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**RAPID ASSESSMENT OF THE FOOD AND NUTRITION SECURITY
IMPACT OF THE CARE FOOD PROGRAMMING ACTIVITIES
IN EASTERN SHEWA AND WESTERN HARARGHE**

October, 1993

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I. EXECUTIVE SUMMARY

INTRODUCTION

A rapid food security assessment was carried out in Eastern Shewa and Western Hararghe (September 25 - October 15, 1993) to determine: (1) what CARE food-assisted projects have been undertaken, and how they were designed, implemented, and evaluated; and (2) what impact the project has had on the participants. To determine whether the projects were properly designed, a rapid assessment of the household food security situation in each project area was carried out. Six Peasant Associations (PAs) were assessed in Eastern Shewa (Fachassa (Chekafachassa), Dongori Wonga, Yaya, Kachama Sobaku, Bate Bora, and Hassie Dhera) and six in Western Hararghe (Mieso, Kuni, Kurfasawa, Galessa, Annano, and Hardim). The PAs were selected on the basis of accessibility, economic base (e.g., cereal, agropastoral, pastoral), distance from main roads, and history of food assistance. Two villages in which CARE assistance was not provided were surveyed in order to compare project areas with nonproject areas.

In addition to the rapid food security assessment, an institutional assessment was carried out to determine the procedures used by CARE in program planning/design, targeting, implementation and management, and assessment of project effectiveness. Information sources included a document review, key informant interviews with CARE staff, and interviews conducted with government agencies, donors, and other collaborating institutions such as the United Nations organizations and other NGOs.

To ensure that all team members were familiar with the concepts and procedures to be used in this assessment, a training exercise was also conducted prior to going to the field. This training exercise was intended to build capacity among CARE staff so that they could carry out such assessments in other areas in the future. Twenty-five people participated in the training exercise.

FINDINGS

Food and Nutrition Security in the Project Areas

The nutritional security of both project areas is affected not only by the factors influencing household food security, but also access to health facilities, clean water, and adequate mother/child care. In both areas, access to clean water and adequate health care were major problems. The amount of time and resources used by households to obtain water and health care has significant negative impacts on efforts to promote better access to food, through either food-for-work or emergency free food distribution. In terms of mother/child care, the health of the mother and child is negatively affected by the labor expended in obtaining water and fuelwood. This has implications for the time available for child care and frequency of feeding. In addition, the narrow diet available to families in the project areas means that many families do not have adequate access to proteins (pulses, meats), vitamins (vegetables, fruits), or oil/fat (necessary for synthesizing vitamin A). There is also little supplementary feeding and few proper weaning foods for children. These problems are compounded by the fact that the majority of the population is

illiterate, which influences care, hygiene, and dietary patterns. All of these factors, coupled with the general food insecurity in both areas, have led to extremely high malnutrition rates.

Both areas are suffering chronic as well as transitory household food insecurity. A major underlying factor in both areas is the high rate of population increase (three percent per year). In Eastern Shewa, the chronic food insecurity is due to increasing landlessness (in some locations as high as 50 percent), limited access to inputs (land, labor, oxen, improved seed and other inputs), natural resource degradation (soil fertility, water availability, access to pasture and forests), limited access to government services, limited alternative income-generating activities due to limited access to markets and high rates of illiteracy, and the loss of animals for draft, milk, and as a buffer against food shortages brought on by drought or war. The chronically food insecure are also not always included in the target group for food aid assistance.

The chronic food insecurity situation in Western Hararghe is much more severe than in Eastern Shewa because of the political insecurity that characterizes much of the area. This is evident in the high rates of severe malnutrition found in the area, and the limited variety of foods consumed. Transitory food insecurity caused by locationally specific drought conditions has also made this region extremely vulnerable to food deficits this year.

To address the chronic food insecurity problems in both areas adequately, food assistance programming must take steps to ensure that food insecure households are targeted in project interventions. Otherwise, all natural resource enhancing activities will have little impact because these populations will rely on charcoal and firewood sales to survive.

Transitory food insecurity is prevalent in both areas as well. Yields are decreasing due to changing rainfall conditions, and crop failure is a common phenomenon. A contributing factor is the fact that the cropping mix is not matched to the changing rainfall conditions, and farmers do not have access to varieties of seed that are better adapted to such conditions. The variety of crops grown is limited, and could be expanded significantly if appropriate seed were made available. Yields are also affected by limited access to traction, labor, and improved inputs such as fertilizer and pesticides. Due to the reduced yields, farmers are having to rely more on market-purchased food to make up for production shortfalls. Access to alternative labor activities are limited, as are commodities that can be exchanged for food. As a result, the terms of trade for labor, animals, and other products sold by farmers turn against them with regard to food purchases. To compensate, farmers turn to charcoal and wood sales as loss management strategies that have a long-term negative impact on the environment.

CARE'S FOOD ASSISTANCE PROGRAMS

It is within this context that CARE's food assistance programs are operating. In Eastern Shewa, the program has been concentrating on food-for-work (FFW) activities, in the areas of reforestation, agroforestry, soil and water conservation, pond construction, vegetable gardening and road construction. The benefits derived from these programs, from the beneficiaries' perspectives, include: a positive impact on access to food; increased access to oil (which may not be obtained by any other means); better access to water through the construction of ponds; greater awareness of natural resource conservation (especially the value of enclosures); roads that link communities to outside markets, resources, and services; increased skills in conservation,

road, and pond construction; and less dependence on credit and wood and charcoal sales. In addition, CARE Ethiopia's Food Information Systems (CEFIS) has made considerable progress in targeting transitory food insecurity in the area. However, CARE does not have baseline data or clearly defined performance indicators to confirm the progress in these activities with regard to impact on household food security (HFS). In fact, the performance indicators that are used are not true measurements of the project objectives.

Despite the positive contributions made by the project, the beneficiaries and the assessment team identified a number of areas in which improvements in food aid programming could be made. (1) Many people felt that there are not enough activities to accommodate all the people seeking work, particularly during the cropping season when the food shortages are the most critical. The team found that introducing food-for-work at this time would have no significant negative effects on food production; it is during the hungry season that many communities are forced to sell charcoal and wood to purchase food in the market. (2) The chronically vulnerable populations in many villages are excluded from the FFW because they are not PA members (e.g., the landless). (3) The FFW payments do not always come on time. (4) The distribution centers are sometimes far from the village. (5) Communities do not participate enough in the design of the FFW activities, setting priorities, or assisting in targeting. (6) The food basket is incomplete and not tailored to family size. (7) Work norms do not take different levels of vulnerability into account. (8) Activities are limited, and do not take the range of viable (food security enhancing) options into account. (9) CARE lacks the resources to address adequately the needs of the communities with which they work.

In Western Hararghe, the food assistance program is orientated toward emergency free food distribution. Given the very difficult security problems under which CARE is operating in this area, it is to be commended for having any presence at all. It is obvious from the interviews conducted in the areas surveyed that CARE's assistance is much appreciated by the beneficiaries. The food has actually saved lives in many villages, prevented migration, reduced the magnitude of fuelwood sales, and allowed people to try to pursue agricultural activities as a source of livelihood.

Under such difficult conditions, the food distribution system is bound to operate imperfectly. The major problems cited by the beneficiaries and identified by the assessment team included: (1) the ration amount does not always account for the size of the family; (2) food sometimes comes too late; (3) the harvest last year was not sufficient to warrant the extent of the FFD reduction; (4) the area-based assessments do not capture intragroup vulnerabilities; (5) the distribution centers are too far away for people with no means of transport; (6) not all of the people in need of food are on the distribution list due to recent displacement--the distribution list needs to be updated; and (7) many of the populations serviced by CARE are becoming increasingly dependent on the FFD.

RECOMMENDATIONS

To improve the food assistance programs in the areas surveyed, the following recommendations are proposed by the assessment team. These recommendations are not prioritized, so the order in which they are discussed does not reflect their relative importance. The recommendations are discussed under the following headings: targeting, performance monitoring, food basket, types of

FFW activities, inputs for work, sustainable development, and promoting food and nutrition activities in conflict areas. Many of these recommendations apply to both regions.

Targeting

The following steps can be taken to improve targeting of beneficiaries to ensure that the chronically vulnerable as well as the households suffering from transitory food insecurity are included in project activities. **Committees should be established to include representatives from the various vulnerable groups (e.g., landless, women-headed households, and elders).** This will prevent the PA Chairpersons from excluding the most vulnerable from the FFW lists. Such committees could be tested on a pilot basis in several communities. Periodic spot checks could be done to see if the committees are targeting effectively. **The CEFIS is an excellent system for monitoring transitory food insecurity in the areas.** For those subareas that are prone to recurring food insecurity, contingency plans should be established to improve the timeliness of response in order to protect livelihoods and any gains made by CARE. In addition, CEFIS could monitor baseline conditions in the project areas as a way to get at performance indicators. **The indicators that are used in food security monitoring and performance evaluation should consist of chronic/baseline indicators, and transitory indicators that monitor current conditions.** Transitory indicators should consist of leading indicators that can be monitored through unobtrusive measures that indicate the early stages of food insecurity problems and concurrent indicators that reflect the effect of the actual food shortage (e.g., changes in consumption patterns). Information on concurrent indicators would only be collected when the leading indicators demonstrate that conditions are worsening. This information could be collected through rapid food security assessments. Once the food security problems are verified, contingency plans involving either FFW or FFD could be initiated. **CARE should consider whether FFW activities could be tailored to different types of vulnerable groups.** This would involve designing different activities for the landless and the landed, or for the weaker members of the community. In addition, consideration should be given to incorporating more activities that give the communities an opportunity to obtain CSM.

Performance Indicators

Output indicators should be defined and periodically measured to detect the impact of the project on household food security. These could include the changes in the number of meals, the diversity of foods consumed, and food substitutions. Care must be taken to ensure that the indicator is not measuring an artifact of food aid, which may not be related to longer term food security. This is why pre- and post-harvest measures are important. Cultural patterns in food consumption must be taken into account. **Nutritional status indicators can also be monitored as a way to assess CARE's impact on overall well being in the communities in which it is working.** If CARE intends to have an impact on the nutritional security of the populations it is working with, consideration should be given to incorporating interventions that improve water quality and access to health services. Otherwise, nutritional status as an output indicator may not change significantly. CARE could enlist the help of the Ministry of Health (MOH) to carry out such periodic assessments.

Food Basket

Presently, the grain being used in both locations for food assistance is wheat. **Consideration should be given to providing grains that people are likely to produce themselves or can be readily obtained in the market.** Maize and sorghum are good candidates. This could avoid a situation where taste preferences cannot be satisfied locally. The market impact of food assistance needs to be monitored more carefully to avoid creating market distortions. In addition, consideration should be given to adding a pulse to the food basket to improve the diet. The current diets of the target populations lack protein and important vitamins and minerals. Another alternative is to expand access to CSM to vulnerable populations.

Types of Food-for-Work Activities

The communities themselves should play a greater role in determining the types of FFW activities they want to pursue. This means that the FFW activities need to be more locationally specific. For example, many communities expressed a desire to build a school or a clinic because these services were not available. If CARE does not have the resources to follow up on the priorities, it could solicit the help of other NGOs or different ministries. **FFW could also be provided to give more technical training to beneficiaries.** Food for training could be provided in such areas as crop production/seed multiplication, conservation, nutrition/hygiene, child care, and various other skills. Some community members could be trained to act as trainers for others to increase coverage. Line ministries could second staff to act as trainers in special areas.

Inputs for Work

In addition to food, consideration should be given to providing inputs for work as a way to improve the long-term resilience of the communities targeted. For example, inputs such as fertilizer, pesticides, seeds, tools, and livestock could be provided. Participants could earn credit toward livestock (e.g., oxen, goats, donkeys) or some other input. This approach may help in the targeting issue because many of the landed households may opt for inputs rather than food. The importance of monetizing food aid to allow for these types of inputs is obvious. The advantage of inputs-for-work is that it can be self-targeting. Through such approaches, cottage industry activities for the landless could also be promoted.

Sustainable Development

Every food assistance program should have built into it activities that promote long-term food security. CARE has been trying to do this through its focus on conservation and improved water access. Every FFW and FFD program needs to be interlinked with sustainable development components. The ultimate objective is to make the populations more resilient and self-reliant. Thus every FFW or FFD should be designed with a long-term vision. For example, in an area where FFD is taking place, inputs such as improved seed could be provided simultaneously so that the production systems become more viable. Also important are contingency plans that monitor locationally specific indicators that determine when to implement a mitigation activity in order to prevent a community from sliding back to a more vulnerable state. CARE needs to look at all programming in this manner.

To incorporate the protection and promotion of livelihoods into ongoing provisioning activities, CARE has to reconsider how large an area it can reasonably cover. It may have to limit the geographical area it covers, delegating the other regions to other NGOs. Indigenous NGOs could have a role to play here. Before launching a broad-based, sustainable program, pilot tests should be initiated to determine the best way to promote livelihoods for a given area.

Food Security Promotion in Conflict Areas

To promote food security in areas prone to political conflict, the following factors should be considered. First, mobile extension teams could be used to train lead farmers to act as community extension agents. These lead farmers could then provide training to other farmers regarding improved seed varieties and vegetable production. Another way to provide extension messages as well as inputs is through food distribution centers. A training facility could be developed at the distribution center to train members from the PAs in more vulnerable areas.

