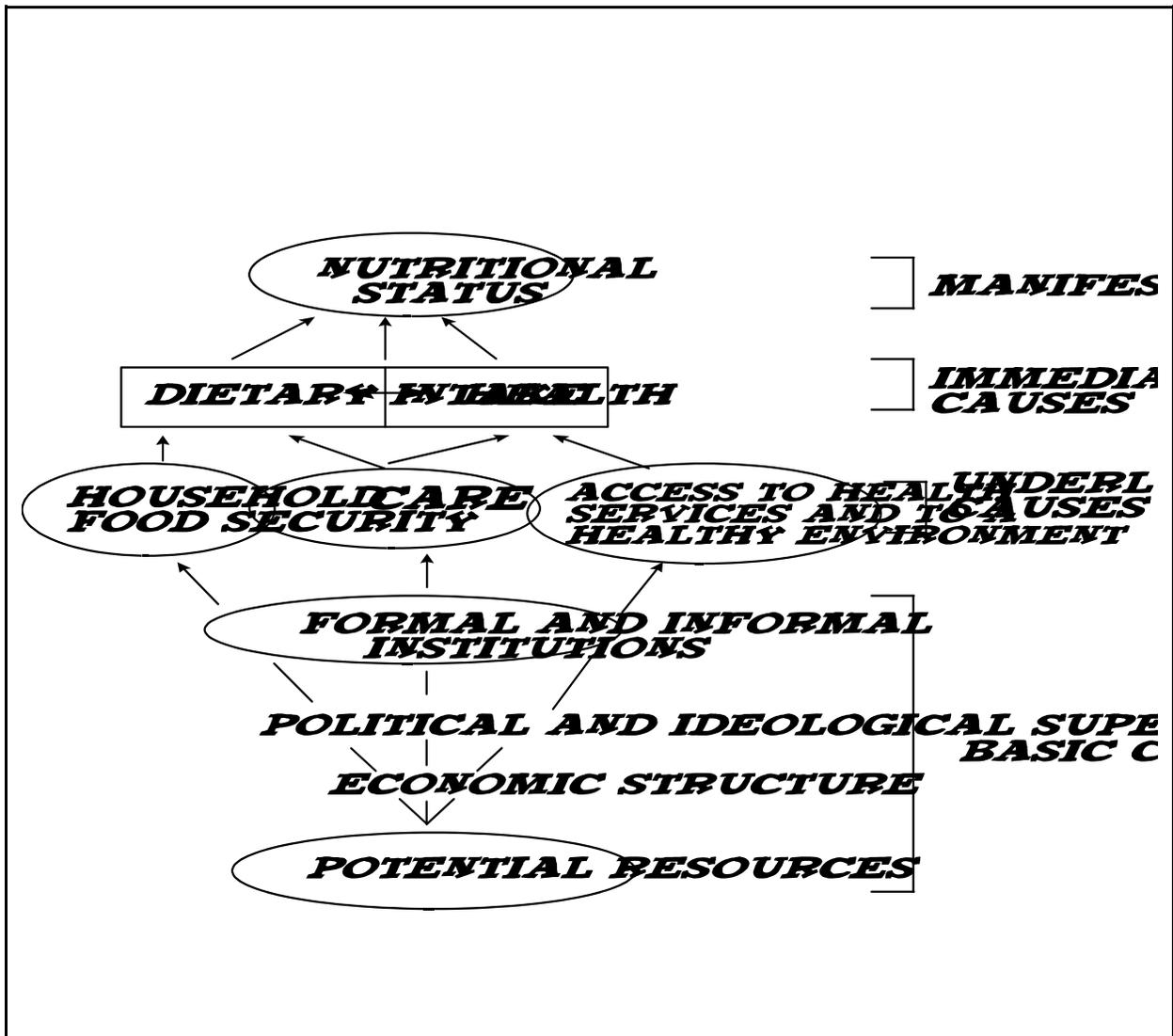
There are two characteristics of the UNICEF model that make it particularly relevant to discussions of food and nutrition security in Africare DAPs:

- (1) it analyses the problem in a way that reveals the cause to effect relationship between the various causal factors
- (2) it encourages the user to look at three levels of causes, those that are immediate, those that are underlying, and those that are fundamental or deep seated causes of the food and nutrition insecurity.

It shows food security as one of the three major conditions or determinants to nutrition security. As we then look closer at their cause to effect relation, we can see that food insecurity can lead to or cause malnutrition and death of children and women. This is an important argument why any specific and narrow food related problem should be analyzed within a broader nutritional security framework.

The UNICEF framework, with its hierarchy of causes of malnutrition, is now widely accepted by health and development professionals. The framework helps the user to take into consideration the many different factors that influence food security as well as those that have an impact on nutrition security. It encourages the user to take both a broader and deeper view of the situation which should, in turn, lead to better DAP planning and a more realistic perspective on the program's activities and their potential impact.

**Figure 6.2** Generic Framework for food and nutrition security  
 (from UNICEF’s framework on malnutrition and mortality of women and children in developing countries)



The UNICEF framework places the nutritional status of women and children as the dependent variable at the top of the framework. We can say, for example, that the nutritional status of children varies as a function of diverse factors. These factors or determinants may also be called “constraints” or “causes.” The framework then identifies these various causes or constraints and ranks them in a hierarchy depending on whether they are immediate, underlying, or deep seated causes of malnutrition.

In this framework, the most immediate causes of malnutrition and mortality in developing countries are:

- u disease and

u insufficient food intake.

Each of these two factors, or the synergistic<sup>2</sup> effect when both occur at the same time, may cause malnutrition or death.

The underlying causes may be numerous. They are summarized here under three major categories: (*follow the arrows on the framework*)

- u food insecurity
- u insufficient or inappropriate care that is accorded to women and children
- u lack of health services in conjunction with an unhealthy and unsanitary environment.

These three factors directly affect the individual's caloric intake or health status in the following ways:

1. food insecurity can be the direct cause of inappropriate food intake;
2. insufficient care given to children can lead to inadequate caloric intake or to sickness;
3. insufficient health services can seriously limit the quality of health care for people who are sick just as well as limit health education that can help households to prevent or more effectively treat illnesses; and
4. an unhealthy environment can cause numerous diseases.

The deep seated causes of mortality and malnutrition are those that are most deeply anchored in the structures of the society or are related to the basic human or natural resource endowment of the country (or region). They represent the most distant causes of the problem and the ones that are often the most difficult to address.

Often these factors create the negative context that support the continued existence of the underlying causes discussed above. These factors may be organized according to the following categories, which are placed in order so that the most fundamental are at the bottom.

1. Formal and informal institutions
2. The political and ideological superstructure
3. Economic structures
4. The resource base of the country

An example of institutional factors that affect nutrition security is the beliefs and cultural or religious practices that may actually be dangerous to the health. These might include force feeding nursing infants or enemas to purify them. These beliefs may be relatively direct causes of inadequate care of children, while they are deeper underlying causes of their illnesses.

An example of a cause that is linked to the political and ideological situation would be policies or institutions that do not permit women access to credit, or that chose to utilize limited national

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<sup>2</sup>Synergy refers to the situation where when two factors are combined, their impact is greater than (1) either factor would have had alone and (2) the sum of the two factors had they acted separately.

resources disproportionately on military expenditures at the expense of spending on health and education.

Finally, malnutrition and mortality can be linked to inadequacies in human and natural resources. Low rainfall in the Sahelian countries is an example of a limited resource that affects food production, food security, and ultimately, the nutritional status of the population.

In general, these deeper causes can only be affected by slow and persistent actions. However, the underlying causes are more easily amenable to change in the short or medium term as a result of DAP interventions. As for the immediate causes of mortality and malnutrition, while they are easily diagnosed, in most cases they cannot be effectively addressed without also working through their underlying causes.

### **C. How Do You Go About Developing a Food and Nutrition Security Framework?**

The elaboration of this type of framework may appear at the outset to be a difficult and time consuming task. It is true that it demands more intellectual concentration and more effort than many other aspects of DAP management. The exercise, however, is well worth the trouble it takes and can be carried out efficiently if certain guidelines are followed that facilitate the process.

The following conditions are necessary to successfully elaborate a food security and nutrition framework for your DAP:

- u First of all, everyone who plans to work on the framework must commit to attending the two work sessions from beginning to end.
- u Because this activity requires a particular focus and power of reflection, it should be carried out in the mornings when the participants are best able to concentrate on the task at hand.
- u All necessary provisions should be made to ensure that the participants are not distracted during the working sessions.
- u The location where the working sessions are held should be calm and comfortable, with a large blackboard or enough space to accommodate a display of flip charts that will be used to record the information from the debate.
- u These working sessions will be most productive if the number of participants is limited to no more than 15.
- u At least two people should be available to facilitate the discussion. One will play the role of moderator while the other is in charge of recording information on flip chart papers or on the blackboard.
- u After each session, someone should be responsible for gathering up the results of the work in progress by arranging them in a clear and legible partial framework. This should be drawn up clearly on the blackboard or on as many flip chart papers as necessary so that all participants can read it from their seats. This will be used as the starting point for the next session's discussions.

## **D. Steps in Developing the Initial Food and Nutrition Security Framework for your DAP**

### **Step 1: Assemble the Relevant Secondary Materials**

**When:** During the week(s) before the Framework Elaboration sessions. This is a first step that is performed during the design phase of the program by the country representative and consultants working on the preparation of the DAP. Some secondary materials may be collected from the literature but most needs to be found in-country.

Before beginning work on the framework , pull together as much secondary material as possible on the current situation of food availability and accessibility, on the major source of revenue, on food preferences and practices, and on the health status of different population groups. Obtain any anthropometric data that may be available on the condition of children from birth to five years of age, as well as ancillary information about how this information was collected and aggregated as well as analyzed. This information should be relevant, if possible, to the specific zone where the DAP will be working. If this is not possible, national level information can be used.

This information can be found in:

1. Earlier studies that may have been carried out by Africare
2. National studies carried out by various ministries (Health, Agriculture, Commerce) or international organizations such as UNICEF, the FAO, UNDP, the World Bank, or NGOs/ PVOs: (ex. Demographic Health Studies {DHS) which can also be found on the website <http://www.measuredhs.com/> And the Living Standards Survey).
3. Socio-economic and demographic base-line studies or village profiles and community action plans if these activities have already been carried out such as is the case for on going programs (ex. Results form the RRA studies, final evaluation of the first phase, etc.)

Take the trouble to familiarize yourself with this documentation, making note of problems that are identified in the studies and any causes or consequences that are noted. Be sure to make a note of where relevant information was found (name of the document, the page, and the paragraph). Have the documents and any notes you have taken at hand to be used during the workshop. (See step 3)

### **Step 2: Constructing the Framework; Brainstorming the Possible Causes of Malnutrition in the Area.**

**When:** The first morning of the framework preparation exercise

Begin by brainstorming a list of the factors that participants believe to be the probable causes of malnutrition and food insecurity in the area where the DAP works. At this time, participants may wish to base their suggestions on their own knowledge of the area and the subject. Later, you can draw more specifically on information in the various documents and reports that have been pulled together for the exercise.

Each participant should feel free to contribute his or her ideas to this list. At first the suggestions

should simply be listed as they are offered, with no attempt to organize them or pass judgement on their validity. However, suggestions that are very broad and unspecific (like “poverty”) should be avoided and replaced by suggestions that are more specific to the situation in the zone being studied. The list may end up looking something like this:

**Table 6.1 First List of Causes of Nutritional Insecurity**

<b>Possible Causes of Malnutrition and Mortality</b>	
U	Insufficient revenues
U	lack of work
U	poor rainfall
U	lack of information about foods to give babies
U	mothers don't have enough time
U	lack of wells near people's homes
U	water sources are polluted
U	production of cereals is insufficient
U	no near by markets
U	malaria
U	short rainy season
U	lack of food
U	access to region is cut off during rainy season
U	too many children to feed
U	children are not supposed to eat eggs
U	animals damage crops in the fields
U	theft
U	low selling price for cereals
U	lack job skills
U	insect infestations of crops
U	shortage of fertile land
U	loss of peanuts during storage
U	childhood diarrhea
U	agricultural inputs are expensive
U	no doctor, few nurses
U	no credit possibilities
U	have to go far for firewood

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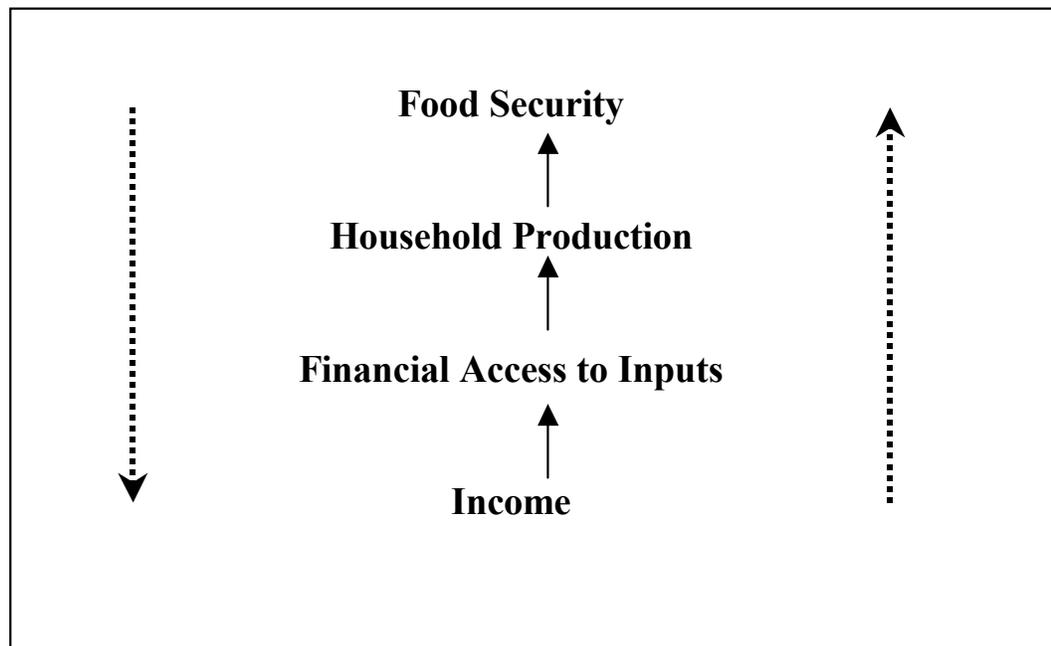
graph BT
    A[Insufficient revenue] --> B[Lack of work]
    B --> C[Lack of job skills]
    D[Loss of peanuts during storage] --> E[Insect infestation of crops]
    E --> F[Ag. inputs too expensive]
  
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Once the list is in place, the moderator should encourage the participants to look for relationships of cause and effect between the various items on the list. These can then be organized on another sheet of craft paper so that each item is placed below the situation that it causes ( figure 6.3).

The framework will be most useful if the items are listed in a positive, rather than a negative sense. For example, one of the causes of insufficient agricultural production is the farmers' inability to pay for inputs and one of the causes of this situation is their lack of revenue. This chain can be transferred into a positive rendition as in the example below: (figure 6.4)

**Figure 6.3 Initial Chain of Cause to Effect**

**Figure 6.4 Framework Using Positive Wording**

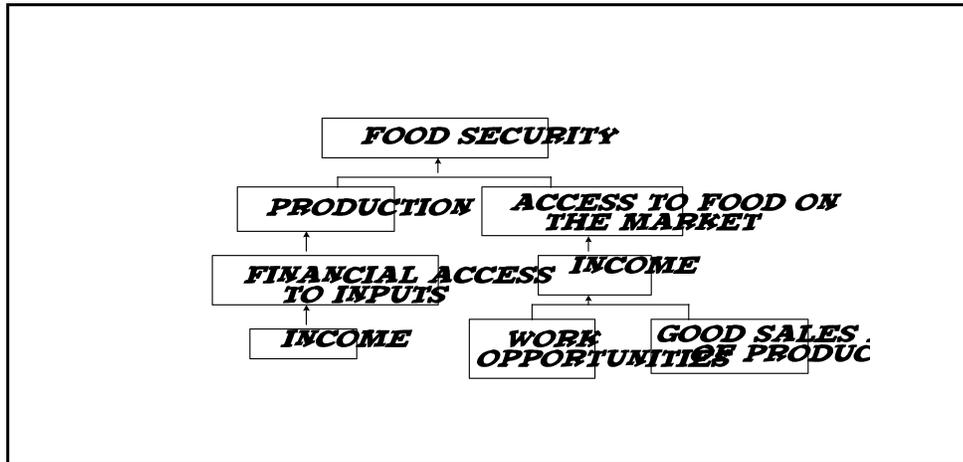


When information is presented in terms of causes and effects, it is more informative than simple statistics. It identifies not only the problems that are found in the area, but also the causes and

their relationship to food security and to nutrition security.

One variable may have several determinants or one problem may have several causes. In the following example, financial access to food in the market is another factor that leads to food security. This, in turn, is determined by income, and income is determined by the availability of work and by the selling price of goods produced by the villagers. From this information, we can construct a diagram or a chain such as the one that follows.

**Figure 6.5 Several Determinants to a Same Variables**

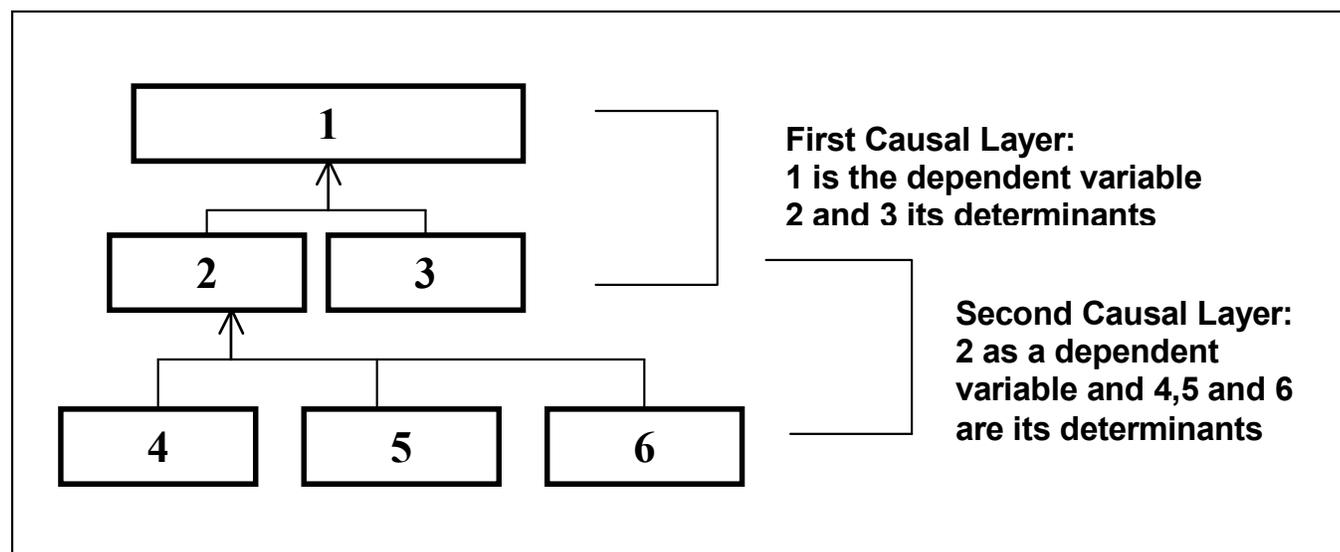


Your causal framework will be composed of a series of causal chains. At the top of each chain will be a dependant variable. As one moves up the causal chain each link is at once, the dependant variable for the cause below it, and the cause for the dependant variable above it (fig. 6.6).

Dependant variables are so-called because their value “depends” on the factors below them. The degree to which a household is food secure, for example, depends on its production and its income. The lower the income and the food production, the weaker is the family’s food security. This information is obtained by repeating the question: “In this area, what factors contribute to dependant variable “X?”

For example, “*In this area, what factors determine nutritional security?*” And “*What determines the degree of food security of households?*” To make this exercise easier, examine only one dependant variable at a time. Look first at all its immediate determinants/causes. Then, when those have all been exhausted, begin with one of its determining factors and examine its causes.

**Figure 6.6 Dependent Variable and its Determinants in a Step by Step Fashion**



**Step 3: Review of Secondary Materials**

**When:** At conclusion of the first session of framework preparation

The next step is to enrich the analysis with information from the secondary data that has been pulled together. This is most easily done if the materials are divided up among the participants and each person is made responsible for one or two documents to review. Each person should be asked to look for the following information:

- u The nature of problems which are identified
- u The population which is affected by the problem (children under three years of age, women, pastoralist, migrants, etc.)
- u Any quantitative information that helps to understand and document the problem (% of population affected, household or individual income)
- u Relevant analyses of the situation (problem identified, causes and consequences, recommendations for possible solutions proposed by the document)

Each person should note the principle findings (and their reference) on cards so that they can be easily used during the session to be held the following morning.

**Step 4: Elaboration of the Food Security and Nutrition Framework**

**When:** Second morning of framework preparation

This session begins the real elaboration of the framework, as opposed to the preparatory work which has taken place in earlier sessions. We suggest that you begin with the problem of childhood malnutrition. Beginning with this question helps to highlight the issue of food utilization

and therefore to properly position issues of availability and accessibility in relation to the causal chain that leads to malnutrition. This will make it easier to analyze DAP impact later on. This approach will also identify, if relevant, any constraints that villagers encounter relative to care, health services, and a healthy environment.

1. Begin by discussing the problem of childhood malnutrition. Start out by giving an estimation of the number (or percentage) of malnourished children. Put the malnutrition problem at the top of the framework. Then ask the question, “*what factors determine or cause childhood malnutrition in the program area?*”

Stay as close as possible to the dependant variable in order to identify the most immediate causes of the problem. Avoid jumping ahead to more deep seated causes at this point.

2. For each cause that is identified, considering both the knowledge of the participants and the information that was found in secondary materials, give specific information for the program zone such as :

- u What segment of the population encounters this problem?
- u At what period of the year does the problem occur?
- u What is the severity of the problem?
- u Who is already responding to the problem and how?

This information will be used later to prioritize problems in the area.

For example, as far as childhood malnutrition is concerned, the immediate causes may be already well known (inadequate caloric intake and poor utilization of the food that is consumed). The first level determinants thus will be noted as *caloric intake* and *biological utilization of food*. What local information can now be found to shed light on these issues?(see table below)

3. Having identified and described the immediate causes of malnutrition in the DAP zone, now ask yourself, “*what are the causes of each of these immediate causes?*”

Using the example in the table below, you might ask: “*in this area, what are the causes behind the fact that children eat only two meals a day?*” or “*in this area, what are causes of Vitamin A deficiency?*” The answers to these questions then become the underlying factors that determine the population’s caloric intake and their biological utilization of food.

Insufficient caloric intake, for example, can be caused by seasonal shortages of certain foods (like cereals) both in household granaries and in the market (*food security issue*). Vitamin A deficiency can be the result of ignorance about the need to consume foods that are rich in Vitamin A, or a lack of knowledge about what foods contain these vitamins. In the case of children, inadequate food intake or inadequate utilization of food may be caused by a lack of supervision of child feeding, for instance to encourage the child to eat the proper foods (*care issue*)

**Table 6.2 Example of Local Information to be used in the Framework**

<b>Caloric Intake</b>		<b>Biological Utilization</b>	
O	Majority of rural households consume less than 80% of their caloric needs in a year	O	Endemic Vitamin A deficiency in the area
O	50% of children less than 3 years old eat only twice a day during the period when their parents are in the fields	O	60% of pregnant women seen by medical practitioners are anemic
O	Only 10% of infants are given enriched porridge after the age of 6 months	O	Measles epidemic in zone since last October and continuing until present
O	Children from 0 to 6 months are given water or tea infusions to drink to fill their bellies and make them sleep better.		

4. Identify and describe all the causes of the problem and put them down on the framework .

5. Continue to identify the immediate, underlying, and deep seated causes of each dependant variable. Add any additional information that is based on information about the situation in the DAP zone.

Upon the completion of this exercise you will have a causal framework for food and nutritional insecurity that is more or less complete depending on how much information was available to the participants as they went through the process. Keep in mind, however, that this framework is still in its initial stages. It is not yet “done!” At this point its utility is in preparing the DAP and the various baseline studies. The information from those studies will then be used to correct and amplify the framework.

**E. Developing a Strategic Framework for the DAP**

The food security framework provides a chain of causality for the food security problems identified in the DAP area. This information will be used to determine the Goal, Strategic Objectives and Intermediate Results for the activity. These targets collectively comprise the strategic framework for the DAP.

Given that the Goals of Africare’s DAPs are variations of : “Substantially Enhanced Food Security for Vulnerable Population in the Activity Area.”, you now must define it more specifically for this

particular DAP. Base it on the information that you now have and on the most legitimate although realistic desire the population would have. This is also to be redone later with the populations themselves. This goal involves not only enhanced food availability, access and utilization but also the capacity to address risks to food security status and maintaining improvements.

Now with this Goal in mind together with the causal framework clearly laid out in front of the participants, begin to think about the issues it raises and about the best strategies to develop over the lifetime of the program in order to attain that goal (or to progress toward it). These strategies will become the Strategic Objectives of the DAP.

Generally DAPs have at least three Strategic Objectives. These are:

1. Improved Community Capacity to Enhance Food Security
2. Increased Agricultural Productivity
3. Improved Household Nutrition

Strategic Objectives 2 and 3 are identified as the priority objectives in the *Food Aid and Food Security Policy Paper* of Food for Peace.

In some cases, where there are other significant problems impacting on food security, an additional Strategic Objective may be considered. For example, in the Uganda Food Security Initiative, there is a Strategic Objective for "Improved Rural Access." It is important not to overload a program and the Strategic Objectives should be limited to no more than four. Envisage how together these strategies will enhance the food security of the beneficiary population with a high potential for sustainability. Adjust them as needed assuring that they are realistic.

However, be careful to avoid the pitfall of trying to equate each problem identified in the causal framework with its own specific solution. One should not seek such a one to one relationship between the two frameworks. The reason for this is due to a very important distinction:

The Food Security Framework portrays a chain of causality for what is, while the Goal and Strategic Objectives of the DAP articulate the desired future situation that is to result from the intervention.

Now, under each Strategic Objective, you can determine the specific Intermediate Results. Achievement of these results should ensure that the program is progressing toward its ultimate goal. It is thus important to envisage (and discuss in the DAP) the mechanism that will be promoted in order to ensure complementarities and synergies between the activities and between the intermediate results to attain that goal. The Intermediate Results will also be monitored and measured in the course of DAP implementation. Hence, they also determine the broader set of activities that the program will be implementing as well as providing the basis for the M&E plan.

It is in determining these Intermediate Results and the activities to be carried out that the Food Security Framework is most useful. As an example, it is very likely that you will find "lack of income" as a cause of a number of the problems noted, i.e. "lack of seeds" and "lack of ability to secure health services." The design team will be looking for ways that incomes can be increased to address these causes. This also shows one of the many ways in which the DAP will establish complementarities between its Strategic Objectives.

At this point, a different exercise needs to be carried out. This is one of identifying **Assets** and **Abilities** present in the area and the **Opportunities** for using and enriching them. This exercise also involves determining how Africare's capacity and resources provided through its team and by the DAP can contribute to realizing the desired results.

The process of DAP preparation is iterative. All involved in it need to come together at different point during that mission to share new information and especially the results of their global thinking in order to refine and adjust the Strategic Framework until it reflects totally sound reasoning. The Goal, Strategic Objective, Intermediate Results, activities and M&E plan must hold together without major gaps, or if some still exist, they should be explained. This is not to say that the DAP should solve every problem, but that the whole should plausibly lead to attainment of the goal.

#### **F. Utilizing the Food Security Framework in Team Building in Preparation for the Baseline Studies**

**When :** This step is performed when the DAP staff is on board and prior to the Baseline.

The causal framework that has been developed is a tool that indicates the causes of the nutrition and food insecurity problems. The strategic framework was built on it and shows how the DAP wishes to address those problems. However, it can often be adjusted and new personnel must appropriate it quickly to be efficient in their work.

##### **1. Team Building in the Process of Revising the Preliminary Framework**

Before devising the baseline studies, you must revise the preliminary causal framework. This is also a perfect time to ensure that the DAP staff "owns" the framework. This exercise will help all members of the program team understand the big picture and where their contributions will fit in. To revise or update the framework, you may go back to steps 1 and 3 and 4, building on what is known, adding new available information.

Depending on the problems identified and the resources available to the DAP, you may decide that you'd like to gather more detailed information about certain of the variables that appear to be most relevant to program activities.

Take, for example, the availability and access to foodstuffs. On the basis of your knowledge of these subjects and the secondary information that you have available, go further in brainstorming all the causes of availability and access problems in the DAP area. Are the foods needed by the population available in sufficient quantity and at prices low enough so that people who need them can buy them throughout the year? What causes certain products not to be available? If they are available, why do some people not have access to them? Continue this line of questioning, as before, down through the causal chain.

##### **2. Analysis of DAP Activities**

You are now ready to look at the activities that are proposed in the DAP. Go through them one by one. See if and how the DAP activities still resonate with the framework that you have just revised and still address the causes of food and nutrition insecurity that you have just prioritized. For each activity that is proposed, discuss the following issues:

- O its relevance to the issues that appear in the framework

- the probable mechanism by which the activity will meet its objectives (that is, how it will attack some causes and what results are expected)
- the feasibility and appropriateness of the activity (given what you know about the interrelated causes and the DAP resources)

After discussing the individual activities, take a look at the whole program portfolio. Are there any major food security or nutrition problems that appear in the framework but will not be addressed by the activities of the program? What are the implications of not dealing with these issues?

Careful notes should be taken of all these discussions since you will want to come back to these issues later on.

### **3. Using the Framework to Prepare the Baseline Studies**

In the course of preparing the framework for your DAP, you undoubtedly found gaps in the information available or had doubts about its validity or found it was not representative of your area. These gaps will be filled as baseline studies of various kinds are carried out at the beginning of the DAP.

The next step, then, is to prepare the various baseline studies. These include surveys and RRA studies. Begin by thinking about what types of information are needed either because (1) they are not available from existing studies or (2) they are needed to verify information that has been obtained from other sources.

The baseline will include a critical component which is the population's own analysis of their situation. For the purposes of establishing a baseline, this type of information will be collected using the RRA method from only a limited number of villages that are representative of the DAP zone. There are several reasons for carrying out these village level studies:

- The very exercise of collecting data with the villagers through the RRA (and later with PRA) is in itself a capacity-building activity of the DAP.
- The villagers have information that is unlikely to be found in any existing study;
- The villagers are the principal actors in the DAP's implementation and should be involved from its earliest stages;
- The study will form the basis for the community's identification of potential solutions and development of their action plans which will match DAP activities with local needs.

During the initial RRAs the DAP team will work alongside the community to analyze the food and nutrition security situation. Once the results of these community level analyses are available, you will undoubtedly want to correct or add information to the framework. This is also the time when you will work, with consultants to the program, to finalize the other baseline studies such as surveys and anthropometric measures.

For more information on the various studies, refer back to the Module 2 on the Program Implementation Time Line, and to Module 7 (RRA/PRA). Useful additional material on various aspects of surveys and measurement is available in the guides on the FANta website,

As information comes back from the different baseline studies, as well as, later on, from the continuous community analyses and action plans, you will continue to refine and adjust the framework so that it represents the reality of the zone where you are working. Each time new information becomes available, go back to Steps 3 and 4 to see if any changes are needed. Be sure, however, that any changes to the framework are made only after a group discussion in which consensus about the changes is obtained.

### **G. Using the Food Security Framework Throughout the Life of the DAP**

The DAP framework will evolve as additional information becomes available. Each version should be saved since, taken together, they will represent a schematic history of how the program's thinking is evolving.

Always keep in mind that the food security conceptual framework is NOT set in stone. It does not require the DAP to follow a specific path that is established from the outset. To the contrary, it needs to evolve, grow, and become more sophisticated over time. It provides a tool that

- C clarifies what the DAP will and will not attempt to do
- C puts the DAP's interventions into the context of issues specific to that region
- C illuminates the mechanisms by which DAP interventions expect to affect food insecurity and malnutrition.

Above all the food security framework provides a tool that should facilitate the DAP team's analysis of issues and thereby help them to make more thoughtful decisions throughout the life of the program.

## MODULE 7

### RAPID AND PARTICIPATORY RURAL APPRAISAL (RRA AND PRA) AND THEIR APPLICATION TO AFRICARE'S FOOD SECURITY DAPS

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## **AN INTRODUCTION TO RRA AND PRA**

Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA) are related methods that are used to gather information in local communities. Both methods are well adapted to gathering many of the types of information that are needed by agencies and communities working on food security issues. Unfortunately, there is much confusion about the terms RRA and PRA and no commonly agreed upon definition to distinguish the two. In this manual, however, we feel that it is important to understand the difference between two different ways in which this approach can be applied. Therefore, for the purposes of this publication, the following definitions will be used to distinguish between RRA and PRA.

### **RRA**

The term RRA is used here to refer to a discrete study, or series of studies in one or more communities. These RRA studies typically last from 4 to 8 days. During this period a multidisciplinary team of researchers looks at a set of issues that are clearly defined by the study objectives. The team works in close collaboration with community members, involving them in all aspects of the collection and analysis of information. Information is collected using a diverse set of tools and techniques that facilitate the participation of community members. The focus is generally on gathering information and ensuring that the information is as rich and as accurate as possible. An RRA generally results in a report that summarizes the research findings. This information can then be used in a variety of ways including DAP design, improvement of an ongoing program, revision of national policies, etc..

### **PRA**

PRA will be used here to refer to a more extended process that involves not only the collection of information but also its eventual use by the community as it plans further activities. The emphasis in PRA is often not so much on the information as it is on the process and on seeking ways to involve the community. If an RRA is generally a discrete study, a PRA is an extended process that can last for months or years as communities develop their own skills needed to address issues, analyze options, and carry out activities.

Both RRA and PRA have uses in addressing food security issues. As described in Module 2 of this manual, Africare DAPs will generally use a combination of these methods. Typically, RRAs will be used first at the very beginning of the program. This manual recommends, for example, that an initial set of RRAs be carried out in order to inform the initial design of the activity and to focus on the issues that are most relevant in the areas where the program intends to intervene. These types of studies might be used to determine where the DAP will focus its efforts, depending on the severity of the food security situation in different regions or zones. It can also help DAP staff think through the types of interventions that might be necessary during the activity. In some places the key issue may be food storage and food stock management, in others it might be marketing and food availability in general, while somewhere else the key problem might be nutritional deficits suffered by a particular population such as children of weaning age. The activity design will be based on the types of issues that arise during these initial studies, as well as other information that is available to the design team. Based on all of this information, the designers will propose a range of possible interventions to meet the various concerns that have been identified.

### **RRA or PRA?**

**To decide whether RRA or PRA is the more appropriate approach, decide whether (1) the focus is primarily on gathering information in a discrete study that will be used principally by the program team for its planning purposes (RRA) or (2) the emphasis is on launching a longer term process in which the community develops its own analytic and planning skills (PRA).**

**In most DAPs, both methods will have a place. Some information will be obtained by a team of “outside” development professionals using RRA methods, while other information will be gathered by local community members themselves who use PRA to understand local issues and plan appropriate solutions.**

A second set of RRAs will then be carried out once the DAP team is in place. These RRAs will, along with the other studies that are carried out, provide baseline information from which progress will be measured as the program is implemented. These studies will be carried out by multidisciplinary teams (see page 14 below) composed of Africare staff and outside specialists as needed. Later in the DAP, further RRA studies (usually in the same villages as the baseline and with at least some of the same team members) will be carried out to provide information on whether the program is meeting its objectives and, of equal importance, to try to understand the community’s perception of the DAP and its impact. The purpose of these studies is monitoring and/or evaluation of DAP progress.<sup>1</sup>

PRA will also play an important role in Africare’s DAPs since capacity building at the community level is an explicit goal of the interventions. PRA is useful in helping a community to study its own problem, analyze the issues, and design interventions to address the priority problems. This manual therefore recommends that every village that takes part in these participatory food security programs engage in a PRA process. Africare will train villagers in the methods, facilitate the process as it gets underway, and support communities as they analyze and search for solutions to their food security and nutrition concerns. The team carrying out these PRAs will be primarily composed of local community members with some assistance from Africare’s staff.

These PRAs will enable each community to “customize” the program approach based on its own needs. Having gone through the PRA process that helps them to identify needs, the community will then be better able to select from among the possible DAP interventions those that most clearly address its concerns. The community may also identify other needs that are not addressed by the DAP in their self study. They should be encouraged to address these issues by drawing on their own resources or contacting other agencies that may be working on similar issues in the region. The PRA process continues throughout the life of the program and, we anticipate, beyond the conclusion of the DAP. The goal is for villages to acquire skills that will help them not only throughout the life of Africare’s program, but also into the future as their needs change and evolve.

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<sup>1</sup>Another important use of RRA is to inform policies at the national level. The government might be reviewing its fertilizer pricing policies, for example, and need information on how the policies in place are affecting households and what the impact of changes might be. There are times when there is a need for information but the agency does not wish to or is not able to commit to a long and intensive process in the community. In these cases, RRA is the more appropriate methodology.

The table below offers a brief comparison of RRA and PRA in the context of Africare’s DAPs. The various issues that are presented here in summary form will be addressed in much greater detail in the sections that follow.

**Table 7.1 A Comparison of RRA and PRA as Used in Africare Food Security DAPs**

<b>RRA</b>		<b>PRA</b>
Inform DAP design, gather baseline information, monitoring and evaluation	<b><i>Purpose</i></b>	Capacity building for improved decision making at community level, situational analysis, planning, and monitoring by community
Multi-disciplinary team of Africare staff and specialists	<b><i>Team</i></b>	Team composed of villagers, sometimes facilitated by Africare staff person, that works with larger community
Limited number of representative sites	<b><i>Sites</i></b>	Each community where Africare will conduct program activities
Discrete studies, usually lasting 5-7 days	<b><i>Time Period</i></b>	Ongoing throughout the life of DAP. Usually begins with training and initial situational analysis (appx 10 days) leading to Community Action Plan
The range of tools and techniques presented below (and others as appropriate)	<b><i>Tools and Techniques</i></b>	The range of tools and techniques presented below (and others as appropriate)
Comprehensive, well written report that captures the depth and complexity of information obtained in the study	<b><i>Documentation</i></b>	Village Log Book with notes of principal findings, activities, and Community Action Plan

We turn now to a review of certain key methodological principles that are critical to ensuring that these methods are used properly and in a way that will yield the best results.