NGO Workshop

An NGO workshop should be held in the near future to discuss: (1) the unequal distribution of activities in the country; (2) opportunities for collaboration; (3) work norms; (4) activities that promote long-term food security; and (5) ways to facilitate better working relationships with line agencies. In addition to representatives from the various NGOs working in Ethiopia, representatives should be invited from the Relief and Rehabilitation Commission (RRC), the Ministry of Health, other line ministries, and the various donors.

Increasing the Frequency of Free Food Distribution in Western Hararghe

In light of the apparent overestimate of the 1992 harvest, the failure of the maize and sorghum crops in low land areas, and present household food insecurity in Western Hararghe, **CARE should carefully consider increasing FFD from quarterly to monthly in this region.**

II. INTRODUCTION

Over the past 20 years, Ethiopia has suffered from chronic and transitory food insecurity, and has often been referred to as the "land of famine." Since the 1970s, there have been two major famines (1973/74 and 1984/85), and food shortages have been a recurring problem for different regions every year. To address these food deficits, governmental and nongovernmental (NGO) organizations have become involved in the rescue operation of saving the lives of millions of people. CARE Ethiopia is one of the NGOs that started its humanitarian assistance in the midst of the 1984/85 famine. Since 1985, CARE Ethiopia has responded to the food needs of thousands of people in the regions of Eastern Hararghe, Western Hararghe, Eastern Shewa, and Borana. CARE has also assisted the refugee population in the Ogaden by providing water for the camp population in Jijiga, Hartishek, and Kebriyah. CARE has delivered large amounts of commodity food aid to food insecure populations in these areas through emergency free food assistance and food-for-work.

This assessment of food assistance programming focuses on two of the regions in which CARE is operating, Eastern Shewa and Western Hararghe. In Eastern Shewa, CARE Ethiopia operated an emergency food transportation and distribution project from February to December, 1988. This program was converted into a FFW development program after the good harvests of 1988. Since 1989, CARE has been working in the Adama Boset district to combat severe land degradation, food and water shortages, and deforestation. In Western Hararghe, CARE has been addressing the drought needs of the population through both emergency food distributions and development interventions since 1986. Insufficient rainfall, a rapidly deteriorating land resource base, and limited access to agricultural inputs are some of the problems contributing to the recurring food deficits that plague the area. Although attempts were made to phase into a food-for-work strategy in 1987, CARE resumed emergency food distribution in the area in 1990 when the long rains failed, resulting in severe drought conditions. CARE has continued to provide this emergency assistance to the present, despite growing political instability that has made food programming both difficult and dangerous to implement.

A rapid food security assessment¹ was carried out in Eastern Shewa and Western Hararghe to determine: (1) what CARE food assisted projects have been undertaken, and how they were designed, implemented, and evaluated; and (2) what impact the project has had on the participants. To determine whether the projects were properly designed, a rapid assessment of

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the household food security situation in each project area was carried out. Six Peasant Associations (PAs) were assessed in Eastern Shewa (Fachassa (Chekafachassa), Dongori Wonga, Yaya, Kachama Sobaku, Bate Bora, and Hassie Dhera) and six in Western Hararghe (Miesso, Kuni, Kurfasawa, Galessa, Annano, and Hardim). The PAs were selected on the basis of accessibility, economic base (e.g., cereal, agropastoral, pastoral), distance from main roads, and history of food assistance. Two villages in which CARE assistance was not provided were surveyed in order to compare project areas with nonproject areas.

In addition to the rapid food security assessment, an institutional assessment was conducted to determine the procedures used by CARE in program planning/design, targeting, implementation and management, and assessment of project effectiveness. Information sources included a document review, key informant interviews with CARE staff, and interviews conducted with government agencies, donors, and other collaborating institutions such as United Nations organizations and other NGOs.

To ensure that all team members were familiar with the concepts and procedures to be used in this assessment, a training exercise was also conducted prior to going to the field. This training exercise was intended to build capacity among CARE staff so that they could carry out such assessments in other areas in the future. Twenty-five people participated in the training exercise.

The following report presents the results of this assessment. The information is organized in the following manner. First, the methodology is discussed, stating the objectives and activities related to the various components of the assessment methodology. Second, the findings of the study are presented, discussing the results of the institutional assessment followed by a summary of the information obtained through the rapid food security assessment carried out in each area. Third, a summary of the evaluation findings is provided. This is followed by a section dealing with the team's overall conclusions and recommendations. The report ends with a number of annexes that present information regarding the villages surveyed, summary tables of the nutritional data, crop calendars, the list of people contacted, the topical outline used in the rapid food security assessment, the conceptual model that guided the team's inquiries into food and nutritional security issues, and matrices that summarize the rapid assessment information by village.

III. METHODOLOGY

A. BACKGROUND AND RATIONALE

The field assessment methodology used in this study forms part of a wider effort to update and revise CARE's Food Aid Policy and Guidelines. Based on a commitment to improve the programming of Title II and other food resources, CARE has begun a process to review its policy and guidelines published in 1985. As part of this review process, CARE has conducted desk reviews of its food programs in Africa, Asia, and Latin America and developed a draft food security conceptual framework. CARE is also carrying out field assessments of food aid programs in Peru, the Philippines, and Ethiopia. This exercise represents one of these field assessments.

The primary purposes of these field assessments are to determine what Title II and other food assistance programs have been undertaken and why, and what has been the impact on beneficiaries. Although these assessments are not substitutes for full-blown impact evaluations,

they provide an initial snapshot of the effectiveness of CARE's food programming activities in selected countries. The information derived from these assessments can then be used as a basis for developing processes to carry out regular program assessments and evaluations. Assessments will also serve as an important training exercise for all Food Program Unit (FPU) members. Thus the secondary purpose of these assessments is to enhance the field assessment skills of FPU members.

B. OBJECTIVES

The general objectives of this assessment were: (1) to determine what CARE food assisted projects have been undertaken in Eastern Shewa and Western Hararghe, how they were designed, implemented, and evaluated; (2) to assess the impact of these projects on the people who participated in the programs; and (3) to train a number of CARE Ethiopia staff to build capacity so that they could carry out similar assessments in other areas in the future. Two additional objectives of this study were to characterize the food and nutrition security of the project areas and to identify various options that could be addressed to improve food aid targeting so that household food security could be enhanced.

C. TRAINING

To ensure that all team members participating in the assessment were familiar with the concepts of household food and nutritional security and the rapid assessment methodology used, a training module was provided in Nazareth, Eastern Shewa. The agenda is found in Annex 5. Twenty-five people attended the workshop, which was conducted over a three-day period. The topics addressed in the workshop included: an introduction to food security (nutritional security, livelihood security, household food security, production-consumption linkages, and food systems analysis); coping strategies; household food security and environmental degradation; indicators of household food security; the emergency-development interface (vulnerability mapping, contingency plans, promoting sustainable livelihoods); introduction to rapid rural appraisals; RRA methods (sampling, unit of analysis, data collection techniques, and interactive data gathering tools); procedures for conducting RRAs in Eastern Shewa and Western Hararghe; constructing interview guides; and information relevant to intervention design. Every attempt was made to make the training as participatory as possible; thus, group activities were integrated into each major training topic. The participants in the workshop had a major role in revising the topical guide that was to be used to gather the household food security information.

D. INSTITUTIONAL ASSESSMENT

An institutional assessment was carried out to determine the procedures used by CARE in program planning/design, targeting, implementation and management, and assessment of project effectiveness in the Eastern Shewa and Western Hararghe regions. Information sources included: project documents such as the project proposals, quarterly reports on progress, and any other relevant secondary information; key informant interviews with CARE staff at headquarters and in the field; interviews conducted with government agencies such as the Ministry of Agriculture (MOA) and Relief and Rehabilitation Commission (RRC); and interviews with donors and other collaborating institutions such as the United States Agency for International Development (USAID), the Canadian International Development Agency (CIDA), the European Economic

Community (EEC), the United Kingdom's Overseas Development Agency (ODA), and the World Food Program (WFP).

Inquiries regarding program planning/design focused on the adequacy of initial needs assessments, objectives, inputs, plans for phasing out, sustainability of project activities, targeting, and community participation. With regard to implementation and management, questions addressed inputs and outputs, obstacles to implementation, verification of targeting, monitoring systems for target groups, the role of the beneficiaries in decision-making, institution-building components, and the technical quality of project execution. Project effectiveness inquiries focused on whether the project management was measuring impacts with performance indicators, what the staff perceived the project impact to be, whether the results are sustainable, the opportunity costs/benefits, and the impact on public policy.

E. RAPID FOOD SECURITY ASSESSMENT

To determine whether the projects were properly designed, a rapid food security assessment was carried out in each project area. Six PAs were assessed in Eastern Shewa (Fachassa (Chekafachassa), Dongori Wonga, Yaya, Kachama Sobaku, Bate Bora, and Hassie Dhera) and six in Western Hararghe (Miesso, Kuni, Kurtasawa, Galessa, Annano, and Hardim). The PAs were selected on the basis of accessibility, economic base (e.g., cereal, agropastoral, pastoral), distance from main roads, and history of food assistance. Two villages in which CARE assistance was not provided were surveyed in order to compare project areas with nonproject areas (see Maps, Annex 1).

1. Composition of the Survey Team

The survey team consisted of 20 members; 17 males and three females. All of the 20 people did not participate in all phases of the survey. For example, the team composition changed when the survey began in Western Hararghe. The various disciplines represented by the team included agronomy, anthropology, agricultural economics, nutrition, soil and water engineering, demography, rural sociology, and a medical doctor. In addition, regional government staff from the MOA and the Ministry of Health (MOH) also participated on the team as interviewers and in collecting nutritional status information. Their participation will help foster future interinstitutional collaboration between CARE and the line ministries in addressing food and nutrition security problems.

The large team was divided into three smaller teams, each team having a designated team leader. The various teams visited different villages on each of the days that the survey was conducted. Team members were rotated within and between teams throughout the survey to give each person an opportunity to work and learn from the other team members. An attempt was made to match one technical scientist with one nutritional or social scientist in pairs to carry out interviews.

2. Secondary Data Review

Prior to going to the field, the team examined existing information that had been collected on the area. Several documents provided a good overview of the project areas, such as the midseason crop assessments carried out by CARE Ethiopia's Food Information Systems (CEFIS) and baseline socioeconomic surveys conducted recently by Dr. Getachew Diriba, one of the co-

team leaders of the assessment. In addition, maps were obtained of the survey areas to aid in the selection of PAs.

3. Key Informant Interviews

Good background information was obtained from the CARE staff working in the areas to be surveyed during the training exercise. The group activities during the training exercise focused on the livelihood systems of both Eastern Shewa and Western Hararghe. This information provided the team with an understanding of the major trends in the area and the ongoing development activities that could be tapped into when considering interventions.

4. Development of the Topical Outline

A topical list or minimum data set was developed to help guide the interviews before going to the field. This list assisted the team members in addressing the topics and aspects of topics that they might otherwise have omitted. Secondary data sources were consulted to help devise the topical list. The development of the topical list was an important team-building exercise. Each team member contributed to the list, and survey priorities were established prior to going to the field. Consensus was reached on every topic included in the outline to ensure that the team functioned as a single entity from the beginning of the field exercise.

The topical outline was pretested in the first PAs surveyed. Prior to this field test, the team discussed the appropriate procedures of conducting the interviews, avoiding biased questions, handling translation, and handling sensitive topics. Before going to the field, matrices were constructed from the topical list to allow for the transfer of data from field notes to a comparative format (see Annex 8). These matrices allowed for continuous comparisons among households and PAs, which helped focus discussions among team members. They also provided a means for evaluating or checking the completeness of the field notes. At the end of the survey, these matrices were shared with all of the team members to facilitate the write-up of the report.

5. Survey Procedures

Upon arrival in the PA, the team first met with a large group of the members of the PA and explained the purpose of the study. In this meeting, the team explained who they represented, what the results would be used for, and why so many questions would be asked. General inquiries were directed to the group regarding village infrastructure, access to resources, land tenure arrangements, major crops grown, sources of credit, government programs in the area, major populations, climatic, resource, and food security trends, social organizations operating in the village, access to development projects, participation in food aid programs, and community problems and needs. At the same time that the group interview dominated by the men was being conducted, one of the female researchers conducted a focus group discussion with a group of women, asking the same set of questions.

After the initial inquiries with the assembled villagers, the team split up into groups of two to conduct interviews with individual households. In general, the teams tried to seek interviews with a range of household types taking into account age, gender, and access to resources. The selection of households to be interviewed was based on the list of families in which nutritional measurements were being collected. This not only allowed for stratified samples to be drawn, but also meant that the team had nutritional measurements for every household interviewed. Focus group interviews were also conducted with female-headed and landless households.

The specific interviews were conducted with households away from the rest of the villagers in order to avoid biased responses. Attempts were made to interview both male- and female-headed households to take into account different knowledge and opinions. For example, female-headed households tend to know more about harvest quantities, processing values, storage losses, and consumption patterns.

After the interviews were completed for a selected PA, the team members gathered to discuss their findings and formulate hypotheses regarding the major food security trends in the area. This procedure helped summarize the important attributes, constraints, and opportunities that characterized the food security situation, and provided a basis for comparison when the survey work was initiated in the other PAs. These reviews helped revise the topical outline for further interviews. In addition, this process was also a crucial team-building exercise.