## **METHODOLOGICAL PRINCIPLES**

Every research method has certain fundamental principles. These principals guide the user in how the method should be used in order to obtain the best results. The guiding principles of most research methods focus on increasing the accuracy of the information collected. In the case of RRA and PRA, which are qualitative methods, the principles are oriented to getting accurate information, but also to getting information that is as rich as it can be, since capturing complexity is one of the principal attributes of these methods.

Any method can be used well or it can be used poorly. There are good surveys and there are poor surveys; there are good RRAs and there are bad RRAs. In order to get the most out of any information gathering method, the user must first be convinced of the need for good information. This will motivate him/her to put in the extra bit of effort that is needed to carry out the methods as they should be. Once the researcher is committed to gathering good information (as opposed to merely fulfilling some external requirement for the sake of checking off another step in the process), she or he needs to understand the key methodological principles that must be applied to ensure that the method will yield the best results possible. In a survey, for example, this would involve selecting a sufficiently large sample using rigorous random sampling techniques. In an RRA or PRA, as we shall see below, the core methodological principle is **triangulation**. And finally, once the principles are well understood and a design has been drawn up based on those principles, it is essential that the necessary resources are brought together to carry out the research according to the “best practices” design.

### **The Need for Good Information**

**Good information is not a luxury; it is a necessary prerequisite to doing effective food and nutrition security interventions. Food and nutrition security is at the heart of the individual's and the households well being. When research gets faulty information (due to poor use of a methodology) and interventions are based on that faulty information, the results are likely to be disappointing to all concerned. At best, such interventions are likely to be ineffectual, wasting the time and resources of the donor and the local population alike. At worst, these programs may actually make people more food insecure by undermining traditional practices, creating dependencies, increasing risk, or otherwise introducing inappropriate practices.**

Mobilizing the resources needed to carry out good research is often a problem for RRA and PRA practitioners since people who do not fully understand the methods tend to see them as infinitely adaptable. In fact, while they are flexible, they are not infinitely adaptable. The number of examples of poor use of the methods suggests that they are often being used in ways that do not follow the principles required to get good results. If a statistician designing a quantitative survey tells us that 3,000 households are needed to get statistically significant results, most agencies will not try to argue that he should get by with a sample of 500. And yet not infrequently, the same agency will try to suggest that RRAs can be carried out in 2 days (when the proposal is for six) or with a single researcher (when the methodology calls for a team). In short, the flexibility that is so important to carrying out good qualitative research should not be mistaken for a license to use the method in a haphazard or slovenly fashion. Rigorous use of the methods is essential to gathering good quality information and quality information is indispensable to carrying out successful food security interventions.

### **Triangulation: The Core Methodological Principle in RRA and PRA**

The core principle that must be understood by RRA and PRA practitioners is called triangulation. Triangulation refers to the diversification of perspectives that comes about when a set of issues is investigated by a diverse, multidisciplinary team, using multiple tools and techniques, with individuals and groups of people who represent the diversity of the community. In order to

**The key to carrying out good RRA and PRA is constant and unwavering attention to the principle of triangulation.**

understand the importance of triangulation, it is necessary to think about the issue of bias. Bias poses the biggest impediment to collecting information that reflects the local reality. When biases are present in the collection of information, the results will reflect a distorted image of reality. Interventions that are based on that distorted image are likely to be inappropriate to whatever the real situation turns out to be. There are three ways in which bias can enter a study:

1. Researcher Bias
2. Informant Bias
3. Bias related to the tools and techniques used to gather the information.

### **The Problem of Bias**

Let us look first at researcher and informant biases since they operate in similar fashions. Behind both researcher and informant bias lies the fundamental truth that every human being is biased. That is, he or she sees the world through his/her own particular set of lenses. He or she will see things differently depending on such factors as gender, age, ethnic group, educational level and experience, wealth standing, caste, etc. All those factors combine to make the individual experience life and observe and report things in different ways.

- 1. Researcher Bias** Each person on the RRA or PRA study team will absorb information differently depending on his or her experiences. They will be more sensitive to certain types of information and tend not to pay attention to other things. A medical professional looking at food security issues is likely to pay attention to things quite differently from a sociologist or a crop scientist, for example. A woman is likely to ask different questions and absorb different types of information than a man will. This type of bias is at once a strength and a weakness. Our biases make us more effective researchers in one sense because they increase our sensitivities in certain areas. Biases can also act as blinders, however, reducing our ability to absorb information in other areas. The key in RRA and PRA, as discussed below, is to acknowledge the biases that are inherent in this type of work and to manage them so that the quality of information obtained is as high as possible. We shall see below how this is done in practice in the section dealing with triangulation.

**People experience the world through their own biases.**  
Imagine a hypothetical situation in which John (a 64 year old American grandfather from New York) and Priya (a 22 year old newly married Indian woman from rural Andhra Pradesh) are somehow removed from their familiar surroundings and placed on a cruise ship in the Caribbean for a week. Afterwards, they are interviewed independently about their experiences: what they saw, what the people were like on and off the ship, how they liked the food, etc. They have, in some sense, had identical experiences. But would their reports be the same? In what ways might they differ?

- 2. Informant Bias** Just as the researchers on the team bring their biases to bear on the way they gather information, so each individual who provides information does so in a way that is biased by his or her experiences. A relatively wealthy person in a village who is used to a diet of rice and meat may describe a gruel made of millet and leaves as a severe hardship diet. A poor person who compares the gruel meal to a day when there is nothing to eat may find such a diet to be extraordinarily good. A man whose principal dealings with water involve drinking it and bathing in it may have very different opinions about how much is adequate from a woman who is responsible for fetching the family water supply each day. Here again, the key is not to

smooth over differences since this is what gives the study its richness, but rather to manage the biases and to ensure that the views of a certain group are not mistakenly believed to represent the situation or opinion of the whole population. This, too, is accomplished by triangulation.

Informant and Researcher biases take many forms, some of the most common of which are listed below.

<b>Gender Bias</b>	More emphasis is put on the point of view of either men or women; the other perspective is under represented
<b>Spatial Bias</b>	One area is favored in collecting information and the views of people who live in or frequent that area may be given more weight. This may take place if some places are more accessible (areas near good roads, near the center of the village versus the periphery) or more pleasant.
<b>Wealth Bias</b>	Often the views of people who are wealthier or who hold positions of authority are given greater weight over the course of a study. The poor are frequently under represented unless specific actions are taken to include them.
<b>Education Bias</b>	The views of those with more formal education are often solicited and considered more carefully than those with less education. This often coincides with a language bias since educated people may be better able to communicate with the research team.
<b>Expectation Bias</b>	The village's expectations of what the outside organization may bring them often causes villagers to favor certain types of information in their discussions. Similarly, the researchers' expectations of what they will find in the community acts as a filter for the information that is received by the team.

### 3. Bias Related to the Tools and Techniques Used to Gather Information

A third type of bias enters the study through the tools and techniques that are used to gather information. The box presents an example of differences that may arise in two very similar tools: group and individual interviews. The differences in the biases of various tools are likely to be even greater when the tools are more varied, such as the difference between doing an interview and using a visualization technique such as mapping or a quantification technique such as matrices. Once again, triangulation is key to reducing the systematic bias that would be introduced if only one tool were used to collect all the information.

#### **Information gathering tools and techniques have their own biases.**

In order to see what this means in practice, we can take the example of differences between individual and group interviews. Imagine that the people doing the interviewing are the same and that they ask the exact same questions of the exact same informant. But, in one case, the informant is by herself in the privacy of her kitchen and in the other case she is in a large group of men and women. The questioner, the respondent, and the questions are all the same. The only difference is the tool being used (group vs. individual interview). Imagine a topic like, "What do you do when there is not enough food to eat in your family?" Do you think that the information collected will be the same using these two tools?

#### **How to Triangulate**

In RRA and PRA, the principal strategy to reduce bias and enhance the quality of

information collected in the study is called triangulation. Triangulation refers to the diversification in order to offset the biases that may result from looking at an issue from a limited viewpoint. The process of identifying and offsetting biases is both explicit and systematic in RRA and PRA. The team is responsible for monitoring the way the study is designed and implemented so as to reduce bias as much as possible. Because bias comes in principally at the three levels discussed above (the research team, the respondents, and the tools and techniques) these are the foci for the team's attentions in reducing biases throughout the length of the study.

The approach taken by RRA and PRA is to seek out bias and deal with it explicitly. The first step, then, is to identify the biases that may be creeping into a study. Once this has been done, the next step is to deliberately and systematically take steps to offset the bias using triangulation as described in the following sections.

### **Triangulating the Research Team**

Triangulation generally begins with the selection of the team. Because each member of the team will bring his/her own biases (positive and negative) to the study, it is essential that the team be composed of several different members with different types of biases. This helps to ensure that no one bias will dominate resulting in a misrepresentation of information.

Triangulation of the team will be done rather differently depending whether we are talking of a RRA or a PRA.

#### **1. Triangulation of the RRA team**

In RRA, as noted above, a team of specialists is put together to carry out the study and to document the information in a well-written report. Triangulation of such a research team takes numerous factors into consideration. Three that are of particular importance are discipline, gender, and whether the person is an insider or an "outsider" to the situation being studied.

Disciplinary bias refers to the person's academic and professional experience. It is often useful, at a minimum, to ensure that both social and natural science backgrounds are represented on the team. It would not be good to have three sociologists on the team, for example. A less biased team might have one sociologist, a medical professional of some type, and an agronomist.

It is critical that the team include both men and women since there are many gender related biases. In some cultures it is difficult for people to communicate across gender lines. Certainly gender is an overriding lens that has a profound impact on the way humans perceive issues and experiences.

The insider/outsider factor refers to how close an individual is to the situation being studied. Proximity has both advantages and disadvantages in terms of information collection. In either case, it is a bias that must be managed. The insider may have better access to information about the program, village, etc. But often the person is so close to the situation that s/he takes certain things for granted or fails to notice things that might strike the outsider as interesting. Triangulation simply reminds us to ensure that the team includes both people with an insider and those with an outsider perspective to ensure that information is collected and analyzed in the most complete and unbiased way possible.

Because of the problem of bias and the need for triangulation at the researcher level, one person cannot do a good RRA. RRA requires a team of people who represent diverse perspectives. At a minimum, the team should include two people. It is preferable to have three or more people on the team to ensure adequate triangulation at this level.

## 2. Triangulation of the PRA team

To the extent that PRA is used for priority setting, decision making, and planning, it is critically important that diverse interests in the community are represented on the “team.” A danger that is always lurking behind the participatory process is that a minority group within the population will coopt the process and purposefully and systematically bias the results to favor their own interests. The team for a PRA is really everyone in the community who takes an active role in the PRA process.

Realistically, however, everyone cannot be involved at the same level without the process becoming extremely unwieldy. This manual therefore recommends that a

“steering committee” be established for the PRA activities. A steering committee might be composed of, for example, twelve members, four from each of three *quartiers*. The four people might be comprised of an older woman and older man and a younger woman and younger man. Within the group of twelve, then, it would be important to ensure that the different ethnic and religious groups present in the village be represented, as well as families who are richer, poorer, and about average. This steering committee should, ideally, be selected in a village plenary meeting where the various criteria are discussed and decided upon as a group.

This committee (which essentially becomes the core PRA team) then mobilizes the population as needed for various activities and planning sessions. While this smaller committee may carry out a certain amount of information gathering and analysis, the actual prioritization of issues, planning for solutions, and drawing up of the CAP should generally take place in plenary sessions where all those who wish to be involved are invited.

What is the role of the Africare facilitator in this team? The role will change depending on how far along the community is in the process. At the beginning, the staff person will probably act as a leader of the steering committee, guiding the process, overseeing that triangulation is taking place, and generally playing an active role on the team in assuring that critical issues are brought up and addressed. Over time, however, as the villagers learn the techniques and principles of the methodology, the Africare staff person will take more of a back seat, supporting the process, but not leading it. An important role throughout will be to continue to promote the principle of triangulation and the participation of diverse groups.

The broad participation of different interest groups should be a key factor that is used in monitoring and, eventually, evaluating the PRA process.

**A danger in the participatory process is that it can be coopted to serve the interests of a particular group.** Men may exclude the interests of women, the wealthy or a certain ethnic group may attempt to capture program benefits. While a donor organization such as Africare has little say in how a community organizes its internal affairs, it does have a right (and some would say, responsibility) to see that interventions carried out with its support do not neglect the concerns of poor, vulnerable, and generally marginal populations.

### **Triangulating at the Respondent Level**

Whether in RRA or PRA, attention must be paid to triangulation at the respondent level. Fortunately, this is fairly straightforward. Since different people and groups within the community have different perceptions and points of view, it is important that the full range of perspectives be considered as information is being gathered. Thus, it is important to gather information from men and women, people who are older and younger, those who are poorer as well as those who are richer, and people from different ethnic groups, castes, or professions. In an RRA, where the team is composed of outsiders who will not necessarily know the composition of the community before they go to the village, use of tools such as wealth ranking and social mapping that explore differences in the community will be useful in identifying different groups that can then be sampled to ensure a good mix of respondents.

### **Triangulating Tools and Techniques**

Since each tool introduces a particular bias, it is important that the study diversify the tools that are used. A sampling of potential tools is presented later in this chapter. When information is collected using only one tool, all that information is subject to the same biases. Individual interviews, for example, may encourage people to confide more fully on sensitive issues, but the information is not subject to public accountability. Group interviews, on the other hand, may put pressure on people to report only “acceptable” behaviors, or might make a person cautious about misreporting a situation when other people know the real situation. Neither tool is inherently better. They each have biases in the types of information they are likely to produce. Therefore, the key to reducing bias in the results of the study is to use different tools. Where differences emerge in the types of responses, the researchers will know that they have to probe further. During the course of the study, the team should be thinking carefully about its choice of tools, both to increase the effectiveness of the information gathering process but also to ensure the diversification of the information gathering techniques and, hence, the reduction of bias.

### **Monitoring Bias in Team Interaction Meetings**

The process of identifying biases and triangulating to reduce those biases should be systematic and deliberate during the course of the study. At the end of each day, the team should take the time to sit down together and reflect not only on the substance of the information that has been gathered, but also on the process. The first question that should be asked is whether there have been biases at the respondent level. If the team finds that information is being dominated by one or more groups (men or wealthier people, for example), it will develop a strategy for meeting women and poorer people in the days to come. The next question should look at the tools that have been used. If one tool is being used predominantly, it is time to begin thinking about other ways that information might be gathered. This process of triangulation is critical in terms of gathering information that is as unbiased as possible and thus as accurate and, ultimately, useful as it can be. A side benefit of this practice is that it will also result in much richer information as many diverse perspectives are brought to bear on the issue at hand.

### **Behavior and Attitudes**

Triangulation may be the nuts and bolts of carrying out good RRA or PRA but the whole process depends on the appropriate behavior and attitudes of the research team and each member of that team. Among the critical elements needed to successfully carry out these methods are the following:

- u Willingness to work together in a group

- u Respect for local people and practices
- u Ability to listen
- u Willingness to be self-critical
- u Interest in others and curiosity to learn more

These attributes are essential not just to RRA and PRA, but to carrying out participatory approaches in general. The more any outsiders who are involved in the process can build a rapport and a genuine relationship of mutual respect with the local community, the better the information that will be gathered and the more productive will be the use of both the outsider's and the community's knowledge.

One of the most common problems when outsiders go into communities to do RRA or to facilitate PRA activities is that development workers have often been trained in more top down approaches. Extension workers have been trained to tell people what to do. Development workers have been trained to find problems and bring in solutions. This approach is quite inimical to the participatory approaches recommended here that require a more egalitarian partnership between the outsiders and the community. In order to be effective practitioners of RRA and PRA, people must often examine their own attitudes and modify their comportment *vis a vis* the local population so that a true partnership can come to life<sup>2</sup>.

Some of the most common and unfortunate practices that are particularly dangerous to effective RRA and PRA are the following:

**Failure to Listen.** Outsiders are often so busy promoting their own perspectives that they forget the value of listening to others. The effective use of many RRA/PRA tools requires the facilitator to stand back and let the process unfold without dominating the exercise.

**Playing the "Expert".** A common outsider bias is to inflate the worth of his or her own knowledge and denigrate the value of local knowledge, especially when that knowledge is not the product of formal schooling. Community members who sense this attitude will be reluctant to share their perspectives at the risk being made to look foolish.

**Answering/Acting in Place of Local People.** RRA/PRA practitioners often try to control activities by, for example, drawing the map in place of the villagers, or holding the beans in a matrix exercise and placing them on the diagram in response to the villagers' instructions. Wherever possible, the outsiders should "hand over the stick" (or beans, or whatever) in order to promote the most active participation of local people.

**Confirming Pre-conceived Results.** One of the worst sins committed by RRA/PRA practitioners is to come into a community with the results of the study already in mind and then to use the so called "participatory experience" merely to confirm or justify these views. This practice is abusive of not only the methods, but also of the populations who contribute their time to an empty exercise.

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<sup>2</sup>Techniques for working with people to identify behavior patterns that are not appropriate in participatory research and to help them modify them accordingly can be found in Participatory Learning and Action, A Trainer's Guide by Jules Pretty et al. IIED: London, 1995. The manual can be obtained from IIED at 3 Endsleigh Street, London WC1H 0DD, UK.

## **THE MECHANICS OF PREPARING THE STUDY**

The principles outlined above are essential elements that need to be taken into consideration at each stage in the planning and implementation of the research. In the following sections we will look at some of the nuts and bolts of putting a study together, starting with the selection of the team and moving on to issues involved in defining the study objectives and choosing the site(s) where the study will take place.

One of the first steps when preparing to do an RRA or a PRA is to determine who will be on the research team. In the case of an RRA, the research team may involve principally people from outside the community. In the case of an Africare DAP, this would typically mean several Africare staff people as well as some “specialists” in different fields as needed to triangulate researcher perspectives. In the case of PRA, the team may include some Africare staff and specialists, but it is also critical that it include people from the community and that those people also represent diverse perspectives.

### **Selecting an RRA team**

As described above, the principal purpose of an RRA is to collect quality information in a rigorous systematic way. The RRA team must be selected with this objective in mind. The team members need to have good research skills and they need to understand the principles of the methodology as well as the issues being studied. They also need to have the “people skills” needed both to work well in the team and to create the rapport with community members that is needed to get good quality information. It is sometimes difficult to find people who have both analytic skills and people skills. If this should be the case, ensure that at least the team as a whole has some people with each type of skills. One can think of the people skills as being critical to getting the information, whereas the analytic skills are important to understanding the information and its implications. Both are essential to a good RRA study.

The RRA team is typically composed of three to five people. Three people is usually sufficient to assure the triangulation of perspectives, while more than five can quickly become unwieldy from a personnel management point of view. These team members should be selected to ensure that various perspectives are represented, including men and women, people with different disciplinary backgrounds and experiences, and insiders and outsiders. At least one member of the team should have solid experience with RRA if at all possible and be designated as the team leader. As far as disciplinary background goes, it will somewhat depend on the objectives of the particular study. One can anticipate that at least one team member will need to have experience on food security and/or nutrition issues and that another will be a social scientist. Whether an economist or sociologist or anthropologist will be the best choice depends, again, on the focus of the study. If the study will involve research on agricultural production issues, an agronomist or other agricultural specialist should be included on the team. If it expects to address medical issues, it will be well advised to include a health worker.

### **Selecting a PRA team**

In selecting the PRA team it is important to remember that information collection is just one of several objectives of the activity. Equally important in PRA is the notion of community ownership in the process and the full involvement of community members in all stages of the process including, especially, the use of the information that results from any studies that are carried out. This implies a considerably different approach to team selection than that for an RRA where outsiders take on most of the research roles.

In PRA, the team may be comprised entirely of community members, with or without an outside facilitator. Early in the process, it is likely that one or several outside facilitators will be involved. Later on, the village may be able to do some or all of the activities without much outside intervention; indeed, this should be one of the goals of the process. Later on, perhaps people trained in PRA from a neighboring community can help with the PRA. In this way proximate villages can share their expertise while reducing the dependence on outside development workers.

Typically, in Africare DAPs where there is a partnership between Africare and the community, the team is likely (at least at the beginning) to include at least one Africare staff person who acts as the facilitator/trainer and a “steering committee” (see page 11 above) of local community members. It may also include specialists representing particular disciplines (such as nutrition) who are brought in to add an additional perspective to the team. Just as the outsiders are selected to represent diverse perspectives, the same principle should apply in the selection of community members. The community might be asked to select twelve team members, for example, including some men, some women, some from wealthier and some from poorer families, and people from different ethnic groups. These people, along with any outsiders, would then comprise the PRA team. The team itself will carry out some of the PRA information gathering activities and will, as needed, call plenary meetings in the community to carry out prioritization and planning activities where everyone needs to feel a part of the process. (If the village is a very large one, these meetings may have to take place at the *quartier* level which then brings its findings to a larger meeting where they are negotiated in public.)

### **Setting Study Objectives**

One of the first steps in preparing an RRA or a PRA is setting the study objectives. The general focus of the study (sometimes called the “theme”) will have to be clear even before the team is selected since this will determine what kinds of people should be on the team. A study to evaluate a nutrition oriented intervention would have to have a nutritionist on the team, for example, whereas a study looking in depth at production and storage losses would require that an agronomist be part of the team. Other team members would have social or economic expertise. This team will be selected according to the subjects that will be studied.

Once the team is in place, its first task is usually to refine the study objectives. Objectives are, quite simply, what the team wants to learn during the study. The more that team members are clear on what they are trying to find out, the more they can focus their inquiry on relevant issues, and the more likely that the information gained will be coherent and useful. It is sometimes useful to think of research as a kind of puzzle. Each time a piece of information is collected, another piece of the puzzle is put in place. The objectives are like the frame or border of the puzzle. All information collected should fit into the frame established by the objectives.

There are two dangers in setting objectives that can be illustrated by the puzzle example. The first danger is setting objectives that are too broad for the time available to do the study. In this case, the frame is a large one. Even if a lot of information is collected, it is likely to be scattered, with one piece here and another there. At the end of the study, there will be so many blank areas remaining that it will be hard to make any sense of the picture and to see the significance of the information. At the other extreme is the danger of setting objectives that are too narrow. In this case the frame is very small and it is easy to get enough information to fill in the whole frame. The picture may be too small to make much sense, though, and the most interesting information may fall outside the frame around the study. (For example, the study may gather an

immense amount of highly detailed information about weaning practices but fail to relate this to the larger context of food insecurity faced by the family during certain times of the year.)

Setting good objectives may be one of the most difficult parts of an RRA or a PRA. In an RRA, the whole team should participate and sometimes other members of the organization doing the study should be invited to participate to ensure that their information needs will be met by the study. In the case of an Africare DAP, people from headquarters or other Africare staff not necessarily on the RRA team might be involved in discussing the study objectives. This is the time to ensure that the different perspectives of all these people who will be using the information are represented in the objectives of the study. If this step is omitted, the different team members will get to the field with their own agendas to follow, leading to a very chaotic situation. The objectives set the team's agenda and it is essential that there be agreement before the team moves into the field.

In the case of a PRA, the local community will be actively involved in setting the objectives. Objective setting will take place as a first step of the field work to ensure that the whole community has a chance to participate.

In setting objectives, a common ground must be found so that the team will work comfortably together in the field. It is dangerous to set objectives that are either too broad or too narrow; a middle course should be found that meets information needs and is compatible with the time available for the study. Typically, it is useful to define a theme for the study and three or four principal objectives. Each objective can then have several sub-objectives to further focus the team's attention on particular aspects of the problem. Sample objectives for a baseline RRA are outlined below (figure 7.1). These should NOT be used "as is" for the objectives of your program since they need to be customized to the issues that are of concern to you. They are presented here only to give an idea of the general format that objectives often follow.

The objectives in Figure 7.1 are fairly broad reaching, looking at the general food and nutrition security situation. These would be particularly appropriate in a baseline study. Objectives can also be written to focus the inquiry on a specific aspect of the food and nutrition security problem. This might happen if, for example, the initial general inquiry had determined that the principal issue in the community was related to market problems and the lack of foodstuffs in local markets during particular times of the year. The objectives of a more focused follow-up study would then focus on marketing issues, identifying constraints at different levels, demand for different types of products, etc. Other types of objectives will be needed if the study is to be used for evaluation at the mid term or end of DAP. Figure 7.2 below portrays an example of evaluation objectives.

**Figure 7.1 Sample Objectives for a “Base Line” RRA**

<b>Theme: Profile the Community of X and its Food and Nutrition Security Situation</b>	
<b>I. Profile the Community of X</b>	
<input type="checkbox"/>	History
<input type="checkbox"/>	Geographic Context (e.g. location, natural resources, infrastructures, health services)
<input type="checkbox"/>	Social Context (e.g. population, ethnic group, social structures, definition of production and consumption units)
<input type="checkbox"/>	Economic Context (e.g. livelihood activities, market access)
<b>II. Profile the Food and Nutrition Security Situation in the Community of X</b>	
A.	Characterize the nature of the problem (or problems)
B.	Assess the severity of the problem(s) identified
C.	Identify the population affected by the problem(s) gender, age, socio-economic class, other
D.	Address the time dimension of the problem(s) identified
<input type="checkbox"/>	Is the problem chronic or episodic?
<input type="checkbox"/>	what is the frequency of the problem?
<input type="checkbox"/>	is there a seasonal aspect to the problem?
<b>III. Analyze the principal immediate and underlying causes of the problems identified with particular attention to such issues as whether the problem is related to:</b>	
<input type="checkbox"/>	shortages in food production
<input type="checkbox"/>	food storage
<input type="checkbox"/>	issues of food management
<input type="checkbox"/>	lack of resources to purchase food stocks
<input type="checkbox"/>	unavailability of food for purchase
<input type="checkbox"/>	nutritional knowledge
<input type="checkbox"/>	health and other issues related to food consumption and human utilization
<b>IV. Identify Community/Household/Individual Strategies to ameliorate food and nutrition security problems</b>	
<input type="checkbox"/>	factors facilitating the effectiveness of strategies identified
<input type="checkbox"/>	constraints impeding the effectiveness of these strategies
<b>V. Begin to assess (process will be continued during PRA phase) which problems can be addressed through DAP activities and which are outside the realm of program intervention. Identify likely “best bets” for DAP intervention. Identify areas requiring further study or analysis.</b>	

**Figure 7.2 Sample Objectives for an Evaluation RRA**

- I. Profile the community of X (if not already carried out in an earlier study; if already done, identify any significant changes)**
  - C History
  - C Geographic context (markets, access, etc.)
  - C Economic Context
  - C Population
  - C Production systems
  - C Family Social Structure
  - C Community Social Structure
  
- II. Describe the PRA process as implemented in the community**
  - C who participated, who didn't
  - C what happened, when
  - C results
  
- III. Assess the community's progress in increasing its planning capacity**
  - C mastering the tools and techniques
  - C using the tools and techniques for information collection and analysis
  - C using the information gathered for independent problem solving, decision making, and planning
  
- IV. Describe the food security and nutrition interventions carried out in the community**
  - C type of intervention and objective
  - C operation/how implemented
  - C management
  - C participants/non-participants
  
- V. Assess the impact of each intervention on the individual, household, and community**
  - C impact on food or nutritional security
  - C other impacts
  
- VI. Make recommendations for future improvements to activities in this community or others where similar activities may be carried out.**

PRA objectives will generally have both a problem identification component and a planning aspect to them (figure 7.3). Some of the problem identification issues would be very similar to what is outlined in the RRA objectives above.

**Figure 7.3 Sample Objectives for a PRA Study**

<i>PRA study objectives for Community X</i>	
1.	Identify the principal food and nutrition security problems in the Community of X.
2.	Determine what part of the population is affected by each problem identified in Objective 1.
3.	Determine the severity of the impact on the population.
4.	Determine the frequency of the problem and its seasonality, if relevant.
5.	Prioritize the problems into a list that can be used for planning purposes.
6.	Draw up a Community Action Plan outlining the population's strategies for improving their food and nutrition security situation

In most cases, the study objectives will not change significantly during the course of the field study. They should have been defined with sufficient care and sufficient advance understanding of the issues so that they are workable, realistic, and relevant. And, they should allow enough latitude for exploration so that the team can make at least minor modifications to their approach in the field without necessitating a complete overhaul of the objectives. Occasionally, however, things turn out to be dramatically different from what was anticipated for one reason or another. Perhaps the initial objectives were to study the overall, long term food security situation in the community but for some reason that village turns out to face a critical and urgent problem (e.g. a fire a few days before burned down most of the village granaries). In such cases, it makes no sense to follow the initial objectives. Instead, the team will have to react quickly to the situation at hand and revamp their objectives to take the immediate situation into consideration. In other cases, the general thrust of the objectives may be valid, but the team will have to put more emphasis on one area, or perhaps add an additional area of inquiry in order to follow a priority concern that is raised during the course of the fieldwork.

### **Site Selection**

Both the number of sites and the way that they are chosen will depend on the nature of the study being carried out. In the process proposed by this manual, RRAs are carried out in a sample of sites at various stages throughout the program process. These RRAs are used to gather information needed to plan at the beginning, to establish baseline information, and to evaluate progress and impact at mid-term and at the end of the DAP. There is neither the need, nor the time available, to carry out these RRAs in each site but it is important to decide carefully how many sites should be studied and what criteria will be used to select them.

The PRAs, on the other hand, comprise the core of the participatory planning process. In the approach proposed here, they will be carried out in each site where the program plans to intervene. The questions then become (1) in how many sites can the activity, realistically, plan to work given the intensity of the PRA process and (2) how will the interventions be phased in given that, realistically, you can't have hundreds of villages carrying out PRAs simultaneously, at least not until they have been oriented and trained in the methods.

### **RRA Site Selection**

Site selection is of critical importance because of the small number of sites that, realistically, can be visited given the time and labor intensity of these methods. In selecting the number of RRA sites, the team will need to consider what type of information is needed, how it will be used, the diversity of the region, and logistical matters. In the approach recommended by this manual, RRAs are carried out at the beginning to understand the range of issues that are likely to be relevant to the activity. These communities are then followed up with further RRAs as the DAP continues. It is not necessary that every last bit of information about food security and nutrition problems be collected during these studies, because each community will conduct its own PRA to get details needed to customize its intervention but the studies should capture the general issues across the program area and any significant variation that exists between sites.

The site selection procedure should be carefully thought out in advance and then followed systematically to ensure that unwanted bias does not creep into the selection process. It should be noted that some bias may be introduced on purpose if the team consciously decides that they want to favor certain characteristics (such as, perhaps, acute food security problems) and deliberately chooses sites with those characteristics. The key question that needs to be asked in setting up the site selection process is: "how do we set up this study in order to get the most useful information about the topics that interest us?"

Begin by thinking about how many studies you'd like to do and, then, realistically, how many you can do given logistical and labor constraints.

The number of sites that you'd like to do will probably depend on the diversity of the region. If the region is quite homogeneous, with one ethnic group, a similar geographic situation across the zone, comparable production patterns, etc, only a few sites may be needed. After a couple of sites, it will be evident that the same type of information is being repeated and it will be pointless to go further. If, however, the DAP zone is very heterogeneous in terms of the factors listed above, far more sites will be needed since the situations are likely to be quite different under different circumstances.

The number of sites that, realistically, can be studied will depend on the availability of competent team members and the amount of time that they can spend in the field. If there are several good teams available to do the studies, it will be possible to visit more sites than if one group will have to do the studies sequentially. Keep in mind that the labor intensity of RRA work means that there are very real constraints to the number of sites that one team can visit. In most cases, a stay of at least four or five days will be needed to gather sufficient information and to ensure that it is adequately triangulated. In areas where the situation is complicated, or people are reluctant to share information and rapport building is more challenging, as much as a week may be needed. Furthermore, it is simply not practical given the demands of the methodology to think that a team can conduct research in several sites in a row without a break. Break time is needed to analyze information after each site and to take a rest from the intensive

pace of the work. Otherwise, burnout is inevitable. Realistically, a team can not be expected to carry out more than two, or at most three good RRAs over the course of a month...and they will probably want to take a good rest after that before embarking on another round.

Once you have the number of sites in mind, you can begin the process of selecting the sites. In most cases this is best accomplished by using a combination of purposive and random sampling. Purposive sampling means that you are making sure that some characteristic is included in your sample...you are selecting it on purpose. Random sampling means that you are choosing by chance without favoring any particular characteristic.

In these DAPs, a purposive sampling is first used to determine groups of villages sharing certain characteristics that are of interest for the study or program. Then random sampling is used to choose without bias this time, from these predetermined groups, which villages will participate in the RRA.

The random selection used here reduces the bias in the sample. However, we used purposive sampling in the step before to ensure that within the final sample, each of the characteristics that is of interest to the study will be represented among the chosen villages.

### **Applying the Procedures**

*Determining the set of villages from which to choose.* The first step in selecting your sample is to determine the set of villages from which you will choose those to be studied. In the case of a pre-DAP RRA, this might be all the villages in a particular zone. If the program plans to intervene only in villages that have a high rate of malnutrition, then this might be all the villages where more than 20% of the children have been determined to suffer from malnutrition. In the case of an evaluation RRA, this might be all the villages where the program has undertaken activities.

*Disqualification.* The number of villages that will be selected from this sample will be quite small (perhaps on the order of three to ten, due to the constraints outlined above). If you are trying to look at villages that represent the dominant characteristics of the region, you will want at this point to disqualify villages which for some reason are very different. You do this to avoid spending a lot of time gathering information from communities where the situation will be very different from the norm. If most villages in the set have a population of 250-1,000 people you may choose to discard villages that are very much larger or smaller than this norm, for example. If most of the villages fall into one of three principal ethnic groups, you may choose to discard those that are from very small minority groups. Please note that you would only discard these "outlier" villages if you were trying to get a picture of the dominant situation in the area. If you are particularly interested in what happens in particular situations and plan to design interventions that respond to those particular circumstances, then you might want to leave those villages in the set and, indeed, perhaps decide to purposively sample for that characteristic (say very small villages) in the next step.

*Categorizing villages.* The next step is the critical step of categorizing the villages into groups from which you will sample. This step insures that you cover as much diversity as is important to you, given the purpose of the study you are undertaking. In order to create these groups, you will need to think carefully about the conditions that are likely to have a major impact on the situation you are studying. If for example, the two ethnic groups in the region have very different food production and management strategies, then you would to divide the villages into

two groups, with a group for each of the ethnic groups. If you think that a key determinant to food and nutritional security is the proximity to markets, you might want to divide the groups according to their proximity to markets. At this point you want to avoid using many different characteristics to create the piles and focus on the one or two that you think will make the most difference in terms of the study results.

*Selecting the final sample.* The last step is to randomly select the sample from each group. You can do this by putting cards from each group in a hat and then drawing out the required number of sites. It is recommended to choose one principal site and one alternate in case the principal site does not work out for some reason. Each site will be visited before the team begins the study to make sure that the conditions are appropriate and that the village wants to participate. After these visits it may sometimes be necessary to deselect a site if it turns out to be non-representative, the logistics will not work out, or the villagers don't want to be involved, for examples. The alternate site will then be visited to make sure that it qualifies. This too should be documented.

*Variations on this system.* There are many possible variations on this system. One variation that allows a few more sites to be visited is to do "principal" and "secondary" sites. In the principal site, an in-depth study of perhaps six days is carried out and then carefully analyzed. These results become the hypotheses that will then be tested in the secondary sites where shorter studies are carried out. In these secondary sites, fewer tools will be used, focusing on those activities that proved to be the most illuminating in the principal sites. The team will be able to move a bit faster in their questioning because they will have a good sense of what the major issues are. In a sense they will be trying to find out if the findings from the principal site apply to the secondary site, and if not, what the differences are and why. One way to do this in practice is for the whole team of, say, six people to visit the principal site. Then, the team can break into two subgroups, each of which visits a secondary site for, say, three days. In this way, three villages can be studied in the time it would otherwise take to do two.

### **PRA Site Selection**

In the approach recommended here, every village participates in the PRA since it is the PRA process that customizes the DAP to the needs of the community. The issue, then, is not so much which sites to do the PRA in, but which sites will be part of the program and the schedule on which the PRAs will be implemented. At this point, it is critical to recognize the labor intensity of the participatory process, particularly in terms of the DAP's staff time. Training and facilitating a PRA exercise with a community is a time and energy consuming process and there are few ways to short-cut the process. DAPs that choose this approach will, necessarily, need to limit the number of sites in which they can intervene. The results should be more appropriate interventions that lead to more sustainable results but, at a cost of fewer program sites.

What is realistic in terms of implementation? It is hard to say in advance, given the vast differences in experience across countries and regions. Experience suggests, however, that working with clusters of villages works better than working with isolated communities because this way neighboring villages can reinforce one another's efforts, training resources can be shared, the facilitator can more easily be in contact with different communities, and there is a general synergy of efforts that increases the impact. Such a cluster might involve three to five villages within easy access of one another (by the villagers using whatever transport they have available). These villages might attend an initial training and send representatives to participate

in the first PRA exercise which would be held in one of the villages. The facilitator would then follow up with the other villages in the cluster.

Given the need for the facilitator to be involved in each of the initial PRA exercises, it is unrealistic to expect that person to work with more than two clusters, at most, during the first year. If the clusters are as large as five villages, then she or he will probably be busy enough with just one cluster. In the second year, then, she or he might add another cluster of villages and continue to support the first group while getting the process underway with the second.

The number of clusters the DAP can work with at a time depends on many factors such as administrative back-up, adequate transportation, prior understanding of the process (or, conversely the need to train staff in the methods), and the number of qualified facilitators who are available. When in doubt, start slowly and then build up as the program gains confidence and experience. It may make sense to start in only three or four clusters the first year, and then add a like number the second year. How long this expansion can take place will depend on the number of years that funding is available. It is critical that villages that enter the process have an opportunity to implement their plans and that resources are available for them to do so. This means that new communities should not be brought on in Year 3 if all the funding will run out at the end of that year and there will be no chance of responding to needs that are identified in the Community Action Plan.

## **CARRYING OUT THE FIELD STUDY**

### **I. The RRA Study**

**Matching Research Objectives and Tools.** With the team selected, objectives outlined, and sites determined, the DAP is now well underway in the RRA process. The next step is to start thinking through what will happen during the field study. The better prepared the team can be, the more efficiently it will use the precious time available in the field. There is a caveat here, however. The team wants to be informed on the issues to be researched and to be clear on the general procedures it will follow in the field. It does NOT want to predetermine the details of its program, however, since this will be determined by circumstances as the study progresses. Studies that are rigid and overly determined tend merely to confirm the team's previous assumptions and biases, rather than discovering new and potentially far more interesting pieces of information. These will only surface when the team allows time to listen to what local people are telling them and to adjust their program and line of inquiry accordingly.

A useful step at this point is to prepare a matrix (for the team's use...not for use with the community as is the case with the matrices described in the tools section) that outlines the types of information that are needed and the tools that may be appropriate for getting that information. As we shall see below in the tools section, different tools have different strengths and are better at getting certain types of information. Going through this exercise as a team will help to ensure that everyone is on the same wavelength about the issues to be studied and will help, especially, novice RRA practitioners to better understand how tools can be most effectively used in the field.

The first step in putting together this matrix (see figure 7.4) is to brainstorm the issues that will be addressed in the study. To do this, it is useful to post the objectives where everyone can see them. Then, read off each objective and ask people to think about what they would need to know to satisfy the information requested by that objective. List all the ideas before proceeding

to the next objective. Once all the ideas have been gathered, they can be organized into a coherent list that will be placed along the vertical axis of the matrix. Along the horizontal matrix, list the various tools that can be used to gather information. Then, for each tool, go down the list and note down whether each piece of information will be addressed using that tool. It may be useful to use “Xs” (as in the example below) to show which tools will gather a lot of information on a particular subject, or “Os” for those that will gather less information less. X’s of different colors could be used for the same purpose.

**Figure 7.4 Use of RRA Tools to Collect Types of Information Needed in Baseline**  
(For illustration purposes only)

	M A P	S O C I A L M A P	T R A N S E C T	VENN D I A G R A M	FS C A L E N D A R	FS T I M E T R E N D	HIST. P R O F I L E	HIST. M A T R I X	SSI C O N S. U N I T	SSI P R O D. U N I T
<b>History</b>						O	X	X		
<b>Geographic Context</b>	X		X							
<b>Social Context</b>	X	X		X			X	X		
<b>Economic Context</b>	X	X	X			X		X		
<b>Nature of FS problem</b>					X			X	X	X
<b>Severity of FS problem</b>					X			O	X	
<b>Population affected</b>		X			X		O		X	
<b>Timing of FS Problem</b>					X	X			X	
<b>Causes of Problem</b>		O	X	O	O	O	O		X	X
<b>Community Strategies</b>		O		X	O	X	O			
<b>Household/Indiv strategies</b>		O			O				X	

If, after completing this exercise, you find that there are some subjects that will not be covered using the tools on the list, then brainstorm some other ways that you might be able to get this information. You may have to adapt a tool, or create a new one. Similarly, if there are tools on the list that appear to have limited utility in terms of the information you are trying to get, then you will quickly see that it may not be worth the time to use this particular tool for this particular study. One advantage of doing a matrix like this is that it will be the starting point for creating the checklist for each tool.

This matrix is not set in stone, it is merely the starting point that will help you effectively organize your time in the field. As you proceed, new topics -- and possibly new tools -- will be added to your matrix. You may decide to forego using some of the tools, or gathering some of the information, as you pursue new and interesting leads.

### **The Time in the Field**

RRA studies are typically (though not necessarily) carried out during a discrete period of field work usually lasting from four to seven days. The studies will be longer when the information to be collected is more complicated or more sensitive, when the outsiders have less background information on the community or the issue being studied, when the community social structure is more complex, or when people are for some reason reticent to share information with outsiders and more time is needed to build rapport.

While, as noted above, it is impossible to predict the exact program of activities in the field, there are certain patterns that are typical of most RRAs. The field studies generally begin and end with "protocol" sessions. In the opening protocol the team will introduce themselves and why they are in the community, explain what will happen during the study, discuss why the information is being gathered and how it will be used. It is often also useful to explain how the community was selected. The better these issues are explained from the outset, the fewer problems are likely to be encountered as the work progresses in the community. In some cases it may be necessary to repeat the explanations several times if all groups do not come to the meeting.

Following the initial protocols, the information gathering part of the study can begin. In programming the various activities it is important to think carefully about the whole issue of sequencing and the order in which different events will take place. Usually it makes sense to gather whatever contextual, background information is needed toward the beginning of the study and to progressively focus in on more specific information. Early activities might focus on understanding the physical layout of the community (with mapping), the social structure (through Venn diagrams), the general agricultural system (if relevant), etc. It would be more appropriate at a later point in the study to address topics such as household budgets or consumption patterns. This strategy will help the team to better understand the context for the detailed information and will also make more sense to people who are providing the information since they will have a better idea of why it is being requested.

### **Community and Household Level Activities**

Information on food security and nutrition issues is needed at both the community and the household level and the time in the field must be allocated accordingly. A certain amount of information can be obtained in large groups, looking at general patterns in the community and better understanding broad phenomena that affect large numbers of people. At a certain point, however, it is critical to move to the household and individual level to gather more specific information. It is really only at this level that very specific consumption data can be obtained, for example. This is where detailed probing can take place about how families make the decisions they do, the impact on intra familial distribution of food, etc. It often makes sense to get the general background information first, and then to sample several families from different socio-economic groups to gather similar types of information, but in greater depth.

### **Managing the Study in the Field**

Planning the RRA study takes place before the team goes to the field, as the members prepare objectives and think through what information they expect to need and how they will get it. It

also takes place on a daily basis during the fieldwork, however, as the schedule for each day is defined. One part of each day in the field is devoted to actual information collection, while the other part is devoted to team administration and analysis. During the administrative part of the day, the team will review the information collected up until that point and see where it takes them in terms of the next activities. In planning activities, they will consider what information needs to be gathered next, what tool is best suited for gathering that information, and with whom they will use the tool. Triangulation needs to be taken into consideration in selecting the tool and the people with whom it will be used to ensure that there is adequate diversification of perspectives.

An important step in preparing the use of each tool is preparing a “**checklist**” that lists the issues that will be addressed using that tool. Tools can be used in many different ways. A map that is used to gather information for a food security study will not ask the same types of questions as one that is being used in a land tenure study (though there may well be some overlap of issues in these two cases). The checklist serves as a reminder to team members of what issues they will discuss during the course of the activity. It should not preclude the team from following up any other interesting leads that arise during the course of the discussion, and neither need it necessarily be followed in order.

Another part of the administrative review will be a careful consideration of bias issues. The team leader should ask everyone to think about what has happened in the study up until that point and to look for any biases that may have crept into the study. After identifying the biases, the team will explicitly think through what its strategy will be to diminish the bias as they move ahead. The administrative activities (sometimes called “**team interaction**”) should be scheduled every day and generally takes at least 2 hours. One common pitfall of novice RRA teams is to spend so much time on information gathering that they are too exhausted to take the time to do adequate team interaction activities that are necessary for methodological rigor, progressive analysis of information, and careful planning to make optimal use of the time in the field.

Somewhere after the mid-point of the fieldwork, the team should plan to take at least a half day off from information gathering in order to do a **preliminary analysis** of the information gathered up until that point. This is a chance to organize the information from the various activities and to identify where there are still gaps. During the last days in the field, the team can then focus on areas where there is missing information.

### **Feedback to the Community**

Before leaving the community, the team should plan a session to share the information they have gathered with the population. This **feedback session** has several purposes. First of all, in participatory research of this type, the team has the responsibility to leave information in the community and not simply to extract it for its own purposes. During this feedback meeting it is useful to spend time with the community thinking through how they might use the information that has come out of the study and what, if any, follow up will take place. (In most cases, Africare’s RRAs will be complemented by PRA activities in the villages thus ensuring effective use of the information for local planning.)

Second, the feedback session is an important last opportunity to triangulate the information that has been gathered. All information will not have been gathered with the whole population; some interviews will have been with small groups or with individuals. In the feedback session, the team will take all the information that has been gathered and weave it into a story about the

situation in that community. This is the opportunity for the villagers to give feedback on whether they think that story accurately reflects their reality. They may point out, for example, that something you thought was a typical pattern is, in fact, only representative of a small minority of families. Or perhaps something you thought happened on a regular basis is really only an occasional event. As the team presents the story they will want to encourage people to correct any mis-perceptions or to add important information that has been omitted.

## **II. The PRA Study.**

PRA studies are much more difficult to describe in any prescriptive way because the process evolves out of the community's participation. If, in RRA, quality information is the priority end result, in PRA the team needs to be as concerned about the process which leads to that information and strengthening the community's capacity to generate, analyze, and use the information. One community may decide that they wish to focus intensively on the PRA during a two week period when there are relatively few demands on their time. Another community may decide to work on PRA activities every Sunday for two months until they have completed one phase of the process. What is feasible will depend on the need for an outside facilitator and his or her availability. It may make sense, at the beginning when the community is still learning the methods, to do an intensive week or two of study and planning. Later, when the DAP has moved on to monitoring and fine tuning, shorter periods of field work, with or without the facilitator, may be possible.

As much as possible, the PRAs should be set up so that communities can help one another and reinforce their skills. This will be most easily accomplished if Africare works with groups of villages in near proximity. A group of five villages might comprise a PRA cluster in which representatives of the villages attend an initial orientation workshop together. The initial PRA might then be carried out in one of the villages, with one or more representatives of the other villages participating to get a better sense of what the process involves.

The community and the facilitator together will have to work out the mechanics of conducting the study since here too there is considerable latitude. The key in deciding whether one option is better than another is to remember the principles of triangulation. It is important that various viewpoints be represented and that a variety of tools be used. Some communities may want to conduct the entire study in plenary meetings where everyone can have their say. Others may find this impractical, and prefer to nominate a smaller -- but still representative -- group to carry out the information gathering activities and then report back to the community so that they can move ahead to the planning exercises. This group becomes the local "steering committee" for the PRA and coordinates with any outsiders who are involved in the process. In any case, the planning exercises that develop from the information gathering part of the study should be as open and transparent as possible since this is the only way to build support for the activities that will eventually be implemented under the community plan.

### **The Facilitator's Role in PRA**

The facilitator's role will change during the PRA process as community members become more familiar with the method and are able to take greater control over the process. The facilitator should always keep in mind that one of the objectives of the process is for the community to take greater responsibility over time...he or she should be actively working him/herself out of a job (at least in that particular community!) as, over time, s/he intervenes less directly and villagers take increasing initiative in the process. Indeed, the evaluation of this portion of the DAP should look explicitly at whether over time the outsiders are doing less and the villagers

are doing more in terms of leadership in using PRA tools for planning and implementing their action plans.

Over the course of the initial PRA, the facilitator will help the community understand what tools are most useful and most appropriate for gathering different types of information and will ensure that the community understands why triangulation and getting the perspectives of different groups is so important in DAP planning. One way to teach PRA techniques is for the facilitator to carry out an activity (such as mapping the village) using the steering committee as informants. After the activity, the facilitator can “process” the exercise, discussing how it is done and why. Then, s/he may ask the steering committee, now acting as the PRA team, to go out and do a map on a particular topic (say issues related specifically to food security) with other members of the community. In this second exercise, the villagers do the map with their fellow community members and the facilitator is merely there as a bystander to observe the process and help as needed to keep things going. The same pattern might then be followed with the other tools of PRA.

The initial PRA exercise, which will involve training, as well as information gathering and planning, will probably be carried out as a fairly intensive process over, say, a couple of weeks (though this is not necessarily the case). Later activities, however, will be carried out as needed over time and are unlikely to involve the same intensive commitment of time by the facilitator and community members. Instead, as a decision needs to be made during implementation (for example) a specific tool might be used in a meeting to help people to analyze the issue and come up with an appropriate decision. Or, in monitoring, a matrix might be carried out at the end of the first year to see who is participating in program activities and what benefits they are getting. The facilitator will “accompany” the community along the process but, increasingly, encourage the villagers to think about how they might use the tools at their disposal to resolve a given issue so that they take ever greater responsibility in decision making and implementation.

As time passes, the facilitator will move into a role of being “on call” to help the village as assistance is requested and helping the community to identify technical expertise as needed to answer questions that arise.

### **Analyzing the Information**

Collecting information takes patience and persistence. But the real challenge often comes in analyzing the information. Analysis is a multi-step process. It requires organizing the information so that it is coherent and makes sense. It requires sifting the information to separate that which is important from that which is less so. And it requires thinking hard in order to figure out why some of the information is so important and what it means for local planning, DAP activities, policy recommendations, etc.

While the process is not very different in RRA and PRA, it does not involve the same people in the two cases. In RRA the principal analysis is carried out by the RRA team, which in most cases is composed primarily of outsiders. The analysis usually takes place after the team leaves the village. In PRA, the analysis is carried out locally by team members who are, primarily, local residents. Indeed, if the community is carrying out the PRA, it is the community who will analyze the information.

In either case, analysis is an ongoing process. This contrasts with conventional survey methods in which the collection and analysis of information are two distinct phases in the research process. In RRA and PRA, analysis begins to take place as soon as information

collection begins. Most of the techniques used in these methods facilitate analysis by organizing material in visual ways. Some, like matrices and flow charts, help local people to work through relationships between different variables, a critical step in analysis. In addition to the analysis which takes place during the information collection activity, the team uses its interaction sessions to review the information it has gathered and to reflect on what is important and where the gaps or inconsistencies lie. It can be very helpful to make this stage of analysis both explicit and deliberate. If the team members are literate, it is useful to make an activity summary on flip chart paper after each tool has been used. These sheets capture the principal points of the discussion in bullet form. The sheets can be annotated to show, for example, which points reconfirm information already gathered, and which ones contradict other information, requiring further inquiry. If the team, or population, is not literate, the same purpose can be achieved by having an oral brainstorming of the most important issues raised during the day. If possible, one person can then record the summary.

The daily analysis is important and permits rapid learning as new knowledge builds on the base of prior information. However, it is necessarily cursory due to the shortness of time during interaction meetings and the team's inevitable eagerness to move ahead in information collection. The next significant step in analysis takes place at the "pause" part way through the field work. This break to analyze is especially essential in RRA because the final analysis will be done after the team leaves the community. If they find out at that point that some critical information has been omitted, it is very difficult to go back and fill in the gaps. In this preliminary analysis, as well as in the final analysis that takes place after the information collection phase is completed, it helps to physically organize the information by objectives. The team should write each objective at the top of a large sheet of paper. Then, the team (or participants in PRA) can brainstorm all the important information learned under each objective.

In the preliminary analysis, it is sufficient simply to organize the information in this way and to think about missing pieces and possible activities to gather that information. In the final analysis the team (or participants) will go further in "massaging" the information and trying to make sense of what it means. The first step is really to tell the story; that is, to establish a descriptive narrative of what the situation is in that community. The situation to be described will depend on the objectives laid out for the study at the outset. The next step, again depending on the objectives and the overall purpose of the study, is to look at causes and consequences of the situation and to trace the various forward and backward linkages. The third, and vitally important step, is to figure out how the information can be used. At this step, the team should be asking itself questions like:

- C "What implications do these findings have for the well-being of people in this community?"
- C "How can this information be used to make things better?"
- C "What is now known that can make DAP interventions more effective?"

In the case of a PRA, this type of information will feed directly into the planning process, often using the type of planning matrices outlined at the end of the tools section. It is important that the facilitator continue to draw people back to the information that has been gathered. There is always the danger that, when it comes to interventions, the community will have a tendency to revert to a "wish list" mentality, based principally on prior donor activities in the village or the area. The facilitator can help to avoid this by asking questions like, "what did we learn about nutrition issues in this community that can help us decide what needs to be done?" or "what did

we learn about the population affected by problem X that can help us better focus our action plan?”

## Documenting the Results

It is important that the results of the study be captured in a way that makes information available to those who could use it to improve a situation. V v In the case of RRA, this will necessarily involve writing a report since, along with the feedback session in the village, the report is the principal avenue for recording and sharing the information from the study. It is important that such a report be well written and that it record the richness and complexity of the information obtained in the study.

Otherwise the results will be of no use to anyone and the study will have done little but waste the time that the team and the villagers spent on the study. Oral presentations to policy makers and DAP staff should also be organized if these will increase the chances that the information will be used.

**Writing a good report helps to avoid one of the most dangerous biases which is the “memory bias”.**

Whether a report is an important part of the PRA process will depend on the purpose of the study. If the results of the study are to be used by the villagers alone and written communication is not particularly useful to them, then there may not be a need for a formal report. Instead, the results may be captured by other means, whether oral or using other visual forms of communication such as diagrams or drawings. At a minimum, the results will need to be recorded in at least a summary fashion in the Village Log Book. If the PRA needs to inform others where written communication is more effective, then it will probably be worth the trouble to write a full report so that information will not be lost...or distorted. The Africare staff will probably want to record the results of at least one or two of the PRA's so that they can share the process more fully with donors and other people who may be interested in the approach.

## The RRA Report

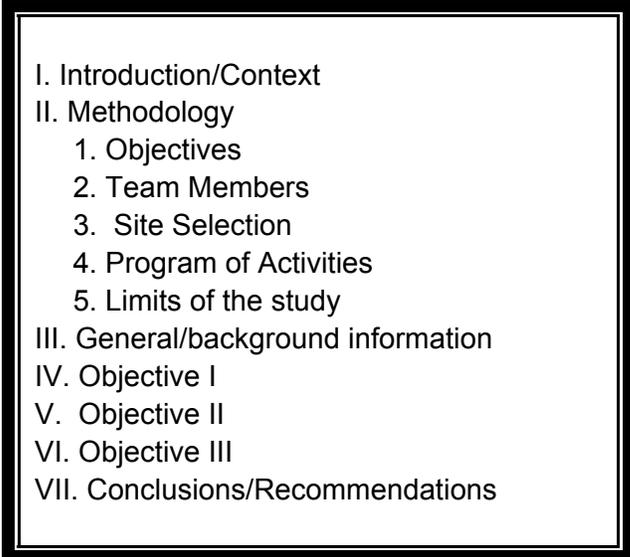
It is impossible to write a good report until the information gathered in the study has been fully analyzed. The analysis of information should include everyone who was involved in the field study. This helps to avoid biases that result from one person's interpretation of information. Generally, the analysis phase should end with a detailed outline of the report with a careful notation of the findings that will figure more or less prominently. Once this has been done, the actual writing of the report can be delegated to a smaller number of people. How many people will be involved will depend on whether people enjoy writing and want to participate, on people's writing skills, and who has the time. If several people participate in the writing, one person should be designated as principal author, or editor. This person is responsible for making sure that all the sections fit together and that nothing has been left out or duplicated in the parts various people have written. Everyone on the team should have an opportunity to review the completed draft report and should offer corrections and additions as needed. This is another aspect of triangulation and the authors should try not to take such corrections as personal affronts or criticisms of their work. The goal of this process is to end up with a report that is as accurate and complete as possible.

The report should attempt to capture the richness of information that was collected in the study

but it should *not* be just a massive compilation of every piece of information obtained in the field. This is why a careful analysis is necessary before starting to write. One step of the analysis is the “sifting” in which the information that is really relevant to this particular study is separated from that which is of little consequence. As the report is written, another sifting is done, putting more emphasis and detail in parts which can be considered to be really important.

There are many ways to organize the report. The outline suggested here follows the objectives of the study. This is one possibility and may be adapted depending on the purpose and results of the study. What is important is that the report follow a logical flow of information and be organized according to themes. What it should *not* be is a summary of field activities or a simple compilation of the diagrams done in the field.

**Figure 7.5 Sample Report Outline**

- 
- I. Introduction/Context
  - II. Methodology
    - 1. Objectives
    - 2. Team Members
    - 3. Site Selection
    - 4. Program of Activities
    - 5. Limits of the study
  - III. General/background information
  - IV. Objective I
  - V. Objective II
  - VI. Objective III
  - VII. Conclusions/Recommendations

The first section of the report, usually called the introduction or context section, often is used to explain why the study was done and for whom. A brief explanation is given regarding the DAP’s goals and where this study comes in the cycle of program activities. This is followed by a methodology section that helps the reader to understand how the information was collected. This is very important, especially where qualitative methods such as RRA and PRA are being used. Many people continue to be skeptical of these methods and it is important to reassure them that they were carried out carefully and systematically with a full understanding of the methodological principles. This section should include information on the team and site selection, the objectives of the study, the tools used in the field, and any particular problems that were encountered. At some point in the report there needs to be a complete listing of all the activities carried out in the study. This may be either in the methodology section, or in an appendix at the end of the report. Throughout attention should be paid to explaining how triangulation was assured in the study. This will increase the credibility of the findings. If for some reason, the team suspects that there were some biases that they were not successful in overcoming, this should be noted as well. Readers will be more likely to take what is being said seriously if they see that an effort was made to control the quality of the work and feel that the authors are aware of its limitations.

Once the introduction and methodology sections are out of the way, the report can begin to focus on the substance of the information that has been gathered. The first of these chapters will generally provide overview information about the community (sometimes called the village profile) that discusses such issues as geography, social structure, history, economic activities, etc. This type of information is often needed to situate the more specific and detailed information that follows. The following chapters then treat the issues that were addressed in the study. If the objectives were well thought out at the beginning, it often makes sense to treat each objective in turn. In some cases, however, the author may find a better way to organize the information once she or he has it all in front of her/him.

The report should convey the information in as clear and interesting a fashion as possible since this will increase the likelihood that people will take the trouble to read it. Information from the report must be put in relation to the food security framework of the activity where one exists or can assist in preparing a first version in other cases. For example, in the case of an RRA conducted before or just at the beginning of the intervention, the results from this study would provide the basic elements for the establishment of the first version of the framework. The report could thus visually summarize on a single page, the major causes of nutrition and food insecurity that were identified by the study. In any case, the text accompanying this diagram could indicate how the information from this study can enrich the initial framework or propose a first version. At mid-term, the RRA evaluation results could show for example that some causes identified at the beginning of the program have diminished in intensity or have vanished or the study could reveal new causes to be put on the framework. This information is important and DAP staff would benefit from logging it down visually as it revises and updates the previous framework. When the report brings forth this type of information, it greatly eases the updating of the framework.

If difficulties arise as a section of the report is being written, it sometimes helps to discuss it orally with a colleague. As you explain it to someone else, the issues often become clearer, making it easier to write them down. The diagrams and tools used in the research should be used as supporting evidence for the arguments being made. Where they are relevant, they should be inserted into the report as illustrations of what is being discussed. Whenever a diagram is put into the report, something should be written that connects the diagram to what is being explained. The whole diagram need not be summarized; instead, the one or two things that are the most important should be pointed out to the readers.

The last section of the report is often the most important since this is where the conclusions and recommendations appear. (They should also be put into an “executive summary” which is a short (2-3 page) summary of findings that precedes the body of the report.) The last chapter is like the “sauce” that pulls together all the “ingredients” that were laid out in the earlier chapters. In writing a coherent report, it is important to be sure that all the ingredients needed for the sauce have been identified and adequately explained in the descriptive chapters. Conversely, in the earlier chapters it is important to avoid spending a lot of time presenting and discussing ingredients that will not be used in the sauce. If this has been done well, the “sauce” chapter can avoid a lot of description and instead focus on the big picture...how the pieces all fit together and what it means.

**The Village Log Books.** In some PRAs, as noted above, a full-scale report may not be necessary, or even possible if the study has been carried out by villagers and they are not familiar with report writing. It is important, however, that the village document the process and that they can use this documentation in the future. This is the purpose of the village log book.

The Village Log Book is a booklet, binder, scrapbook, etc. in which the community notes down all the information it is gathering that is relevant to its food and nutrition security management. It also contains the results of their analysis of this information and their action plans. When PRA (or RRA) activities take place, it will be useful to include copies of any diagrams that were done as part of the study (maps, matrices, etc.) as well as the summary of principal findings and decisions that are made. If other information gathering activities occur (such as weighing or measuring children, price monitoring, etc.) this information should also be recorded in the log book. This will enable villagers to analyze the change in their situation by recording information that can be used to identify trends and to make comparisons over time.

A note should be made in the log book each time an activity associated with the DAP takes place. The note should include the date and time, as well as who was involved (both from the community and from outside) and what happened. In short, the log book provides the village with an instrument for recording and a mechanism for monitoring progress on the village's implementation of its action plan and other program activities.

## **AN INTRODUCTION TO SOME USEFUL TOOLS AND TECHNIQUES**

There are many different ways to get information in RRA and PRA. This variety of techniques is sometimes called the RRA/PRA "Toolkit." While there are a certain number of techniques that are frequently used by most practitioners, the list continues to expand as people devise their own ways to get information in a more participatory and more interesting fashion. Furthermore, as mentioned above, the tools are really generic; that is, they can be applied to researching any subject. They need to be adapted to be most useful and then focused with the use of a checklist to ensure that the needed information is obtained.

It is important to remember when using any of these techniques that the tools are not the end product. That is, the purpose is not really to end up with a pretty map or a well drawn Venn diagram. The purpose is to obtain information using these techniques. This means that in almost all cases it is not enough to get something down on paper or sketched out on the ground. The next stage is invariably to "interview the diagram." This merely means using the picture that has been obtained as a way to further the discussion around the points on the checklist. A map that details the existence of certain markets may be used to launch a discussion of marketing constraints. A matrix or calendar that shows when the hungry season is can be used to discuss people's strategies to try to avoid hunger...or their coping strategies once hunger strikes.

In the pages that follow, we present some of the tools that might be useful in a food security study. Not all tools will be used in all studies, and you may come up with others that are more appropriate to the questions you wish to ask. Similarly, the descriptions of how the tools may be used are purely illustrative to give you an idea of the utility of different tools in different circumstances. These descriptions are not intended to discourage you from using the tools in different ways but rather to stimulate your thinking about different applications under various conditions.

The tools outlined here can all be used in either a RRA or an PRA mode. That is, they can be done by outsiders who facilitate the activities and use the tools to encourage information sharing and analysis by community members. Or, they can be used by villagers themselves to analyze their own situation and generate information that they then use for their own planning

purposes. When training villagers to use the methods for PRA purposes, it is particularly important that only locally available materials be used. (e.g. Avoid the use of flip-charts and markers if the villagers don't have these materials. Instead use a stick to draw on the bare ground or chalk to draw on a cement floor.)

### **Sequencing of Tools and Techniques**

There is no fixed order for doing tools in an RRA or PRA. The team needs to think through what makes the most sense, given the information that is needed and the situation it finds in the community. The program will undoubtedly evolve and change as the study gets underway. In general, toward the beginning of the study, tools will be used that provide general information and that raise fewer sensitivities in the population. As the study progresses and the team gathers more information, it will begin to use some of the more complex techniques. These are ones, like calendars and matrices that require more information to do them well. As we shall see below, matrices have a set of hypotheses embedded in them and to be used well, require the team to have a fair bit of information already in hand. As a result they are most effective when used several days into the study. Other tools, such as wealth ranking and social mapping, may be sensitive because they deal with more private information. Generally this type of tool should only be used once the team has developed a rapport with the community or, at least, with some community members, and attained a certain level of confidence with the population.

## **PARTICIPATORY MAPPING**

Participatory mapping is an exercise that uses spatial analysis to gather information about a range of issues and concerns. In conventional mapping, the trained outsider draws a map of the village or territory. In participatory mapping, community members themselves are asked to do the drawing. Outsiders who have not tried the participatory method are often surprised to find that people with no formal education can draw maps that are both quite accurate and very illuminating.

In drawing participatory maps, the primary concern however, is not with cartographic accuracy, but rather with gathering useful information that sheds lights on food and nutrition security issues in the community. It is often one of the first activities that is carried out when the team arrives in the village because it is a lively "ice breaker" that helps to put both the team and the community in a participatory mode. It also provides information that the team, especially if they are not very familiar with the community, needs to be functional and to find their way about.

### **How to do a Participatory Map**

Before beginning the mapping activity, the team should brainstorm their checklist of the issues they would like to see covered in the map and discussion that follows. This checklist should remain in the background as the activity gets underway, however, and the team should begin by asking the villagers present to indicate the landmarks that they feel are important to show on a map. It is important to begin with the villagers' own priorities since these will be revealing of their perspectives and priorities. Only when the villagers have completed the map as they would like to see it, should the team intervene and ask about its interests.

To begin the map, clear a large open area, ideally outside where there is plenty of space to expand as needed. Mapping on paper is often an exercise in frustration since it is hard to erase and redraw and the paper boundaries pose uncomfortable limits. The best medium for mapping is a large space of open ground, using sticks, shells, rocks, leaves and other objects as markers. If this is not possible or appropriate, chalk on a cement floor also works fairly well.

Maps work well in groups since people can remind one another of things that are forgotten and correct errors as they arise. The facilitator should explain the exercise and start off the activity by drawing in one or two landmarks (usually those that are immediately evident from the spot where everyone is standing). These landmarks might be the road by which the team arrived in the village, or a major building or tree. Whenever a landmark or specific location is mentioned, a marker should be put down (e.g. stone, shell, leaf) to indicate its location.

As the activity gets underway, the team should be careful to stand back and leave the drawing and placement of markers to the villagers. The outsiders should, initially, limit their questions to asking, "is there anything else?" "Has anything been forgotten?" Only when the villagers have completed the map as they would like it to be should team members ask about other questions they might have, or issues that appear on the checklist. Figure 7.6 shows an example of Village Mapping.

### Variations on Participatory Mapping

The most common type of a village map focuses on the inhabited part of the village, as in the example in fig. 7.6. There are many ways that this technique can be adapted to get at specific types of information that may be of interest in a food security or other type of study. One variation changes the scope of the map. A map can look at a larger area, such as the whole village territory, or even the larger region. A **territorial map** would include the boundaries around the village lands and could explore the resources in the territory and how they are managed. A regional map might include neighboring villages and areas used by villagers. This type of map could be used to explore such issues as marketing practices, uses of health facilities in the larger area, sources of credit, food security safety nets that exist inside and outside the community, etc.

Maps can also look at smaller units, such as the lands owned and used by an individual family. **Family resource maps** can show the resources that a family controls, including land that they own, rent, or otherwise use, the number of animals they keep (shown, for example, by placing a goat dropping in a corral made of sticks for each goat the family owns), the location of family members not physically present in the compound, etc. By doing these types of maps with families in different socio-economic groups, it is possible to get information on livelihood patterns and constraints faced by families of different means.

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### Types of issues that might be explored using a participatory map:

Village landmarks  
Village infrastructures: water, health, education, food storage, community buildings  
Village social structure (e.g. the organization of *quartiers*)  
Settlement patterns  
Information on livelihoods and places that are important to livelihoods  
Markets  
Relations with other villages  
Dwelling places of village authorities or specialists (e.g. chief, midwife, health worker, etc.)

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**Historical mapping** can provide a useful way of understanding changes that have taken place in a community. After doing the first map of the current situation, the community can be asked to draw another map, or revise the first map, to show how things were at a given time in the past. The time selected will depend on the nature of the study. It might be before a specific historical event that changed the community in some specific way (e.g. a war or drought) or it might be a time in the distant past such as “when the elders of this community were young children.” This type of paired mapping allows for exploration of many issues such as the impact of in- or out-migration, changes brought about by the building of infrastructures such as roads or health facilities, the impact of changes in livelihoods, etc.

**Interest group mapping** acknowledges that maps reflect not some “objective” reality, but rather the perspectives of the people who draw them. When a heterogeneous group draws a map, it will reflect multiple views and perspectives. Another use of mapping attempts to capture diverse views held by different people by asking them to map in groups. Group membership may be determined by gender, ethnicity, age, profession, etc. depending on the purpose of a map. Thus, for example, the team might ask men to do a map of the village while women do their own map. It is likely that the two maps will reflect different concerns and preoccupations depending on the gender of the people involved.

**Social maps** combine spatial analysis with ranking. In a social map, the various households in the community are generally noted on the map. Information about those families is then indicated using various symbols or markers. Families might be categorized according to their food security level, for example, so that those who are relatively more food secure are indicated by a certain type of stone, while those who have “average” or low food security are indicated by another type of object. Other information such as ethnicity, families that have malnourished children, families who participate in DAP activities, or those that grow a certain crop can also be shown on the map. While most mapping activities are not very sensitive, social mapping can sometimes be more delicate. Depending on what information is being requested and the sensibilities over discussing issues in public, it may be better to do a social map with a small group of informants with whom the team has developed a certain rapport.

When maps are done in an RRA context, the team members will generally draw the map into their notebooks as it is being drawn by the villagers. These maps will then later be transferred onto flip chart paper so that they can be used for analysis in large groups. The village often appreciates it if a copy of the map is left behind for their use when the team departs the village.

Figure 7.6 Example of Village Mapping





## TRANSECT WALK

A transect walk takes the team on a mobile interview where they walk through the community with “guides” from the village. As they go, they ask questions related to the things they are seeing, as well as others that are found on the checklist they have prepared.

The idea of a transect is to get the team out of the usual interview setting and to make use of their powers of observation, as well as listening. Most often, the transect walk will take the team through different areas of the community (often defined after studying the participatory map) and make a point of reaching the outer limits of the territory. The purpose of going to the territorial limit is to reduce the spatial bias that often results in activities focusing on the central part of the community. Things are frequently different at the periphery where, for example, more marginal populations may live or farm, land use patterns may be different, access to resources may change, etc.

If the team is large, it makes sense to divide into several subgroups when doing a transect. Each subgroup will have its own guide(s). These people are generally chosen with the community as “experts” in the area being studied. Hence, a transect that was looking at health issues might ask the traditional medicine practitioner to serve as the guide/informant for the walk. A transect focusing on agriculture might rely on information from someone considered to be a “master farmer” or the herding expert in the area. Often it will be useful to have one or two guides with different characteristics for each group (e.g. a man and a women, people from two different ethnic groups or livelihoods). By walking in different directions, the team can insure that more area is covered and reduce the bias.

It is generally wise to walk rather directly to the furthest point of the transect and then to ask questions along the more leisurely return walk. This increases the chances of actually reaching the outermost point of the walk. As the group progresses, they will observe their surroundings and ask questions about things they see that might be related to food security and other issues on the checklist. As they come upon a group of granaries, for example, the opportunity arises to ask about food stock management. A stream crossing might suggest questions about water quality, water borne illnesses, etc.

The information from a transect walk can be organized and transferred to a diagram after the team returns to the village. This diagram will usually have the different areas of the territory on the horizontal axis. On the vertical axis will be categories relating to the different types of information collected on the walk. In the case of a food security transect this might include, for example, health related information (such as health hazards or assets), food related information (production/storage), livelihood/income related information. In addition to gathering information about these various subjects, the transect is a good way to verify the map.

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### Types of issues that might be covered in a transect:

- food storage
- community resources
- differences in households and their assets
- livelihood strategies
- agriculture production and constraints
- livestock management
- health assets and hazards
- water resources and hazards
- village infrastructure
- land use patterns and seasonal variations
- credit sources
- crops and other food production
- gathered foods

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**Figure 7.8 Example of a Transect Focused on Food Security and Nutrition Issues**

	<b>Central village</b>	<b>inner fields</b>	<b>outer fields</b>	<b>forest</b>
<b>food production / gathering</b>	household vegetable gardens, chickens, papaya, mango, and orange trees, goats picketed during rainy season	groundnuts, corn, some hibiscus, women's garden, some tree products, small ruminant grazing during dry season	millet, sorghum, some rice Watering holes for animals, karite trees, cattle grazing during dry season	fruit from baobab, wild date, fig and other wild trees, honey, cattle grazing during rainy season
<b>food processing and storage</b>	dried vegetables and fruits, groundnuts in women's rooms	family granaries in near fields	oil processed from karite nuts	
<b>health issues</b>	some wells unkempt, not sanitary, health unit lacks trained nurse, no use of mosquito nets			Many medicinal plants harvested from forest area, river at forest edge is source of shisto.
<b>food security and nutrition observations</b>	Many mangos rot ...possibility for processing? Lots of insect damage to groundnuts in storage...possibility for improved storage?	Conflict over goats and gardens leading to reduction in number of goats; family and individual granaries managed so as to secure food supply during agricultural season	Serious striga problem reduces millet harvest significantly; water holes dry up before rains...lack of water reduces milk production	conflicts with neighboring villagers over harvest of baobab fruit that is an important hungry season food. Collection of fruits by young boys adds important nutrients to diet...girls working at home have less access. Theft of cattle common during rainy season

## VENN DIAGRAM

Participatory maps represent the community's analysis of its space. It focuses principally on physical landmarks. A Venn diagram offers another way to "map" a community, but this one focuses on social relationships rather than physical ones. The Venn diagram looks at how a community is organized, both in terms of its internal organization and its relationships with the larger community beyond its borders.

While a Venn Diagram can be done on the ground, using natural markers such as stones and leaves, it is somewhat easier to use a large sheet of paper with smaller shapes that are cut out of different colored card stock or paper. Alternatively, if the only paper available is white, markings can be made using different colored markers to distinguish between the different groups, associations, and individuals on the diagram.

As with the participatory map, the team should begin with a well thought-out checklist of the types of issues they wish to explore using the Venn diagram. However, it is best to keep this list in the background until the villagers have completed the diagram.

The facilitator begins by drawing a large circle on the paper or ground (see figure 7.9). This circle represents the village; everything inside the circle is a village institution, while anything outside is an external source of power or influence. It is best to start with internal organizations and individuals, asking the group to think of all the groups, committees, individuals, associations in the village. As each one is listed off, a colored paper is placed on the diagram with the name of the group. These papers may be cut in different sizes to reflect the size of the group or its influence on the life of the village (which definition is used will depend on the way the team asks the question which will depend, in turn, on the type of information they are seeking. The facilitator should continue to ask whether there are any other groups until all the villagers have put down all they can think of.