Once the survey was completed, hypotheses were formulated regarding the major livelihood systems operating in the two project areas, changes occurring in these livelihood systems, major food and nutrition constraints, the most vulnerable populations, and the interventions recommended to help improve household food security in the area. In addition, the effectiveness of the food aid activities in each area was also assessed on the basis of the perception of the participants and the evaluation team. Team consensus was reached on all constraints and recommendations proposed. This review gave the team members an opportunity to combine their various disciplinary expertise in formulating possible solutions.

Following the discussion of the food and nutrition security constraints, the status of the food assistance programs, and recommendations, the team leaders assigned each member a portion of the report to write up.

F. RAPID NUTRITIONAL ASSESSMENT

To obtain an approximation of the diet and nutritional status as part of the broader food and nutrition security assessment, a quota sample of from 24 to 40 households with children under five years of age was selected from each village. The sample was designed to be roughly representative of four socioeconomic strata in each village, ranging from those without assets (land and/or animals) to those with relatively large land holdings and livestock ownership.

As a means to obtain a more precise indication of nutritional status, the youngest child under five years of age from each family was weighed and measured for height or length (depending on whether the child was measured while standing or supine), and child health and household 24-hour dietary recalls were obtained from their mothers. Weighing was done by health staff recruited from the MOH zonal offices in Nazareth and Asebe Tefari under the supervision of nutritional specialists on each subteam using Salter spring scales and standard measuring boards. MOH staff spoke the local languages and were well acquainted with eliciting age, morbidity, mortality, and dietary information.

Using these methods, 367 children from six to 60 months were weighed and measured and their mothers provided health and dietary information. A nested sample of 102 of these households were interviewed in-depth regarding their household food security and participation in the CARE food aid program in the village. The health staff also examined all children under five for common ailments such as malaria, eye infections, diarrhea, and vitamin A deficiency, and

appropriate medications were dispensed on the spot (e.g., vitamin A, oral rehydration salts, antimalarial drugs, and eye ointments along with instructions).

Anthropometric analysis was done using standard weights for height or length and according to other standard procedures used by relief agencies in Ethiopia. (Time did not permit analysis of weight or height for age that might have been a more appropriate indicator for long-term effects of food insecurity). Group mean percentages of standard were used for analytical association with health information, diet, and other household food security information.

IV. FINDINGS

A. INSTITUTIONAL ASSESSMENT

1. Donor and Other Collaborative Organizations' Perspectives

Five donors and collaborating agencies, United States Agency for International Development (USAID), the United Kingdom's Overseas Development Agency (ODA), the European Economic Community (EEC), the World Food Program (WFP), and the Canadian International Development Agency (CIDA), met with the team. Programming priorities, as discussed in the interviews, varied among organizations, as did the extent of recent contact with CARE. The agencies' perceptions of CARE Ethiopia's food programs were positive on the whole. Opinions of CARE ranged from "a reliable partner" and "one of the most serious NGOs in Ethiopia in its use of food aid" to "not very impressed."

Of the four donors, the EEC has had the least recent interaction with CARE. The EEC shifted away from channeling resources through the Government five years ago, and now has yearly NGO food security programs consisting of food, seeds, and support for Early Warning Systems. A major initiative of recent years has been the use of monetization funds to purchase locally produced food aid. (It appears that some misunderstanding may have occurred surrounding the reasons CARE refused EEC funds to conduct a local purchase). With respect to the concept of an employment-based social safety net, presently under intensive discussion in the country, some reserve was expressed regarding the breadth and effectiveness of coverage it may provide.

ODA has also increasingly funneled funds through NGOs, which are perceived as more accountable than the Government. CARE's programs funded by ODA are seen as worthwhile and generally cost effective. Reporting by CARE is viewed as adequate; however, it was suggested that quarterly monitoring reports would be helpful. A strong interest was expressed in food-for-work programs over free food distribution, because of the former's capacity to provide a stimulus to local economies. Cash-for-work was felt to be inherently corrupt. Interest was also expressed in rural programs, given that only a small percentage of the Ethiopian population resides in urban areas. Moreover, a large proportion of migration to urban areas has been related to push rather than pull factors; that is, related to rural distress rather than work opportunities in cities.

USAID sees CARE's Food-for-Work and Free Food Distribution programs as generally consistent with its food security objectives for Ethiopia. These include (1) increasing staple production, and (2) provision of emergency and humanitarian assistance to Ethiopia's most vulnerable groups. Food-for-work outputs, in the form of improved agricultural infrastructure

and roads linking rural areas to markets, are important to regional food security. CARE also provides a safety net to help prevent recurrent emergencies in the form of free food, particularly important for the drought-prone area of Hararghe. Likewise, the CEFIS strengthens CARE's ability to identify and respond to impending emergencies.

USAID perceives CARE to be doing a good job in involving the community in targeting the most needy, although reaching certain vulnerable groups is recognized as difficult. Emphasis should be placed, therefore, on close targeting of food assistance to areas of greatest chronic food insecurity. A recommendation was made that commodity/recipient reports, although meeting requirements, could be made more useful.

CIDA is considerably less satisfied with CARE than its donor counterparts. CIDA reported communication problems, lack of cooperation, superficial and top-heavy management, poorly conceived FFW activities, poor community participation, inappropriate oil monetization, lack of sustainability, and dependency creation. CIDA thinks that CARE should be installing hand pumps in its operational areas, instead of digging ponds that do not substantially increase the supply of clean water. CARE should focus on the technical implementation of its FFW programs rather than on just the outputs. CARE should also focus on more community participation. CIDA anticipates a "cool" relationship with CARE in the future, and that this relationship will depend largely on how CARE Canada responds to the recently completed CIDA evaluation of CARE Ethiopia's programming.

WFP will be one of the major collaborators with the RRC's Employment Based Safety Net Program, planning eventually to phase out all relief feeding, apart from refugee programming, to be replaced by community-based food-for-work. Communities would be involved in identifying priority public work projects, which could be implemented during periods of food insecurity. Self-targeting is expected to result from low food wages, which would only attract the most needy of the community. Details of determination of this rate have yet to be worked out; however, a 2.5 kg daily rate appears to be a possible candidate. Fifteen pilot project areas have been identified by the RRC and may begin operation during early to mid-1994. WFP is considering supplementing food-for-work with small vulnerable-group feeding programs focused in the same areas.

The WFP food basket for relief feeding consists of cereals, pulses, and oil. Mainly wheat is received from donors; however, WFP often trades the wheat for maize and sorghum with the Agricultural Marketing Corporation in Addis Ababa, receiving greater tonnage of cereals in exchange, and often saving on internal transportation costs.

Anticipated food requirements for Ethiopia during the coming year are an estimated 10-20 percent higher than last year. However, the official FAO/WFP Assessment Mission will be coming next month to analyze the food needs. At the same time, food programming is being scaled down by donors.

2. Government Views and Policies

CARE works with both the MOA and RRC. The MOA has recently been split into the MOA and the Ministry of Natural Resources. The latter is not yet sufficiently established to have had any contact with NGOs; in the meantime, CARE continues to liaise with the MOA.

The mandate of the MOA Office for NGO Liaison is to coordinate and assist NGO efforts, to provide them with necessary resources, and to monitor and evaluate their programs. The MOA collaborated with CARE in the design of its Nazareth (Eastern Shewa) Project, and continues to sit on a technical committee with CARE that provides on-going monitoring and problem-solving for the project. It worked on the Habro project design as well, and is satisfied that its design is in line with MOA policies. CARE regularly shares its reports and evaluations with the MOA.

The MOA appreciates CARE's community participation approach, to the extent that it adopted the approach in 1989/90 in some of its programs. However, it feels that CARE sometimes bypasses local institutions. The MOA would like to see CARE diversify its programming into cash-for-work, tools, or other inputs for work. It would also like CARE to play a greater policy role in land reform and marketing support for smallholders (as the parastatals pull out). The MOA is concerned that without proper monitoring, FFW may depress local markets, provide disincentives to production, and interfere with production during peak harvest time.

The RRC is the GOE body responsible for regulating and planning the national relief program, and has been CARE's principal counterpart since 1984. The RRC bases its prediction of Ethiopia's food requirements on crop yield, rainfall, satellite imagery, and rate of erosion. The NGOs and donors collaborate with the RRC in planning their food programming, and are expected to comply with RRC directives.

The RRC has recently established a new set of guidelines on disaster management, in which it asserts that FFW should replace FFD in all but exceptional cases. It is very much committed to eliminating free food, but will be flexible in consideration of vulnerable groups.

The RRC's relationship with NGOs has been shaky at various times in this history, last year being one of the more difficult periods. The RRC did not report this; rather, CARE Addis management commented on the poor relations resulting from confusion within the GOE about the RRC and MOA mandates. The RRC alluded to this, however, when it asserted that CARE sometimes signs contracts directly with the MOA instead of going through the RRC.

The RRC reports having good relations with CARE, due to CARE's consistent consultation with RRC technical officers and adherence to its policies, and to CARE's flexibility in response to RRC's vulnerability assessments. It considers CARE's management to be above average relative to other NGOs. CARE's reporting is reliable but could focus more on the impact on the food security of its beneficiaries. In Eastern Hararghe, the RRC thought there was evidence of creating disincentives by overpaying on FFW projects for pond construction, and violating work norms. The RRC's major criticism of CARE was that it is not doing enough to indigenize its projects and should be paying more attention to capacity building.

RRC's general feeling is that CARE is looked up to by other NGOs, and that if CARE took steps to do more sustainable projects, the other NGOs might follow suit.

3. Eastern Shewa

CARE began operations in Ethiopia during the famine of 1984-85 with free food distributions to hundreds of thousands of people. As the famine abated, CARE moved from relief to rehabilitation with a large food-for-work program in the areas where CARE previously distributed relief food. The FFW program in Eastern Shewa began in 1989.

The assessment of CARE's programming in Eastern Shewa was based on a review of relevant project documents, interviews with key project staff, male and female group interviews in six PAs, individual interviews with beneficiaries including the full range of landless, female-headed, land-owning and oxen-owning households, and visits to project sites. Information from each of these sources has been integrated into the following section.

a. Adequacy of Program Planning/Design

The original project was based on a beneficiary list for Free Food Distribution provided by the Relief Committee, which was inadequate in both its targeting and assessment of community needs. CARE recognized the need for better baseline data but early attempts to gather it were hampered by insecurity and devillagization. Since 1992, with the more stable political situation and the introduction of the CARE Ethiopia Food Information System (CEFIS), CARE Shewa has been systematically gathering information on key indicators of food insecurity in its project areas. This information will serve as baseline data with which to monitor and plan future programming. The Objectives of the Eastern Shewa Rehabilitation project are as follows:

1. Nutritional levels of the targeted population in Eastern Shewa region will be maintained through FFW activities and relief distributions should an emergency situation arise.
2. Areas planted with tree and fodder resources in targeted agricultural production areas will be established on a demonstration basis.
3. Increased access to water for human and livestock consumption will be enhanced by establishing new ponds and maintaining old ones.
4. Local farmers and semipastoralists will have begun to develop an increased awareness of their problems, potential solutions, and the capability of generating such solutions of their own initiative so as to address recurrent or new problems in the future.
5. CARE's capacity to effectively respond to emergency food relief situations in the targeted areas will be maintained.

These are laudable objectives, and there is evidence that some of the measurable objectives are being met. However, a major criticism of the project design is that objectives such as "maintaining nutritional levels" and "increasing awareness of problems and solutions" cannot be measured in terms of outputs such as "number of farmers' training sessions" held. Clearly, the construction of 98 kilometers of road is not evidence that nutritional levels have been maintained. A second finding is that communities were not sufficiently involved in program design; women especially were not well informed about rations or work norms. Additionally, although communities were very much aware of the food impact, they were less aware of the longer-term benefits to the environment and production. A third weakness is that nonfood inputs, such as cement, pipes, and tools, were not budgeted for. This is to some extent a result of donors' willingness to cover food and administrative costs, but unwillingness to consider complementary inputs. CARE recognizes the limitations this places on technical soundness, and has recently put together a proposal for an Infrastructure Enhancement Component for all of its FFW programs. ODA has agreed to fund a portion of this component, while CIDA continues to restrict its funding to strict "food programming".

b. Targeting

Under the previous regime, the Peasant Association (PA) wielded considerable power in community decision-making. As such and as a result of limited resources and accessibility, CARE relied heavily on PA discretion and direction in compiling beneficiary lists and in targeting its FFW interventions. In some communities, this has meant that vulnerable groups, particularly the landless and female-headed households, have been disadvantaged and inadequately targeted. In Fachassa, one landless female head of a household had to beg the PA to allow her to work on the program. Because she was landless and therefore not a member of the PA, she was technically ineligible to work. Eventually, the PA relented and allowed her to work, but not without much delay and hardship. In Dongori Wonga, the PA bases eligibility on equal turn taking rather than on degree of need. As a result, landed households with productive assets and alternative income sources have the same access to food aid as those more vulnerable households which rely almost entirely on FFW for subsistence. CARE is making some effort to correct this bias, however. In Wolenchity, where the Committee tried to disqualify all landless, CARE intervened and insisted that it include all needy, regardless of land holding.

Another targeting weakness identified pertains to CARE's lack of attention to the (in)ability of vulnerable groups to perform labor-intensive activities. Work norms are based on outputs regardless of strength or capacity, which obviously disadvantages the sick and the elderly. To some extent, this may be mediated by the fact that communities form their own groups to enter into contractual obligations with CARE to complete certain activities, and they may be taking ability into account when assigning tasks to the weaker members. It is likely, however, that weaker members have difficulty being selected by the groups and/or are forced to accept lower wages. As they are likely to have the greater needs, this is less than ideal.

Third, the food basket itself is limited (wheat and oil only) and is not addressing the nutritional needs of vulnerable groups who have little access to complementary foods. Nor does it take actual family size into account. These are not CARE-specific problems, but country-wide RRC-dictated policy for FFW. With CEFIS results and a better understanding of the variability in household-level food insecurity, CARE may now contribute to and influence GOE policy making in favor of vulnerable groups.

In summary, vulnerable groups have not been adequately represented in the PA political structure, and as a result, their particular needs have not been taken into consideration in project design and targeting. CARE's move toward establishing FFW Committees through which and with which to plan and implement FFW projects is a step in the right direction, but it has not made enough of an effort to ensure that vulnerable groups are adequately represented on these committees.

c. Implementation and Management

In 1990, CARE discovered instances of food misappropriation, and subsequently launched an internal investigation of its FFW activities. A team led by Lizette Echols found that CARE Ethiopia's commodity management systems were inadequate, creating opportunities for misappropriation of food. Echols found that the FFW projects in Hararghe were not adequately planned or supervised, and recommended their immediate suspension until better systems could be developed. The Shewa FFW program, on the

other hand, was found to be better run and was permitted to continue and to serve as a testing ground for improved FFW systems.

Since 1991, CARE Ethiopia has concentrated on developing its commodity management systems. It has instituted a food monitoring unit, new formats to register and track commodities, and a computerized commodity tracking system. In addition, it has held several training sessions in commodity management for all levels of staff. In Eastern Shewa, CARE has concentrated on its FFW design, with particular attention to improving the technical quality of FFW interventions, and in devising mechanisms for communities to play greater roles in project decision making and management. It has switched from an attendance-or-time-based format to a contract-or-output-based format for activity proposals and payment requests. It is in the process of hiring engineers to provide technical input to infrastructure design and integrity. And it has encouraged communities to form FFW Committees with which and through which it designs and implements activities. While these measures are improving community participation, ensuring better technical outputs and controlling for corruption, the need to negotiate contracts and monitor outputs has led to delays in making food payments. CARE Shewa staff think that with experience these delays can be avoided to some extent, but that the steps are all necessary and therefore cannot be streamlined. CARE Shewa manages two projects: the FFW and a Logistics Support Unit. There is insufficient management for the two, and as a result, the needs of one are compromised by the needs of the other. Project staff repeatedly mentioned lack of resources.

d. Effectiveness

Respondents report that the food inputs of the program have had a positive impact on consumption. To some extent, the food aid has prevented them from depending upon credit and more wood and charcoal production. It is in some cases the only access to oil in a diet which is generally deficient in most complementary foods. This is a particularly important impact because of oil's role in enabling the body to synthesize Vitamin A. The consistent criticisms of the food inputs were that they came too infrequently and that they were interrupted during critical food production periods, generally when the food was needed most. Respondents were unanimous that they could have managed both FFW and agricultural production activities at the same time, with no opportunity cost to continuing FFW activities during peak periods in the food production cycle.

Positive impacts of the infrastructure development were increased access to water through ponds, better links by road to outside markets, resources and services (including CARE food aid), enhanced skills in pond construction and resource management, and an increased awareness of natural resources conservation. A shortcoming is the very limited range of activities being undertaken. CARE focuses mainly on roads, ponds, reforestation, agroforestry and bund construction. It has recently started promoting vegetable gardens, but it has not explored the much wider range of food-security-enhancing options which would be viable in this community, such as outgrower schemes for seed multiplication or alternative income generating activities. As well, it has not sought the collaboration or inputs of other organizations which could be doing complementary programming; e.g., there is a dire shortage of clean water in these communities, but CARE has not explored whether another NGO, such as Africare, might collaborate in the sinking of wells.

4. Western Hararghe

The free food distribution program initially began in Western Hararghe during the 1984/85 famine. As the famine abated, CARE moved from relief to rehabilitation with a large Food for Work program in the areas where CARE previously distributed relief food. In 1990, upon discovering instances of food misappropriation, CARE suspended FFW operations until better systems could be developed. However, CARE continued its free food distributions in Eastern and Western Hararghe, albeit with limited access and frequent suspensions due to civil unrest. Since August, 1992, the political situation has settled down (relatively speaking) to the extent that CARE has been able to resume its FFD program with some measure of regularity. The program aims at assisting marginal and lowland populations whose asset bases and market systems have suffered the combined effects of the previous four years of drought and civil unrest.

a. Adequacy of Program Planning/Design

The program's principal goal is "to maintain the nutritional standards of 80 percent of the population in the program area, enabling these persons to lead a productive life and to remain in their own communities." Fifteen kilograms of wheat and half a liter of edible oil per person per month have been programmed, corresponding to the ration specified in the Ethiopian Government's request for foreign assistance. The number of months of coverage varies from area to area, according to production and marketing conditions, which are presently monitored by the CEFIS. Small quantities of Vitamin A capsules and improved variety maize and sorghum seeds have also been distributed occasionally.

Measurement of program impact is restricted by the present absence of baseline data². The project documents do not specify indicators to be used in monitoring and evaluation, but project staff reported that they have been hoping to monitor nutritional status. Nutritional status, by itself, however, should not be relied on, given that water and sanitation conditions, which also impact nutrition, are not being dealt with either by CARE or through other programs. Planning for phase out and restructuring is to be guided by CEFIS data, frequent monitoring, and periodic socio-economic surveys.

b. Targeting

The program targets geographic areas, while identification of vulnerable groups within these areas has not been carried out due to obstacles discussed below. CARE Ethiopia staff have given a good deal of thought to the question of beneficiary identification though, particularly because of the disintegration of the peasant associations, the community-level structure through which CARE has traditionally operated. In one part of Ethiopia, CARE has begun to experiment with the inclusion of community elders in committees responsible for identifying the free food beneficiaries.

c. Implementation and Management

In 1990, CARE discovered instances of food misappropriation, and subsequently launched an internal investigation of its FFW activities. A team led by Lizette Echols found that CARE Ethiopia's commodity management systems were inadequate, creating opportunities for misappropriation of food. Echols found that the FFW projects in

² Although a nearly completed socio-economic survey carried out through CEFIS in Habro will help fill this gap.

Hararghe were not adequately planned or supervised, and recommended their immediate suspension until better systems could be developed. In addition to many commodity management systems-related recommendations, Echols also strongly recommended hiring food programming specialists and recentralized, tighter management of the Hararghe programs. CARE immediately suspended its FFW activities in Hararghe, and has since concentrated on developing its commodity management systems. It has instituted a food monitoring unit, new formats to register and track commodities, and a computerized commodity tracking system. In addition, it has held several training sessions in commodity management for all levels of staff. Between January 1991 and July 1993, a total of 19,500 MT of wheat and 600 MT of edible oil were distributed in Western Hararghe, representing 99 percent and 94 percent respectively of the planned commodities. During each month in 1993, between 45,000 and 60,000 persons are expected to receive rations.

In addition to the problems discussed above, obstacles to the program over the last 2 1/2 years include restricted and interrupted operations resulting from: (1) security problems, involving looting, a number of staff casualties and injuries, and two personnel evacuations; (2) infrastructure/logistics problems, including lack of road access to many of the 120 Peasant Associations served, frequent power outages, and limited means of communications; and (3) limited staff size due to difficulties of hiring qualified and capable staff to work in this region. Improvements in security have resolved many of these constraints, and CARE has taken measures to solve the communications and power problems. Road accessibility and limited staff size, however, remain serious constraints.

In addition, program quality has been affected by: (1) a lack of government counterparts in Western Hararghe. The principal counterpart, the RRC, opened an office just six months ago, but its operations are severely constrained by limited resources; (2) a lack of community level organizations, caused by the political transition and instability; and (3) scattered locations of the intended beneficiaries.

Verification of beneficiary lists, which are provided by PA leaders, has been attempted in a number of PAs. Ten percent of households are selected to crosscheck household size. In three of the PAs, complete registrations were also carried out this year. Collaboration between CARE and the RRC essentially began with the opening of the RRC Office in Asebe Tefari six months ago. A needs assessment committee has been established, comprised of the RRC, the MOA, CARE, and other Government Departments to evaluate the requests for assistance presented by the PAs.

Technical quality of project execution, as represented in the commodity management system and food monitoring, appears to be solid and to meet expected norms. Over the past two years, emphasis has been placed on the establishment of a computerized tracking system, and on reworking commodity control forms. CARE staff have also been trained in commodity storage and monitoring and in data collection for the CEFIS.

CARE Ethiopia will be restarting FFW activities in Eastern and Western Hararghe in October, 1993. CARE has an ongoing rural FFW project in Eastern Shewa and an Urban FFW Infrastructure Project in Addis Ababa. Through lessons learned from these ongoing projects, CARE has made a conscious decision to aim for quality over quantity FFW, and plans to undertake only those activities it can properly plan and implement. To this end,

CARE has also designed an Infrastructural Enhancement Component, with funding from the ODA, that will cover the technical expertise and nonfood inputs necessary to ensure technical quality.

d. Effectiveness

This study represents the first attempt to measure the results and impacts of the Western Hararghe free food distribution program. The CARE Sub-Office in Asebe Tefari had hoped to use Save the Children's nutritional surveillance data to analyze the program's impact; however, SCF's survey areas have corresponded very little with CARE's areas of operations, as security and accessibility factors have limited SCF's studies to areas close to the main roads.

Periodic assessments using rapid appraisal techniques were mentioned by the Sub-Office as a means of supplying monitoring and impact information. Such assessments may also help to monitor the secondary goals of the program: productivity and opportunity benefits/costs of the beneficiaries, and absence of outmigration.

In general, the number of months of free food distribution matches the number of months of a farmer's food deficit, thus reducing the possibility of dependency or disincentives to production. However, a case was cited in which a large number of pastoralists attempted to relocate from their land to the town of Miesso with the intention of surviving on free food.

The program's targeting may be considered effective at the community level. However, although compilation of beneficiary lists is not within CARE's mandate, the staff agreed that FFD is not effectively targeted to vulnerable groups. Many of the PA lists are sufficiently outdated that rations may no longer correspond to present household size, and several needy households may not be included in the lists.

B. RAPID FOOD SECURITY ASSESSMENT

1. Eastern Shewa

a. General Features of Area Surveyed

Location and Geographic Features: Eastern Shewa is located southeast of Addis Ababa and consists of the *Woredas* (districts) of Adama and Boset. According to the latest GOE region designation, Eastern Shewa is one of the administrative zones of the Oromia Region (Region 4). This area is characterized by subsistence agricultural production, which is often too little to meet family livelihood requirements due to irregular rainfall, high pest infestation, and declining access to productive resources. These will be discussed in more detail below.

Adama-Boset, CARE's main geographical focus in Eastern Shewa, is located in the Rift Valley that dissects Eastern Africa. The area falls in the lowland (*kolla*) agroecology, where cropping diversity and successes in production output are severely affected by climatic irregularity. Average annual rainfall is estimated at 700 to 800 mm in "normal"

years. Within the peasant production systems, Adama-Boset is classified as a cereal-major and livestock-minor economy. There are, however, important variations in the area: some PAs put heavy emphasis on agropastoral production systems and other PAs rely on cereal production. This type of economy is dependent on household labor with little or no hiring of outside wage labor. Production is aimed at the self-provisioning of the household. There are low capital and technological inputs, high labor inputs, and low investment, and production is highly dependent on the forces of nature. These factors result in low labor and land productivity (Diriba, 1993). Diriba's study also shows that climatic irregularities are a common feature of Adama-Boset and other regions of Ethiopia. There have been major droughts in 1984/85 and in 1988 involving substantial crop losses for subsistence farmers. As the respondents of this survey showed, every year there is a certain proportion of production losses due to moisture stress (premature on-set and/or break during flowering stage), high pest infestation, and low or no agricultural input utilization. Due to increasing climatic hardship, the local varieties of maize and sorghum (often requiring 180 to 270 growing days) are not suited to the changing rainfall conditions.

Awash is the only perennial river passing through Adama-Boset with very little irrigation service to the peasant economy. Few farmers along the river use irrigation for crop production. Adama-Boset consists of two major urban centers and four rural markets; Nazareth is the single most important business center offering considerable demand for teff. As Diriba (1993) showed, 78.7 percent of the households in Adama-Boset have been involved in market exchange of teff for the cheaper grain staple (maize). Wonji town, an important industrial estate for sugar manufacturing that has a high demand for rural produce, is located in the present study area. Some PAs have already benefitted as out-growers of sugar cane. However, the surrounding PAs have not benefitted from seasonal employment from the factory.