The next question will address individuals who have a particular role in the community. These may be represented by triangles, generally using only one size to avoid controversy. The team should be careful to ask about both men and women who play important roles in the community. Once these have been fully identified, the facilitator will turn to outside organizations that have an influence, whether positive or negative, on the community. Here again, it can be useful to begin with institutions and then finish with individuals. It can be useful in placing the external organizations on the diagram to show the mechanism by which they intervene in the village. If they work with the whole village, a line would be drawn to the inside of the circle. If they work through a particular committee or individual, a line would be drawn from the outside group to the person or committee with whom they most often work.

### **Types of issues that can be address in a Venn Diagram:**

- Role of organizations in local decision making
- Role of external forces on the community
- Community leaders and decision makers
- Decision making processes
- Role of government and NGOs
- Relationship with other villages
- Credit and marketing institutions
- Conflicts and conflict resolution mechanisms
- Social safety nets
- Sharing of food and other resources
- Access to land and other resources



### **Variations on the Venn Diagram**

The Venn Diagram can and should be adapted for the purposes of the study. One adaptation is quite simple and requires nothing more than changing the types of questions that are asked. In addition (or instead of) to asking about people and institutions, for example, the diagram might focus on economic relationships, making notes of goods and services that are produced in the community and those that are exported or imported from outside.

### **Polarization Diagram**

Another adaptation is sometimes called a “polarization” diagram. It might include not only the village where the study is taking place, but also circles representing other places that have an impact on the community, whether other villages in the vicinity or more distant locales such as the capital city or even a foreign country that provides, say, employment opportunities for people from the village. The diagram can then be used to show such things as the flow of resources between various communities, whether labor, goods, or money.

## **CALENDARS**

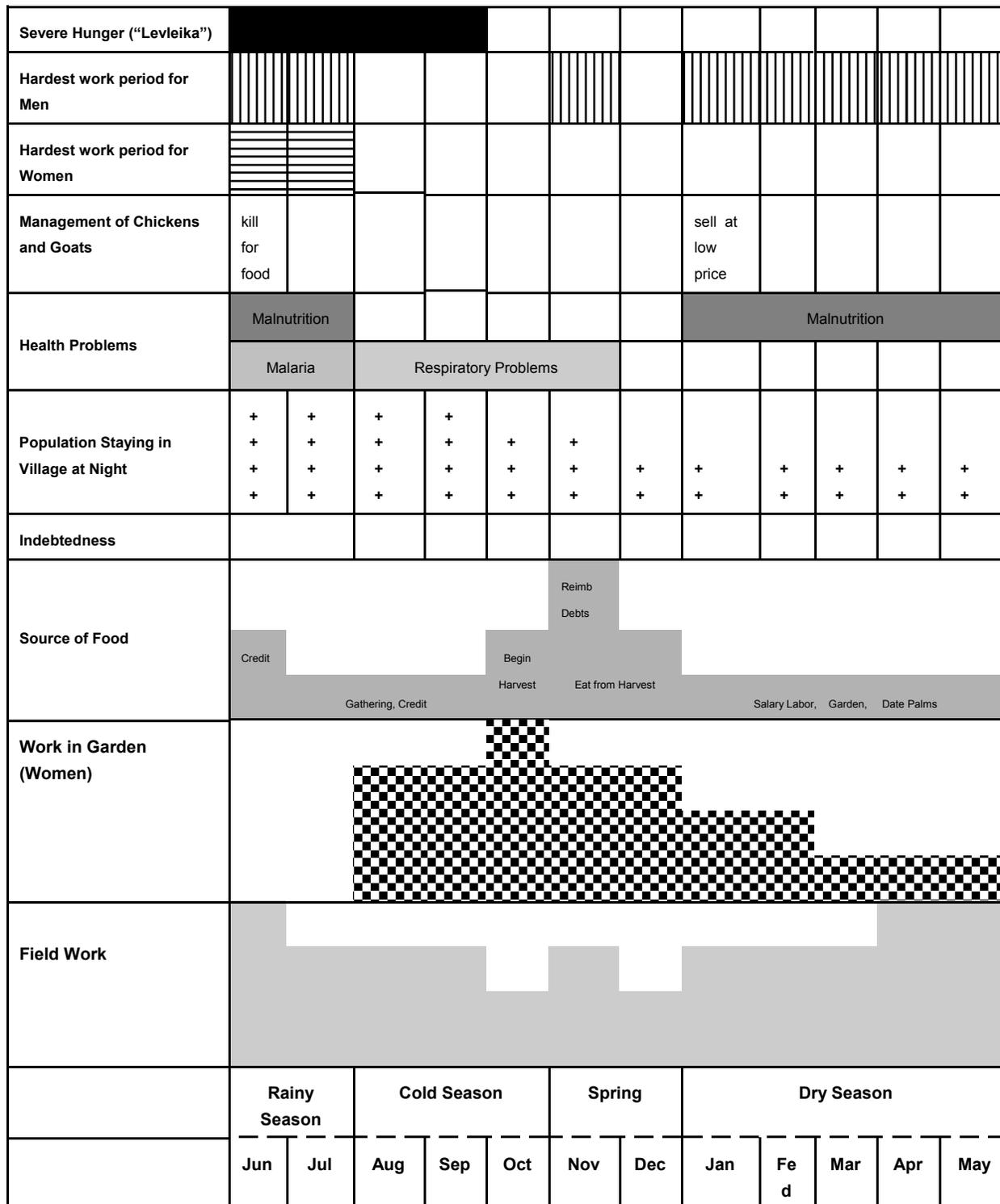
Calendars are diagrams that focus on seasonal issues and how things change through out a year. Calendars have a particular importance in food and nutrition security studies because seasonal variations in consumption are often critical to food security and nutritional well being. Calendars also help the team to avoid any seasonality bias related to the time of year when the team conducts their study. The calendar allows the team to consider how the reality changes during different seasons when conditions change in the community.

The horizontal axis of a calendar is the time axis. One of the first steps in doing a calendar is to figure out with the community the unit of time that makes the most sense to them. In some places, people are familiar with the western, twelve month calendar. In other places they will prefer to use other time intervals such as a religious calendar or seasons. The calendar that is carried out with the villagers should use the time frame that is most familiar to them. Afterwards, the team may choose to transpose the time scale to something that will be more familiar to outsiders who use the report.

The vertical axis of the calendar will include variables of interest to the study being carried out. Anything that has a seasonal aspect to it and varies throughout the year can be considered as a variable for a seasonal calendar. These might include migration, agricultural production, use of credit, the incidence of disease, income patterns, management of livestock, consumption levels, labor intensity, etc. Figure 7.10 gives an example of a composite calendar. In drawing the calendar, it is important to consider whether the variable is to be evaluated simply in terms of when it happens (a dot to indicate that people consume millet during that season) or whether it will be useful to add a ranking dimension to show how much of something happens during a given season (several dots if more millet is consumed, fewer if less is consumed).

There are many ways to do a calendar. It is often useful to do it on paper or on the ground in a large open area where everyone can see clearly what is being done. The time axis should begin at a time that makes sense in terms of the questions that are to be asked. For example, a calendar that focuses on food security issues will probably want to start the time axis at harvest time since that is, in some sense, the “beginning” of the year. The variables can be represented using columns drawn to different heights (like a bar graph) or using local materials, such as sticks that are broken to be longer or shorter, or smaller or larger piles of stones.

**Figure 7.10 Example of a Composite Calendar**



## **A Food Security Calendar**

The calendar described below (figure 7.11) has been adapted to look specifically at food security issues. It has proved extremely valuable in looking at several of the more critical issues of food security and involves a combination of techniques including the calendar, semi-structured interviewing, wealth ranking, and time trend line. We look first at how this type of calendar might be carried out (subject, of course, to adaptation), and then at some of the follow up activities that complement and expand the information initially gathered. This exercise is key to determining the “Average Months of Adequate Household Food Provisioning,” in the DAP area. This is one of the standard indicators to be included in all of Africare’s food security DAPs. As a result, this exercise is to be carried out in the design phase of activities, and at a minimum, in the baseline, mid-term and final. Some DAP teams may find it useful to carry it out annually at the time when the community reflects on the results of the Community Action Plan and is making adjustments for the following year. It is a powerful exercise as the portrait of the dire situation experienced by most households in the areas where Africare intervenes generally impels the population to ask themselves, “What can we do to change this situation?”

The calendar outlined here is particularly useful in looking at variations in food consumption over the year. This is particularly important in places that have a distinct “hungry season” due to the seasonal availability of food, or other constraints. Most communities in the Sahel, for example, are subject to this type of problem. The calendar further distinguishes between groups which have more or fewer food security problems, assuming that in every community there are people who are relatively better off and others who are relatively worse off. This calendar permits the situation of different groups to be compared over the course of the year. This exercise is best carried out with a cross section of the community present so that individuals with personal understanding of the different situations of households are present.

Before beginning the calendar the team must think about which situation they wish to probe. Do they want to know about a “good” year? an “average” or “typical” year? Or a particularly bad year. Whatever is decided, it should be discussed with the group that will be doing the calendar and they should decide on a specific year that they will keep in mind as they do the activity. (That is, if the question addresses an “average” year, they should think about when the last average year was and then talk in terms of that year, say 2002).

Having established the year, the next discussion is about different “food security levels” in the community and the relative size of the groups in the village that experience them. Using a pile of stones to represent all the households in the village, ask the community participants to divide the stones into piles representing households that are most food secure, average and most food insecure. The participants often divide the stones into three groups, but sometimes they may divide their community into a larger number of groups. For example, in a land scarce area, the participants may divide the least food secure group into two, those households with enough land for their house and a compound garden and those with only enough land for their house. The size of the piles will provide a perspective on the percentages of people in the community who suffer from food insecurity. This activity is discussed in more detail under the discussion of “bean ranking” below. The exercise to follow establish the severity of the food insecurity. For the moment, it is enough to talk about those who have fewer problems in having enough to eat, those who are in the middle, and those who have a lot of problems with food issues. Later, these questions will be probed in greater depth.

After establishing the time axis, begin with the group that is considered average. Ask them first about the months in which people (still in the average group) “eat until they are full.” In each of

these months, they will put a particular symbol (e.g. a stalk of millet, a corn cob, a leaf). Next, ask about any months that these “average families” in an “average year” (or the reference year) suffer from hunger. Ask them to put another symbol, such as a rock or stone, in these months. The months that are left will be considered transition months and can be filled with yet another symbol (perhaps a stick). Once the experience of the average group has been recorded, move to either the group that is better off or the one that is worse off and ask the same questions, recording the information using the same symbols as with the first group. Finally, complete the exercise with the third group (and others if any), thus filling in the entire matrix.

**Figure 7.11 Example of A Food Security Calendar**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>I. Most food secure</b>  (+/- 10-15% of popn)	q	q	q	q	q	q	q	q	q	q	T	T
<b>II. Medium food secure</b>  (+/- 35-40% of popn)	q	q	q	q	q	q	T	T				
<b>III. Least food secure</b>  (+/- 40-50% of popn)	q	q	q	q	T	T	T	T				

q Period of Abundance: “We eat until we’ve satisfied our hunger”

T Period of Transition (the ration is reduced)

Hungry Period (Two dots indicates period of exceptional difficulty)

Having completed the calendar, it is now useful to go back and interview the diagram, using the categories established in the calendar. This will provide a matrix of information about the consumption patterns of different groups in the community at different times of the year. Begin, for example, by asking about the period of abundance when families eat until they are full (see figure 7.12). Ask about each group in turn (average, better off, worse off) finding out about how many times a day they (adults and children) would eat, what their diet is like during that period, what types of food management strategies they might use, etc. Other issues that can be

discussed using the calendar as a point of departure are strategies people use to avoid hunger, or to deal with its consequences once they find themselves in the hungry period. Continue with the transition and hungry periods.

The way this calendar is used will, of course depend on the situation. It may be useful to define groups based on factors other than food security levels (such as ethnicity or livelihood patterns). People may wish to quantify the amount they eat using larger numbers of stones for more abundant diets, etc. In general, however, it will probably be best to keep this calendar relatively simple and then to probe greater details using other tools and interviews.

**Figure 7.12 Example of an “Interview Matrix” to Accompany Food Security Calendar**  
***Typical Composition of Meals by Food Security Status and Season***

	Period of Abundance	Period of Transition	Hungry Period
<b>Group I (Most food secure)</b>	Eat porridge every morning plus 2 meals. Tô with complementary sauces, meat or fish most days, often consume <i>dolo</i> .	Eat 2 meals but no longer consume porridge and reduce consumption of meat and fish; ration may be slightly reduced in last months before harvest.	N/A
<b>Group II (Medium food security)</b>	Eat porridge (millet flour with tamarind fruit) during morning in cold months plus 2 meals based on to with bean or hibiscus leaves.	Adult consumption reduced to 1 meal per day; ration diminishes. Usually no beans. Children continue to eat at least twice a day.	One meal a day and ration is reduced considerably further (to about 1/4 what consumed during abundant period). Wild leaves may be used for sauce if nothing else available.
<b>Group III (Most food insecure)</b>	No porridge; 2 to based meals a day; quantities and preparation similar to group II.	Ration diminishes to appx ½ what it was during period of abundance, meals reduced to 1/day for adults; children continue to eat at least twice	May go for several days with no significant cereal consumption. Often eat only thin soup of wild leaves and sorghum or millet flour.

The same type of food security calendar can be done with individual families, going into considerably greater depth. The purpose of this is both to gather additional information at the household level and to check the information that comes out of the group activity. It is useful to do this calendar with households of different wealth levels, such as one or two poor families, an average family and, perhaps, a wealthier family. This type of calendar can list in detail, the different foods that the family eats during different times of the year and make note of whether the foods were grown, purchased, or obtained from another source (such as gifts or food aid).

This type of activity may be carried out with several “representative” families for the baseline and then repeated in mid-term and final evaluations in order to understand how and why food management patterns may have changed during the DAP.

### **WEALTH AND FOOD SECURITY RANKING**

A key issue to understanding food insecurity is to profile the population that faces food insecurity, understanding who has problems and why. Ranking techniques in which the community itself ranks families in terms of their wealth or food security levels offer a way to get at this information that can otherwise be sensitive and difficult to attain.

There are numerous ways to do wealth ranking. (Food security ranking is simply a variation in which, instead of asking people to categorize families in terms of their wealth, they ask them to categorize in terms of their level of food security, as described in the mapping activity above.) Two methods will be described here, one using counters to rank families and the other using social mapping techniques.

**Bean Ranking.** Bean Ranking can be done as an independent exercise or in conjunction with an activity such as the calendar described above. In either case, the first step is to discuss the concept of food security in terms of whether people have more or less trouble meeting the food needs of their family. It is also important to consider carefully what unit is to be ranked. This will depend on how food consumption is organized in that particular society. Perhaps people share food in extended families, in which case the larger family unit becomes the relevant one for ranking purposes. Perhaps people eat in nuclear family groups, or households. This then becomes the relevant ranking unit. When this activity precedes the food security calendar, it may be easiest to ask people to divide the stones into three piles, showing how many families are better off, average, or have more problems meeting their food needs. However, it is better not to limit the number of groups. People might divide the piles into five or more groups depending on how food secure or insecure each group is.

Depending on the number of units to be ranked, one stone can be put in the pile for each family or household. If there are very many families, then a large number of stones can be put into a pile to represent all the families in the village. Division of the stones into piles will then be made on a proportional basis: about ½ the families fall in this category, or about 1/3 in another category.

In doing the ranking, it can be useful to divide up the villagers doing the exercise so that women rank together and men rank together, comparing the results afterward and discussing any significant differences. Ultimately, however, it is important that the final picture developed represents the consensus of the views of both genders and of the households experiencing the different levels of food insecurity. Once the stones have been divided, the team should follow up by asking about the different groups. In this interview they can find out what factors make people more or less vulnerable, whether people’s food status changes from year to year, whether ethnicity, religion, livelihood patterns play a role in food security, whether there are family, community, or other safety nets that help in times of crisis, etc.

**Map Ranking.** A more specific mechanism for ranking is to use the social map technique described earlier. This tends to be more sensitive because information is being provided about specific families and so in some cultural contexts it will be better to do this privately rather than in a large public gathering. Such an activity would take place a bit later in the process, once the team has had a chance to develop a rapport with one or several potential informants.

The map ranking can use a map that has already been prepared by the villagers (if it has each compound clearly indicated) or a map can be drawn as the ranking takes place. In either case, at least three symbols should be available (whether papers of three different colors or items such as leaves, shells, and stones). The person or people doing the ranking then indicate on the map the food security level of each family, indicating families with higher food security by green papers, average with yellow, and low with red, for example. It is important to associate the different groups with the actual names of families if this activity is to be used for sampling purposes, as will often be the case (for example with Semi Structured Interviewing, see below).

Variations of the ranking techniques described here can also be used to explore intra-familial distribution issues to find out how, for example, diet varies among various people within a family and who eats, or doesn't eat to their fill. There are many creative ways that different colored beans or stones can be used in this exercise, sometimes in conjunction with household mapping as described above.

### **HISTORICAL PROFILE**

A historical profile is little more than a semi-structured interview that focuses on historical information and attempts to organize that information into a systematic chronology of events. In most cases, this interview will be carried out with more elderly people, and particularly those who are known for their historical knowledge. Typically, a historical profile begins with the founding of the community and attempts to identify all the landmark dates that have had a significant impact on people's lives. In the context of a food security study, the questions would focus particularly on events that had an impact on people's food security and nutritional status. This might include events as varied as the departure of herders from the village (through whom the villagers had access to milk), changes in fertilizer prices, construction of community grain storage or introduction of a credit program, changes in cropping patterns, introduction of a day care center, building of the dispensary, etc. Each time a significant event is mentioned, it will be written on a card. If the date (or approximate date) of the event is known, it will be noted as well. The cards will, in the course of the interview, then be organized in chronological fashion. In this way, even events that are not associated with particular dates will be placed in at least approximative order.

The historical profile is often carried out as a preliminary step to doing the historical matrix, described below.

### **MATRICES**

Matrices are among the most sophisticated and analytic tools used in RRA and PRA, and hence among the most interesting. They permit the exploration of issues from multiple angles and tend to push people's thinking beyond the most superficial levels. In this section, we discuss the use of classification matrices and in the next we look at an adaptation that focuses on historical information.

Classification matrices explore the interaction of two sets of variables. Hence we might look at (1) what categories of people get (2) what types of diseases. Or (1) what categories of people eat (2) what types of food. Or (1) what types of food are eaten (2) in different seasons. Or (1) what type of impact a DAP has had on (2) what types of people. Or any of a myriad of other situations, depending on the nature of the study. In each of these cases, one set of variables would be placed on the horizontal axis and the other set of variables on the vertical axis as

shown in the examples below (fig.13 and 14).

**Figure 7.13 Use of Health Facilities by Different Groups**

	Children	Men	Women	Old men	Old Women
Traditional Medicine					
Village health worker					
Government Doctor					
Hospital					
Self-treat					

**Figure 7.14 Example of a Consumption Matrix by Group**

	Men	Women	Rich	Average	Poor	Children	Adults	Old people
Rice								
Millet								
Meat								
Eggs								
Fruit								
Vegetables								

The next step, after laying out the variables is to decide whether the matrix should be completed horizontally or vertically. In some cases it is possible to do it either way (though the results will be somewhat different) while in other cases only one way makes sense. In the example above, if the health matrix were to be ranked vertically, the interviewer would be asking, “when children need health care, which of these options would they be most likely to use?” If the matrix were to be done horizontally, she would be asking, “what kind of people frequent the traditional medicine practitioner more often?” In either case, more beans or stones would be placed in the box where there is greater consumption and fewer in the box where consumption is less. It generally works best to suggest, at the outset, that people place from 0 to 10 beans in each square. Should they later decide to increase the number of beans because they need to emphasize a certain variable, that is fine. But limiting the beans to 10 at the beginning avoids the situation where mountains of beans are piled on each square, making it difficult to evaluate what people mean.

The second matrix shown above is a somewhat more complicated one that, in essence, joins

three separate matrices. First the interview would ask about differences in consumption between men and women: who, for example, consumes more rice? The interviewer would continue to ask about other consumption differences between men and women (how much fruit they eat, etc.) before moving on to the next set of comparisons which will be between people of different wealth rankings. Now, she or he will ask about whether people who are rich, average, or poor eat more rice, millet, fruit, etc.

In explaining the exercise and interpreting the results, it is important to remember that the number of beans will, in most cases, have no absolute meaning. That is, five beans does not mean that someone eats five kg of meat. It merely means that the group in question eats somewhat more meat than the group which has only three beans in its column and considerably less than another group that has ten beans. Bean counting of this type is valid for establishing trends and may in some cases be useful for estimating orders of magnitude but it should not be pushed to levels of precision where it is not appropriate.

As the matrix is being completed, each time a number of beans is being put down, the interview will gently probe to find out why that number of beans, especially in relationship to previous boxes that may have had another amount. Hence, if men consume more meat than women, the interviewer can ask why to get a better understanding of consumption patterns in different groups.

### **Historical Matrices**

Historical matrices are carried out in a very similar way but one axis is reserved for a time variable. Typically, the time dimension is placed along the horizontal axis. The time increments to be used depend on the type of information that is being sought. If a longer view of things is desired, it makes sense to start at the earliest time period in the memory of villagers participating in the activity. If the elders are in their 70's and 80's, they can probably remember the situation up to 60 years previous. Then, significant landmark dates would be chosen during the 60 year period in order to evaluate changes that had taken place. The choice of dates depends, again, on the type of information being sought. The study may wish to understand, for example, consumption patterns in typical years. In that case they might choose landmark dates that are not particularly related to specific events that affected food security. They might, for example, ask people about how things were in the year of a certain election or when a particular tree fell down. In other cases, it may be more interesting to see the impact on food security of a particular event. In this case, the years will be chosen according to their likely significance on food security. This might be the year of a major drought, or the year after fertilizer prices changed or a new crop was introduced. It is recommended to limit the time variables to four or five categories at most to avoid getting bogged down in minutiae and dragging out the process to the point where it becomes boring.

The vertical axis then attempts to capture variables that will be most illuminating about the situation in general (or food security in particular) in the village. The example below (figure 7.15) suggests some of the types of variables that might be of interest. This list will, of course, vary depending on the issues being studied and the questions that would be most relevant in a given situation. When using variables like "food secure" in such a matrix it is, of course, important to agree on a definition of what is meant so that everyone gives the same meaning to the term.

It is generally better to complete the historical matrix vertically, completing one period in time

before proceeding to the next. As with the explanation of matrices above, keep in mind that the beans express trends and the relative importance of various variables and do not express absolute quantities (unless you expressly ask people to be exact, as in the number of months the harvest would last).

**Figure 7.15 Example of a Historical Matrix Used to Look at Food Security Issues**

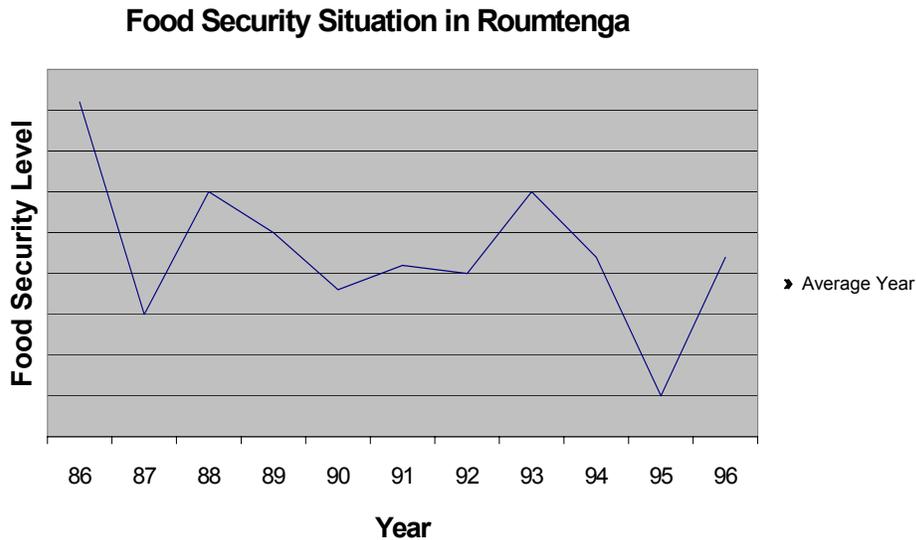
	appx. 50 years ago	When the school was built (1973)	When the dam was completed (1985)	Present
Population of the village				
Number of months the average family's harvest lasted in an average year				
Consumption of meat				
Consumption of oil				
Amount of harvest devoted to ceremonial purposes				
Number of food insecure households in the village				

A variation on the historical matrix is to take much shorter time intervals, such as last five years and explore in greater depth how things changed in each of the five years. This type of matrix can be particularly useful in exploring the impact of a DAP and how things have changed as a result of program interventions.

### Time Trend Lines

A technique that is similar to the historical matrix uses a line graph to plot changes over time. This technique was found to be very useful when applied in conjunction with the food security calendar discussed above. The food security calendar discussed the situation in an average year. Now, the time trend line looks at how the situation has varied from the average over, say, a ten year period. In this particular case, a line was drawn in the sand and defined as the average year. The village informants were then asked about last year, and whether it was considered to be better or worse than average. They then placed a stone above or below the "average" line to indicate how much better or worse. They were also asked what factors contributed to the year being either good or bad. Then they were asked in turn about each of the previous years going back a decade. The result was a time line as displayed in the example below (figure 7.16).

**Figure 7.16 Example of a Time Trend Line**



### **SEMI-STRUCTURED INTERVIEWING**

In each of the techniques presented above, the concept of interviewing the activity to draw out more information than what can be demonstrated visually was emphasized. The various “hands-on” activities outlined in the tools above provide the mechanism for drawing out information, making people feel more comfortable with participating, and facilitating the analysis as information is organized visually. Ultimately, however, the most effective use of these techniques requires the user to ask perceptive questions and to use his/her best judgement in probing beyond the superficial to get at key information that will be of use in the DAP design and implementation. This is why we speak of “interviewing the diagrams.”

In most cases, then, the interview plays the subsidiary role to the diagram or activity which holds center court. Sometimes, however, the semi-structured interview (SSI) becomes the core activity. This is often true part way through the process when large amounts of background information have already been gathered. At this point the team may find it necessary to narrow in on specific types of information that are less easily obtained using one of the tools outlined above. Such an interview might focus, for example, on a precise topic such as weaning methods, or the consumption patterns of the elderly. A carefully focused semi-structured interview may be the best way to get this type of information.

Another use of semi-structured interviewing is to verify information that was obtained in a group activity with individual families. These families might be chosen from different socio-economic groups in light of the information gathered in the wealth or food security ranking. In some cases it will be useful to use a tool or diagram as part of these interviews (such as doing a food security calendar with an individual family). In other cases a straight interview may be a faster way to get the information. Interviewing without the use of participatory tools should be used sparingly. It is the technique that is perhaps the most subject to bias (because of the limitations of words as a means of communication and because it tends not to build rapport with the

interviewee) and generates the least interest among the people who participate.

### TOOLS SPECIFICALLY USEFUL IN PLANNING

All of the tools used above gather information that will feed into the planning process of a community that wishes to use the PRA for planning purposes. Good planning requires good information and the more a community can understand about the problems it wishes to address, the more likely that its solutions will be appropriate and feasible.

There are several tools that can help the community to prioritize its problems and then analyze the potential solutions in order to find those that make the best sense. A common problem with community planning exercises has been that villages tend to model their desires on what looks good in another community where a development program has intervened. If an agency has put millet grinding machines into a number of villages in the area, all the other villages will consider that their priority, regardless of whether it meets a priority need or is a feasible solution in their community. The goal of a serious community planning process is to move beyond what is commonly referred to in America (where this phenomenon is also a problem) as “keeping up with the Joneses [neighbors]” and instead to ensure that planning is based on a thorough and reflective analysis of the problems.

The two matrices proposed below (or adaptations of these tools based on the situation at hand) are useful in facilitating the community’s analysis and ensuring that the full range of relevant issues are considered in the planning process. The first matrix (figure 7.17) helps the community to prioritize the problems that have been identified while the second (figure 7.18) serves to think through issues in order to come up with the best solution(s) for addressing the problem. In each case, the criteria used to evaluate either the problem or the solution are indicative. Each community, with the PRA facilitator, will have to come up with the criteria that they feel are the most relevant to their situation. In the problem ranking matrix, the problems will come out of the study that the community has just completed. When it comes to solutions, both the community and outside specialists may have ideas about how the problems can be solved.

**Figure 7.17 Example of a Problem Ranking Matrix**

	Number of people affected			Gravity of Impact on Affected Population	Causes other problems in village	Solution depends on solving other problems first	Likelihood we can solve the problem ourselves	Chance we can find outside help with the problem
	Men	Women	Children					
Problem #1								
Problem #2								
Problem #3								

Based on this discussion, the village will then rank their problems in the order in which they

think they should be addressed. Once this has been done, each problem will be looked at in turn, to determine the possible solutions to that problem. The following matrix facilitates this activity (fig.7.18).

**Figure 7.18 Intervention Ranking Matrix for Problem X**

	<b>Sustainability</b>	<b>Equitability</b>	<b>Productivity</b>	<b>Stability</b>	<b>Overall Assessment</b>
<b>Solution #1</b>					
<b>Solution #2</b>					
<b>Solution #3</b>					

In this case, the criteria used to rank the solutions that are proposed are the following:

- (1) sustainability: the likelihood that the solution will continue to work as long as it is needed
- (2) equitability: the extent to which a solution is “fair” and accessible to all who face the problem: e.g. a solution that can only be afforded by a few of the richest families is not equitable.
- (3) productivity: the extent to which the solution fully addresses the problem: e.g. a credit program may be expected to increase women’s incomes by 3,000 francs a year but this may be insignificant relative to their needs. Perhaps introducing an oil press would provide greater benefits.
- (4) stability: this refers to the reliability of a solution, not so much in the long term (addressed by sustainability) but from day to day. Some technologies may be subject to intermittent breakdown and thus not provide a stable solution to a given problem.

While these criteria address issues that are often important to consider in analyzing potential solutions, as noted above, they should be discussed with the community and amended as appropriate in any given setting.

### **THE COMMUNITY ACTION PLAN**

Based on a systematic analysis of their situation using the tools and techniques outlined above, the community will then come up with its Action Plan. This Action Plan will be an evolving document that will begin by focusing on the issues that are a priority for the community. While some communities may be able to develop a complex multi-year plan at the outset, this level of planning and analysis will probably not be possible for most villages. Instead, they will get an idea from the PRA of the principal problems contributing to their food and nutrition security difficulties. They will then focus on a few strategies for meeting these concerns and begin to plan specific interventions to address those concerns. The plan itself will then include their ideas for future activities (ongoing PRA studies for example) that will be needed to address the problems.

The initial plan should specify the tasks to be accomplished, the anticipated time frame for each action, and the person responsible (see figure 7.19). It should also make note of any special

materials needed or logistical support that would be required. Keep in mind that, especially in the early phases of the planning process, several of the tasks to be accomplished may involve searching for more information. The community may not know all the options that are available to them and may need to consult specialists to gather more information.

**Figure 7.19 Action Plan**

<b>Action Plan</b>			
<b>Action</b>	<b>Person Responsible</b>	<b>Date to be Completed</b>	<b>Materials Needed</b>
1.			
2.			
3.			
4.			
5.			

One village, for example, might focus on developing market gardens. As a part of its plan, it may note that this will require particular attention to ensuring that it has enough water during the dry season and looking into marketing issues. A first step of the plan, then, might be to carry out more detailed studies of these two issues. Once this information has been gathered, additional details would be added to the plan. These would outline specific interventions for deciding where to place the garden and the wells (or other water source), determining what crops would be grown, etc.

Another village may decide to focus their efforts on food processing activities such as drying of fruits and vegetables. Such a plan might address the needs of various concerns in the community including improving gardening practices, enhanced water conservation, construction of drying racks, and research on marketing outlets.

In both cases, while the plans would anticipate the general areas where the villagers see a need for intervention, the most specific planning would take place around the most immediate interventions with the others being planned through a rolling process as some activities get underway and it is now time to add new ones. In short, the Action Plan is not a rigid, completed document that sits on a shelf somewhere. It will evolve as the community moves through the process and gathers additional information.

### **MAINTAINING FLEXIBILITY, CREATIVITY, AND YOUR SENSE OF ADVENTURE**

One of the greatest opportunities in RRA/PRA, as well as one of the greatest challenges, is the

chance to use these methods in creative, reflective, and innovative ways. This manual could have provided you with a blueprint for carrying out an RRA or a PRA, telling you day by day or hour by hour what to do and how. It would have made it easier for you, and for the people who are supervising the implementation of the DAP. The problem, however, is that such a recipe, or set of recipes would have gone against some of the core principles of the methodology that strongly discourage its use as a rote exercise. The tools lose their effectiveness when they are applied in this way and you will almost certainly end up with standardized results from such a standardized process.

As you work through the process, you will undoubtedly develop a set of tools that work well for you and the types of issues that commonly surface in the areas where you are working. That's O.K. and you need not feel guilty if certain patterns develop in your studies. Be careful, however, if you find that you are exactly replicating previous exercises and have lost the capacity to be surprised or your curiosity to follow up the unexpected. This may be the time to bring on another outsider to challenge your assumptions or offer some new perspectives.

Take the openness of the advice that is offered here not as a prescription for frustration, but as an invitation to use your own experiences, creativity, and good sense to come up with a study that is more appropriate to your milieu than anything we could have proposed from a distance. Review the principles of the methodology regularly to keep yourself on track and then innovate to your heart's content. If you do so, it will be rewarding, it will be fun, and your DAP will contribute in a significant way to improving the food and nutritional status of vulnerable populations in Africa. Good luck.

## MODULE 8

### PRACTICAL GUIDANCE FOR IMPLEMENTING A DAP INFORMATION SYSTEM

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## Introduction

This module takes the concepts presented in the earlier sections of the manual and translates them into particular actions that will be undertaken by the DAP staff to put an information System into place. It begins with a section on information that is needed to prepare the DAP and continues with a detailed section on how to develop a DAP monitoring system with particular attention to the following issues:

- the set of indicators Africare is using for all Food Security Initiatives to have data that is comparable across countries
- how to identify indicators of vulnerability (to food insecurity) with the local population
- how to identify indicators of capacity building
- how to integrate the village's and the DAP's monitoring activities

### I. Gathering Information Needed to Prepare the DAP

The first information that is needed in the DAP Timeline is that which will be used to write the DAP and to develop the first food security framework. This information is usually gathered by the team that is responsible for elaborating the DAP. If the DAP is not preparing a new DAP, but rather amending an existing one or designing a follow-on DAP, then the program team will be much more involved in this process.

The information to be pulled together includes both primary and secondary information. We begin by discussing the secondary information since it is the easiest to get hold of and is generally the first to be collected.

#### A. Secondary Information

We refer to information which has already been written up and can be found in reports or studies that have been carried out by others as **secondary information**. It may include:

*Reports from other projects or other Africare studies* that concern the same set of issues or have been carried out in the country where the DAP will take place. These studies may be found in the Africare national offices, in the project office, or at headquarters. Information from this type of report tends to be fairly specific to the particular project that was studied.

*Regular reports* of ministries that are responsible for agriculture, livestock, fishing, health, family issues, industry and commerce, etc. as well as from the national statistical offices. These generally include information on government services and their utilization by the population, on conditions and practices related to agricultural, commerce, micro-credit, health including on the nutritional status of different population groups, various statistics including demographics, and other information of this type.

This type of information is often gathered by various services at the local level and then aggregated at the national level. This kind of information usually reports on families who have used the government service in question. It is not generally based on a random sample and therefore will probably not be statistically significant. Neither, in most cases does it presume to document the general situation since it is gathered from a particular group of people.

*National Statistics* include the results of surveys that have been carried out on subjects such as health, agriculture, commerce, or credit, or track variables such as consumer prices. These may be found either in the national statistical office or in the offices of the particular ministries concerned. These statistics usually are gathered using random sampling techniques and are thus representative of the areas where the studies took place.

*USAID's Living Standard Studies* report on socio-economic conditions at the household level, including activities, revenues, etc. They focus on poverty, the distribution of revenue, and income generating activities. The information is valid and statistically significant at the national level.

The *World Bank DHS (Demography, Health and Population) Studies* include information about the demographic distribution of the population, vaccination levels, the availability and accessibility of health services, the incidence of disease and nutritional deficits, and the nutritional status of women and children less than five years old. This information is valid and statistically significant at the national level.

The World Bank and the International Monetary Fund, working with a number of individual country governments have prepared *Poverty Reduction Strategy Papers*. These papers and studies carried out for their preparation often have up-to-date information on topics related to food security. They can be downloaded at [www.imf.org](http://www.imf.org).

In most countries, you will find various reports of studies that have been carried out by USAID and the World Bank. These are available either in the field offices of the agency concerned or in the national statistical office. They may also be found in the headquarters of these two agencies, which are located in Washington, D.C.

*Reports, evaluations, and other periodic studies* carried out by national projects, national and international NGOs, multilateral agencies such as UNICEF, UNDP, FAO, World Bank etc., bilateral organizations such as USAID, SIDA, GTZ, CIDA, DANIDA, CFD, EU, etc. These studies will be found either in the ministry or in the field office of the agency concerned. Many of these studies can be accessed on the Internet. A good portal to use

both as a search engine and for links to other sites is [www.developmentgateway.org](http://www.developmentgateway.org) that is maintained by the World Bank. Another good website with links to information on food security is that developed by Food Aid Management (FAM) and available on their website [www.foodaidmanagement.org](http://www.foodaidmanagement.org).