Population and Socioeconomic Characteristics-Trends: National population statistics show a rapid population growth in rural Ethiopia, estimated at three percent per annum (CSA, 1984). The RFSA discovered that households in the area have, on average, six to seven people per household. This finding is comparable with CARE Ethiopia's recent socioeconomic survey of the area, which gives an average of 6.3 persons per household (Diriba, 1993). The age distribution of the population, according to CARE Ethiopia's survey, is as follows:

up to 5	20.0%
6 to 10	20.0%
11 to 20	23.0%
21 to 60	34.7%
61 and over	1.7%

Three types of households were identified: male- and female-headed households and the landless. The composition of households in Adama-Boset is as follows:

husbands & wives	31%
children	57%
relatives	10%
employed help	2%

This puts a heavy burden on the land and other resources that determine food security and general welfare of the rural population (Diriba, 1993).

In cereal-major PAs of Adama-Boset, teff, maize, barley, and haricot beans are major crops, whereas agropastoralists struggle to keep the balance between livestock and cereal production. The socioeconomic condition in Adama-Boset can be characterized as subsistence based, labor intensive, and declining. The agropastoralist group is in transition, having lost most of its animals and means of livelihood during the past drought. Our discussion with group households in Fachassa PA of Alemetena zone aptly describes this situation (see Box 1).

BOX 1

Fachassa is an agropastoral PA with 88 members. At the time of the group meeting there were 46 households, including 22 landless and 12 female-headed households. They reported that their traditional way of life has changed over the past decades. Land is no longer available. Livestock ownership has been dramatically reduced as the result of many droughts and their inability to meet family consumption. They are far from any source of water. The irrigation discharge from the sugar estate is dirty; as a result, many people fall sick and animals die. Very few households own oxen. They have very little access to clinics or schools; those that exist are more than two hours away.

According to a CARE survey of 16 PAs in Adama-Boset, 11 percent of households were found to be landless. Further enquiry into the economic opportunities available to these groups showed a combination of economic activities both within and outside the agricultural sector. They include sharecropping, "family land sharing," commodity trading, casual employment, and charcoal and fuelwood trading (Diriba, 1993). According to the study, 32.5 percent of the landless households maintain their sustenance through sharecropping, and 44.7 percent share land with family (mainly with the father of the landless household). Economic alternatives included trading (two percent), casual employment (nine percent), and charcoal and fuelwood trading (12 percent). Note that a significant percentage of the landless households are engaged in selling charcoal and fuelwood for survival, which has far-reaching implications for the viability of environmental resources and measures aimed at environmental rehabilitation.

Among the land-owning households, an average land holding in Adama-Boset is seven *timads*³ per household. However, there is important and binding variability among the sample households in the amount of land owned. Twenty-one percent of households in this area own a plot of up to six *timads*. 11 percent own 6-9, 22 percent own 9-12, 18 percent own 12-15, and 28 percent own more than 15 *timads* of land. It must be noted that 21 percent of the households in the sample own land less than six *timads* (which is less than one hectare and includes both farmland and dwelling). Those who own less than three *timads* are effectively landless from the point of view of production and satisfaction of household consumption. The remaining 79 percent of the sample includes the middle and the upper categories of land size; although there is variability in the extent to which

³ The hectare equivalent of a *timad* varies and there is no accurate conversion parameter. Nonetheless, 4 to 6 *timads* are estimated to equal a hectare of land, with the average taken to be 5 *timads* per hectare

food security and other needs are satisfied, these households are generally better off than the lower category of land owners.

Both types of households (landless and land owning) are constrained by lack of oxen. There is very little hoe cultivation in this area, which increases the demand for animal traction. Throughout the group discussions and individual interviews, lack of oxen was reported as the single most important problem impacting on agricultural production and food security.

The underutilization and inaccessibility of fertilizer in recent years has also been reported as a community problem. Fertilizer is too expensive for the vast majority--three to four times the price farmers paid a decade ago. The inaccessibility of pesticides increases preharvest losses due to pest infestation (CEFIS estimates losses at 20 to 30 percent). The postharvest losses (storage losses) are estimated to be even higher-- 25-30 percent.

The respondents of this survey demonstrate that livestock ownership has been declining over the past decade due to land shortage, recurrent drought, and distress sales. Many households do not own any animals and, as discussed above, oxen ownership is rare. According to a recent study in the area, 18 percent do not own oxen and 25 percent own a single ox (Diriba, 1993). Access to pasture and water in this area is also scarce. Some PAs pay large amounts of money for water, both for livestock and for human consumption. The veterinary services are irregular, compounding problems of production. Seasonal terms of trade turn against the poor: for example, many farmers sell grain at 40 Birr at the time of harvest and buy grain at 70 Birr during the months of scarcity. The price of animals such as goats reduces from 60 to 20 Birr during the rainy season.

In summary, Adama-Boset is characterized by a lack of diversity of income opportunity, almost complete reliance on agriculture, very limited employment opportunities within and outside the agricultural sector, and increasing reliance on charcoal and wood production as a major source of food security. The population is growing rapidly, swelling the ranks of the landless and the corresponding food insecurity. Production is also reduced as the result of climatic irregularities. All available evidence suggest that the trend of production in the area (total and per capita) is declining.

Access to Natural Resources and Trends: Natural resources such as forest and bush land are no longer available in the Adama-Boset area of Eastern Shewa. There is no forest land in the whole area. Some shrubs and lowland shrubs can be found in small quantities, thinly distributed over the region. Particularly in the agropastoral areas where the density of crop production is lower, few shrubs can be found. Due to increasing dependence on fuelwood and charcoal production, these remaining trees will doubtlessly be wiped out in very short order. Neither environmental sustainability nor household food security can ever be established or maintained once the remaining shrubs and trees have been exhausted. Despite a potential resource in the Awash river and the Koka dam, there is very little fishing because few people know how to fish or have developed a taste for fish.

Access to Infrastructure: Despite Adama-Boset's strategic location in the Oromia Region, little infrastructure and few services are accessible to the rural population. Lack of access

to sources of potable water is a major problem in this area. Water is extremely expensive in communities (e.g., in the Wolenchity area). Expenditure on water drains the few resources that could otherwise be invested in household livelihood. Box 2 illustrates the water supply problem in Dongori Wonga PA.

BOX 2

Bekele Dherie lives in the Dongori Wonga Peasant Association area. There are 11 dependents in the family. His residence is 20 km away from the Awash river and his family does not have access to water in the nearby village. CARE helped construct a pond near the village where Ato Bekele resides. The pond retains water during the rainy season but the water dries up during the long period of dry months, when the nearest water supply is at Wolenchity town, about a two-hour walk one way. He told us that he spends seven to eight Birr for a barrel of water, which the family uses for three days' consumption. His livestock also drink the purchased water. He feels that providing access to water greatly reduces the burden of maintaining his family's welfare.

For the most part, schools and health services fall outside the 10 km range and are very poorly subscribed as a result. With the exception of rural access roads around Wolenchity, Bofa, Doni, Wonji, and Alemetena, the rural areas do not have access roads that connect them to markets and other services.

Access to Government Services: None of the villages of Adama-Boset have access to Government services such as credit facilities or extension. Farmers have to rely on informal credit (borrowing) at very high interest rates (often 1:2). As discussed earlier, major social services are concentrated in the major urban centers.

Social Organizations: In Ethiopia, social welfare traditions have played a major role in protecting resource-poor households, especially in rural areas. Such welfare systems include *mehaber* (giving of alms) and *idir* (support to grieving families). To a small extent, these support systems still function in Adama-Boset, but due to a decline in the livelihood of households, these mechanisms have dwindled to the point where they can no longer offer assistance to those in need.

Access to CARE Projects: CARE has been operating in Adama-Boset since 1988, doing FFD for the first year and then shifting over to FFW in mid-1989. Through FFW, CARE has been able to plant trees, terrace, construct ponds and roads, and introduce vegetable gardens.

Health Status: Many households reported illness among family members, with children being the worst affected. The lack of potable water and health service facilities along with inconsistent child care have resulted in a high rate of diarrhea among children. Malaria and vitamin A deficiency are also very common.

b. Livelihood Strategies

The major livelihood of the communities in the project area is derived mainly from crop production (e.g., PAs in Bate Bora, Dongori Wonga, Yaya, and Kachama Sobaku) and, in the case of agropastoralists, crop production in combination with livestock rearing (e.g., PAs in Hassie Dhera and Fachassa). Marginal farmers and the landless rely on such nonfarm strategies as wage labor and fuelwood gathering. Constraints to production have been numerous over the last ten years. Shortage of cultivable land is a major problem; 42 percent of the households visited were landless, and the holdings of landed farmers are small, ranging from 1.5-6 kerts (.35-1.5 has) per household. Additional constraints include lack of essential agricultural inputs (improved seeds, fertilizers, and tools); irregular rainfall (both in quantity and seasonality); soil infertility due to overuse; crop diseases and pests (migratory birds, locusts); lack of labor, especially in female-headed households; lack of animal traction; and storage loss (25-30 percent losses were reported).

Cropping Systems/Livestock Systems: A large variety of crops are grown in Adama-Boset. The major cereal crops include maize, teff, sorghum, wheat, and barley; pulses include haricot beans, broad beans, chick peas, and peas. Lentils, kale, and wild cabbage are also produced. Fruits are uncommon in the region. Due to a number of production constraints (discussed below), crop production has declined significantly in recent years. Sorghum, chick peas, pearl millet, and lentils continue to receive emphasis in the more restricted cropping regimes. Intercropping is a common agronomic practice in the area, especially of sorghum with soy beans or maize. Due to the scarcity of cultivable land, fallowing and crop rotation are not practiced. Animal traction is used in most agricultural activities. Farmers lacking draft power rent oxen. Family members are the major source of farm labor; much of the work is done by men, although women and children participate in weeding and harvesting.

Because agriculture is entirely rainfed, most of the crop production activities are carried out during the long rainy season known as kremt or meher. The growing season for most of the crops is from April until November or December (see Annex 4 for crop calendars). The use of improved seeds, organic fertilizers, or pesticides is unknown in the region; most farmers use local seed varieties and rely on manure and chemical fertilizers (DAP, urea) for homestead cultivation. Thus both the yield and gross production of the field crops in the area are estimated to be much lower than the national average. Although a wide variety of crops are grown, the average farmer plants one or two types of crops on a small plot. The entire production system is at a subsistence level; however, some of the produce with higher prices (e.g., teff and pulses) are sold or bartered to purchase less expensive food items such as maize or sorghum.

Livestock raising is an economic activity practiced by both crop producers and agropastoralists in the area. However, cattle, sheep, and goats are kept in significantly larger numbers by agropastoralists. An estimated 30-40 percent of the landed farm households in the region own oxen. Livestock resources serve as a source of both food and cash for their owners. Cattle are the most important animal resource, followed by sheep and goats. Equine or other pack animals are rare, and few households report ownership of chickens. Livestock management practices are constrained by the absence of high-yielding livestock breeds and the poor quality of pasture land in the area, which is mostly communal grazing and bush/shrub land. Aftermath grazing on stubble is also

practiced. Productivity of the livestock sector is therefore poor, and is used mainly for home consumption. However, during food security crises the sale of livestock is the major source of household income. During individual interviews, many farmers reported selling their productive livestock resources (i.e., oxen and cows) in the last decade in order to purchase grains to meet household food needs. Major limiting factors to livestock production mentioned by farmers include disease, internal and external parasites, scarcity of grazing land, inadequate supply of veterinary services, and absence of credit.

Other Income-Generating Activities: Off-Farm Employment: Income is generated through labor sales, in village centers and state farms for work in cultivation, weeding, harvesting, and quarrying (e.g., Bate Bora PA). Food-for-work programs also provide income opportunities. Payment ranges from Birr 1.5 to 6.0 per day. Some farmers reported earning Birr 20.00 to harvest a one kert field. Fifty percent of the households interviewed add to their household income by selling their own and their children's labor (the latter working as shepherds).

Charcoal/Wood Sales: Charcoal and/or firewood sales are an alternative income source for a majority of the households interviewed. However, the scarcity of forest resources and their distance from villages require that people spend from six to eight hours collecting firewood (exclusive of time spent in marketing the collection). Tree species suitable for charcoaling are becoming scarce in the region from overuse. Government efforts to confiscate charcoal at checkpoints has added to the burden of this strategy. As a result, many households that had formerly relied on charcoal production for extra income are abandoning the practice.

Trading: Trading is not very well developed in the area. Only 10 households (17 percent of those interviewed) reported involvement in trading. Items traded include grains (mainly teffs and pulses), goats, sheep, and to a lesser extent chickens and eggs. The income received from trading is used mainly to cover the cost of other household expenses.

Sale of Wild Foods: Although many families mentioned that wild foods (especially cactus) are important food substitutes in times of food insecurity, only one household reported income from sales of wild foods.

Seasonal Migration: None of the households interviewed reported migration for employment as an income-generating strategy.

c. Coping Strategies

In Eastern Shewa, evidence of the following coping strategies indicates that the community is food insecure and in distress:

Adjustments in Meals and Food Substitutions: Respondents in all six villages reported reducing the number of meals consumed from three to two, or from two to one meal per day during the most critical months before the harvest. Adults generally give up meals before cutting back on the frequency of children's meals. During times of shortage, these populations switch from injera to fried or boiled grain, cut down or eliminate coffee from their diets, do without *watt* (sauces), or switch from pulses to potatoes and cabbage *watt*.

and in the most severe cases, resort to eating bread or injera with salt water. Several respondents reported having sold teff in order to buy greater quantities of maize. There was also evidence that traditional snack foods, such as *kollo*, *nefro*, and unripe grain, had become meal replacements.