While many types of information may be found in these reports, their quality and relevance vary considerably. Some are really excellent while others are of only limited value. *Food security monitoring studies* (such as SAP<sup>1</sup>, FEWS<sup>2</sup> and GIEWS<sup>3</sup>) can provide much useful information. Such studies can usually be found either in the Health, Planning, or Agriculture Ministry, or at the National Statistics office or they may be accessed at the websites listed in the footnotes below. The information is often issued in periodic bulletins that discuss climate, food prices, and migration patterns. It may classify different regions according to their food insecurity status. Since the index used to classify food security levels varies from one system to another, it is important to carefully study the indicators used and to interpret the results accordingly.

## B. Primary Data

Primary data is collected by the design team and Africare staff. These will be gathered in studies that are organized specifically to meet the needs for accurate information (ex. socio-economic conditions, nutritional status, agricultural practices, etc.). The methods that may be used to gather this information include, among others:

- focus groups that are used to gather deeper information or to verify information in groups
- RRAs and PRAs that focus on a given set of issues and seek to understand the complexity of the local reality
- survey questionnaires that provide quantitative information (this type of information will generally be available during the design process only when a follow-on DAP is prepared)

The more good secondary data is available in the area where you work, the less need there will be to carry out primary research in order to get the information needed to develop the DAP and the preliminary food security framework for the DAP. Even when secondary information is available, however, it is necessary to visit potential DAP sites and to meet with future beneficiaries since this contact can never be replaced by secondary information. RRA is an effective method both for building rapport during initial contacts and gathering the information needed to prepare the DAP.

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<sup>1</sup>Système d'Alerte Précoce: Individual Sahelian countries such as Chad and Mali have established SAPs (Early Warning Systems). The SAPs are networked with FEWS and GIEWS.

<sup>2</sup>Famine Early Warning System. This system is supported by USAID and can be accessed at [www.fews.net](http://www.fews.net). Reports for French speaking countries are available in French.

<sup>3</sup>Global Information and Early Warning System for Food and Agriculture. This system is maintained by the Food and Agriculture Organization of the United Nations and can be accessed at their website: [www.fao.org/giews](http://www.fao.org/giews). Reports are available in English, French and Spanish

The information that is gathered from primary and secondary sources will be used at this stage to:

- justify the site for activity intervention
- determine what resources will be needed
- draw up the preliminary food security framework
- develop the program's strategic framework
- brainstorm a list of potential activities
- prepare the initial plans for a program monitoring system and the Indicator Performance Tracking Table (IPTT)

The principal users of this information will be the activity design team, Africare, USAID's Food for Peace Office and, eventually the DAP team. As soon as the DAP team is put in place, it will want to familiarize itself with the information that is available in order to better understand the context of the DAP and the nature of the problem(s) to be addressed. This will help the new staff as it begins to set up the baseline studies and plan specific DAP activities.

### **C. Sketching out the Initial Information System for the DAP.**

In order to have the greatest possible impact, any activities undertaken by the DAP need to address concrete food security and nutrition problems experienced by the population. To increase the relevance of its activities, the DAP counts on the active participation of beneficiaries in identifying their problems, coming up with realistic and feasible solutions, and identifying specific indicators that can be used to monitor and evaluate DAP results.

The experience with monitoring and evaluation systems in the 5-year period from January 1999 through 2003 has resulted in Africare standardizing on a limited number of impact indicators in all of its DAPS. These indicators were developed and tested together with the DAP staff, local partners and participating communities. The methodology for establishing and measuring the indicators is discussed in Section II below. They have proven to be effective in measuring the impacts of activities at the level of the Strategic Objectives and for reporting these impacts to FFP. They are also helpful to all levels of Africare and local managers of activities from headquarters staff to the local community committees.

The Standard Impact Indicators are:

1. S.O. for Increased Agricultural Productivity: Months of Adequate Household Food Provisioning
2. S.O. for Improved Household Nutrition: Stunting of Children 24-59 months, Underweight of Children 0-35 months
3. S.O. for Improved Community Capacity to Enhance Food Security: the Food Security Community Capacity Index (FSCCI)

In addition to the standard impact indicators, the DAP will identify a limited number of impact and monitoring indicators for the I.Rs that look as though they will be effective in the context of the DAP. The monitoring and evaluation plan that is presented in the DAP should indicate how the DAP will elicit the participation of the beneficiaries and how the communities will be involved in monitoring the DAP's progress and evaluating its impact as is discussed in Section II. These

indicators are included on the initial IPTT for the DAP. Both the indicators and any targets identified maybe modified following the baseline studies and surveys.

This plan outlined in the DAP must provide enough information so that the donor can assess the rigor and quality of the proposed Information System, but it must also be flexible enough so that it can accommodate the later input of the communities involved. Without going into details that are not known at this point in the activity's development, the DAP will discuss how it expects to:

- monitor the food and nutrition security situation
- monitor community capacity building
- monitor inputs, outputs, and results
- monitor implementation of village action plans
- identify (with the local community) indicators of food and nutrition security and capacity building
- assess DAP impact on food security and nutrition
- assess DAP impact on capacity building
- measure DAP impact related to specific activities that are implemented

## **II. Developing a Monitoring and Evaluation System**

There are three “sources” of indicators that can be useful in setting up your monitoring and evaluation system:

3. The standardized indicators developed by Africare that permit a comparison of Africare results across its DAPs.
2. Indicators that have been used by others under similar circumstances. These can be found in evaluation reports of other DAPs or in literature on the subject<sup>4</sup>. Considerable effort was also expended by the FAM Monitoring and Evaluation (M&E) Working Group during the Institutional Support (ISA) Grant period (1998-2003) to develop M&E tools. These can be accessed on the FAM website. Additional information is available on the FANta website: [www.fantaproject.org](http://www.fantaproject.org).
3. Indicators that you will identify in conjunction with local communities. These will be most useful for the communities themselves and for the DAP team. They may also be used by USAID to evaluate your DAP but will not be useful in comparing the results with those obtained in other projects since the same indicators will not be used across the board.

This section has four parts:

1. How to develop indicators of agricultural productivity that relate to the initial level of food insecurity of the local communities and their improvement over the life of activity.

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<sup>4</sup>See work by Simon Maxwell and Timothy Frankenburger and Nyborg et Haug in particular.

2. How to establish a community-based information system for measuring indicators of improved household nutrition.
3. How to use the FSCCI and other indicators with communities to measure improved community capacity to enhance food security.
4. How to put together the DAP's monitoring and evaluation system.

The various DAP teams have now developed considerable expertise in using the standard indicators for the FSCCI and the Months of Adequate Household Food Provisioning (MAHFP). However, as they were piloted by Africare, they are still a work in progress and will be refined in the coming years as is discussed below. In contrast, the methodology for measuring the impact indicators Africare is using for improvements in household nutrition, child stunting and underweight, are well established and fully standardized by UNICEF and in the guide available on the FANta website. What is different about Africare's approach is that the measurement of weight for age of children less than three is integrated into a village-based growth monitoring and promotion system. This data is the source of a Community Based Information System that is incorporated into a comprehensive food security framework to meet other reporting and program management needs.

#### **A. How to Use the Months of Adequate Household Food Provisioning to Measure Impact and Other Indicators to Address Food Insecurity with the Local Community**

The MAHFP are established in several ways. PRA exercises are usually carried out with the communities included in the DAP to identify the number of months that households have adequate food to eat until they satisfy their hunger, months when they have to restrict their consumption to two meals a day, months when consumption is very restricted and those which are severely restricted. The exercise further maps the different patterns of food adequacy between households that are food secure, those that are food insecure and those which are severely food insecure and determines the proportion of the population that falls in each category. These exercises are discussed in detail in Module 7 (see pages 7.45-7.48). A weighted average of "*# of months of adequate household (HH) food provision*" is then calculated: *# of months of adequate HH food provision* =  $\frac{\sum (\# \text{ HH in each category} \times \# \text{ of months of adequate HH food provision})}{\text{total HH population surveyed}}$ . Food consumed is from all sources, that produced, purchased, donated, etc. This information is needed for each community and serves as one of the important inputs to the Community Action Planning Process.

This PRA technique was the only one used in the initial period of using the MAHFP. More recently, starting with the baseline for the Burkina Faso DAP in 1998, Africare began to integrate questions to establish the MAHFP in the baseline and final surveys. This has now been done also in the baselines for the second phases of the programs in Uganda and Mozambique as well as the baseline for the Chad/Mali consolidated DAP. These questions will form part of the baseline for all future activities. In addition, Africare has been working with Cornell University in Burkina Faso to identify questions that could be used in the baseline questionnaire to develop a Food Security Index for the DAP area. A guide prepared by Cornell researchers was used to formulate questions that were integrated into the Chad/Mali baseline. These different sources of information, as well as information on the relationship between answers to the questions and the responses of households to other questions, for example, the size of land holding, livestock

herds, etc. will be analyzed to provide additional perspectives on the validity of the different indicators.

The MAHFP provides a means of measuring the overall impact of the DAP activities on increased availability and access to food at the S.O. level. Other information is needed to measure the I.R.s and for activity management. Following the food security calendar and household ranking exercise it will be helpful to conduct various other activities that offer clues about what makes families more or less food secure. This information can be used to identify, with village input, those indicators that are the most revealing of the food security situation in their community. Identifying such indicators should be one of the objectives of the PRA (it is possible these will be fairly standard across the DAP zone, but this is not also the case).

The sequence below suggests a certain number of activities that should be carried out either as part of the PRA or in complementary actions.

1. Classify households into those which are more or less food secure.
2. Identify the characteristics of each group. Information about the characteristics should cover the following areas (as well as any others deemed of interest):
  - activities
  - assets
  - strategies used to assure the family's food security
  - adaptation strategies used in the case of shocks to the family's food security
3. Using this information, draw up a table that lists the characteristics of families that are food secure, as well those that are not. The examples that follow show what such a table might look like but you should adapt it based on your needs and the situation of the community in question.

**Table 8.1 Characteristics of Food Insecurity (Example I)**

	Food Secure Households	Average households	Food Insecure Households
<i>activities</i>			
<i>assets</i>			
<i>strategies for assuring food security</i>			
<i>strategies in times of shock</i>			
<i>etc.</i>			

The second example (below) of characteristics of household food insecurity comes from Davies' work in Mali. It is organized into eight categories: five types of village resources and three types of resource utilization. Most elements from this table are generic. They indicate the nature of relevant characteristics in each category. In a locally specific situation, you would choose a small number of characteristics that are most relevant and then identify the best indicators to use to measure them or to follow their evolution over time. The following list presents indicators that could result from such an analysis of the characteristics of a particular community :

- Owning over 50 chickens, more than 1 sheep and/or 1 goat
- Selling off progenitors
- Amount of animal sales at different times of the year
- Month at which a household is borrowing food from others
- Number of times a household is borrowing food in a month
- Terms under which food is received
- Consumption of a given type of food (such as wild leaves)
- Number of meals consumed per day by women

Remember that such indicators are not universal. For example, families in town, even food secure ones, may not own animals. The types of food that are consumed in different areas only in times of hardship vary greatly. You must first know the customs of the community in order to choose an indicator that can reveal when and how much of this characteristic is happening.

**Table 8.2 Characteristics of Food Insecurity (Example II)**

Resources	Food Secure Households		Food Insecure Households	
	Activities, assets, and other sources of resilience	Buffers against shocks	Activities, assets, and others conditions that make the family less resistant to shocks	Conditions making these families sensitive to shocks
Production	<ul style="list-style-type: none"> <li>Projection covers more than 100% of household food needs</li> <li>Revenue from other sources</li> </ul>	<ul style="list-style-type: none"> <li>Cereal stocks covering X months are kept in reserve in case of bad harvests</li> <li>Production can be diversified and other products sold in case the harvest is poor</li> </ul>	<ul style="list-style-type: none"> <li>Production covers only X% of household needs</li> <li>Secondary production must cover remaining needs</li> </ul>	<ul style="list-style-type: none"> <li>No back up if primary food production is insufficient</li> <li>No backup if secondary food source fails</li> </ul>
Exchange	<ul style="list-style-type: none"> <li>Little dependence on markets</li> <li>Strong purchasing power</li> <li>Favorable terms of trade</li> </ul>	<ul style="list-style-type: none"> <li>Not very vulnerable to changes in basic foodstuff prices</li> </ul>	<ul style="list-style-type: none"> <li>Highly dependent on markets</li> <li>Weak purchasing power</li> <li>Unfavorable terms of trade</li> </ul>	<ul style="list-style-type: none"> <li>Very vulnerable to increases in cereal prices</li> </ul>
Assets	<ul style="list-style-type: none"> <li>Able to accumulate assets</li> </ul>	<ul style="list-style-type: none"> <li>Can sell goods or animals in case of need</li> </ul>	<ul style="list-style-type: none"> <li>No or limited possibility to accumulate assets</li> </ul>	<ul style="list-style-type: none"> <li>No or few assets that can be liquidated in time of need</li> </ul>
Mechanisms to weather shocks	<ul style="list-style-type: none"> <li>Coping strategies only needed in exceptional cases of food shortages</li> </ul>	<ul style="list-style-type: none"> <li>Coping strategies only used as a last ditch strategy</li> </ul>	<ul style="list-style-type: none"> <li>Coping strategies used every year</li> </ul>	<ul style="list-style-type: none"> <li>No possibility to add coping strategies in time of special need</li> </ul>
Adaptation	<ul style="list-style-type: none"> <li>Little or no need to adapt</li> </ul>	<ul style="list-style-type: none"> <li>Can adapt easily as needed</li> </ul>	<ul style="list-style-type: none"> <li>Intensive adaptation required</li> </ul>	<ul style="list-style-type: none"> <li>Little latitude for further intensifying adaptation</li> </ul>
<b>Utilization of Resources</b>				

	Food Secure Households		Food Insecure Households	
Resources	Activities, assets, and other sources of resilience	Buffers against shocks	Activities, assets, and others conditions that make the family less resistant to shocks	Conditions making these families sensitive to shocks
Consumption	Sufficient for full year	Go into crisis situations in strong health and with good nutritional status	Insufficient consumption during X months of year Poor nutritional status	Enter crisis period in poor nutritional and health condition
Claims on others	Reciprocal linkages are strong	Mutual aid mechanisms are functional, requests can be satisfied from surplus of others  Few problems paying school and medical expenses, taxes, etc.	Reciprocal linkages are weak; most linkages are based on dependency	Mutual aid mechanisms are weak, requests for aid weaken the subsistence capacity of others  Difficulties or inability to pay medical and school expenses and taxes
Protection of the livelihood	Can invest in securing their future	Food security is well assured by actual livelihood	Inability to invest in improving food security situation	Continued vulnerability

by Nyborg and Haug 1994, adapted from Davies, 1993

4. Use your table to analyze the situation with the community and to identify which indicators of food insecurity will be most useful for monitoring their situation. Then, among those indicators, determine which will be the easiest to measure on a regular basis. Food security calendars can enrich this discussion and provide a time frame.
5. Select from among the list you come up with those indicators that will be the most useful. Consider the following criteria as you make your selection:
  - will they measure what you want to measure (validity)?
  - will they tell you quickly enough that the food security situation has changed (sensitivity)?
  - will they give you a good sense of how much the situation has changed (sensitivity)?
  - will they change even if the food security situation remains the same or will they only change in response to changes in food security (specificity)?
6. The next step is to establish the baseline situation. By using the indicators they have selected, the villagers can classify households by according to whether they are more or less food secure.

Using this system, or some variation on it, you will be able to come up with indicators of food insecurity. Now, by monitoring the indicators, the DAP team and the villagers will be able to assess changes in the community's food security situation.

Keep in mind, however, that to measure impact, you must compare like situations. For example, measurements should be taken at the same time of year or at least during the same season. To claim impact, you must also demonstrate that any changes are actually due to the DAP's intervention. It may be that external factors (such as climate or rainfall) are responsible for the change, rather than anything done by the DAP. Maintaining information on critical determinates of productivity in the DAP zone will be useful in making such assessments.

## **B. Using a Village Based Growth Monitoring and Promotion Program to Measure and Foster Improvements in Household Nutrition**

The nutrition component of the Dinguiraye Food Security Initiative that was discussed in Box 5.1 and Table 5.1 (see pages 5.7 and 5.8) was the first Africare DAP to develop a comprehensive Community Based Information System (CBIS) using data drawn from a Village Based Growth Monitoring and Promotion Program. These program activities started in 1997. Box 5.1 describes how they were carried out and Table 5.1 documents the impressive results of this approach. While this was the first use of this methodology in a food security activity, Africare staff had long experience in implementing such activities and knowledge of "best practices" as a result of Africare's child survival and maternal/child health activities supported with other resources. In the period since 1997 nutrition components were incorporated into almost all Africare programs and are included in all current Africare DAPs.

Data from the baseline RRA/PRA and questionnaire surveys provide information on the child and health care practices in the DAP zone. Strategies for changing those that have a negative affect on nutrition and health status can then be developed. The most common approach is to train the Community Volunteers to provide such messages using traditional communication methods such as songs. Griots (traditional story tellers) and drama troops are also used to communicate messages in entertaining ways.

The solid community structure supporting nutrition enhancement activities has made it possible to establish programs such as "Hearth" activities that are used to rehabilitate moderately malnourished children in a community setting. This method has been used most extensively in Guinea and Mozambique. The Guinea experience is described in Box 8.1. Much useful information on managing child survival activities and "Hearth" programs as well as measuring these initiatives can be found at the CORE group website, [www.coregroup.org/](http://www.coregroup.org/).

### **Box 8.1. Africare's Experience in Reducing Infant Malnutrition in an Established Hearth Model Programs in Guinea**

The Hearth program is a community nutrition rehabilitation program for malnourished children. It is especially designed to rehabilitate the nutritional status of moderately malnourished children in their own communities. Mothers of well nourished children who are in the same poor socio-economic conditions are trained in counselling mothers with malnourished children. They are called "mamans lumieres" in Guinea. A Hearth program cycle lasts 12 days. Each morning, malnourished children and their mothers gather in the home of the "maman lumiere". Mothers prepare and feed adequate foods for their children while learning from the "maman lumiere" appropriate nutrition and sanitation practices to rehabilitate malnourished children and to maintain an adequate nutritional status for their young children. Africare had very successfully conducted a Hearth program in Dabola and has now conducted 4 cycles of Hearth in Dinguiraye.

Each of the four cycles in Dinguiraye had a remarkable success. Even 6 months after the end of the 12 day program, a very high percentage of participating children were still showing adequate nutritional status. Even though July is amongst the most food insecure and busiest months of the year, communities still decided to conduct a Hearth program cycle in

2002 as the number of malnourished children in their communities was high. Moreover, some participating children in that cycle were severely malnourished when they entered the program. Nevertheless, after 1 month, 74% of these children were fully rehabilitated. Community-based volunteers follow-up the children for 12 months after their participation in a cycle. During home visits, they advise and encourage mothers as needed.

Some participating infants are not included in the follow-up because they leave the area. Some leave with their mothers when these go to work in mines or during the dry season when they move in search of work. Some mothers with infants between 1 and 2 years old also temporarily leave home to live with their own or their husbands' family to decrease the risk of pregnancy until they have weaned their child. All of the above contribute to the decline in the number of participating children over the follow-up period.

The Hearth program was first introduced in Guinea by Africare in the prefecture of Dabola. Its remarkable success led to the adoption of this program as a national strategy for rehabilitation of malnourished children. Many organizations are now supporting a Hearth program in the country and participate in regular country meetings on the subject.

These nutrition components are integrated into a comprehensive food security framework that also includes the elements of food availability and access. There is great value in this linkage and the information on the nutritional status of children available from the CBIS. The data on the dire nutritional status of children in the areas where Africare intervenes is a factor impelling communities to take action to improve their food security situation. Information from the nutrition and health education component provides them with guidance on how this can be done. Just as importantly, the agricultural productivity activities are geared to provide increased availability and access to foods on a year round basis as well as increasing the availability of food that are more nutritious. This synergy is a significant factor in the success of Africare activities.

## **C. How to Use the FSCCI and other Empowerment/Capacity Building Indicators with the Community**

### **I. Measuring the Capacity Building S.O.**

The FSCCI has grown out of the experience of Africare DAPS in implementing the capacity building process. It is easier to come up with a system to monitor capacity building in the community and beneficiary groups once you have already started working with them on food security and nutrition issues. This section discusses first the process that has led to the development of the FSCCI including the concepts and approaches that underlie it. Then the FSCCI is presented and discussed.

In preparing their Community Action Plans, communities will work on developing a vision for the future and identifying the roles that various people will play. They will also identify where they see their strengths to be and the areas in which they feel they need to develop more skills. This is a good time to engage the population in a discussion of what the best indicators for empowerment or capacity building might be.

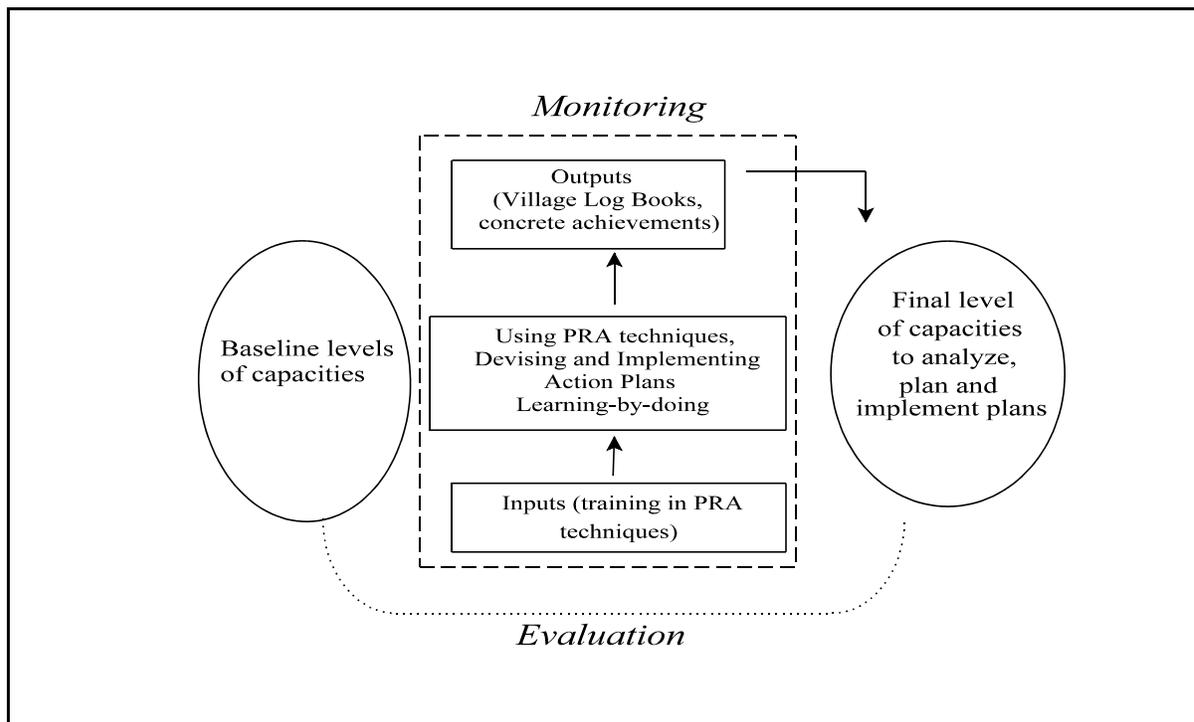
The task of DAP staff at this point is to guide the villagers in thinking about social organization and their capacity to mobilize around collective concerns. You will, in particular,

- encourage the broad participation of community members in this process
- help the community to use (or develop) appropriate PRA tools
- assist in organizing information so that it will be useful for assessing changes in capacity

The principal empowerment objective of these DAPs is to develop the community's capacity to

implement a Community Action Plan that will improve their food and nutrition security. The participatory approach is adopted as the most likely mechanism to achieve this objective, i.e. the ends are increased capacity while the means is participation. This capacity building objective will be subject to monitoring and evaluation in the same way as the food security and nutrition objectives. Impact, then, will be measured in terms of the ends, which is to say: the capacity building objective. In addition, however, throughout the DAP, you will monitor the effectiveness of the participatory approach as a means to achieving this objective. You will probably be able to see interim impacts in the early villages as these villages will begin acting more independently and showing signs of increased capacity well before the end of the DAP.

**Fig. 8.1 Links Between Participation and Capacity Building in the DAP**



**Elements of the FSCCI.** The DAP team and the villagers themselves will need to find ways to evaluate changes in the village’s capacity to analyze their situation, and to elaborate and implement an Action Plan to improve their food and nutrition situation. They will also want to assess the community’s interest and ability to continue its efforts beyond the end of the DAP. In the table below, we describe elements of capacity building (to be adapted according to need) that may be used in discussions with the local population to identify locally appropriate indicators of capacity building and empowerment.

**Table 8.3 Evaluating the DAP's Capacity Building Objective in Participating Communities**

<i>Capacity Building Objective</i>		<i>Develop the long term capacity of local populations to elaborate and implement Community Action Plans in order to improve their food security and nutrition situation</i>	
<b>Intermediate Result</b>	<b>Indicator</b>	<b>Measures</b>	<b>Questions that the indicator should be able to answer</b>
Capacity to analyze the situation	Ability to effectively carry out PRAs	<ul style="list-style-type: none"> <li>C How often PRA is used</li> <li>C Ability to adapt the tools to their uses</li> <li>C Evidence that community is using the method independent of outsiders</li> <li>C Use of the method to address other issues (besides food security)</li> </ul>	<p>Are the villagers using the tools?</p> <p>Do they understand both the tools and the methodological principles?</p> <p>Do they feel ownership over the process?</p> <p>Can they use the method without an outside facilitator?</p>
	Ability to explain their situation	<ul style="list-style-type: none"> <li>C Ability of listeners to understand the conclusions of the study when presented in feedback or planning sessions</li> <li>C Participants' satisfaction with the way information is presented</li> </ul>	<p>Are the villagers who present the information clearly understood both by other villagers and by outsiders with whom they discuss the proceedings?</p> <p>Is the material presented complete and accurate?</p>
	Capacity to identify solutions that are both equitable and realistic	<ul style="list-style-type: none"> <li>C The solutions selected address (in whole or part) the needs of food insecure families</li> <li>C The solutions focus on problems of women and children</li> <li>C The solutions can be at least partly achieved over the course of the DAP</li> </ul>	<p>Have the concerns of diverse sectors of the population been taken into consideration?</p> <p>Can the solutions proposed be achieved in a reasonable time frame?</p> <p>Are the villagers able to identify some solutions that they can implement using their own resources?</p>
Capacity to put the Action Plans into effect	Capacity to mobilize needed resources	<ul style="list-style-type: none"> <li>C Community mobilization</li> <li>C Negotiation to obtain resources</li> <li>C Communication with outsiders</li> </ul>	<p>Has the community been able to mobilize to implement the activities they agree to implement?</p> <p>Is the food security and nutrition committee capable of negotiating for resources?</p> <p>Is the community in contact or able to make contact with outside agencies and authorities to involve them in their plan?</p>

Intermediate Result	Indicator	Measures	Questions that the indicator should be able to answer
	Capacity to implement the action plan	<ul style="list-style-type: none"> <li>C Skills needed to carry out the plan</li> <li>C Resources needed to carry out the plan</li> <li>C Effective resource management</li> <li>C Actual completion of some or all the activities outlined in the plan</li> </ul>	<p>Have the villagers identified all the skills needed to carry out their plan?</p> <p>Have they come up with a plan to develop any skills that they don't have (with the support of the DAP or other agencies)?</p> <p>Are they able to come up with the resources that are needed in a timely fashion?</p> <p>Are all the resources used managed competently and openly?</p> <p>Have any plans been fully implemented?</p>
	Capacity to monitor the Action Plan	<ul style="list-style-type: none"> <li>C An implementation calendar</li> <li>C A person or committee with clear responsibilities for implementation</li> <li>C Clear documentation of implementation in village logbooks, with information both on activity implementation and the food and nutrition situation</li> </ul>	<p>Is there a person (or persons) responsible for implementing the plan?</p> <p>Have the villagers developed tools to monitor and document activities that are part of the plan?</p> <p>Are the people or agencies that are supposed to be carrying out work actually doing so?</p>
Community commitment to continue developing Action Plans	Community organization to develop and follow-up Action Plans over the longer term	<ul style="list-style-type: none"> <li>C A village structure with clear responsibilities for action planning</li> <li>C Clear roles for all members of this structure</li> <li>C Responsible people feel confident in their abilities to carry out their tasks</li> <li>C System in place to attract new people, pass on responsibilities, and share knowledge</li> </ul>	<p>Is the community well enough organized so that it will be able to continue to work on FS&amp;N oriented Action Plans?</p> <p>Are the plans generating enough benefits so that people consider their participation in the process worthwhile?</p> <p>What benefits are people getting?</p> <p>Does the community at large understand the objectives of action planning and the structure that has been put in place to carry it out?</p> <p>Can members of the community easily become involved in the process?</p>

Over the five year period from 1999-2003, the FFD unit and the staff of the various DAPs worked with these indicators and have grouped them under broader variables. Overtime, the

FSCCI was developed as a means of measuring the results of the entire process. There is broad consensus on eight variables that are used to measure capacity building. Table 8.4 is an example of a typical FSCCI based upon a composite of FSCCI used in Africare DAPs. The FSCCI in all Africare DAPs (with the exception of Burkina Faso) now include the same eight variables as those shown in Table 8.4. There is a variation in the indicators used to measure the variables, however, and differences in the total number of variables, for example Chad has 33 indicators while Uganda has 27. As can be seen, each indicator is measured on a scale of zero to five. The baseline value and targets are established as percentages calculated by taking the total achieved and dividing it by the maximum value possible. As an example, in the Uganda case, at the baseline for UFSI 2 the average level achieved was 27. When divided by 135 this resulted in an initial level of 20%. By comparing the percentage improvements between programs, Africare can determine how the different DAPs are doing in relative terms and measure the achievements in capacity building at the level of the S.O.

An example of a specific FSCCI is that used by the Ouaddai Food Security Initiative in Chad. It can be found in Annex 4 to the *Local Capacity Building in Title II Food Security Projects: A Framework*, by Suzanne Gervais included in the Annexes to this manual (Tab 12).

**Table 8.4 AFRICARE FOOD SECURITY COMMUNITY CAPACITY INDEX FORM (Example)**

<b>Capacity Building Variable</b>	<b>Indicators</b>	<b>Nil 0</b>	<b>Poor 1</b>	<b>Fair 2</b>	<b>O.K. 3</b>	<b>Good 4</b>	<b>Very Good 5</b>	<b>Note</b>	<b>Observations</b>
Community Organization	Growth in the number of organization, groups in the community								
	Meeting Frequency								
	Existence of a written or oral record of meeting proceedings								
	Documentation of Activities								
Participation	Participation in Decision Making								
	Turn-over in Leadership								
	Percentage of village members present during meetings/general assemblies?								
	Gender Equity								
Transparency of Management	Openness on how the business is carried out								
Good internal functioning of the community or organization	Definition of Roles								
	Understanding of the association rules by members								
	Formalized organizational structures								
	Capacity to Manage Conflict								
	Timeliness of debt payment								
Capacity to analyze and plan	Capacity to use RRA and PRA techniques								
	Capacity to analyze needs								
	Ability to explain a situation								
	Capacity to analyze situations, prioritize problems and develop solutions								

<b>Capacity Building Variable</b>	<b>Indicators</b>	<b>Nil 0</b>	<b>Poor 1</b>	<b>Fair 2</b>	<b>O.K. 3</b>	<b>Good 4</b>	<b>Very Good 5</b>	<b>Note</b>	<b>Observations</b>
Capacity to take action	Ability to elaborate plans of action, implement and evaluation them								
	Capacity to Negotiate for External Resources								
Communication and exchanges with outsiders	Exchanges with outsiders								
Individual Capacity	% of persons that know how to read and write								
	Presence of local expertise								
	Application of learned technologies in the group/village								
<b>TOTAL</b>								<b>..../120</b>	

While this innovative index is proving very valuable in guiding the process of community capacity building, it is recognized that there is much room for improving the tool and enhancing its utility. For example, it would be helpful to know if some variables or indicators are more closely correlated with improvements in the MAHFP than others. Also, measures need to be taken to enhance the use of the tool as a means of aggregating achievements across DAPs.

An initial step was to ask the DAP teams to prepare analyses of their experience with the index and also to prepare rankings for the conditions needed to achieve the different levels of scores on the index. These analyses were used to prepare the composite index and the *Suggested Ranking Form for Each Indicator on the FSCCI* that is included as Appendix I to this module (pages 8.30 – 8.36). It is intended to carry out further exercises with the various DAP teams at workshops and training sessions to further refine this tool. The goal is to develop an index that can be used across all the DAPs that is essentially uniform. The rankings form is expected to serve several purposes. It will not only assure more uniformity in measurement but it can also be used to train staff in the conditions that they are working towards in developing community capacity. Finally, it can be used as a self-assessment tool for communities as is discussed in the Star Ranking exercise below.

It is recognized that there will always need to be provision for differences in local conditions within the FSCCI. In particular, some of the indicators, for example, “turn-over in leadership” may not be applicable to certain situations. In addition, the details of the rankings may also need to be modified to adapt to local customs.

## **2. Measuring Capacity Building Intermediate Results**

In addition to the overall objective of capacity building that focuses on the Community Action Plan, the village will probably identify several capacity building I.R.s and sub-I.R. that they consider important in terms of implementing specific activities in their Action Plan. Whether the DAP can respond to all these requests will depend on its resources and strategic decisions about where those resources will be best invested. In one case, for example, an activity may decide to support functional literacy programs, in another it may support management training or the maintenance and repair of milling or pumping technologies. Each activity in the Community Action Plan should specify whether there any capacity building needs associated with its implementation.

Both the villagers and the DAP team will then need to identify tools that will allow them to judge whether they are making progress toward their objectives or whether they have been achieved. These tools will be part of the monitoring and evaluation system. They will include both indicators of progress toward the overall capacity building S.O. that will be integrated into the FSCCI and also more focused indicators that deal with the I.R. for specific activities.

The following sequence is proposed to identify relevant indicators for the capacity building I.R.s. It should, of course, be adapted as needed and may either be integrated into the larger PRA process or carried out as an independent series of activities.

The objective of this exercise is to identify, with the communities:

- the skills they need to implement their Action Plan and improve their food security and nutrition status
- the level of skill they already have in these areas
- the areas where they need to improve their capacity
- the level of expertise that, realistically, they think they can develop during the life of the DAP
- indicators that can be used to assess their progress in developing these skills

One way to proceed is as follows:

1. The villagers come up with their vision of what they would like their food security and nutrition situation to be like at the end of the DAP. This should be one of the early activities in the PRA so that the Action Plan is developed with this vision clearly in mind.
2. The villagers systematically go through each of the activities proposed in the Action Plan and identify the skills and human resources needed to carry them out effectively. At this point they should note the different roles to be filled, the tasks to be carried out, and the skills needed to carry out these tasks. If there are too many items, they should be grouped together around similar themes and, at this stage, it is not necessary to go into great detail.

At this point, the discussion should be generally around roles, tasks, and skills and not about particular individuals. This will encourage a more open and honest discussion. It will also make it more likely that people who do not currently hold leadership positions in the village will eventually be drawn in to fill some of these roles.

3. The next step will be to inventory the skills of villagers (for example: how many people know how to read and write; how many have masonry skills, are mechanics, are village spokespersons, etc.).

This discussion will help to focus attention on priority capacity building needs and how these might be attained. The information can be recorded on a table such as the one below.

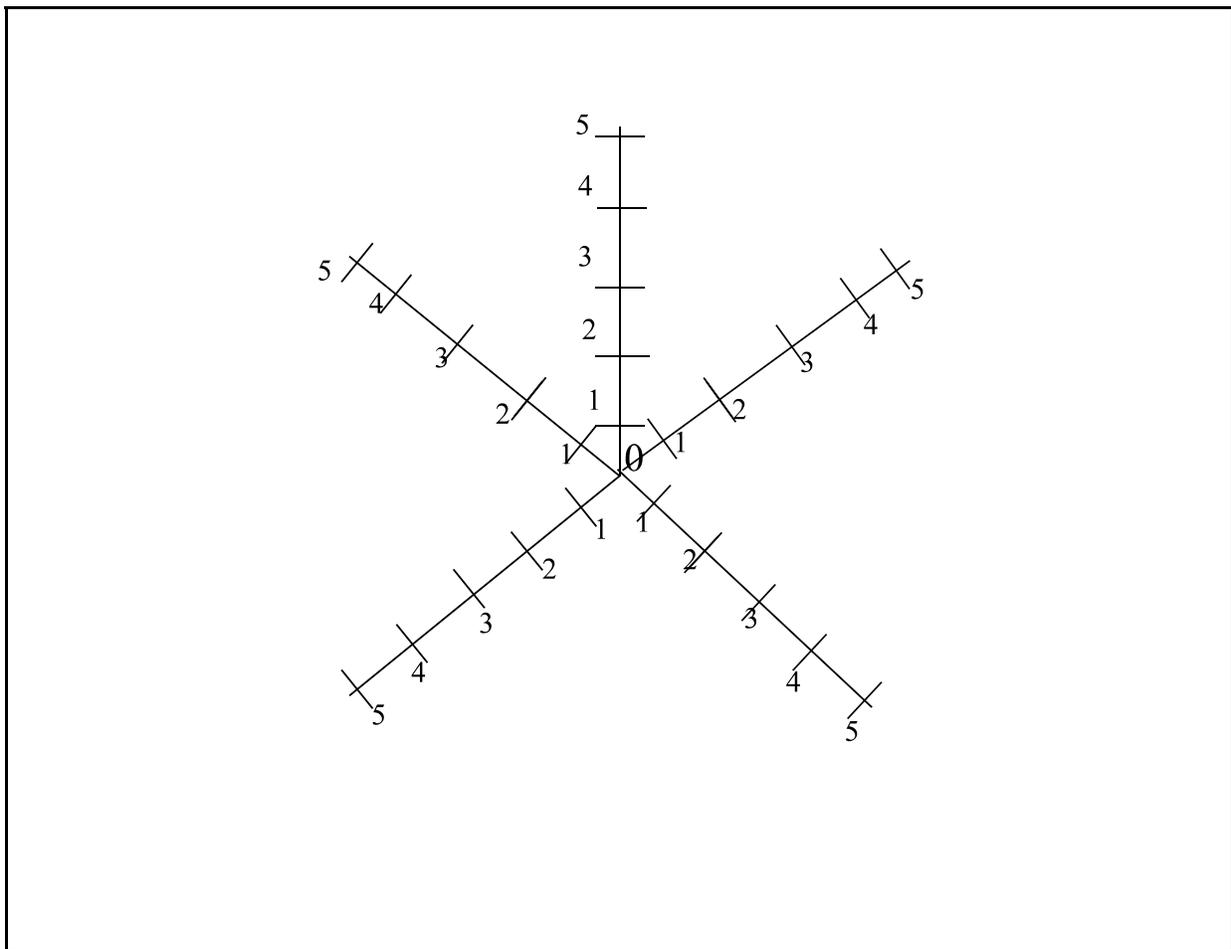
**Table 8.5 Roles, Tasks and Skills Needed to Implement the Community Action Plan**

Activity or Action	Role to be Filled	Tasks to Accomplish	Skills Needed	Existing Skills	Skills to be trained

Once the activities and capacity building needs have been laid out, they may draw on a star figure such as the one below. Each capacity building I.R. will be represented on a point of the star. The arm leading to this sub-objective can then be divided into five gradations showing progress toward this objective. Level 5 is the goal to be reached by the end of the DAP. These

levels are rankings similar to those of the FSCCI example in Appendix 1.