Sale of Assets: Half of the respondents had sold livestock in distress. One farmer had sold his last goat for medical purposes and another sold his oxen and sheep because his farm land had flooded, destroying his crop. The balance of the respondents reported having nothing to sell. In these communities, there were very few productive assets (tools, traction animals) and virtually no liquid assets (jewelry).

Borrowing Food from Relatives and Friends: No respondents reported lending food or money, and most reported having no one to borrow from. Those who had borrowed informally had borrowed from relatives and neighbors, and had to pay back at a rate of 2:1. A few respondents shared food with family members.

Credit: A few male respondents had borrowed from official credit sources such as the Agricultural Inputs Supply Company (AISCO), and had paid interest of 2.5 birr per 50 kilos of maize borrowed. Two female heads of households in Chekafachassa were nervous of the terms and fearful of not being able to pay back, and so had not borrowed anything.

Wild Foods: Several respondents reported foraging for cactus fruit and *chambarla*, a wild cabbage known to have no nutritional value but mildly toxic effects on digestion. Only one respondent had eaten wild dove and fowl. None of the respondents had hunted, fished, or sold wild foods.

Alternative Employment and Migration: In the vast majority of households, at least one member sold fuelwood or charcoal. In general, women gathered and sold fuelwood and men were involved in charcoal production. All had to walk great distances both to gather and to sell. One female respondent did weeding on another farmer's land for a wage, and brewed *Tella*, from which she earned net three to four birr per week. No other alternative sources of income were reported in these communities.

There were few reports of outmigration. One male respondent in Hassie Dhera had tried unsuccessfully to get work on a nearby state farm, and another from the same village was planning to migrate. One woman in Chekafachassa had worked in Arsi as a laborer. In general, the people responded that they did not have marketable skills.

Remittances: No one interviewed had received any remittances.

Redistribution of Children and Livestock: No one reported having redistributed livestock to graze on others' properties. One respondent's children (two) were earning their room and board by tending another's livestock. Many who could not afford to feed their children had redistributed them to relatives' homes. One female head of household could not care for a sick daughter and so had sent her to live with her sister.

Household Perception of Household Food Security: Questions asked regarding household perception of household food security included what they considered adequate food access, what the constraints were to food access, what other livelihood needs competed with food needs, and what the possible solutions were. The answers were wide ranging but largely short sighted. They had to do with filling stomachs and not with longer range livelihood options. Perceptions of security included food variety, three meals a day, the ability to pay taxes or repay food debts, not having to borrow, the ability to meet daily needs, not having to buy food from the market, low prices, and food in storage. Constraints included the amount of time spent gathering wood, selling grain that would ordinarily be reserved for seed, storage losses, insufficient funds to buy agricultural inputs, no land, no oxen, no husband, poor harvest, and drought. Medicine and clothing were often cited as the needs that competed most with food. In general, the response was that the need to feed themselves was all consuming. Solutions ranged from God, Government and food aid, to more tangible solutions such as the redistribution of land, starting a mill, credit for oxen purchase, and subsidized agricultural inputs. No respondents thought in terms of durable solutions such as education or drought-resistant seed varieties, indicating little hope of ever getting beyond hand-to-mouth subsistence.

d. Changes in Livelihood Strategies

When food insecurity persists over long periods of time, coping strategies come to permanently replace customary livelihood strategies, and may even change traditional cultural practices (which generally have their roots in livelihood strategies). Several of these, including distress sales of productive assets and selling of firewood, are temporarily effective in mitigating against hunger but have detrimental effects on long-term livelihood and resilience, not to mention devastating effects on the environment.

The coping strategy with the most far-reaching consequences for the livelihood and resilience of these communities is the sale of firewood. Due to the complete absence of alternative sources of income, women spend the daylight hours walking great distances to gather and sell wood. Thus they have less time for child care, food preparation, assisting in crop production activities, and traditional income-generating activities such as basket-weaving and brewing. The firewood trade is also responsible for the rapid destruction of Ethiopia's forests and widescale erosion, which have consequences for livestock, wildlife, and crop production.

Distress sales of productive assets also have serious consequences for a community's ability to recover. Agropastoralists who are forced to sell off goats and cattle prematurely in order to buy grain are left without a buffer stock; depletion of oxen leaves the cereal farmer without traction power; and rental income is lost through the sale of donkeys. Both Fachassa and Hassie Dhera are agropastoral societies in transition; having lost most of their animals, they have to adapt to other livelihood strategies, in competition with the landless and cereal growers for the limited resources in the region.

In Dongori Wonga, women reported not having time to rest or resources to buy the fattening foods they would normally eat after childbirth. Although not a livelihood strategy, fattening lactating mothers with buttered porridge was obviously a strategy designed to improve the rate of mother and infant survival in a society with an extremely high mortality rate. Destitution has led to this practice being abandoned.

e. Food Consumption Patterns

Composition of the Diet (24-hour recall): Mothers from 194 households were interviewed to elicit a recall of foods consumed on the previous day. Analysis of this data reveals that villagers were following a quite reliable pattern of three meals per day; only 9.1 percent of households had consumed less than three meals on the previous day. In cereal-producing households, 99 percent were consuming injera at least once per day (a baked flat bread used as a utensil for consuming other items) (see Annex 3, Table II). And in agropastoral households, 69 percent were consuming injera. Injera was composed of the locally produced grains, maize, teff, and wheat, singly or in combination, depending on local food production. In cereal areas, full meals also included pulses (69 percent), vegetables and fruits such as kale and wild cabbage (four percent), and oil or fat (80 percent) for use in the preparation of watt (local sauces). In the two agropastoral areas, the consumption of oil (29 percent) and pulses (29 percent) were considerably lower, although animal protein consumption was somewhat higher. In some villages local maize beer (Tella) and coffee were widely used, perhaps due to the recent holiday celebration of Meskal in Christian households (Annex 3, Table II).

Animal protein, although a desirable part of watt dishes, was eaten rarely, on ceremonial occasions. Milk was the most widely consumed source of animal protein for children in the agropastoral area of Hassie Dhera. The most common snack food was kollo (roasted grain) or nefro (a boiled grain). These were often reported as the midday meal. Overall, the female-headed households reported more limited variety of diet than the male-headed households. In-depth household interviews also revealed that the mid-highland community of Dongori Wonga (1600 meters) had the most varied food consumption pattern.

Sources of Food: Foods consumed could largely be predicted by the foods produced in the area. Also, local cereals were the most frequently purchased foods by the landless and, toward the end of the rainy season, by farmers whose production stores were exhausted. Coffee, peppers, onions, oil, and salt were purchased year round by the more wealthy households. All communities reported that prices of basic staples were the highest in the rainy season, "just when we are poorest" as one respondent put it. Prices of maize and teff rise between 50 and 100 percent from the harvest at the end of the year to the end of the rains in September of the following year. Hunting and gathering of wild foods were only reported in three of the communities and involved wild cabbage, cactus fruit, and occasionally birds. Fish was never consumed and if caught was sold. Borrowing and sharing were a common source of food across all the communities except perhaps the wealthiest one, Kachama Sobaku. Female-headed households were more frequently reliant on borrowing from extended family and in some instances "begging" from family. Credit purchases in lean times were common, and in the case of Bate Bora interest repayments reached usurious levels of 100 percent of the amount of the grain obtained.

In five of the communities, food aid was provided by CARE, and in Kachama Sobaku by the MOA. This aid provided an important source of food in the lean season for those families that received it most frequently. But in some instances (Fachassa), CARE food aid was sold to buy medicine. In Kachama, MOA food aid wheat was said to be the second most important source of income by the wealthiest household surveyed. Most of

the landless and female-headed households reported a lack of opportunities to obtain more food for work. In two communities, Bate Bora and Hassie Dhera, FFW oil was said to be the only source of oil for the community.

Problems with Food Availability: Only in Fachassa and in Kachama did interviews indicate sufficient food availability. In the other four communities, food was often in short supply because of local production shortfalls; production problems such as lack of rain, inputs, and flooding were given as causes. Universally, the problems for the poor in the wealthier communities and for the general population in the other communities were food prices and the lack of income to buy food, especially in the leaner season of the year.

Food Conservation/Preservation: Grains were milled in nearby towns; there were no in-village milling facilities and only a minority of the households milled by hand. Trips to mills can be time consuming, up to three hours one way, and the wait long (especially in Nazareth, where security was also seen as a problem on the return trip). Costs of milling ranged from 5 to 10 Birr per hundred kilograms (quintal). Foods were stored by a variety of means: in bags on the floor, in the house in Dogogos (dung urns), or in above-ground vessels lined with dung and covered by thatch roofs (Gotera). Teff was reportedly most easy to store for up to a year with relatively low losses. In general, food was stored for little more than six months, and losses of 25-33 percent from rats and weevils were reported. Only one household reported the use of insecticides.

Traditional Food-Sharing Networks: A number of traditional food sharing networks exist in the communities. In Christian communities, sharing is done around Christmas and Meskal. In Fachassa, Dongori Wonga, and in Hassie Dhera the institution of Market results in some food sharing. Food is also shared during funerals. These events did not appear to be of any significance to household food security or indicate food insecurity.

Food Taboos/Specialty Foods: Moslems reported they would not eat wild pig. "Vetch grass" was avoided in two communities due to its reported effect on breast milk. Bate Bora and Yaya respondents said they would not eat chicken for religious reasons (perhaps due to recent proclamations from a local healer). Although not stated, there was a surprising lack of fish consumption in these communities. Considering its availability in local streams and ponds, the attitude toward fish consumption may be further explored.

Changes in Diet: Except for the wealthiest in Kachama, most households reported less use of animal foods in the diet in the last ten years. The decline in milk and butter was especially important in the two agropastoral villages of Fachassa and Hassie Dhera. There has also been a shift away from injera made from teff in favor of wheat and maize.

f. Child Care

Care of Children: In the villages of the Shewa region, if a mother does not take her young child to her work place, the child is cared for by an older child, a member of the extended family, or a neighbor. Fathers participate in child care when the child is an infant. In female-headed households, in contrast to male-headed households, mothers are more likely to carry the child with them when they leave the home.

Feeding Patterns of Children: Breastfeeding is practiced in all of the villages. Demand (as opposed to scheduled) breastfeeding is practiced and feeding of other foods tends to take place two to three times per day until the child is old enough to participate in the adult meals. Weaning foods are introduced when the infant is 8-14 months old, and most children are completely weaned around 24 months of age. Consequently, exclusive breastfeeding appears to extend far beyond the recommended age of four to six months.

Weaning Foods: Commercial weaning foods are not available in the villages. Local weaning foods include goat milk and porridges from wheat, barley, maize, and beans. Injera with milk and oil or "lean-seed" water are also used. When available, milk or eggs are also added to the porridge mixtures. Sometimes "kitta" (a homemade, thin, leavened, dry bread) is used as a weaning food.

g. Nutritional Status

In the six villages (PA areas) surveyed in Shewa, study teams selected 198 households containing at least one child from six months to five years of age. Pertinent health and dietary information was gathered from each household, and the youngest child in the desired age range was chosen for anthropometric measurement of height and weight. Data were also gathered on the child's incidence of diarrhea in the past month. To ensure that the analysis was comparable to the studies done by the RRC, only the households with children from one to five years of age were included in the analysis (see Table I and Summary Tables in Annex 3). In a subsample of the study population, a clinical assessment was performed to determine the state of vitamin A deficiency, based on the prevalence of Bitot's spots.

The main economic support for two-thirds of the households chosen was cereal production; the rest were supported through agropastoral activities. Nearly 20 percent of the households had no assets (land, draft animals such as oxen, or other livestock). Nineteen percent of households were headed by females, and were much more likely to be assetless (46 percent) than were male-headed households (14 percent) (See Annex 3, Table IV). Sixteen percent of the households reported that a child under the age of five had died in the past year. The mean age of the index children included in the study was 33 months; one-third were 25-36 months old. The male to female ratio was 0.9. The nutritional assessment used the RRC assessment methods and standards: under 90 percent of standard weight for length (WFL percent) for children between 70-110 cm in height or length was considered to be some degree of nutritional deficiency (wasting). For all households in the six villages, the mean WFL percent was 85 percent, with a village range between 80.6-90.8 percent. In three of the six villages (Bate Bora, Kachama, and Yaya), the mean weight for length was under 85 percent of the standard, thus placing them in what RRC considers a serious range of malnutrition. All of these villages have cereal-based economies.

As shown in Annex 3, Table I, 64.5 percent of the study population has some degree of wasting; one in eight children exhibit severe wasting and over one-third of the children are either severely or moderately wasted. Wasting appears to be associated with households that are assetless, and such households tend to be disproportionately female-headed households (See Annex 3, Tables III and IV). In general, children in the cereal-

major households are twice as likely to be affected with wasting as those in the agropastoral households of the region. The prevalence of vitamin A deficiency (Bitot's spots) was 3.1 percent, a rate that is six times more prevalent than the WHO-defined minimum threshold for public health significance (See Annex 3, Table VII).

h. Summary of Constraints to Household Food and Nutritional Security in Eastern Shewa

Land, Crop Yields, and Income Access: Landlessness has been increasing substantially over the past few years. Nine of eleven landless households at Yaya reported owning some land and cattle ten years ago. Male-headed, landless households lost their land either because their fathers' very small plots of land could only effectively be given to one son, or the PA committee confiscated the land after they had failed to pay taxes on it. Landless, female-headed households lost their land either because they were divorced and had returned to Yaya, or the PA chairman forcibly confiscated the land, which was then resold. Land availability is declining due to population pressures on the land as well as the return of soldiers or displaced people who then claim or reclaim some land. Communities have had to adjust to population pressures on limited resources. Soil is eroding and natural resources are rapidly becoming degraded. Land is often fragmented; farmers reported working plots of land up to two-hours' distance apart.