Fig. 8.2 Star figure



5. The next step is to identify indicators that will permit you (and the villagers) to measure progress toward the objective. You might, for example, identify characteristics of a village, group, or person who had made progress in meeting the objective.

These characteristics should correspond with the five levels of progress noted on the star figure. The objective might be, for example, to increase the skills of villagers to market their produce. Level 1 might be the frequent absence of products on the market, difficulties in predicting prices, and the absence of any coordination among producers and/or sellers. Level 3 might be characterized by the presence of one or more producer groups and by regular meetings during the cropping season. Level 5 then represents the level that the village expects, realistically, that it may attain by the end of the DAP. At this level, the producers and sellers might be expected to meet at least five times a year to plan and evaluate their activities using PRA techniques, have identified a working transport

system, and publicize their products on the radio at least twice a year.

The villagers will then place themselves on the scale according to their own assessment of their skills. Then, at various times throughout the DAP, the village can use this tool to check whether they have advanced to a new level and to record this on the star. By connecting the points that they have achieved, the village can get a quick picture at any point in time of where they are in relation to the objectives they have set for themselves.

For its part, the DAP staff may want to monitor the capacity building objective using a table that includes more information. The table below suggests a mechanism for recording this information:

**Table 8.6 Monitoring Plan for Village Level Capacity Building**

Activities and Roles	Intermediate Result	Current Skill Level	DAP Inputs to Developing Skill	Indicators	Results

If you wish to track many indicators, the star figure becomes unwieldy. In such a case you might use several stars, each one representing a group of indicators.

#### **D. How to Develop a Monitoring and Evaluation System**

**The Choice of Indicators.** As shown in Module 5, a monitoring and evaluation system consists of baseline information, monitoring of inputs, outputs, and results, and various evaluations of the impact of DAP activities on the population and living conditions.

As you create or adapt your monitoring and evaluation system, put yourselves in the shoes of someone who wants answers to the following questions:

- What is the purpose of this DAP and what is it trying to change? (baseline information)
- How is the DAP working? (Inputs, activities, outputs)
- What is being accomplished? (Results, impacts)

This person will also be curious to know whether the DAP is being carried in the most effective way or whether there are suggestions for how it might be improved.

Begin by pulling together any of the following materials that you can lay your hands on:

1. The DAP with the initial IPPT and the Results Reports (if any)
2. The most up-to-date version of the food security framework
3. The strategic framework for the DAP
4. A list of any indicators that have been identified by the communities (indicators of food insecurity, capacity building, various impacts, etc.)

5. A list of potential DAP activities
6. A list of anticipated inputs and outputs
7. The Table of information Users and their Needs
8. The Matrix of Information Properties and Indicators
9. Information about indicators used by other DAPs that might inspire your own thinking

Using the DAP, the food security framework, and the strategic framework (with which you are already familiar), begin by pulling out the S.O.s, I.R.s, and any sub-I.R.s as well as the expected results and impacts (see table that follows).

Next identify all the activities that will be part of the DAP. These will have been selected based on information from the baseline studies (the initial RRAs and other work) and from discussions among team members, including Africare/W staff as they review information from various studies. Each activity will be associated with at least one DAP I.R. and each of these I.R.s will, in turn, be associated with a result or impact that is expected from the DAP. Each activity should also be accompanied by a notation of the inputs necessary for its implementation, the outputs that will be produced, and the results that are expected. All of this information should be clearly recorded in brief, shorthand entries.

**Table 8.7 Useful information for Choosing Monitoring and Evaluation Indicators**

Intermediate Result	Activity	Input	Output	Result	Impact
Increase revenues	Increase employability with literacy training	Trainers Building Manuals Lodging Food	Participants Training sessions New manuals	Participant skills in reading and writing instructions	Increased employment  Increased revenues

In the next step, the team will come up with indicators for each input, output, result, and impact. You will decide what needs to be observed or (as needed) quantified in order to assess the changes that are occurring. Be sure that any indicators selected meet the criteria described earlier in Module 5.

#### Input and Output Indicators

Indicators of inputs and outputs generally use the number of things or people involved (e.g. tons of bricks, number of garden plots, number of people receiving credit).

#### Results Indicators

Results indicators show what the activity accomplished. In other words, they should allow us to judge whether the activity was a success or a failure. They don't necessarily have to consider the baseline situation.

#### Impact Indicators

Impact indicators report on changes that have taken place relative to the baseline. The Indicator

Table (Table 8.8) divides impacts into three categories: (1) activity related impacts, (2) impact on the food security and nutrition situation, and (3) impact on capacity building.

Activity related impacts are associated with particular development interventions that are carried out by the DAP. Your DAP might be involved with food processing, or road and irrigation construction, or training health workers. While all of these activities are (as noted in the food security framework) very much oriented toward improving food security and nutrition, you will also want to measure changes that are specifically related to this intervention.

The column “food security and nutrition impacts” includes those indicators that are directly related to the FS & N situation, whether improving access or availability of food stuffs, improving consumption patterns, increasing the quality of care, access and availability of health care, and improving sanitation. This column will also contain indicators of food insecurity and nutritional status.

Indicators of capacity building will be listed under their own column. We suggest making this a separate column in order to enhance the visibility of this issue and to ensure that you have enough viable indicators to assess progress toward this DAP objective. Indicators in this column may measure the progress of an individual, a group of people, or the community as a whole.

Be especially careful to distinguish between outputs and results and impacts when looking at capacity-building. The number of people or committees trained is really an output, for example, because it does not tell the information user whether the training resulted in any increase in capacity to make decision or to act. All we can say is that so many people were trained. The number of sessions organized by these trainees to share the information they gained would be an example of an indicator that shows that the training had a beneficial result. Impacts are always related to the overall DAP objectives, whereas results are related to the activities themselves. They should reflect the effects of these activities and not just the “product” that comes out at the end.

This exercise will result in a table that starts to look like the food security framework for the DAP. In fact, the indicators’ table may help you to adjust the food security framework, if needed.

Having gotten this far, you are now at the point where you can take this mass of information and prioritize it to come up with a final list of the indicators that you will actually use and the information that will need to be gathered. This prioritization will take into consideration:

- the needs of the information users
- DAP resources
- the conditions required by the indicators to get useful information

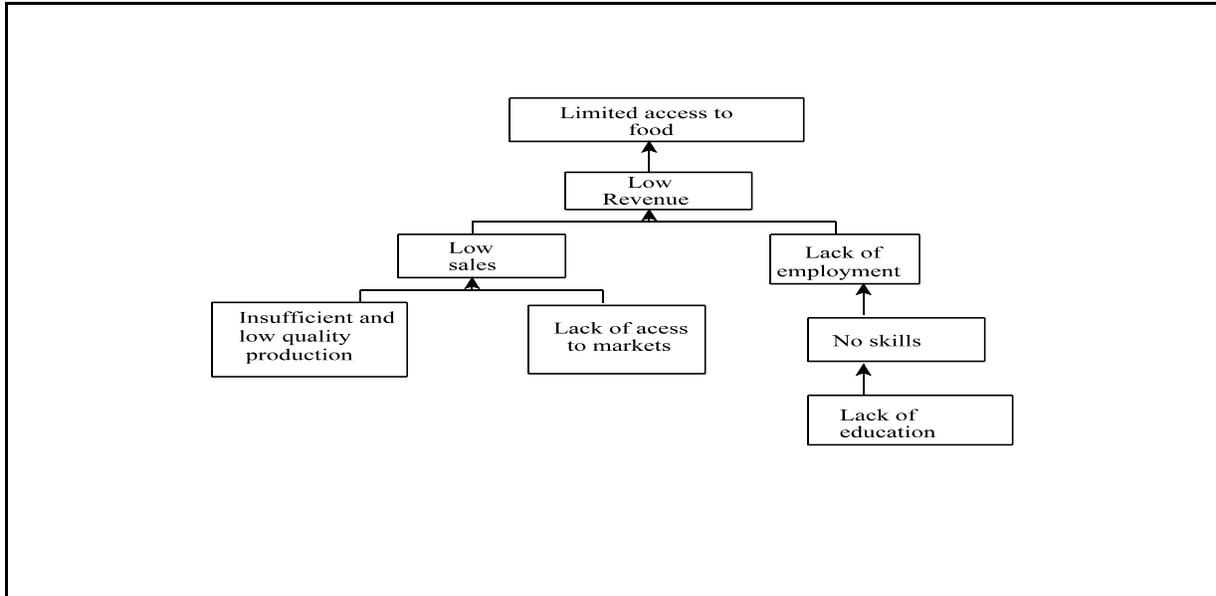
At this point this is probably sounding like a daunting process. It becomes manageable when it is carried out systematically, one step at a time.

You should be able to complete the Table that goes from DAP objectives to impacts in a few well organized working meetings. The process is illustrated in the following example.

### **Example of the Process Used to Identify Indicators for Monitoring and Evaluation**

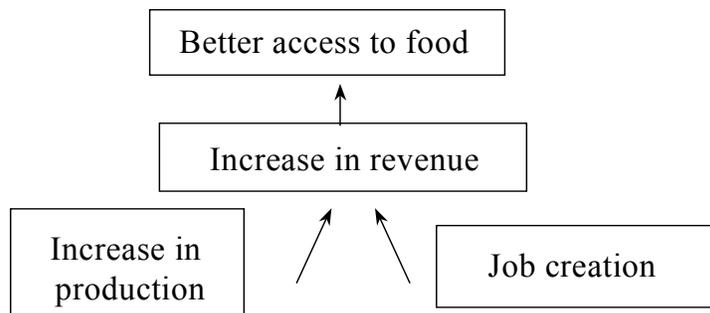
The food security framework summarizes all the information that the DAP has about food security and nutrition problems in the zone.

**Figure 8.3: Abstract of Food Security Framework**



DAP activities are planned in light of information that is gathered in the initial RRAs and while preparing the DAP. These activities will correspond with the causes of food and nutrition insecurity as laid out in the food security framework (above). In order to implement these activities, certain inputs are required. All of this information can be incorporated into an enhanced version of the food security framework (below).

Figure 8.4 Activities of the DAP



**Inputs :**

- *Increase in agricultural inputs*
- *small credit*
- *water and soil conservation*

**Inputs :**

- *training in micro-enterprise management*
- *literacy training*

In this example, in order to achieve the Strategic Objective of Enhancing Agricultural Productivity, there are two I.R.: to increase agricultural production and to create off-farm (micro-enterprise) employment in order to augment revenues. These revenues will, in turn, increase villagers' access to food. The sub-I.R.s of the DAP are to:

- increase literacy
- train the villagers in the small enterprise management
- facilitate access to micro-credit
- train farmers in the use of appropriate agricultural technologies and the efficient use of inputs

The DAP plans to invest certain inputs and expects certain outputs to follow. The DAP monitoring system is concerned with the process by which inputs are transformed into outputs and results. Impacts related to the DAP objectives and sub-objectives are also hoped for. All of these concerns: objectives, sub-objectives, activities, inputs, outputs, results, and impacts are summarized in one table. The impacts are grouped into those that are activity related, those that directly concern the FS & N situation, and those that focus on capacity building.

**Table 8.8 Model table Summarizing M&E indicators for the DAP**

Objective	Activity	Input Indicator	Output Indicator	Results Indicator	Activity Related Indicator	FS & N Indicator	Capacity Building Indicator
Improve the FS & N situation						<p>Increase the number of daily meals</p> <p>Decrease the hungry season of 50% of households by 2 months</p> <p>Number of households moving from "vulnerable" category to "food secure" category using village criteria</p>	
Increase skills in situational analysis and action plan development							<p>Number of FS &amp; N committees that have developed their own FS &amp; N action plans</p> <p>Number of committees that have carried out PRA activities independent of the DAP</p> <p>Number of new committees trained to carry out action plans at their own request</p>

Objective	Activity	Input Indicator	Output Indicator	Results Indicator	Activity Related Indicator	FS & N Indicator	Capacity Building Indicator
Sub-Objectives							
Increase revenue by increasing production and sales	<p>Promote use of agricultural inputs</p> <p>Micro-Credit for small producers</p> <p>Make agricultural inputs available</p> <p>Train farmers in fertilizer user and seed selection</p> <p>Train farmers in compost production</p>	<p>1000 kg of improved seeds made available</p> <p>NPK and urea available throughout the zone</p> <p>\$100,000 available for micro-credit</p> <p>12 training sessions</p>	<p>X hectares seeded</p> <p>X households participate in activities</p> <p>200 loans issued</p> <p>720 farmers trained</p> <p>90% of credits reimbursed</p>	<p>400 farmers using improved seeds</p> <p>620 farmers using NP and urea</p> <p>Return of X % on credit issued first year</p>	Millet yields increase 40%	Revenues on sale of cereals increase by X% (or absolute amount)	<p>Number of farmers who have renewed their own cereal seeds over several consecutive years</p> <p>Number of farmers regularly making their own compost</p>
	<p>Soil and Water Conservation</p> <p>Construction of water filtration dikes</p> <p>Live hedges</p>	<p>Number of trees planted in woodlots</p> <p>Number of hours truck is available</p>	<p>90,000 acacias planted</p> <p>500 km of dikes constructed</p>	<p>20% of fields are protected by dikes</p> <p>200 additional hectares under cultivation</p>	<p>Production increases 40% over previous year</p> <p>Water availability increases by 3 months</p>	Reduction in incidence of childhood diarrheal disease due to improved access to water	<p>Number of villagers who have created their own dikes as a result of the DAP</p> <p>Number of kms of dikes constructed independent of DAP activities</p>

Objective	Activity	Input Indicator	Output Indicator	Results Indicator	Activity Related Indicator	FS & N Indicator	Capacity Building Indicator
Increase revenue due to greater employment	Literacy training	No of levels offered No of sessions offered Number of people mobilized to do training Materials used Number of Centers built	Number of participants at training Profile of participants	Number of participants who know how to read and write according to the criteria for that level Number of participants who can read the instructions on agricultural products	Number of literate people who begin to train others Increase in the demand for written materials	Increase in the number of children participating in growth monitoring since health agents can record info more quickly and mothers have to wait less	Newly literate people taking more leadership initiative in the community
	Training in micro-enterprise management	Costs to prepare the training modules Cost of logistical support People employed to do training Number of sessions offered	Number of participants Profile of participants	Number of participants able to maintain a notebook of basic accounts Number of new enterprises created 10% increase in profits of participating enterprises (reduction in losses)	Number of independent enterprises Increase in the demand for training	Increase in the availability of flour on the market Reduction in the amount of time women spend on domestic tasks Reduction in loss of revenue due to improved bookkeeping	Organization of a business network for micro-enterprise owners in order to increase their bargaining power

## Appendix 1

### SUGGESTED RANKINGS FOR EACH INDICATOR OF AFRICARE FOOD SECURITY COMMUNITY CAPACITY INDEX

Prepared by Ange Tingbo and Judy Bryson

(Note: There are 8 variables, 24 indicators, and a maximum score of 120 achievable by a community/group)

#### VARIABLE 1: COMMUNITY ORGANIZATION

##### Indicators

##### (a) Growth in the number of groups/organizations in the community

0. There are no group/organization present in the village/community
1. Nascent group/organization present, even if embryonic
2. Existence of 1 or 2 functional groups/organizations
3. Existence of 3 groups/organizations, two of which are functional
4. Existence of 4 functional groups/organizations
5. Existence of at least 5 functional groups/organizations

##### (b) Meetings Frequency

0. Group/Organization members never meet at all
1. Group/Organization meets once a year or once a semester
2. Group/Organization meets every 2 or 3 months on specific agenda
3. Group/Organization meets once a month on specific agenda
4. Group/Organization meets twice a month on specific agenda
5. All the scheduled meetings are agreed upon by the members are always held.

##### (c) Existence of a written or oral record of the meeting proceedings

0. No record/Minutes of meetings held
1. A few proceedings verbally/orally disseminated in an informal manner
2. Proceedings verbally disseminated in a formal manner
3. Proceedings are recorded in written form but not so well handled or kept
4. Proceedings are recorded/written but some are misplaced or skipped
5. Excellent written and kept/archived records of proceedings

##### (d) Documentation of activities

0. No form of documentation of activities done by the group
1. A few activities are documented but not properly recorded or written
2. Activity records made but a few skipped or misplaced
3. Activities are documented along with financial records, but with external help for perfection

4. Financial and activities are well documented, but documentation are with different people
5. All group activities are well documented and archived in one place

## **VARIABLE 2: PARTICIPATION**

### **Indicators**

#### **(a) Participation in decision-making**

0. Decisions are made and arrived at by one person or a few members without informing the group/organization
1. The person or small group making the decision notifies the group/organization
2. The person or small group making the decision consults with the group/organization
3. There is fairly broad participation of members in meetings but decisions are arrived at by influential members without consensus
4. There is fairly broad participation of members and decisions are not made only by influential people.
5. All members fully and democratically participate in decision-making concerning the group/organization.

#### **(b) Turn-over in leadership**

0. Leadership committee has never changed
1. Elected leadership still exists since inception with group/village's consent.
2. Group pleased with the current leadership in spite of more than 5 years in office
3. Only one leadership change in 4 years
4. Only one leadership change in 3 years
5. Leadership in place as per provisions in the by-laws.

#### **(c) Percentage of village members present during meetings/general assembly**

0. No general assembly ever held by the group/village/organization
1. 5% of members participate in the general assembly/meetings
2. 10% of members participate in the general assembly/meetings
3. 30% of members participate in the general assembly/meetings
4. 50% of members participate in the general assembly/meetings
5. More than 60% of members participate in the general assembly/meetings

#### **(d) Gender Equity**

0. No women accepted/represented on any committees
1. Both genders are represented by there is dominance in discussions by one gender and suppression of the other during discussions.
2. All members have opportunity to communicate but the majority of those speaking are always from one specific gender.
3. Equal opportunity availed for each gender to communicate. But this is only after facilitators highlight imbalances
4. There is free interaction and communication from any member of the group.

5. Women represent at least 25% of leadership and all women participate actively

### **VARIABLE 3: TRANSPARENCY OF MANAGEMENT**

#### **Indicators**

##### **(a) Openness in how business is carried out**

0. Running of affairs / activities is non-transparent and carried out by only one individual or a very small group. Almost no knowledge of how business is run by majority of village members.
1. Some information on running of business is shared /known but by a few people only. This is restricted to a few committee members and not all transactions are known.
2. Most of the group/village members are informed of the business through verbal and informal discussions.
3. 50% of group/village members know about how business is run through information during scheduled meetings
4. 60% of group/village members know about how the group business/activities are planned and run through scheduled meetings.
5. 80% of group/village members know about how the group business/activities are planned and run through scheduled meetings. Documents and information are accessible to anyone.

### **VARIABLE 4: GOOD INTERNAL FUNCTIONING**

#### **Indicators**

##### **(a) Definition of Roles**

0. No defined roles. No one knows his/her role or the roles of others
1. Roles exist but are not very clear to either committee members or the other members of the group/village
2. Roles exist and defined but not respected
3. 40% of committee members understand and execute their roles
4. 100% of the committee members understand and execute their roles
5. Conditions as in 4. plus 90% of village understand the member's roles

##### **(b) Understanding of the association rules by members**

0. Inexistence of rules or by-laws
1. Rules/by-laws exist but nobody adhered to or respected them
2. Rules/by-laws exist but respected just by 2 or 3 people
3. Rules exist, known by most people but respected by a few people
4. More than 50% of members know and respect the rules/by-laws
5. Rules/by-laws exist, known by all group members and respected all members

##### **(c) Formalized organizational structures**

0. No organizational structure for the group. It exists in name only

1. Organizational structure for the group exists but not laid out in any statutes or by-laws.
2. Organization structure exists, formally laid out but needs streamlining and re-organizing
3. Well organized, formalized and functioning organizational structure
4. Organization structure exists, formalized but not known by 50% of villagers
5. Well organized, formalized and functioning organizational structure with local authorities recognition.

**(d) Capacity to Manage conflicts**

0. Never manage / resolve emerging conflicts or disagreements within the group members
  1. Existence of elders who can or have resolved emerging or open conflicts
  2. A few cases of conflicts are resolved by the group members but others are pending or deferred indefinitely
  3. Conflicts are resolved but after external mitigation e.g., by village traditional mitigation structure, Africare staff, etc.
  4. Conflicts are resolved, but are often delayed, or until general assembly takes a ruling
  5. The group members themselves immediately resolved amicably any conflicts that emerge.

**(e) Timeliness of debt payment (e.g. for inputs, seeds, credit, etc.)**

0. Never paid debts at all
  1. Paid back a portion of the debt
  2. Paid debts back but after harsh external enforcement
  3. Paid back the debt but with difficulty and in small staggered and unspecified amounts
  4. Debts Paid but always delayed
  5. Group pays its debts immediately according to repayment schedule

**VARIABLE 5: CAPACITY TO ANALYZE AND PLAN**

**Indicators**

**(a) Capacity to use RRA and PRA techniques ( e.g. Food security calendars, action plans, Resource maps)**

0. The group doesn't know any of the RRA and PRA techniques
1. The group can list some RRA and PRA techniques, but does not use them
2. The group can use some RRA and PRA techniques with external assistance but has no or little understanding of the process
3. The group uses at least 1 RRA/PRA technique
4. The group uses at least 2 RRA/PRA technique
5. The group knows many RRA/PRA tools and uses at least 3

**(b) Capacity to analyze needs**

0. Don't know their needs as a group
1. Little knowledge about their needs
2. Able to list their needs but only in broad and not specific terms

5. Ability to analyze their needs is still lacking and group needs much outside assistance
4. The group can assess its needs but forgets some important details
5. Group understands their needs well and presents precise and specific needs

**(c) Ability to explain a situation**

0. Total failure or inability of the group to explain their current situation
1. Explains the situation with difficulty
2. Can explain elements of the situation but cannot to put ideas together in order
3. Often guided by external people /facilitators before explaining their situation
4. Good at explaining their situation, with minimum support
5. Can explicitly explains the group's situation

**(d) Capacity to analyze situations, prioritize problems and develop solutions**

0. Group has no concept of this type of process
1. Group is aware of this type of exercise, but cannot analyze situations, prioritize problems or develop solutions
2. The group can only assess their present situation but finds difficult in prioritizing problems and/or developing solutions
3. The group can assess their present situation, prioritizing problems but always need strong external support from outside in developing solutions.
4. The group can assess their present situation, prioritizing problems and initiates some tasks/activities as a way of creating solutions.
5. The group can perfectly analyze their present situation, prioritizing problems and does many activities as a way of creating solutions

**VARIABLE 6: CAPACITY TO TAKE ACTION**

**Indicators**

**(a) Ability to elaborate plans of action, implement and evaluate them**

0. The group doesn't have action plans
1. The group has action plans but cannot elaborate/explain plans, implement and/or evaluate them
2. The group has an action plan(s) but only 25% of the plan(s) has/have been executed
3. The group has an action plan(s), and 50% of the plan(s) has/have been executed
4. The group has an action plan(s) and 80% of the plan(s) has/have been executed
5. The group can perfectly elaborate/explain plans of action, implement or and evaluate them and 100% of them have been executed.

**( b ) Capacity to negotiate for external resources**

0. No form / idea of negotiation for external resources exist within the group
1. Group has developed an idea or seeking or negotiating for eternal resources but no

- action taken
2. Group has already set up a task force for negotiating for external resources, the specific sources of resources are known but only informal contacts made so far.
  3. Group has developed one project from the action plan and has submitted to outside partners for funding
  4. Group has developed 2 projects from the plan of action and funding obtained for at least one
  5. Good linkage with external resources. The group is benefitting from self initiated and negotiated external resources.

## **VARIABLE 7: COMMUNICATION AND EXCHANGES WITH OUTSIDERS**

### **Indicators**

#### **(a) Exchanges with outsiders**

0. Unable to speak to outsiders about themselves and what they do
1. Rarely speak to outsiders about themselves and what they do
2. Often speaks to outsiders about themselves and what they do but with reservations unless with the presence of a facilitator.
3. Can speak to outsiders and have visited another group once to share what they do.
4. Can speak to outsiders and visit and invite other groups to share what they do.
5. Perfectly and explicitly communicate and exchange information with outsiders by most members of the group.

## **VARIABLE 8: INDIVIDUAL CAPACITY**

### **Indicators**

#### **(a) % of persons that know how to read and write**

0. No adult is literate in the group
1. One to three persons in the group can read and write and record keeping is weak/problematic
2. 5% of the adult population can read and write and keep record of the group activities
3. 10% of the adult population can read and write and keep record of the group activities
4. 20% of the adult population can read and write and keep record of the group activities
5. 30% of the adult population can read and write and keep accurate record of the group activities and individuals are present who can handle financial records.

#### **(b) Presence of Local Expertise**

0. No adult in the group has ever been trained
1. 1 to 2 persons in the group have received training in a skill needed by the group
2. 5% of adults in the group have some training in a skill area needed to carry out the

- activities
3. 10% of adults in the group have some training in a skill area needed to carry out the activities
  4. 25% of adults in the group have some training in a skill area needed to carry out the activities
  5. 50% of adults in the group have some training in a skill area needed to carry out the activities

**( c ) Application of learned technologies in the group/village**

0. No adoption or initiation of any practices or technologies by community members
1. 5% of community members have adopted or initiated a practice or technology
2. 25% of the members in the community adopted or initiated a practice or technology introduced in the group/village
3. 50% of community members have adopted or initiated any practice or technology introduced in the group/village
4. 75% of community members have adopted or initiated any practice or technology introduced in the group/village
5. All the participating members in the community have adopted or initiated one or all of the practices or technologies introduced in the group/village

\*\*\*\*\*

Local Capacity Building in  
Title II Food Security Projects:  
A Framework

September 20, 2003

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## ACRONYMS

ABCD	Assets Based Community Development
CB	Capacity Building
CS	Cooperating Sponsor
DAP	Development Activity Program
DCHA	USAID's Bureau for Democracy, Conflict and Humanitarian Assistance
FAM	Food Aid Management
FFP	USAID's Office of Food for Peace
FS	Food Security
FSC	Food Security Calendar
FY	Fiscal Year
IPTT	Indicator Performance Tracking Table
IR	Intermediate Result (from FFP strategic objective )
LOA	Life of Activity
LCB	Local Capacity Building
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organization
PVO	Private Voluntary Organization
USAID	United States Agency for International Development
WG	Working Group
UNDP	United Nations Development Programme

## Executive Summary

Although food security projects have always conducted capacity building activities in the field, they have scarcely been monitored, evaluated or documented, leading to a paucity of lessons learned and little understanding of best practices. The new strategic plan under development by USAID's Office of Food for Peace (FFP) for 2004-08 will give a higher priority to capacity building activities within projects. This initiative provides a hospitable environment and an incentive for Cooperating Sponsors (CSs) to more systematically conduct, monitor and evaluate capacity building activities within their projects.

This paper establishes a conceptual framework on local capacity building within food security (FS) projects. It is designed to provide Title II CSs with a basic reference tool for the design, implementation, monitoring and evaluation of their capacity building activities at the local level.

This framework builds on the USAID food security (FS) framework, in which food availability, access and utilization constitute the three pillars of food security. It focuses on the local level, and therefore accounts for all actors who work toward FS within a geographic community, such as a district, village or neighborhood. These actors include individuals, households, and associations, as well as the local leadership. Each plays a different and useful role in producing community food security. Community food security is the result of their combined activities and efforts.

The framework defines capacity as the ability to productively use one's assets base to protect and enhance one's food security. It further defines capacity building as a process by which actors increase their abilities to use their assets and enlarge their assets base, or at least maintain it. This applies at the community level as well, where the assets base is the pool of public goods, and its managers are the community's representative leaders. The assets the various actors use to protect and enhance their food security generally fall under some of the following categories: managerial, physical, environmental, human, technical, financial, economical, and social.

The local level capacities that protect and enhance food security as well as control risks and decrease households' vulnerability are divided into two broad types: **analytical and managerial capacities** and **general capacities**.

**Analytical and managerial capacities** enable populations and their leaders to discuss and reflect together on their concerns about food security; to assess the FS situation; to establish a FS action plan; to target, monitor and evaluate FS activities; to design ways to mitigate risks and decrease vulnerability; to advocate for FS; and to make other decisions that affect FS at different levels in the community.

**General capacities** include all other capacities. They are more directly associated with each FS pillar separately. They refer to those capacities needed: (1) to produce food and otherwise increase its availability, (2) to produce income, control food prices and

promote food accessibility, and (3) to adequately utilize food. In many cases, they materialize through capacity building activities that promote improved practices and behavioral changes at the individual and household levels.

Emphasizing capacity building in community food security projects has some implications for project design, implementation, monitoring and evaluation. It affects the nature of beneficiaries, the time at which beneficiaries should be involved in the project, the choice of project activities, and the sequence of their implementation.

Monitoring and evaluation of these projects should look at the increments of the assets base at all levels in the community, and at the increments of the different actors' abilities to use their assets base productively toward the protection and enhancement of their own food security, and that of the community as a whole.

Assessing the potential for sustainability of new capacities can include an examination of: (1) the autonomy of the beneficiaries' performance, (2) the availability of necessary resources over the medium term and the community's capacity to access them, and (3) the sense of participation, including community support of volunteers who provide services to protect and enhance their community's food security.

To globally assess a community's capacity to protect and enhance its food security, projects should consider the following:

1. The existence, functional level and potential for sustainability of public assets essential to food security;
2. The existence, functional level and potential for sustainability of a locally accepted and legitimate social structure that is responsible for managing public assets, food security and risk management plans;
3. The sense of community participation and the level of community support for food security activities, and for the leaders and volunteers of such activities;
4. The existence and value of food security action plans;
5. The existence and value of risk mitigation plans;
6. The existence, functional levels and potential for sustainability of local associations conducting activities which promote household food security;
7. The level of vulnerability of community members (relevant cut-off values and significant qualitative elements of this variable need to be developed with local communities and aligned with international norms, when they exist);
8. The level of resiliency of households;
9. Food availability at the community level (presence of food in market and household production);
10. Food accessibility at the community level (affordability and stability of food prices and food basket price relative to income); and
11. Food utilization at the community, household and intrahousehold levels (adequate practices in food handling, preparation and consumption at and within the household level, as well as in food stands and local restaurants).

## Introduction

Title II Cooperating Sponsors' projects have always emphasized building local capacities to enhance households' food security. In the past, these efforts were more often considered, monitored and documented as an important part of the process for achieving project results, but their outcomes and impacts were not evaluated. This was due to previous USAID/Food for Peace (FFP) requirements which did not consider capacity building as an acceptable "higher order" objective of Title II Food Security projects.

With the transfer of the Office of FFP to the Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA), capacity building activities are receiving renewed focus. The FFP Strategic Plan for 2004-2008 (currently under development) proposes as its strategic objective to "*Reduce Food Insecurity in Vulnerable populations*". The first intermediate result (IR1) is concerned with enhancing FFP's global leadership, while the second intermediate result (IR2) aims to increase the field impact of the Title II program. The pursuit of IR2 is especially relevant to capacity building. It will be achieved through: the protection and enhancement of human capabilities (Sub-IR2.1); the protection and enhancement of livelihood capacities (Sub-IR2.2); the protection and enhancement of community resiliency (Sub-IR2.3); and through the increase of communities' capacities to influence factors (decisions) that affect food security (Sub-IR2.4).

The FAM Local Capacity Building (LCB) working group, consisting of CSs conducting food security projects under Title II, has been focusing on the issue of measurement of local capacities that are built through their programs in the field. This is particularly timely, as capacity building will receive high priority in the Title II program and CSs will need to report on their achievements in this area.

It is in this context that the current effort to establish a conceptual framework on capacity building at the community level is taking place. The framework should provide CSs with a reference tool to examine their programs, and to design, promote, monitor and evaluate their capacity building activities at the local level.

## The methodology

Previous efforts of the FAM LCB working group produced an in-depth review of Indicator Performance Tracking Tables (IPTTs) from CS projects, and constructed a database of all indicators used to monitor and evaluate capacity building in the field from 18 PVOs/NGOs holding 84 programs in FY2001 (Ferris-Morris 2002). A preliminary framework was sketched based on the monitoring and evaluation (M&E) process, categorizing LCB indicators under inputs, process, outcomes and impact while differentiating between various levels of capacities, such as organizations or systems capacities, community capacities for self-development, and individual and household capacities.

The framework presented here builds on the previous work as well as on new information provided by CSs about their current activities. New information was collected through

documentation and through a short questionnaire about capacity building activities in the CSs' most successful projects. Additional information came from an examination of related literature, including the concept paper for FFP's strategic plan for 2004-08 and commissioned papers leading to the concept paper (Webb and Rogers 2003, Haddad and Frankenberger 2003). The FAM LCB working group organized a workshop to generate inputs from the CSs into this work-in-progress on August 27-28, 2003. Results from the workshop were incorporated into this paper.

## Capacity and capacity building

### ***Capacity***

Capacity is often defined in terms of ability and performance. For example, the United Nations Development Programme (UNDP) defines capacity as “the ability...to perform functions effectively, efficiently and sustainably” (UNDP, 1997).

In the context of local food security, a community needs the ability to perform many functions, starting with ensuring that food is available and accessible for all in a sustainable manner, and that people can and do utilize foods adequately. Additional critical functions relate to reducing vulnerabilities and increasing resiliency for the entire community (Webb and Rogers 2003, FFP 2003).

One's capacity to perform in any domain rests with one's assets base and the ability to use it productively. This capacity can be applied at the individual and organizational levels, as well as the community level. As the spectrum of potential assets is incredibly large, it is more convenient to treat them in categories. Common categories of assets found in a community are managerial, physical, environmental, human, technical, financial, economical, and social (Green and Haines 2002; Mathie and Cuningham 2003).

For example, to produce more food, people rely on physical resources such as productive land and water. They also use their agricultural knowledge and farming skills, which can be thought of as *technical assets*. Women selling cakes at the local market use their knowledge and skills of food preparation. These are their technical assets. They rely on their savings or on their access to micro-credit, which are their *financial assets*, to procure raw materials for their income generating activities. They draw on the community's assets as they use roads and markets to sell their products. Local farmers associations providing agricultural extension services draw on their *technical assets* to deliver sound agricultural messages, while they use their community's *social assets* when they use local branches of farmer associations in outreach to benefit individual farmers. Table 1 gives examples of assets and abilities for each category.

Thus, the “ability to productively use one's assets base to perform a function” can adequately summarize our working definition of *capacity*. This applies equally to individuals, households, organizations, communities, etc.

**Table 1: Examples of assets and abilities in each category**

<b>Category</b>	<b>Examples of specific assets</b>	<b>Examples of specific abilities to use assets</b>
Managerial	Presence of systems (M&E, surveillance, sentinel sites, etc.). Presence of a local authority (can also be a food security committee) that establishes local development plans	Analytical capacity; capacity to establish and use a local FS framework, to assess FS, to assess risks and vulnerabilities in the population; capacity to plan for food security and for mitigating risks; capacity to use information from the available local information systems; to manage local funds; to advocate; to be accountable and responsive to the population; to promote and support local public services such as health, nutrition or agriculture volunteers; capacity to maintain and promote community programs such as disaster preparedness, Health programs, child growth monitoring, etc.
Physical and environmental	Buildings, market places and other infrastructures, tools and manuals, natural resources (water, soil, clean air, wood, metal, wildlife, etc.)	Capacity to productively use and maintain infrastructures; to use tools; and to use natural resources productively yet sustainably, etc.
Human and technical	People's education, knowledge, technical skills, etc.	Capacity to maintain local literacy/numeracy in the community; capacity to train new community workers (health or agricultural agents, nutrition counselors, model mothers in HEARTH programs, workers in the growth monitoring programs, community proposal writers, etc.); continued performance of all the above-mentioned workers over time; farmers' and families' capacity to adopt new practices; functional leaders in the community.
Financial and economical	Presence of financial institutions and credit schemes (institutional or informal), pools of investors, access to financial resources, well-established market circuits, etc.	Capacity to use and manage credit; capacity to continue performing income generating activities after the removal of project support; capacity to attract investment and to raise funds; capacities to develop new products and market them, etc.
Social	Norms, shared understanding, trust, networks, social and professional organizations, social safety nets, strong political leadership, etc.	Local organizations' functional capacities; local political bodies' capacities to link vertically and horizontally with various structures; community solidarity, mobilization and participation capacities and skills, etc.

## **Capacity building**

Whereas the concept of capacity translates assets and abilities into performance, the concept of *capacity building* is associated with transformation processes and increments in capacities or performance. In other words, capacity building is the process of increasing capacities. Increasing capacities can imply broadening the assets base, but this is insufficient for enhancing performance by itself. The act of increasing capacities encompasses the enhancement of abilities to use assets productively.