The unavailability or high price of agricultural inputs has reduced yields substantially and induced farmers to rent out their lands for as little as 40 birr per cropping season. Yaya farmers reported renting out land to Boffa residents who could afford to use tractors to cultivate the land and then hire wage laborers, including the farmers themselves, to work the land for two to three birr a day. Traction animals are beyond the reach of most farmers. Farmers with less than two oxen must sometimes delay their planting until they are able to borrow one or two oxen, thereby affecting yields. Fertilizer is too expensive for many farmers, and some farmers reported that erratic and poor rainfall renders fertilizer useless. Crops are often not matched to the irregular rainfall patterns, and inaccessibility of appropriate seed varieties further affects yields. Pests frequently attack crops, yet pesticides are rarely available for purchase. Farmers store their grain in traditional structures or simply in bags in rooms, and storage losses are commonly 25 to 30 percent.

Livestock : Declining access to pasture and water has affected animal production. In recent years, farmers have been forced into distress sales of productive assets, particularly cattle, oxen, and goats, and livestock products. They often sell their animals when the market prices for animals are low. For example, one community reported that goat prices fall from 60 to as low as 20 birr during the rainy season, when transitory food insecurity plagues agricultural and agropastoral households. As a result, agropastoral groups are in transition, having lost most of their animals.

Services: Government services are generally poor to nonexistent. Agricultural extension services were reported to be good at Kachama Sobaku, where the MOA manages a high-profile project. Extension services have not been effective in the other five communities visited.

Access to Alternative Employment Opportunities: Although not a traditional livelihood, charcoal and firewood production are the most important income-generating activities, and may be the most important income-earners for most households given the extent of landlessness and the numbers of marginally landed farmers. The reliance on firewood collection and sales reflects the lack of diversity in income-generation options. Wood is sold for 2.50 to 5 birr a bundle, depending on the market and the time of year. There is a real opportunity cost associated with collecting firewood. Residents of Yaya required twelve hours to collect firewood in Arsi, a different region of the country across the Awash river. The people of Yaya reported that the work is dangerous because they clash with Arsi people, and that it almost feels like stealing to cut down trees from that area because the resources belong to another group of people. Considering the importance of charcoal and firewood production to household food security, the purportedly forthcoming government policy restricting charcoal and wood sales could have a profound impact on household coping options. The only other income-generating activity in the region involves occasional wage labor on farms during the cultivation period for two to three birr per day. The excess supply of labor depresses wages.

Access to Markets: The distance to markets varies, but five of the six communities use the market to purchase and sell subsistence items only; other goods are too expensive. Seasonal terms of trade turn against the most vulnerable groups. Grain sells for 40 to 60 birr after the harvest, when the poor need cash to repay loans that they were forced to take earlier at exorbitant rates in order to survive the cultivation season. Grain sells for 70 to 90 birr from approximately July to September, before the harvest, when all vulnerable groups are dependent on the market for their consumption needs. The terms of trade for goat sales against grain prices also worsen drastically as the harvest approaches: the price of a goat can decline by as much as 200 percent. The common credit terms throughout Eastern Shewa require those who borrow money to repay moneylenders 200 birr for every 100 birr borrowed within three months, an interest rate of 100 percent. Those who cannot repay are taken to court, where they will pay an additional 50 birr.

Access to Education: Illiteracy and the lack of education facilities affect alternative employment options. Over time, educated children can obtain alternative types of employment, help to support household members, and occasionally send remittances into the community. In addition, an educated community can respond more effectively to issues surrounding long-term natural resource degradation.

Health and Sanitation: Only one of the six communities visited has access to potable water; women from the other communities must travel hours to collect river or pond water. Diarrheal diseases are common. Health clinics are sometimes over ten km from the community. People in debt or involved in distress sales, manure sales, or charcoal/wood sales rarely have enough cash on hand to pay for proper medical care, even if they have access to clinics. The quantity and variety of foods deteriorate during the cultivation season. Households substitute nefro and ground grains for injera and consume excessive amounts of green maize.

Maternal Child Care: Children are usually fed only when adults eat. If adults are out of the house working all day, children often do not eat. Children may also forgo meals if either or both parents are ill. Supplementary feeding is rarely undertaken.

i. Beneficiaries' Perception of CARE's Food Aid Activities

In Eastern Shewa, the project has been concentrating on FFW activities in the areas of reforestation, agroforestry, soil and water conservation, pond construction, vegetable gardening, and road construction. From the beneficiaries' perspectives, the benefits derived from these programs include: increased access to food; increased access to oil (which may not be obtained by any other means); better access to water through the construction of ponds; a positive impact on awareness of natural resource conservation (especially the value of enclosures); roads that link communities to outside markets, resources, and services; skills in conservation, road, and pond construction; less dependence on credit and wood and charcoal sales; and CEFIS's considerable progress in targeting transitory food insecurity in the area. However, CARE does not have baseline data or clearly defined performance indicators to confirm the progress in these activities with regard to impact on household food security.

Despite these positive contributions, the beneficiaries and the assessment team identified a number of areas where improvements in food aid programming could be made. (1) Many people felt that there are not enough activities to accommodate all the people seeking work. This is especially true during the cropping season when food shortages are the most critical. The team found that introducing food-for-work at this time would have no significant negative effect on food production. It is at this time that many communities are forced to sell charcoal and wood to purchase food in the market; (2) The chronically vulnerable populations in many villages are excluded from the FFW because they are not PA members (e.g., the landless); (3) The FFW payments do not always come on time; (4) The distribution centers are sometimes far from the village; (5) Communities do not participate enough in designing the FFW activities, setting priorities, or in assisting in targeting; (6) The food basket is incomplete and not tailored to family size; (7) Work norms do not take into account different levels of vulnerability; (8) Activities are limited, and do not take into account the range of viable (food security enhancing) options; and (9) CARE lacks the resources to address adequately the needs of the communities with which they work.

j. Recommendations

Targeting: To improve targeting of beneficiaries to ensure that the chronically vulnerable as well as the households suffering from transitory food insecurity are included in project activities, the following steps can be taken. **Committees should be established to include representatives from the various vulnerable groups (e.g., landless, women-headed households and elders).** This will prevent the PA Chairpersons from excluding the most vulnerable from the FFW lists. This could be tested on a pilot basis in several communities. Periodic spot checks could assess whether the committees are targeting effectively. **The CEFIS is an excellent system for monitoring transitory food insecurity in the areas.** For those subareas that are prone to recurring food insecurity, contingency plans should be established to improve the timeliness of response in order to protect

livelihoods and any gains made by CARE. In addition, CEFIS could monitor baseline conditions in the project areas to assess performance indicators.

The indicators that are used in food security monitoring and performance evaluation should consist of chronic/baseline indicators and transitory indicators that monitor current conditions. Transitory indicators should consist of leading indicators of the early stages of food insecurity that can be monitored through unobtrusive measures, and of concurrent indicators that reflect the effects of the actual food shortage (e.g., changes in the consumption patterns). Information on concurrent indicators would only be collected when the leading indicators demonstrate that conditions are worsening. This information could be collected through rapid food security assessments. Once the food security problems are verified, contingency plans involving either FFW or FFD could be initiated. **CARE should consider whether FFW activities could be tailored to different types of vulnerable groups.** This would involve designing different activities for the landless and the landed, or different activities for the weaker members of the community. In addition, consideration should be given to incorporating more activities that give the communities an opportunity to obtain CSM.

Performance Indicators: **Output indicators should be defined and measured periodically to detect the impact of the project on household food security.** These could include the changes in the number of meals, the diversity of foods consumed, and food substitutions. Care must be taken to insure that the indicator is not measuring an artifact of food aid, which may not be related to longer-term food security. This is why pre- and postharvest measures are important. Cultural patterns in food consumption also need to be taken into account. **Nutritional status indicators can also be monitored as a way to assess the impact on overall well being in the communities in which CARE is working.** In order to have an impact on the nutritional security of the populations with which it works, CARE should consider incorporating interventions that improve water quality and access to health services. Otherwise, nutritional status as an output indicator may not change significantly. CARE could enlist the help of MOH to carry out periodic assessments.

Food Basket: Wheat is presently the grain used for food assistance. **Consideration should be given to providing grains that people are likely to produce themselves or can be readily obtained in the market.** Maize and sorghum are good candidates. This could avoid a situation where taste preferences cannot be satisfied locally. The market impact of food assistance needs to be monitored more carefully to avoid creating market distortions. In addition, consideration should be given to adding a pulse to the food basket to improve the diet. Presently, the diets of the target populations lack protein and important vitamins and minerals. Another alternative is to expand access to CSM to vulnerable populations.

Types of Food-for-Work Activities: **The communities themselves should play a greater role in determining the types of FFW activities they want to pursue.** Thus the FFW activities need to be more locationally specific; for example, many communities expressed a desire to build a school or a clinic because these services were not available. If CARE does not have the resources to follow up on the priorities, it could enlist the help of other NGOs or different ministries. **FFW could also be provided to give more technical training to beneficiaries.** Food for training could be provided in such areas as crop production/seed

multiplication, conservation, nutrition/hygiene, child care, and various other skills. Some community members could be trained to act as trainers for others to increase coverage. Line ministries could second staff to act as trainers in special areas.

Inputs for Work: Consideration should be given to providing inputs for work as a way to improve the long-term resilience of the communities targeted. For example, fertilizer, pesticides, seeds, tools, or livestock could be provided. Participants could earn credit toward livestock (e.g., oxen, goats, donkeys) or other inputs. This approach may help in the targeting issue in that many of the landed households may opt for inputs rather than food. The importance of monetizing food aid to allow for these types of inputs is obvious. The advantage of inputs-for-work is that it can be self-targeting. Cottage industry activities could also be promoted for the landless through such approaches.

Sustainable Development: Every food assistance program should have built into it activities that promote long-term food security. CARE has been trying to do this through its focus on conservation and improved water access. Every FFW and FFD program needs to be interlinked with sustainable development components. The ultimate objective is to make the populations more resilient and self-reliant. Thus every FFW or FFD project should be designed with a long-term vision. For example, in an area where FFD is taking place, inputs such as improved seed could be provided simultaneously so that production systems become more viable. It is also important to have contingency plans that monitor locationally specific indicators that determine when to implement a mitigation activity to prevent a community from sliding back to a more vulnerable state. CARE needs to look at all programming this way. To incorporate the protection and promotion of livelihoods into CARE's ongoing provisioning activities, CARE has to reconsider how large an area it can reasonably cover. It may have to limit the geographical area it services, delegating the other areas to other NGOs. Indigenous NGOs could have a role to play here. Before launching a broad-based sustainable development program, pilot tests could be initiated to determine the best way to promote livelihoods for a given area.

2. Western Hararghe

a. General Features of Area Surveyed

Location and Geographic Features: Western Hararghe is a vast geographical area, stretching from the Awash river in the southwest to the Bale and Arsi borders in the east, south, and northeast. Under its present administrative setting, it falls within the Zone 4 Oromia Region. There are six to seven *woredas* (districts) in the area. Western Hararghe is characterized by a diverse agroecology and various forms of peasant agriculture (pastoral, agropastoral, cereal- and cash-major) economies. Combinations of these are also found in different proportions. As discussed in the earlier section on Eastern Shewa, Western Hararghe is characterized by subsistence agricultural production. Production often does not meet family livelihood requirements. This is exacerbated by irregular rainfall, high pest infestation, declining access to productive resources, rapidly growing population, and ethnic conflict.

CARE Ethiopia is the only NGO operating in this vast and difficult terrain. Average annual rainfall varies dramatically between the lowlands and the highlands, ranging from below 300 mm to 1200 mm in "normal" years. This agroecological diversity offers different opportunities and constraints for the peasant production systems. Some areas rely mostly on pastoral or agropastoral production, whereas others rely on cereal production or a combination of these. Production is aimed at self-provisioning of the household. There is limited use of capital and technological inputs, but rather a high labor input with low investment. Production is highly dependent on the forces of nature, which results in low labor and land productivity (Diriba, 1993). Diriba's study shows that climatic irregularities have been a common feature of Western Hararghe throughout the past two decades. There have been major droughts in 1973, 1984/85, 1989, and 1991/92. At the time of the survey (October 1993), another drought was creating an emerging food crisis in this region with substantial crop losses for subsistence farmers. As the respondents of this survey indicated, every year there are production losses due to moisture stress (premature on-set and/or break during flowering stage), high pest infestation, and low and/or no use of inputs (e.g., pesticides, fertilizer, and seed). Due to the increasing climatic hardships, the local varieties of maize and sorghum (often requiring 180 to 270 growing days) are not matched to changing rainfall conditions.