Yet another dimension is crucial to capacity building in the context of development: *sustainability*. Building capacities would seem a useless effort if they were not sustainable. A major challenge facing FS projects is ensuring their capacity building activities are not only instrumental to the success of a specific project component, but that the new capacities will be put to use and contribute to the sustainability of food security in communities over the long-term.

## **Increasing assets and developing abilities through food security projects**

Title II food security projects comprise a number of components, most often corresponding to sectors of development such as health, agriculture and economic development.

FS projects can *increase communities' assets bases* by investing in infrastructure and other material and physical inputs, by developing new tools, and by increasing the population's knowledge level in various domains such as health, nutrition, agriculture, literacy, numeracy, accounting, bookkeeping, and in specific techniques used in income generating activities. Furthermore, organizing and structuring a local civil society also creates new assets in communities.

On the other hand, FS projects can *build capacities* by developing people's abilities to use and maintain their infrastructure, to use their new tools, to actually put in practice their new knowledge, and to conduct income-generating activities in an autonomous fashion with high potential for sustainability. Increasing the performance of local structures, including that of government offices, to address local food security issues is another way in which FS projects contribute to building communities' capacities. An important contribution that rests more specifically with FS projects is building communities' capacities to establish their own FS framework and plan of action, to promote a shared understanding of determinants of local food insecurity and vulnerability within and outside the community, and to identify risks to food security and develop ways to mitigate them.

The above examples show how capacity building (CB) activities in FS projects are, in essence, slightly different than the sectoral activities per se, although sometimes the difference is so subtle that it can be difficult to perceive. One way of looking at it is that the focus of CB activities is on the process of increasing abilities, beyond just increasing the assets base. Their results are reflected in the practices and performances of people in various functions as they work toward achieving food security.

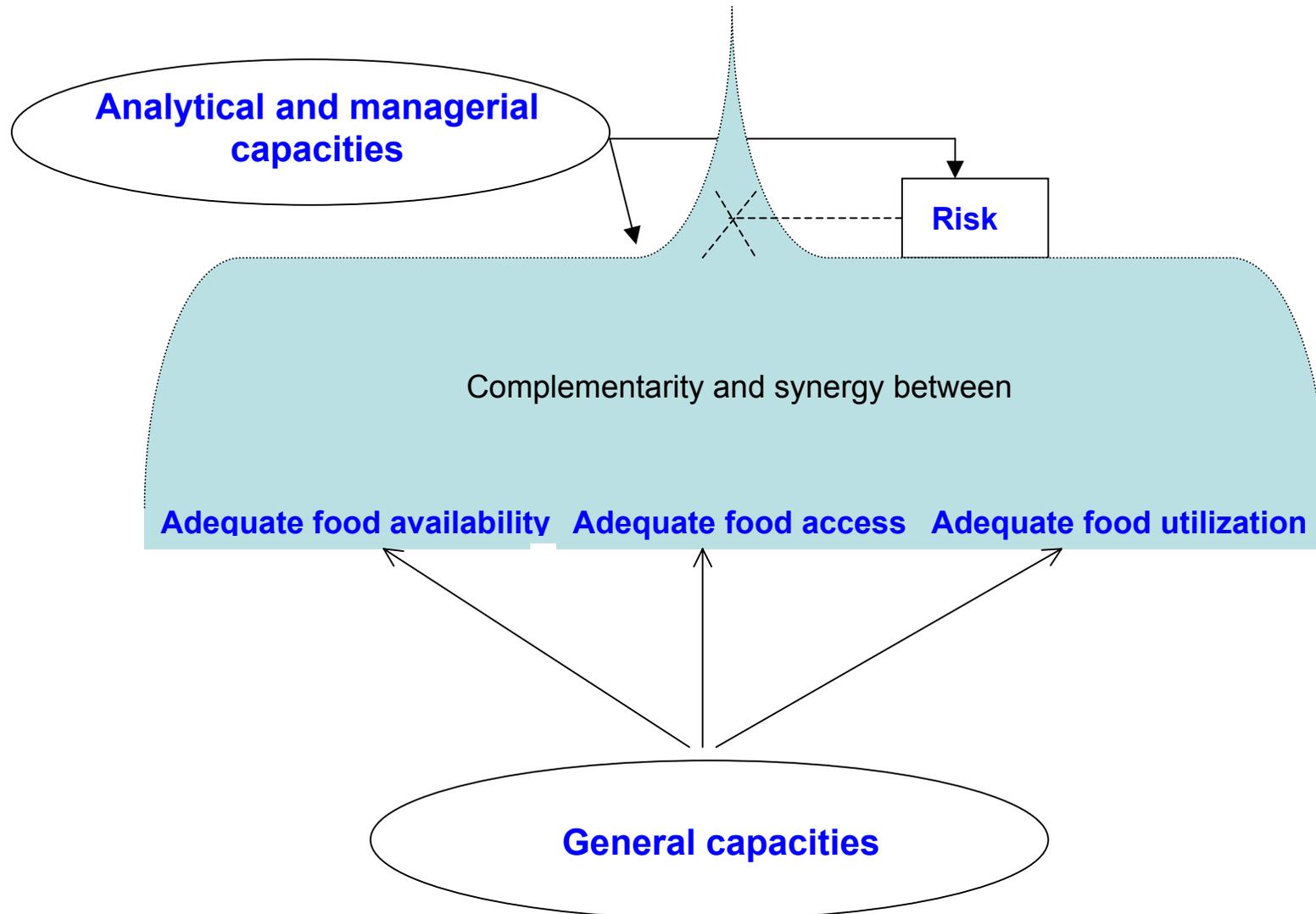
The overall sectoral activities may or may not include capacity building activities within their scope, but they are usually designed to at least broaden the assets base. Their results have been reported in terms of sectoral performances, such as yields of crops achieved and kilometers of roads built, or in terms of human and social assets, such as increased nutrition knowledge and the number of new organizations established in communities.

Disentangling the two kinds of activities can be made easier by using two different lenses to examine a project or its components: one to examine assets and sectoral performances, and one to examine the ability to use assets productively and sustainably.

## **Framework for Local Capacity Building in Title II Food Security Projects**

This framework establishes the relationship between local capacity and enhanced community food security. It first lays out the basic elements of food security and their complementarities and synergies, and then identifies the potential risks communities often face that affect their ability to achieve food security. It then distinguishes two broad types of capacities (which Title II Food Security projects can build at the local level) that will increase communities' abilities to enhance their food security and to manage the risks they may face. The other sections of this paper expand on various local food security actors that can benefit from project efforts in capacity building, on the implications of this framework for project implementation, and on monitoring and evaluation of LCB activities in these projects. The framework is summarized in Figure 1.

**Figure 1: Framework for Local Capacity Building in Title II Food Security Projects**  
**Enhanced Community Food Security**



## ***Basic elements of food security***

### **Food availability, access and utilization**

Food availability, food access and food utilization are the three pillars in USAID's food security framework. Webb and Rogers (2003) see the three pillars as "hierarchical in nature with food availability being necessary but insufficient for access and access being necessary but insufficient for utilization". Between each pillar one can also extend feedback loops that show, for example, that better nourished populations are more able to sustain food productivity, etc.

### **Complementarities and synergy between food availability, access and utilization**

The three pillars are connected and work together to produce a food secure environment. Specific efforts by food security projects are often needed to promote the complementary and synergistic aspects of these elements, whose absence can jeopardize attainment of project objectives. For example, if food production is increased but there is a lack of market capacity to absorb the surpluses, or if increases in food production or income are achieved by households at the expense of proper care for their children, then food security may be jeopardized - in the first case by the lack of revenue, and in the second by negative effects on children's food utilization and health. Projects can build their staff and beneficiaries' capacities, first to understand the links between the pillars and second, to ensure that their complementary aspects are put into practice at all levels.

### **Risks and vulnerability**

However, some risks can jeopardize the achievement of community food security. For example, loss of harvest to severe pest infestation can disrupt food availability. Seasonal or sudden floods can isolate a community from markets and job opportunities, reducing access to food. An infectious disease outbreak can impair children's ability to maximize their food utilization. One can also think of the independent promotion of each pillar as a limitation or risk to achieving the community's full potential for food security.

Webb and Rogers (2003) point to three large categories of risks, which can affect the state of any FS pillar or mitigate its contribution to food security. These are natural shocks, economic risks, and social and health risks (Table 2). Some risks manifest themselves as sudden shocks and take the form of a crisis, others present a quasi-permanent struggle for some segments of the population. In fact, chronic vulnerability is a major problem of underdevelopment. For example, poverty, mild malnutrition, ethnic and gender marginalization, and powerlessness are but a few determinants of chronic vulnerability that projects can address (CARE 2003). Communities and households are all the more vulnerable when they are not prepared to cope with risks and do not have the necessary buffers to absorb shocks when they occur. Repeated shocks can drive households or communities into a downward spiral of asset depletion, decreasing their resiliency further with each strike.

**Table 2: Risks to food security (extracted from Webb and Rogers, 2003. A conceptual framework for understanding food insecurity)**

<b>Natural shocks</b>	<b>Economic risks</b>	<b>Social and Health risks</b>
Climatic shocks; Natural resource mining and degradation; Yield volatility; Asset depletion; Neglect of natural hazard mitigation	Income fluctuation; Collapsed terms of trade; Savings depletion; Employment insecurity; Price volatility; High transaction costs; Information asymmetry; Inflation	Epidemics; HIV/AIDS; Widespread unintended malnutrition; Risk perceptions; Corruption; Social disintegration; Predatory extraction by armed forces; Conflict; Ethnic and social discrimination

### ***Types of capacities FS projects can build in communities***

The local capacities needed to ensure and enhance food security, as well as to control risks and decrease vulnerabilities, can be divided into two broad types: “analytical and managerial” capacities and “general” capacities, as described below.

#### **Analytical and managerial capacities**

Analytical and managerial capacities are capacities that enable populations and their leaders to discuss and reflect together on their concern about FS, to assess the FS situation, establish a FS action plan, target, monitor and evaluate FS activities, design ways to mitigate risks and decrease vulnerability, advocate for FS, and make other decisions that affect FS at different levels in the community. These capacities broaden the communities’ understanding and sharing of a food security framework and allow them to focus on food security in the midst of various options for action planning. These capacities are also needed by community leaders to promote complementary aspects and synergy between activities affecting food availability, access and utilization in the community.

Finally, a community needs to monitor and manage the risks its members face to reduce their vulnerability. To increase its resiliency, a community must achieve more than just the minimum level of “adequacy” for food availability, access and utilization. It must also provide buffers that can mitigate shocks, and implement special programs to help community members quickly recover after a crisis.

Analytical and managerial capacities also apply to the organizational and household levels. The literature within and outside the NGO community offers many examples of building managerial capacity at the organizational level (Fowler 1997, Holloway. 1997, IFRC 2000, Care Nepal 1997, INTRAC web site). At the household level, examples could be the management and distribution of new resources or assets within the household in a manner which increases the food security of all members, or securing buffers which protect the household’s assets base when it faces shocks. These capacities can also contribute to increased bargaining power of the more vulnerable individuals within the household, such as women with young children and elders.

## General capacities

In this framework, other categories of capacity are grouped under “general capacities”. They are usually directly associated with each FS pillar<sup>1</sup> separately. They refer to those capacities needed (1) to produce food and otherwise increase its availability; (2) to produce income, control food prices and promote food access; and (3) to adequately utilize foods (in terms of consumption and/or in terms of physiological utilization of nutrients). In many cases, these capacities materialize through CB activities promoting improved practices and behavioral changes at the individual and household levels.

Most CB activities in this group are instrumental to the success of specific sectoral project activities. For example, activities improving technical skills and transferring appropriate knowledge about improved farming practices contribute to the success of project activities in the agricultural sector, which aim to increase food availability. Increasing mothers’ knowledge about appropriate feeding practices for their young children contributes to the success of project activities in the health and nutrition sector, which aim to enhance food utilization. Table 3, below, gives an example of how capacity building activities in the Morulem project by World Vision International in Kenya are instrumental to the attainment of the objectives of the component activity.

**Table 3: Example of how capacity building activities are instrumental to the achievement of project component objectives**

Component activity objective	Capacity building activity	CB activity’s objective / desired outcome
To increase agricultural production and to achieve adequate household level of grain production during years of normal rainfall to supply 80% of household food grain needs	<ul style="list-style-type: none"> <li>• Training farmers in appropriate irrigation farming technologies</li> <li>• Training farmers through participatory approach in agroforestry technologies</li> <li>• Training farmers in income generating activities</li> <li>• Training farmers in use of animal traction</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers who are skilled in irrigated farming</li> <li>• Farmers who have included agroforestry activities in their farm</li> <li>• Farmers who have started income generating activities which will cushion them against a bad harvest</li> <li>• Farmers who use animal traction in farming activities</li> </ul>

In this example, capacity building activities are very closely linked to the agricultural component activity. In fact, they are instrumental to the attainment of its objectives.

Figure 1 illustrates how the relationships between local capacity and the factors discussed above relate in community food security. General capacities are focused on assuring that the conditions necessary for achieving adequate food availability, adequate food access and adequate food utilization are met. Managerial and analytical capacities are required to achieve the complementarity and synergy between the three pillars. In addition, managerial and analytical capacities are required to assess and manage risks so they do not block community food security.

<sup>1</sup> The three pillars of food security are food availability, accessibility and utilization.

## **Actors involved in creating food security at the community level**

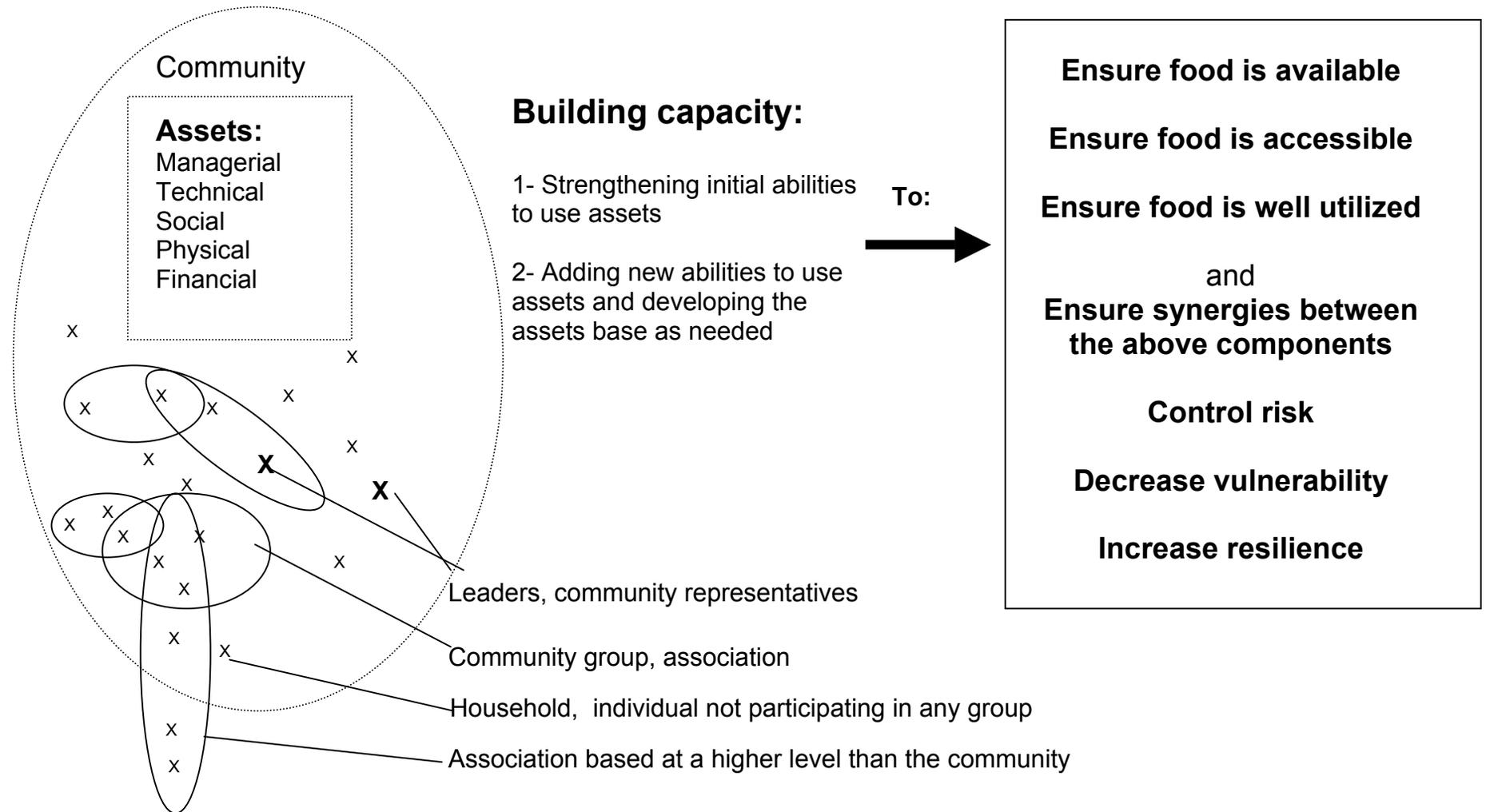
This framework focuses on the community level. For the purposes of this paper, the term “community” will be used in its geo-political sense, and will mean the lowest administrative unit at which the project is working. This can be a village, a town, a district, etc. depending on the project and on the country’s administrative division. In any case, it means a “community of place” as opposed to a “community of interest”. It implies a group of individual residents governed by the same political or traditional authoritative body as opposed to, for example, a community of faith or a professional community, which are not geographically circumscribed.

Thus, a community is a place where people live, work, and access goods and services, while engaging in a multitude of other social and economic activities. When a FS project begins in a new community, it becomes part of a rich and complex set of intricate human relations, with established dynamics between individuals, local groups, political and administrative leadership, and external organizations, as shown in Figure 2 below. Local capacity building activities to ensure a food secure community may involve them all.

As Eade (1997) puts it, “Like development itself, capacity building is concerned with social and political relationships. It cannot, therefore, be viewed in isolation from the wider social, economic and political environment – governments, markets and the private sector, as well as CBOs, NGOs and other institutions, right down to the community, household, and personal level.”

Food security at the community level results from the activities carried out by all actors in the community. From individuals to the political leadership, each plays a different role in society, and in the realization of the community’s food security. Their tasks and responsibilities vary as well as their need for capacity building.

**Figure 2: Building local capacities at all levels to produce community food security**



## ***Specific roles of community actors in building community food security***

### **Local administrative and political leadership**

The overall responsibility of the local leadership, whether it is the local governmental administration, the traditional leadership or the local development committee, is to plan and provide community services and manage public resources. This includes providing residents with infrastructure and services related to transportation, markets, power and sanitation. It means facilitating access to basic education and health services, and promoting productive use of public assets within the community while managing their sustainability and preventing their depletion. The leadership’s role is also to assess and manage community vulnerabilities, risk of shocks, and prevent failure to access the community’s assets base by insecure households.

In the context of community food security, this means planning local development with a focus on food security by using resources (community assets) in a manner that fosters food availability, accessibility and proper utilization, and managing the overall food security in the community. Table 4 below gives examples of specific activities that FS projects have been promoting which fall under this level of responsibility.

**Table 4: Activities which are the responsibilities of the local administration and political leadership**

<b>Food security variable</b>	<b>Specific activities</b>
Promoting food availability	Develop roads, markets, food and seed storage facilities, cereal banks, etc.
Promoting food accessibility	Promote an environment that can sustain economic activities (roads, markets, etc.) Attract investment and development projects Ensure and improve services such as power, safe water and waste disposal, which sustain income generating activities Attract financial institutions offering affordable micro-credit
Promoting food utilization	Promote accessibility and utilization of health services Promote child growth monitoring, hearth programs, and community nutrition education Collaborate with government and donors in health programs Ensure availability of safe places to conduct such activities, etc.

<b>Food security variable</b>	<b>Specific activities</b>
Overall management of food security	Monitor community food security levels Assess vulnerabilities and potential risks (from the profiles of food insecure households, and predictable risks such as seasonal food shortage, drought and floods in risk prone areas, social and political conflicts, pests, etc.) Establish food security action plans Establish natural resource management plans Establish risk mitigation plans, especially in risk-prone areas With the community’s constituencies, develop acceptable targeting mechanisms to benefit poor and food insecure households through special community relief or social funds, special programs, or specific activities from the FS action plans, etc. Advocate for financial capital investment (attract funds from donors, the local / national private sector, individuals from the area currently residing elsewhere, projects, government programs, etc.)

Representative leaders constitute the most legitimate locus for decision making and planning affecting the whole community’s food security. Good governance and democratic processes have been associated with better distribution of benefits from interventions. Projects should target representative leaders for capacity building in planning for FS and in the establishment of risk mitigation plans at the community level. This also includes building their capacity for participatory planning and good governance.

### **Local groups**

In each community, some people form groups to increase their own capacities to perform various functions and to access resources. Groups have been a preferred entry point into a community for many FS projects. They often offer a natural and easily manageable structure facilitating outreach in the community. However, it is important to recognize that groups present a wide but uneven range of capacities and credibility in the eyes of the population. By nature, they rarely represent the whole population in the community. This also limits their legitimacy to conduct planning at the community level.

On the other hand, local groups are often linked laterally to other communities, broadening their array of capacities. Some groups are also linked vertically, providing their members with access to a larger pool of assets outside their community, and some leverage on higher level policies. Just as with local representative leaders, they can play a major role in raising funds and attracting programs, projects and investments.

**Table 5 Activities which are the responsibilities of local groups**

<b>Food security variable</b>	<b>Specific activities</b>
Food availability	Farmers / herders associations that produce and sell foods in local markets Producers associations that advocate for policies at higher levels Men's or women's groups producing vegetables and fruits from community gardens Groups or associations transforming or preparing foods, or producing local complementary foods for young children
Food accessibility	Groups and associations conducting income generating activities Buyers clubs Local groups and association chapters attracting external funds or other resources laterally and vertically Tontines and other informal credit schemes providing access to credit
Food utilization	Women's groups / associations promoting child nutrition, or counseling mothers on adequate nutritional practices Self-help groups offering support to lactating mothers
Overall food security management	Planning and conducting group activities to promote food security Advocating for participation in community decision-making about food security Expressing / voicing population's concerns with their food security Vertical and lateral exchange of resources, activities and information relevant to food security

Usually, members subscribe to a group voluntarily. Groups may be formed on the basis of age, gender, place of residence, faith, activity, or on any combination of those. Examples are women's groups, farmer's associations, youth groups, etc. An important issue when concentrating project activities on local groups is the potential bias against a segment of the most food insecure people in the population. Poor households can represent a significant proportion of those not participating in any group. This often results from self-exclusion due to risk aversion, and limits to participation imposed by lack of transport, ethnicity, or otherwise limited social, economic or health conditions (FAO 1995).

Increasing communities' food security capacities includes strengthening the capacity of civil society to organize into a variety of groups in order to provide services to their members, and to increase their ability to better leverage the larger pool of assets. This will enable them to positively contribute to their community's food availability, accessibility and utilization.

### **Local Food Security or Development Committees**

Many FS projects set up local food security committees (FSCs) or local development committees. Across the spectrum of CSs, there are variations in the establishment procedures and composition of these committees, but most are mandated to play an important role in the development of food security action plans, and in maintaining communication between the community and the project.

These committees are usually set up by projects when none existed prior to collaboration with the villages (in most cases so far, these activities are taking place in rural areas). Committees may be comprised of representatives from many or all of the local groups in the community. Elsewhere, CSs are strengthening existing committees established by the government.

FSCs in Africare programs in Chad and Mali are comprised of village group leaders and traditional leaders. They are responsible for their community's FS action plans.

The WVI program in Bangladesh is working with district and municipal Disaster Management Committees to draw up contingency plans to protect the population during floods.

Objectives for CB at this level lie with increasing abilities in planning, M&E, communication, mobilization (particularly of support and participation), and in the development and use of a local FS framework, thereby raising capacities to promote linkages between different project activities and food security.

However, the committee's level of effective legitimacy, legal authority and credibility in the community as well as outside the community may be an issue, both during the project's life and afterward. Its sustainability is often another issue, and projects must contribute to developing community interest and capacity to support the committee and maintain an active FSC over the long term, where appropriate.

### **Households and individuals**

Within their households, individuals may contribute in many different ways to food security. In many contexts, within the same household, men's and women's assets bases and abilities vary greatly, and their respective responsibilities for food security may vary as well, though not always proportionately to their capacities (Gervais 1993). When one's responsibilities outgrow his / her capacities, the individual becomes more vulnerable and can experience high insecurity, affecting health, and the ability to care for others and perform other functions.

A household can be a very complex unit itself. Some are mononuclear units, but many present different structural arrangements. Some households form a large unit with many

extended family members residing within for some time during the year, and then dividing into mononuclear families during periods of food insecurity. Some may change their patterns of using or sharing assets over the year to mitigate risks and decrease their vulnerability in the face of potential shocks, such as drought or the usual food shortage period before the new harvest season. Many households completely change configuration as men migrate to find alternative income sources while remaining members of the extended family conglomerate. The patterns are numerous and they have a significant impact on the determinants and profile of food security in the community. This variation then complicates processes of monitoring and evaluating FS at the community level.

In most contexts where Title II programs are implemented, households are essentially the primary producers of goods, especially food. Their productive capacity is a major determinant of their own food security. It also plays an important role in the community's food security by making more or less food available on the market.

How communities develop their infrastructure (roads, markets, etc.) and service base (schools, health services, water and power, etc.) affects households' capacities to contribute to their community's overall food security.

### ***Addressing food security at multiple levels***

Many FS projects are already addressing multiple levels in the community by targeting different activities to various actors. For example, Africare's program in Burkina Faso is addressing food security actors at all levels in the communities where it works. Its child growth monitoring activity targets individual mothers and community health workers for participation, and children for direct benefit. Its agricultural activities are targeting farmer's associations for cereal production and animal husbandry, and women's groups for vegetable gardening. Its income generating activities are targeting women's groups. Community education activities are targeting the whole community with education in nutrition and sanitation, HIV/AIDS, and child rearing. Finally, food security committees comprised of various community leaders are targeted for capacity building activities to enhance their abilities in establishing FS action plans, monitoring the FS levels in the community, and ensuring the complementarities between the activities contributing to community food security.

Other projects also address FS at many levels, even if they do not address all levels at once. Determining a community's capacity building needs, or evaluating a community for its level of capacity to enhance its food security implies observing performance and capacities at all these levels.

## Implications for project design and implementation

To address the “big picture” of FS at the community level, it is necessary to have a good understanding of the determinants underlying households’ capacity to use, protect and enhance their assets base, secure their livelihoods, maintain their safety nets, and participate in their community’s affairs. It is also important to understand the social structure and dynamics of decision-making in the community that affect the community’s assets base, its provision of services, and how people access them.

This, in turn, can inform the selection of capacities that projects can build in communities to enable them to better address their food security issues. This understanding is also crucial for determining the most appropriate level of targeting for specific capacity building activities in the community.

Broadening the scope of FS project activities to include a focus on community capacity building has at least four implications for project implementation.

First, it determines the nature of beneficiaries. Addressing FS at the community level includes all members in the community. Some levels within the community might need more capacity building than others, varying across different geographic and sectoral areas. Community leadership has not been the conventional target of FS interventions, yet it plays an important role in the long-term management of community development, presenting a high potential for benefit from FS project’s capacity building efforts. When FS projects work with community leaders they also build capacity in good governance and democracy.

Second, including a focus on community capacity building affects the time at which to involve the various stakeholders in the project. Involving beneficiaries from the beginning and at all stages of project implementation presents greater opportunities for beneficiaries to learn how to assess needs, plan actions, conduct activities, and participate in processes that affect their food security. It can lead to development of greater process ownership on their part and present opportunities to develop skills for participation in democratic political processes.

Third, the choice of project activities is affected. Although the development of a program may require that at least some of the activities be pre-determined, the more opportunities beneficiaries have to influence the choice of project activities, the higher the project’s potential to be responsive to community members’ specific needs and to engender participation. Furthermore, for sustainability of many project activities, it becomes necessary to expand their scope vertically or horizontally. For example, training in the use of new farming techniques and in the use of new inputs (seeds, soil amendments, tools, etc.) can be instrumental to the achievement of an increase in yield over the life of the activity. However, if the community (particularly the market place) is not able to sustain long-term availability and accessibility of these inputs, or if social policies do not promote insecure households’ access to land, then poor farmers will not be able to use

their new capacities after the project pulls out. The vertical and horizontal expansion of activities may call for CB activities and targets of their own.

Fourth, the best sequence for activity implementation may be determined by focusing on community capacity building. For projects building local capacities to assess the community's food security situation, establish FS actions plans and conduct food security activities, it is logical to implement such activities in that sequence. Specific project activities in various sectors can then emerge from the community FS action plans, and be more naturally linked to one another in a local FS framework.

These are general guidelines for design and implementation of community food security projects. By providing a full-circle experience of food security management to communities during a 3 to 4 year program, projects increase the probability that communities will internalize the analytical and managerial capacities they want to build. Results of the CB effort can then be evaluated in terms of the community's capacity (as opposed to the project's capacity) to produce food security and to decrease households' vulnerability.

### **Techniques used in the process of capacity building**

Participation and learning-by-doing approaches work best for CB in an adult population, and these techniques have become mainstream in development projects. This does not preclude the use of a variety of techniques to carry out specific CB activities in each project component. There is a panoply of possible techniques to use, from formal classroom training to learning-by-doing, and learning through networks. The objectives pursued for each specific project activity (literacy, farming practices, child growth monitoring, development of action plans, etc.) as well as the level targeted in the population (individuals, groups, leaders, etc.) should determine the best techniques for each specific CB activity. The challenge is to be consistent with a fundamental participatory approach, yet be relevant and efficient in conducting the specific task at hand.

In conflict-affected Maluku, Indonesia, Mercy Corps builds local NGO capacity using a one-on-one technique, group training, coordination meetings, and training at workshops and seminars in Jakarta. It builds civil society's capacity to develop and manage small projects in various sectors through, among other techniques, a direct approach to peace building using neutral spaces and do-no-harm principles, and uses modeling to build capacity for transparency and accountability in small project management.

Annex 5 presents a few resources proposing various techniques and approaches that can be used in designing and implementing capacity building activities.

## **Monitoring and evaluating local capacity building activities in the context of community food security projects**

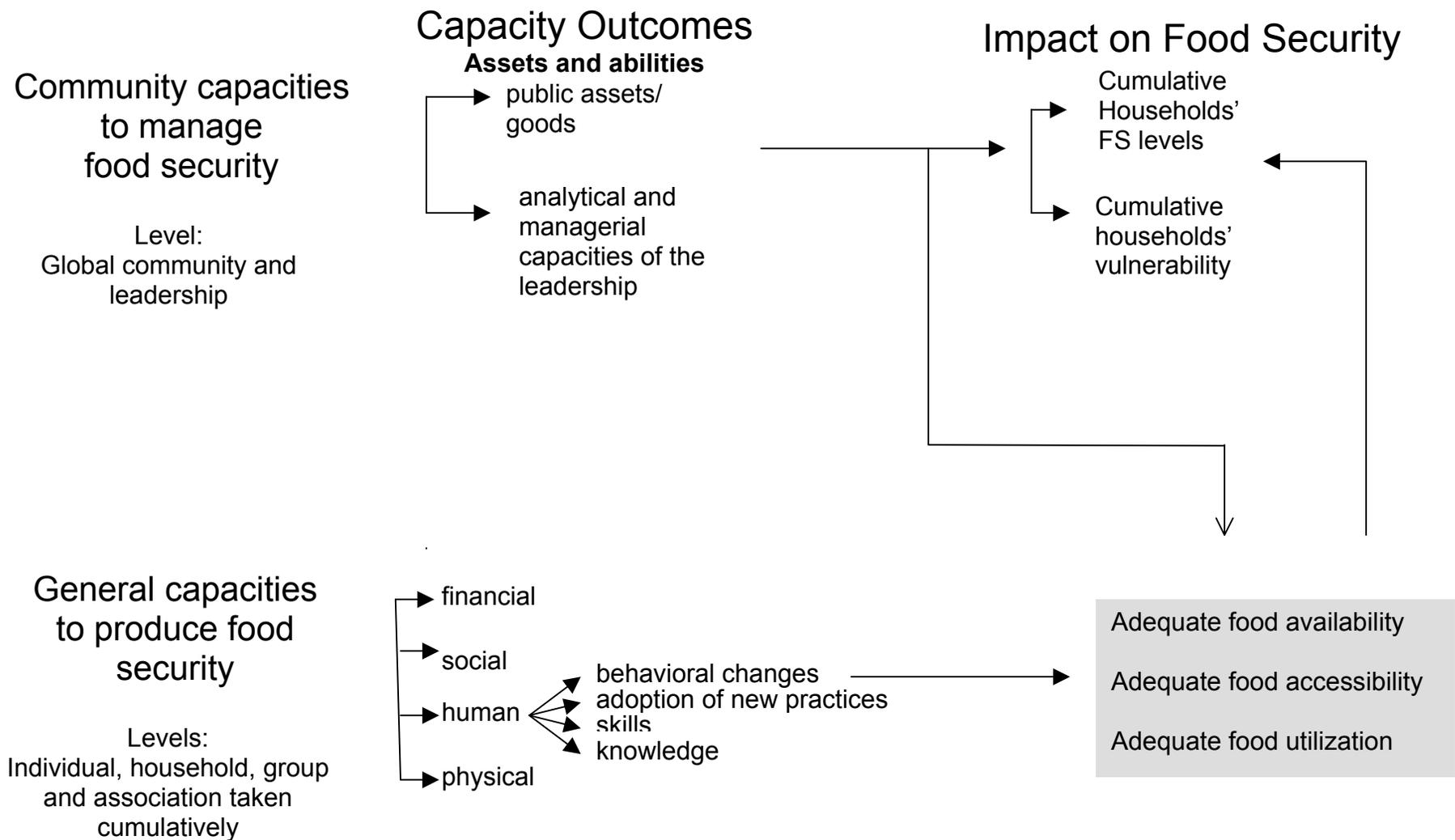
Measuring community capacity in general presents multiple problems (Chaskin et al 2001). There are problems related to the definition of capacities, the level at which capacities are measured, how to attribute the effect to a specific activity, and the measurement methodology. All of them apply to the measurement of CB in Title II FS projects. This LCB framework begins addressing these issues and provides some structure for the development of projects' M&E plans.

In accordance with the framework in Figure 1 projects can build two broad types of capacities:

1. Analytical and managerial capacities to manage food security at the community level (including creation of new assets at the community level)
2. General capacities in the community to ensure adequacy in food availability, accessibility and utilization (including a global appreciation of new assets created at the association / group, household and individual levels)

Figure 3 below provides a structure for the monitoring and evaluation of the basic components of capacity building.

**Figure 3: Basic M&E components of community's capacities to enhance their food security**



## ***Monitoring and evaluation of analytical and managerial capacities***

The upper part of Figure 3 concentrates on the level of the global community and its leadership. In order to evaluate the community's capacity to manage its food security, stakeholders need to examine the increase in public assets and goods engendered by the project, and changes in leaders' analytical and managerial abilities.

Public assets such as roads and markets play an important role in achieving local food availability. Public assets such as FS action plans contribute to the overall enhancement of FS in the community. Risk mitigation plans decrease community members' vulnerability to asset depletion and food insecurity.

The public assets created or enlarged can come under any of the asset categories described in the earlier section on capacity and capacity building<sup>2</sup>.

Their particular character is their public nature. This means they belong to the community and are managed by the community's leadership for the benefit of community members.

Leaders' abilities comprise their capacity to: develop, use and manage the community's assets base; establish and ensure the conduct of FS action plans and risk mitigation plans; promote complementarities and synergy between the various food security activities in their community; and mobilize their community to enhance their food security. Increased assets and leaders' abilities constitute the results of the CB effort at that level.

Positive outcomes at the leadership level contribute to global food security and a decrease in the vulnerability of households, because they enable food availability, accessibility and utilization in the community, and promote their complementarities and synergies. It remains difficult, however, to determine how much of the households' food security level is attributable to these capacities.

## ***Monitoring and evaluation of general capacities***

The lower part on the diagram in Figure 3 examines the "general capacities" which cover all other capacities built within the community. These apply to all other levels, from individuals to their associations. Again, any asset and ability under each category targeted by the intervention should be monitored and evaluated. However, which abilities to examine may vary from one level to another, depending on the specific functions each exercises in FS development, the specific project activities and their objectives. Usually these assets and abilities are closely associated with the sectoral activities for which they were developed.

Typically, these capacities are in agriculture and market gardening, husbandry and herding, small businesses and other income generating activities, nutrition, sanitation, and

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<sup>2</sup> These assets are classified as human or technical, managerial, financial or economical, physical or environmental and social.

health education and practices. Specific examples are capacities to grow and prepare new crop varieties, build new types of granaries, diversify the diet, prepare enriched complementary foods for young children, conduct growth-monitoring activities, and press and sell oil, etc. Other capacities included in this category are more fundamental and have broader applications, such as literacy and numeracy, and general accounting skills. Overall these capacities are often measured in terms of knowledge acquisition, reported behavioral changes, and adoption of new practices.

Such capacities constitute the primary outcomes of capacity building efforts through sectoral activities. They can affect food availability, access and utilization at the household level for households participating in these associations and/or activities. They can impact the measurement of food security at the community level, especially when the benefits of the activities are concentrated in the most food insecure households. For example, the FS indicators “average number of months of adequate food provisioning in the community” or “duration of lean season” perform better as the number of households entering early into a lean season diminishes.

Hence, measurements of changes in the levels of food security and vulnerability of all households in the community can lead to an appreciation of the CB effort. However, that measurement also reflects the effect of all project activities combined. To assess the impact of any specific CB activity on food security levels per se requires a rigorous and extensive qualitative survey, as well as quantitative surveys, analyzed with regression analyses. Collaboration with academic or other research institutions would be useful at this early stage of knowledge in measuring CB.

## ***Sustainability***

Sustainability is an important aspect of CB efforts that must be examined. Chaskin (2001) characterizes community capacity by its sense of participation, commitment, ability to solve problems and access resources. In this context, these characteristics can also be used as measured elements of the potential for sustainability in capacities built.

The following generic variables can be applied at each level to examine the sustainability of the capacities built by a project:

1. *Autonomy of performance of the beneficiary, including the capacity to solve problems.* The best time to measure this is just before beneficiaries graduate from the program but after the point when financial support to them has ended.
2. *Availability of the necessary resources over the medium term and the community's capacity to access them.*

3. *Sense of participation and community support.* In cases such as community programs and public service provision by volunteers,<sup>3</sup> community support is a determinant of the sustainability of the structures created.

Ensuring the sustainability of capacities built often requires the horizontal and vertical integration of activities. The level of integration should also be evaluated where appropriate.

### ***Global assessment of the community's capacity to protect and enhance its food security***

To assess results of project efforts to increase communities' capacities to enhance their food security, it is insufficient to focus only on one particular group or level. When only one group is assessed, the assessment relates to that group only and does not refer to the community as a whole. Assessing changes in the elements below provides a good measure of the project's capacity building efforts.

1. The existence, functional level and potential for sustainability of public assets essential to food security;
2. The existence, functional level and potential for sustainability of some locally accepted and legitimate social structure that is responsible for managing public assets, FS and risk management plans;
3. The sense of community participation and the level of community support to FS activities and for the leaders and volunteers of such activities;
4. The existence and value of FS action plans;
5. The existence and value of risk mitigation plans (especially important in risk prone areas);
6. The existence, functional levels and potential for sustainability of local associations conducting activities which promote household food security;
7. The level of vulnerability of community members (relevant cut-off values and significant qualitative elements of this variable need to be developed with the communities, and aligned with international norms when they exist);
8. The level of resiliency of households;

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<sup>3</sup> Volunteers might perform services as agricultural extension workers, mothers conducting a HEARTH program, volunteers conducting child growth monitoring in the community, participants in Food Security Committees, etc.

9. Food availability at the community level (presence of food in market and household production);
10. Food accessibility at the community level (affordability and stability of food prices and food basket price relative to income); and
11. Food utilization at the community, household and intrahousehold levels (adequate practices in food handling, preparation and consumption at and within the household level, as well as in food stands and local restaurants).

A number of the variables mentioned above can be agglomerated for reporting in the form of an index. Annex 3 summarizes the steps in construction of an index and discusses a few issues relevant to using indices.

Finally the global project impact on the FS situation at the community level can be measured through:

1. cumulative household food security level <sup>4</sup>
2. cumulative household vulnerability level (including household resiliency capacities)

Annex 2 provides a simple framework for M&E with examples in the area of community food security capacities, and a succinct glossary of terms used in Title II food security monitoring and evaluation processes.

## **Recommendations to help in design, implementation and M&E of capacity building activities within FS projects**

*Increasing cooperating sponsors' internal capacities to design, implement, monitor and evaluate FS projects*

1. When staff internalize a food security framework and a capacity building framework, they can better design, implement, monitor and evaluate project activities accordingly. They also become better promoters of the concept of food security in the beneficiary communities. At the field level, cooperating sponsors need to take the time in the beginning of projects to build the capacity of their staff to internalize the philosophy of the projects. Project implementation teams need to understand a food security framework and be able to build it themselves before they assist communities in such tasks. They should also understand and use the local capacity building framework in order to identify capacity building needs, and to target the appropriate food security actors in the community for benefit.

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<sup>4</sup> Cumulative household food security level can be given in terms of the cumulative or averaged food security levels from all members of the community, or by focusing on changes within the most insecure group in the population, etc.

2. When project implementation teams have internalized food security and capacity building frameworks, they are better equipped to respond to local communities' needs and action plans. They can then advantageously adapt the programs if they are given such authority and latitude from the CS's headquarters.
3. Projects that are not addressing all three pillars of food security should consider collaborating with other projects in the area that can address other pillars, in order to increase contributions toward building more food secure communities.

*Building managerial capacities in communities*

4. Local leadership plays an important role in community food security. FS projects would make valuable contributions to their beneficiary communities by building local leaders' capacities to manage food security and relative risks at the community level. In targeting leaders for capacity building, projects must ensure that they are representative of the population, and that they enjoy the necessary credibility and support at all levels in the community, enabling them to be productive over the long-term.
5. Targets for capacity building activities should focus on as many levels in the community as necessary and appropriate.

*Building local capacities in various sectors*

6. Projects are already putting a great deal of effort into local capacity building activities in various sectors, namely agriculture, health, nutrition, and economic development, but monitoring and documentation of these are limited. Projects and beneficiaries would benefit from a more systematic approach to the design, implementation, and M&E of capacity building activities based on the concepts of assets and abilities with respect to each level in the community.

*Implementation methodology for sustainability of results*

7. Most beneficiaries of capacity building activities in FS projects are adults. Implementation methodology should draw on adult education theory and practice. Of particular interest to food security projects is the important role "learning-by-doing" and "trial-and-error" methods play in adult learning. Projects need to allow the necessary time and opportunities for adult learners to participate in the design of their activities, and to experience them under various real life conditions. This implies (i) including a period of time for capacity building in participatory methodologies and planning for beneficiaries in the project design, and (ii) conducting the program over a sufficient period of time to allow a few reruns of the full cycle of activities.

8. The exit strategy for moving project activities out of an area should include a period of limited support to the community, mainly in the form of consultation and observation without financial inputs. This would allow project beneficiaries to take full responsibility for management of activities and adapt them to their own situation. It also allows project teams to observe the conduct of activities under real life conditions and learn lessons for future programs.

*M&E of capacity building activities in the context of FS projects*

9. It is useful for projects to use indices to measure and report on the capacities built in communities. These can be developed by the integration of a number of variables and various levels. However, it is also useful for projects to maintain easy access to the disaggregated data by variable and unit of analysis (household or village, etc.). This can serve both for comparisons between areas of the project and to enable analysis of specific variables within the index.
10. External factors affecting the capacities projects are trying to build must be taken into account as much as is possible and discussed in monitoring and evaluation reports. These contribute to understanding the results and to the potential for sustainability of capacities built.
11. In order to assess the sustainability potential of capacities built in the community, it is recommended that implementers monitor and evaluate the degree to which capacities built are used in activities. It is not sufficient to only evaluate performance at the end of training sessions. Furthermore, it is interesting and useful to promote and measure the capacity of communities to ensure training and the transfer of knowledge to new service agents (either volunteers or remunerated staff), and to households and individuals as appropriate.
12. Results measurement from capacity building activities within food security projects constitutes a fairly new domain. Best practices and the most useful indicators remain to be identified and tested in the field. Collaboration with academia and other research institutes should be sought now to increase practical and theoretical knowledge and to contribute in a timely fashion to food security projects and to FFP's strategic framework.

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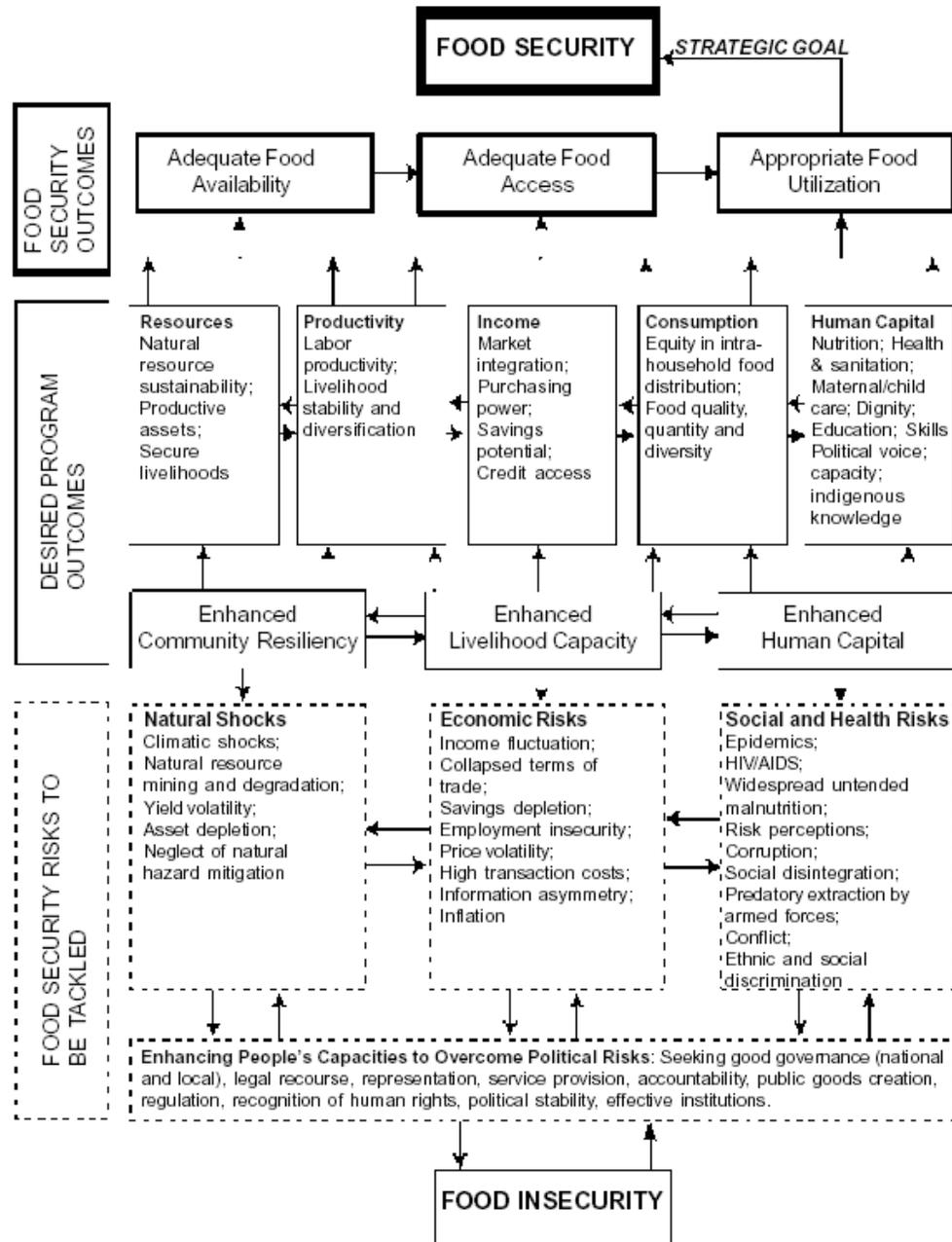
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# Annex 1

## Conceptual Framework for Understanding Food Insecurity (By Webb and Rogers, 2003)

Figure 1: A Conceptual Framework for Understanding Food Insecurity



## **Annex 2**

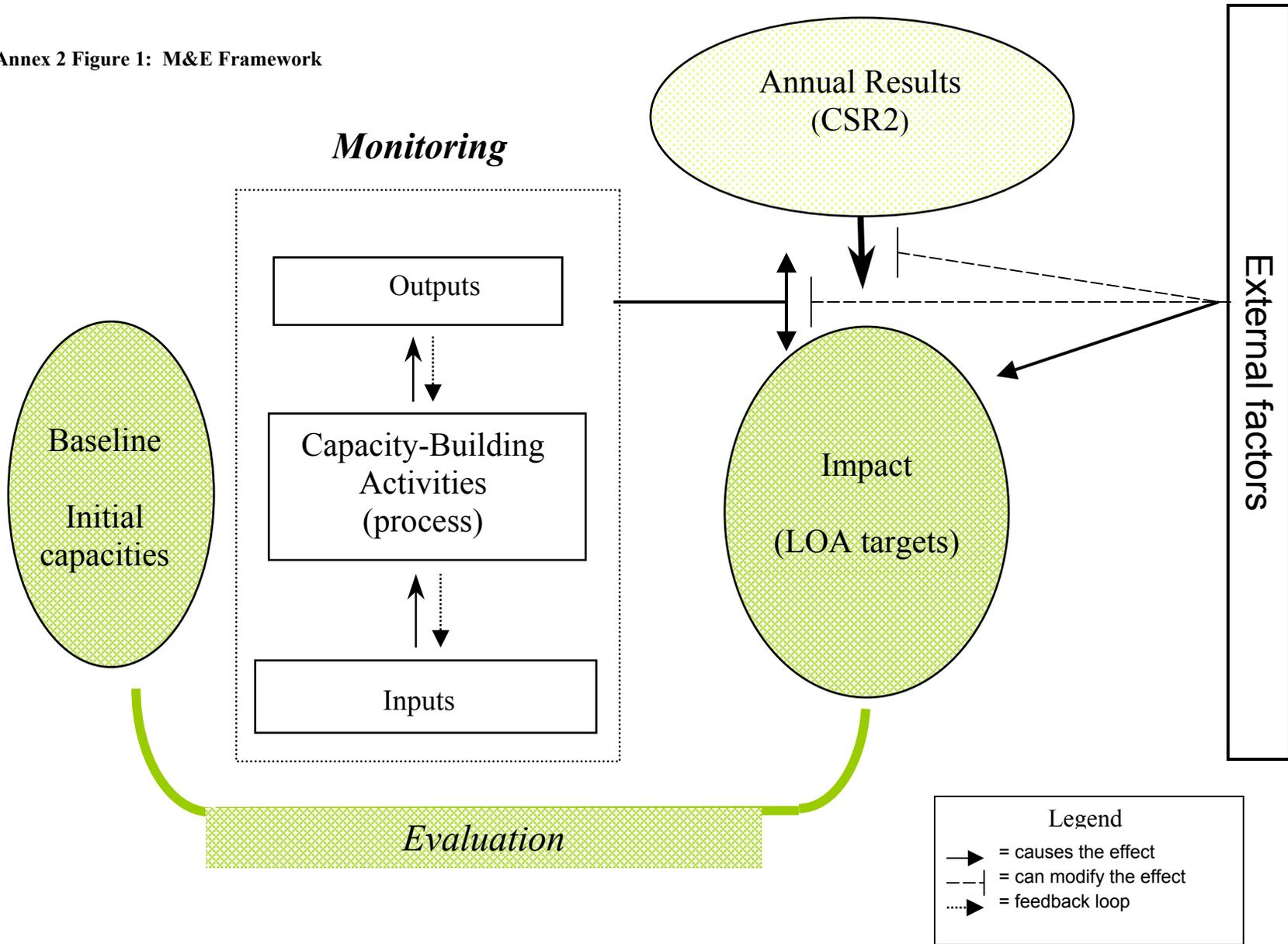
### ***Monitoring and evaluation processes***

Monitoring and evaluating local capacity building activities can draw on a conventional M&E framework. As shown in the non-colored section of Annex 2 Figure 1 below, one follows how the intervention transforms inputs into outputs and creates results through monitoring activities. CSs report these as annual results in their CSR2. Therefore, for each significant capacity addressed by the project, some annual and LOA targets should be set with the community and other stakeholders.

On the other hand, through the evaluation activities, as shown in darker color in the figure, the states of capacities before and after the intervention are compared. The difference between these two states is assumed to be caused by the intervention. For capacity building activities, pre- and post-intervention states are the most important for comparison. When this is not possible, then projects can compare the states between the intervention group and a control group (one that has not participated in the project).

External factors, though outside the control of the project, can still affect its implementation and results in some way. Political, climatic or social factors, for example, can positively or negatively affect project implementation, or mitigate its results. Other development programs working in the same area will also effect the population, but these would not be attributed to the FS intervention. External factors often confound results and need to be discussed in the evaluation report. They also need to be taken into consideration during the project's implementation.

Annex 2 Figure 1: M&E Framework



## ***The evaluation***

The evaluation process comprises baseline and impact measurements.

### **Baseline**

Baseline is the measurement of the level of capacities found at the beginning of the project, and it is the basis for comparison at the end of the project. It hence needs to be done at the outset of the intervention, prior to any other activity.

It is noteworthy to distinguish between a needs assessment and the baseline. The needs assessment, which is also usually performed before or at the beginning of a project, identifies where the needs are or which capacity the intervention needs to address or strengthen. This needs assessment helps to determine the nature of activities to undertake in the project. The baseline is the measurement of the initial level of the capacities the intervention will address, which is different from their identification.

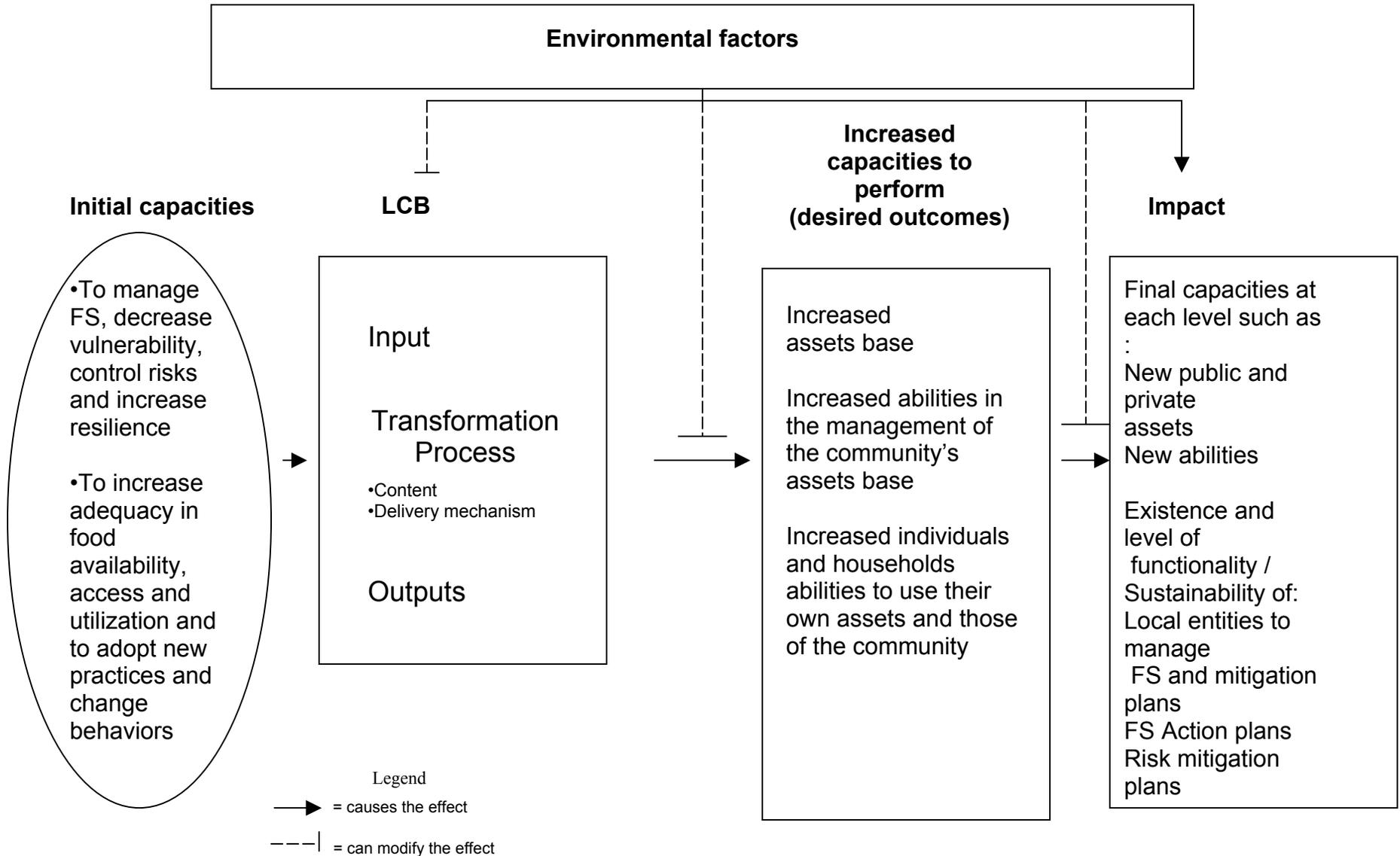
### **Impact**

Since most food security project interventions seek changes in the social and economic environments of beneficiaries, as well as changes in their practices and behaviors, capacity building activities are obviously often instrumental to the success of the project. Their impact may come through the activities themselves. Moreover, CB activities can have a direct impact on livelihoods, as they increase the beneficiaries' capacities to manage their assets, old and new.

At the community level, the impact of the CB interventions should focus on capacities to manage and enhance food security. This includes the enhancement of resiliency, decrease in vulnerability, better control over risks, and an increase in sustainability of livelihoods. See the section on the global assessment of community's capacities for more elements to measure.

Annex 2 Figure 2 presents the elements of M&E in the LCB activities in Title II FS projects in greater detail.

**Annex 2 Figure 2: M&E of LCB activities in Title II FS projects**



## **Monitoring**

Monitoring the capacity building process means following how specific capacity building activities are progressing and ensuring they contribute toward achieving the project's desirable impacts. Monitoring activities accounts for inputs, examines the process, and measures outputs and results.

## **Inputs**

Inputs to the process can come both from CSs and from beneficiaries. For example, both CSs and beneficiaries can contribute financial and material investments in varying levels; moreover, beneficiaries most often contribute manpower, land and meeting space, while CSs usually provide education, training, assistance, and some essential materials and tools. These inputs are used to produce activities that are expected to increase or enhance the targeted population's capacities, and ultimately their food security.

## **The process, or the activities themselves**

"Process" refers to the actual CB intervention. It covers the methodology and techniques used (i.e., formal training, workshop, meetings, etc.) or the approaches (i.e., RRA, PRA, PLA, learning-by-doing, action research, etc.). It also includes activities related to the structuring or strengthening of organizations, communities, and/or networks, including facilitating their access to material and financial inputs. The content in training or other CB activities is an important element to consider when examining the process.

Examining the process itself and assessing how and whether it was implemented adequately provides a necessary and crucial piece of information for the interpretation of results. Everyone knows of the impact a bad teacher can have on students' capacities when measured by their outputs. This analogy is very relevant to the area of capacity building in projects.

## **Outputs**

During this process, particular outputs are produced such as training materials, local trainers, etc. Since these outputs can be used over and over while the intervention expands its coverage, or while the beneficiaries take over their capacity building activities after the project pulls out, it is useful to equally monitor, evaluate and document them. In many instances, they eventually become new inputs into the intervention. This is represented by the feedback loop between the inputs and the activities, and between the activities and the outputs in Annex 2 Figure 1. Potential for sustainability of an activity can also be observed at this level when, for example, outputs such as locally trained trainers are fed back into the loop as new inputs. They can also be considered new assets to the community.

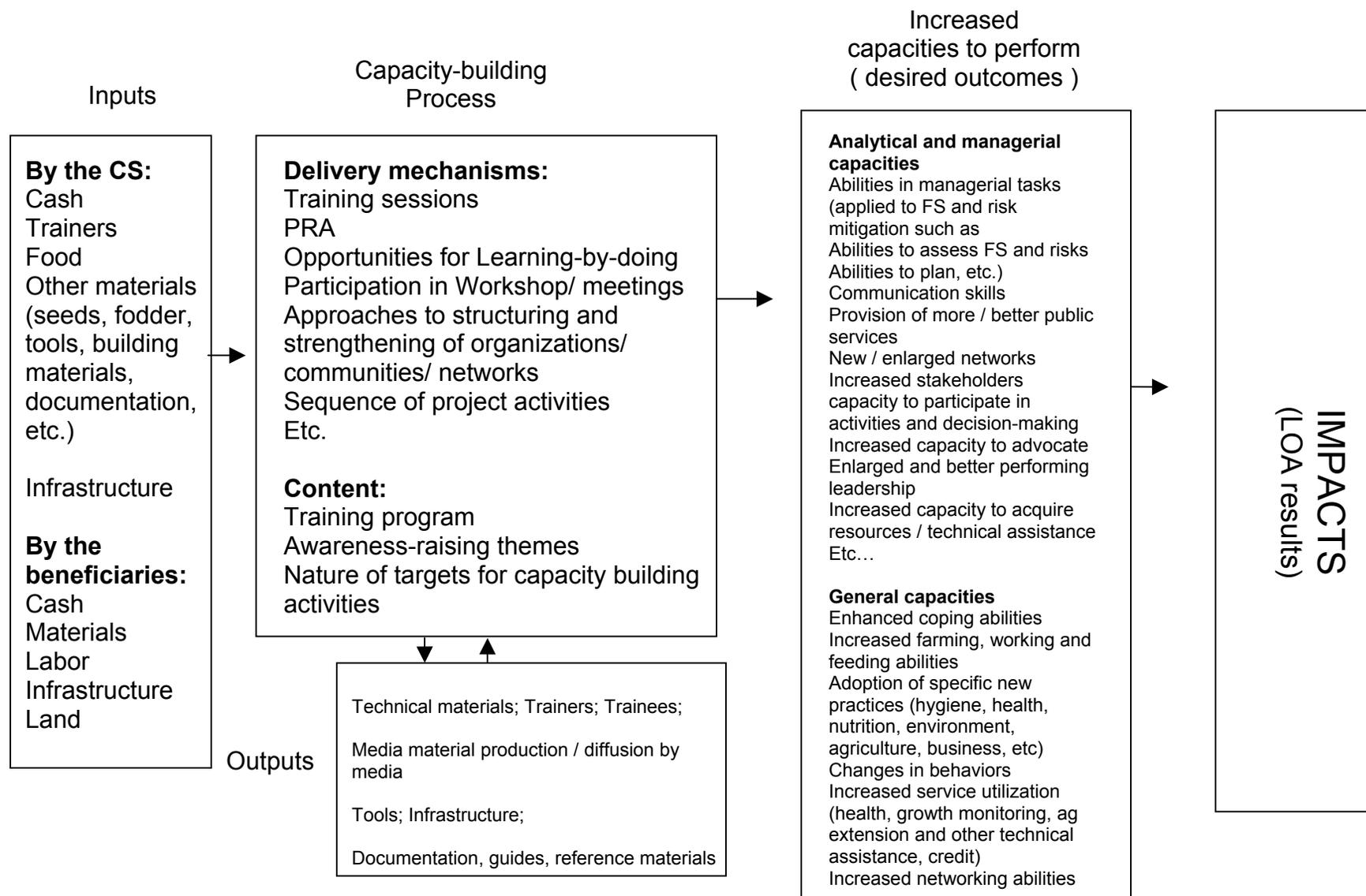
## **Results**

The results of the LCB process are intrinsically linked to the objectives of the capacity building activities. For each level of beneficiary, specific objectives for CB and corresponding outcomes may differ. For example, issues related to food availability are different whether the project is focusing at the community, the farmer's association or the

household level. They also differ according to the sector of interest, such as health, agriculture, small business, etc. For results to be relevant for measurement, they must correspond to the appropriate level in the population and to the sector of interest.

Annex 2 Figure 3 below lays out a structure for the monitoring process and gives examples of relevant elements to monitor.

**Annex 2 Figure 3: Monitoring the process of LCB in Title II FS projects**



## Annex 3

### ***Building an index for the measurement of local capacity building for food security***

Measuring local capacity building in food security projects and reporting on it can be a daunting task. An index can capture and document some common aspects of local capacity while easing the M&E process. Indices can be particularly useful for measuring community vulnerability and for measuring the overall capacity of social organizations or institutions in the community.

Quick steps for building an index:

1. Identify significant variables of interest that describe the phenomena to be measured (they should emerge from literature and from local knowledge)
2. Determine the relative weight each variable should get in the index (see *Alternative* below). For example, if there are 5 variables and if they should be weighted the same, give each a value of 10.
3. Identify the best questions to capture information on each variable (this step involves pre-testing local relevancy)
4. Give a value to each question, and ensure that the total value for all questions used to capture any one variable matches exactly the total value pre-determined for that variable. In the example in Step 2, the total value of all questions under one specific variable should equal 10.
5. The index provided in this example has a maximum potential value of 50 points. This corresponds to the total of all 5 variables, where each variable equals a maximum of 10 points allowed for the questions (5 variables X 10 points each = max of 50 points).
6. Determine a scale to use for the measurement of each question (usually a 5 point scale works best).
7. With stakeholders, determine the behavior (or other relevant description) to which each point on the scale corresponds and document it as a reference. This must be done for each question.

❖ *Alternatively*, consider only the indicators themselves in scoring the survey. If there are 33 indicators (as in the Africare case study in Annex 4) and each receives a maximum of 5 points, then the maximum potential score is  $33 \times 5 = 165$  points.

Issues with indices:

- The weighting of questions and variables is important and should correspond to the value they will receive. Allowing a value of 1 point to each question or indicator without paying attention to the potential bias this brings to certain aspects of the result can create a distorted measurement. This is all the more important because an index is usually reported in terms of its overall value, and thus hides the details behind this global value. If distorted, it can mislead decision-making based on the measurement.

- Ensure that the full database of responses is available to the project for further analysis at any time. It is useful for M&E staff to go back to the database and examine communities' performances under one or more particular variables or even indicators, in order to adjust the program's activities toward better achievement of capacity building and/or sustainability objectives. The global score is useful for the IPTT and for reporting, but less useful for program enhancement.
- Indices are most useful to communities that have actively participated in their construction and understand what they mean. However, this results in high local relevancy and low ability to generalize the outcomes for use in other locations. When the indices will be used to compare a number of projects or localities within a large area, they should be standardized to increase their generalizability. A scientifically rigorous process is required to achieve an index that will provide reliable results across a broad span of contexts.

## Annex 4

### ***CASE STUDY: Africare’s Food Security Community Capacity Index (FSCCI)***

Africare’s food security project in Chad developed an index to measure the increase in capacities of beneficiary communities. This index correlates best with the “analytical and managerial capacities” presented in this LCB framework.

It is composed of 8 variables. Each variable is measured by a number of indicators. The whole index comprises 33 indicators. Each indicator uses a scale of 6 points from 0 to 5; the value five indicates the best and maximum scoring for each indicator. Thus, the total potential score is 33 indicators X 5 points each = 165 points.

<b>Variables</b>	<b>Indicators</b>
Community organization	<ul style="list-style-type: none"> <li>• Increase in number of community organizations</li> <li>• Increase in number of meetings</li> <li>• Increase in the level of community initiative</li> </ul>
Participation	<ul style="list-style-type: none"> <li>• Renewal of appointments well organized and implemented</li> <li>• Renewal of the leadership</li> <li>• Type of participatory approach of the leadership</li> <li>• Level of participation of the population (or association members) in organizational decisions</li> </ul>
Transparency in management	<ul style="list-style-type: none"> <li>• Increase in population knowledge about community organizations that can make decisions that affect their lives</li> <li>• Increase in population (or members) knowledge about the activities and the types of decisions community leaders (or organization leaders) make</li> <li>• Transparent management of daily business</li> </ul>
Internal functional level of the community or of the organization	<ul style="list-style-type: none"> <li>• Well defined roles</li> <li>• Conflict resolution capacity</li> <li>• Capacity for raising external funds or other resources</li> <li>• Membership knowledge of the organization’s rules</li> <li>• Level of formal recognition of the organizations</li> <li>• Timely loan repayment</li> <li>• Activity documentation</li> </ul>

Analysis and planning capacity	<ul style="list-style-type: none"> <li>• Capacity to utilize RRA tools</li> <li>• Capacity to assess needs</li> <li>• Capacity to analyze the food security situation and to prioritize problems and solutions</li> <li>• Capacity to explain/discuss the food security situation</li> <li>• Capacity to develop, implement and evaluate action plans</li> </ul>
Capacity to maintain external relations	<ul style="list-style-type: none"> <li>• Increase in external relations (at the community or organization level)</li> <li>• Partnership</li> </ul>
Capacity to act	<ul style="list-style-type: none"> <li>• Autonomy</li> <li>• Increase in the decision-making capacity</li> <li>• Increase in budget for community works</li> <li>• Implementation of food security action plans</li> <li>• Decrease in the dependence upon the project facilitator (change in type of relationship over the year)</li> <li>• Level of literacy of community or organization members</li> </ul>
Individual capacities	<ul style="list-style-type: none"> <li>• Literacy level</li> <li>• Increase in the sense of commitment toward the community or the organization</li> <li>• Increase in self-confidence</li> </ul>

For each indicator, the project has determined the best method for collecting the data and has pre-defined the meaning of values 0 to 5 on the scale. The table below gives a few examples:

<b>Indicator</b>	<b>Method</b>	<b>Value meaning</b>
Increase in number of meetings	Measured through group discussion during Venn diagram activity	0=traditional structures with no meeting schedule and no by-laws; or modern groups and associations with scheduled meetings and by-laws but no increase in meeting frequency 1=10% increase in # of meetings 2=20% increase in # of meetings 3=30% increase in # of meetings 4=40% increase in # of meetings 5=50% (or more) increase in # of meetings

Level of formal recognition of the organizations	Measured through group discussion during RRA	1=traditional structures with democratic approaches but w/o official recognition 3= official structures working on legal basis with community recognition 4= also recognized outside the village
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Africare has implemented such FSCCI in a number of food security projects, especially in West Africa. Each country has developed its own version of the index. For example, while the project in Mali uses the same variables but fewer indicators, the one in Burkina Faso has incorporated the variable on external relations within the variable “Capacity to act”, and streamlined the indicators to achieve a potential total of 75 points. Overall, the same themes are covered in each project.

## Annex 5

### ***Resources on useful approaches and techniques for designing and implementing capacity building activities in Food Security projects***

1. The Food Aid Management (FAM). Fam's web site provides access to the Online Database of the Food Security Resource Center at FAM <http://www.foodaidmanagement.org/fsrc3.htm>. This library offers a large pool of resource materials from cooperating sponsors and other agencies.
2. Food and Nutrition Technical Assistance (FANta). FANta's web site <http://www.fantaproject.org> also offers a list of publications and other information relevant to food security projects and M&E.
3. CARE - Managing Risk, Improving Livelihoods. Program Guidelines for Conditions of Chronic Vulnerability 2<sup>nd</sup> Edition. CARE Eastern/Central Africa Regional Management Unit, Nairobi. 2003 (By CARE Eastern/Central Africa Regional Management Unit and TANGO International)  
This document first presents a conceptual overview of issues of chronic vulnerability and the main lessons learned in the past three years of using these tools (within CARE). Then it presents programming details of dealing with chronic vulnerability, emphasizing protecting people and their livelihoods in such situations, through improved information systems, improved community-based preparedness, mitigation and rehabilitation. The final section deals with the thornier issue of overcoming chronic vulnerability, and includes a chapter on longer-term program strategies and a chapter on advocacy<sup>5</sup>. The Guidelines include a CD-ROM of best conceptual articles, methodologies and case studies related to each section, which together constitute a comprehensive set of resources for programmers. The basic document is available online at <http://www.kcenter.com/phls/2003CVGuidelines.PDF>
4. Africare Field Manual on the Design, Implementation, Monitoring and Evaluation of Food Security Activities 1999 (by Suzanne Gervais and Karen Schoonmaker Freudenberger). This manual is intended for project administrators, technical advisors, and field workers intervening directly with beneficiaries of Africare's food security projects. Volume I describes the theory and concepts of food and nutrition security, participatory approaches to local capacity building and information systems, from project design to M&E of project activities. Volume II proposes practical techniques to devise a project conceptual framework as a management tool, a comprehensive overview of RRA and PRA to be applied in the field, and techniques to collect and manage information for DAP preparation

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<sup>5</sup> Excerpt from the introductory overview, page v of the manual.

and M&E systems both for project and community use. For more information, contact the Food for Development office at Africare in Washington D.C.

5. CRS Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA): A manual for CRS Field Workers and Partners. (by Karen Schoonmaker Freudenberger). This manual focuses on RRA and PRA techniques and applications in various sectors.
6. Asset-Based Community Development (ABCD). Mathie & Cuningham (2002) and (2003). The ABCD approach was developed by John Mcknight and John P. Kretzmann from their experience in reviving American urban and rural communities. This approach is being adapted to developing country settings and projects and promoted by the Coady Institute in Nova Scotia, Canada. Two papers present this new approach to building community capacity in developing countries. The approach focuses on the identification, promotion and strengthening of existing assets, as opposed to focusing on problems and needs assessments. The authors of these papers “found that this approach complements much of the innovative theory and practice occupying centre stage in development literature, such as is found on sustainable livelihoods, the role of social capital, democratization via decentralization, governance and civil society, and psycho-social strategies for community mobilization.” Indeed [they] would go so far as to say that, as an approach, it integrates and operationalizes many of these ideas. In an earlier paper, [they] elaborate on this further (see Mathie and Cunningham, 2002). In [the 2003] paper, [they] focus primarily on the fit between this approach and the theoretical contributions of literature on the sustainable livelihoods approach, and on the implications of an ABCD approach for the external agency’s role. The central message is that the transformation of the external agency is essential for the transformative potential of an ABCD approach to be realized”.<sup>6</sup> The Coady Institute at Saint-Francois Xavier University in Nova Scotia, Canada has produced training materials and offers a training program on this approach for NGOs and program designers in developing countries. For further information see [www.stfx.ca/institutes/COADY](http://www.stfx.ca/institutes/COADY) or contact [amathie@stfx.ca](mailto:amathie@stfx.ca).
7. World Vision Food Security Assessments: A Toolkit. “This Food Security Assessment Toolkit has been prepared for World Vision’s National staff, Regional staff, and Headquarter Program Officer staff, who are involved in the design of programs that use food resources. Many of the principles outlined [are] appropriate for non-food resource-funded activities and for other relief and development organizations. The purpose [...] is to provide an introduction to inform and guide WV staff through the necessary steps in an assessment process. Special attention [is] paid to food security assessments, as well as agriculture, education, nutrition, and water and sanitation assessments. A list of specific assessment tools and a decision tree is also presented in this manual. This [is to] support WV staff in standardizing the assessment process but leaves flexibility for

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<sup>6</sup> Excerpt from the 2003 paper by Mathie and Cuningham

modifications. References are included for more information.” Attachments included in this manual are: WVRD’s Food Security Assessment Guidelines for Emergency Situations and the General Methodology for a Rapid Food Security Assessment.<sup>7</sup> For more information, contact World Vision’s Food Resources Team.

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<sup>7</sup> Excerpt from the World Vision tool kit introduction