Population and Socioeconomic Characteristics-Trends: As in Adama-Boset, the population in this area is growing rapidly. The assessment team identified households with large family sizes, averaging seven to nine people. This finding is comparable with CARE Ethiopia's recent socioeconomic survey in two districts of Western Hararghe, which gives an average of 6.5 persons per household (Diriba, 1993). According to CARE's survey, age distribution is as follows:

up to 5	17%
6 to 10	20%
11 to 20	24%
21 to 60	37%
61 and over	1%

This age distribution has far-reaching implications for access to resources.

Three types of households were identified in Western Hararghe: male and female-headed households and landless households (headed by males or females). Composition of households in Western Hararghe consists of the family heads (male or female or both), their children, and relatives and others.

husbands & wives	30%
children	61%
relatives and others	8%

This puts heavy pressure on land and other resources that have a determining effect on the food security and general welfare of the rural population (Diriba, 1993).

The socioeconomic conditions in Western Hararghe can be characterized as subsistence, labor-intensive, and declining. The team found the lowlands cereal community to be demonstrating more signs of distress than the midlands cash- and cereal-major group. Even without food aid, the highland and midland areas seem to be coping better.

In the cereal- and cash-major PAs of Western Hararghe, sorghum, maize, chat, and teff are the major crops. Due to the erratic rainfall, sustained drought, and ethnic conflict, many households in these areas have suffered from crop and livestock losses in the past years. The continued distress conditions over the years have added to the inability of households to recover from these effects. In these areas, access to land, oxen, and inputs such as fertilizer are no longer available to a significant part of the population. The survey team identified the following major limitations to the economy: (1) limited land for redistribution and an increasing percentage of landless⁴ households (50 percent in one village); (2) high incidence of plant pests and diseases, such as coffee berry disease (CBD), forcing cash croppers to abandon coffee in favor of sorghum or maize; (3) environmental degradation due to a heavy reliance on wood production as a major source of food security; (4) little or no use of fertilizer, pesticides, herbicides, or improved seed, and a lack of equipment; (5) entrepreneurial activities limited by capital costs; (6) increasing and forced dependence on market-purchased food, in both cereal- and cash-major economies. This is a departure from agrarian norms and poses further threats of inconsistent market supply; the market in the area has not developed to meet this new profile of needs; and (7) a large number of displaced people and an unstable security situation. The conflict in the region has disrupted the cooperative economic relationships between various tribes, which affects access to livestock, vegetables, and other sources of income (e.g., camels are not rented as frequently). Furthermore, the fight between the Government and OLF (Oromo Liberation Front) forces in the lowland area has caused widespread loss of animals and has made accessibility difficult.

According to a survey conducted by CARE in 21 PAs, 13 percent of households in Western Hararghe were landless. A variety of economic activities both within and outside the agricultural sector were found, including share cropping, "family land sharing," commodity trading, casual employment, and charcoal and fuelwood trading (Diriba, 1993). According to the study, 17 percent of the landless households depend on share-cropping, and 63 percent share land with family (mainly of the father's side). Other economic alternatives include trading (four percent), casual employment (12 percent) and charcoal and fuelwood trading (four percent). Among the land-owning households, an average land holding in Western Hararghe is 11 *timads*⁵ per household. However, land is not the major problem in pastoral and agropastoral areas. In these areas, resources such as livestock and labor are very important.

In cereal- and cash-major economies, access to land and oxen are important. Both landless and land-owning households are constrained by the lack of oxen. Ownership of oxen has declined over the past decades due to land shortages, recurrent drought, distress sales, lack of access to pasture and water, and irregular

⁴ According to recent socio-economic survey by CARE there are 13 per cent landless population in Habro and Guba-Koricha woredas of West Hararghe (see Diriba, 1993).

⁵ The hectare equivalent of a timad in West Hararghe is different than East Shewa. It is estimated that 11 timads equal a hectare of land.

veterinary services. These factors have compounded problems of production and have resulted in the predominance of perennial crops. According to a recent study in the area, 48 percent of households do not own oxen, and 18 percent own a single ox (Diriba, 1993). Thus the lack of oxen was reported throughout the group discussion and individual interviews as the single most important problem impacting on agricultural production. The very low use of fertilizer and its inaccessibility (due to high prices) in recent years was also reported as a community problem. Fertilizer is too expensive, three to four times the price farmers paid in the past decade. Lack of access to pesticides increases preharvest losses due to pest infestation (CEFIS estimates 20-30 percent). The postharvest losses (storage losses) are also very high (an estimated 25-30 percent). Finally, seasonal terms of trade turn against the poor. Many farmers sell grain at low prices at the time of harvest and buy the same grain at double or more the price during the months of scarcity.

Summarily, Western Hararghe is characterized by chronic and transitory food insecurity, lack of diversity of income opportunities (almost complete reliance on agriculture, very limited employment opportunities within and outside the agricultural sector), and increasing reliance on charcoal and wood production as the major sources of cash for maintaining food security. The population is increasing rapidly, expanding the ranks of the landless and corresponding food insecurity. Production is declining as the result of climatic irregularities. Ethnic conflict and the resulting displacement have added to the complexity of problems in the region. All available evidence suggests that production in the area (total and per capita) is declining. The emerging food crisis needs to be dealt with urgently.

Access to Natural Resources: Natural resources such as forest and bush land are no longer available in almost all districts of Western Hararghe. There is no forest land in the whole area. Some shrubs can be found in small quantity, thinly distributed in the area. Particularly in the pastoral and agropastoral areas where the density of crop production is lower, few shrub trees can be found. However, due to increasing dependence on fuelwood and charcoal selling, these remaining trees will be wiped out in a short time. Neither environmental sustainability nor household food security can be established once the existing shrub trees are completely exhausted. Steep slopes are being cultivated, increasing the loss of top soil and the chances of crop failure in such areas.

Access to Infrastructure: Almost all districts of Western Hararghe have limited access to infrastructural facilities such as health, education, and water. Lack of access to potable sources of water is the major problem, resulting in a high prevalence of diarrheal diseases. There is limited access to schools and health services in the rural areas: only a few communities along the main roads within Western Hararghe have access to such facilities in the radius of 10 km distance.

Access to Government Services: As in Adama-Boset, there are no Government services such as credit facilities or extension in the districts of Western Hararghe. Farmers have to rely on informal credit (borrowing) at very high interest rates (often 1:2).

Social Organizations: In the past, numerous rural social welfare organizations have played major roles in protecting resource-poor households, including *afosha*, *zaka*, and *sadaka*.

Afosha and *zaka* used to provide welfare assistance for the sick, orphans, and burial services for bereaved families. Today these organizations are no longer available to the same extent, due to the **secular** decline in the livelihood of households. The role of these organizations has dwindled to the point where they can no longer offer assistance for those in need.

Access to CARE Projects: CARE started free food distribution in this region in 1985/86 and shifted to FFW in 1989, which ended in mid-1991. The focus was on the construction of roads and ponds and hillside terracing on degraded slopes. Since mid-1991, only FFD has been provided. At the time of assessment, CARE was considering restarting FFW programs in a limited number of PAs.

Health Status: Many households reported illness among their family members. Children are the most affected. Because of the lack of potable water and health service facilities and poor child care, many children suffer from diarrhea. Malaria and vitamin A deficiencies are very common.

b. Livelihood Strategies

Western Hararghe consists of distinct agroecological zones, which can be broken down roughly into lowland (kolla) areas, the midlands (wena-dega), and the highlands (dega). Livelihood strategies vary across communities of the different zones in relation to the predominance of pastoralism, agropastoralism, or agricultural activities. In addition, some agropastoral groups are in transition toward critical dependence on agricultural production for their livelihood needs. Years of conflict in their areas as well as hardship sales have produced devastating livestock losses, and many if not most agropastoral households now own no livestock.

Cropping/Livestock Systems: The RRA team visited one pastoral community (Mullo) in Western Hararghe, where camels have long been the lifeblood of the economic system. Smaller livestock, especially goats and cattle, have also been essential components. The small ruminants provided the community with liquid assets as well as an occasional source of meat. Unfortunately, the most recent drought destroyed this livelihood option. Two years ago the loss of grasslands gradually eroded the goats' resiliency to drought conditions, and diseases decimated the entire goat population. One household reported losing over one hundred goats. Deteriorating economic conditions, exacerbated by an influx of migrants from other communities who were displaced by conflict, have prevented the community from attempting to rebuild goat stocks. As a result, small ruminants are no longer found at Mullo.

Cattle provide the population with an important source of milk as well as income. Approximately 40 percent of the households hold on average three to five cows, although female-headed households rarely have three cows. Milk that is not consumed in the household is sold at Mullo or Mieso markets and can bring from one and a half to three birr a day when cows are giving milk. However, cattle distress sales, which usually occur when the terms of trade for cows against grain decline, have apparently increased in recent years. A few households also hold oxen, which were previously rented out to Oromo farmers at the rate of two to four quintals of sorghum per planting season. Tribal

conflict between the Oromo and Somali populations has put an end to this mutually advantageous activity.

Camels are the mainstay of this pastoral economy. Ninety percent of the male-headed households own camels, and average five to ten camels per household. However, female-headed households own significantly fewer camels; their sons or other male relatives graze the camels for them on the communal grazing lands. Camel milk is consumed and sold in the markets during the gestation period of approximately 10 months. Camels are an important means of redistributing productive assets among the community. Families of daughters who marry receive two or more camels as bridewealth; newly married men also receive camels. In addition, before ethnic and political conflicts destroyed this livelihood strategy, male camels provided a major source of income to their owners. Camels were rented out for 20-60 birr per trip to Oromo farmers who used them to transport grain from their fields. Camels were also used to transport clothing and various types of contraband, which usually originated in Djibouti. For example, Mullo camel owners used to rent their camels out to Issas and "Gurages" to transport goods from Bike to Bordode; the five-day trip netted them 200 birr. A longer ten-day trip from Djibouti provided the owner with up to 500 birr per camel. Conflicts within Ethiopia and between the Issas and the Djibouti government have halted this lucrative source of income. In fact, the community lost over a hundred head of camels within the last year as a result of the Issa-Djibouti government dispute. Camels now appear to be used fairly exclusively to carry firewood. Male camels can carry more firewood than can donkeys. Households without male camels must borrow them. Despite the critical importance of camels to their economic livelihoods, approximately half of the households interviewed reported that they had sold at least one camel during the past year. One household was forced to sell four camels during the drought.

Agropastoral communities in Western Hararghe cultivate sorghum, maize, and some chat, haricot beans, and chick peas. However, declining rainfall over the past few years has forced farmers to stop growing teff, potatoes, and sweet potatoes, as well as to reduce significantly the production of sesame, haricot beans, and chick peas. More cropland has been shifted over to sorghum production, which is now the most important crop. Land preparation for sorghum and maize cultivation begins in February or March; the planting season ranges from April and May for sorghum to June for Maize; weeding and intercultural activities continue from May through August; and maize is harvested in September or October, sorghum between October and November. Women participate in weeding and harvesting, and men are involved in every phase of the cultivation cycle. Access to land is not a major constraint in the agropastoral zone; farmers have access to up to five hectares of land, although ownership of approximately half a hectare is the norm. However, access to inputs, especially labor and oxen, severely limits production potential.

Food needs require farmers to search for off-farm seasonal migration employment opportunities or to collect and sell firewood in order to purchase grains, thereby neglecting their own farms. Few households own their own oxen; access to oxen is usually only possible at Annano through labor and collaboration with other households. The lack of access to other inputs to production, including tools, fertilizer, appropriate seeds, and

pesticides, further contributes to very poor yields. As a result, sorghum and maize yields range from zero to six quintals in bad to good years.

Agropastoral communities of Western Hararghe appear to be in transition toward primary dependence on agricultural pursuits as livestock populations dwindle. This is particularly the case at Galessa, where 150 of the 216 households own no livestock at all and the most prosperous households own five cows and three goats. Many of their animals were stolen (and crops and even houses were destroyed) when the community was caught in the middle of the clashes between the OLF and Government forces last year. One-third of the Annano households are without livestock where the lack of adequate pasture land contributed to some distress sales. Some households manage to sell milk in the market for up to two birr a day over a four-month period.

Western Hararghe farmers grow sorghum, maize, haricot beans, lentils, sweet potatoes, barley, chick peas, coffee, chat, and teff for consumption and as cash crops. The diversity of crops grown has declined, as have yields. Communities reported that poor rainfall patterns have reduced the amount of land available for cultivation, adding substantially to already increasing pressure on the land. For example, the combination of rapid population growth and escalating land degradation in Kuni, a cash major region, has prompted farmers to turn from chat and coffee production as cash crops to sorghum production. The cropping cycle depends on the crop grown: Sorghum is planted in March or April and harvested sometime between October and December; maize is sown in May or June and usually harvested in October; haricot beans and chick peas are sown between May and July and generally harvested in October; and coffee is planted in July or August and harvested in October. Intercropping of sorghum and maize is fairly common. The unavailability of inputs, including fertilizer, insecticides, appropriate seeds, and oxen hampers yields. One livelihood strategy is to share land, oxen, and sometimes labor. At Mieso, where many male-headed households own one ox, a second ox is borrowed for three quintals of sorghum. Female-headed households, usually with no oxen and often landless, have fewer options. A few households own one to three cattle, goats, sheep, or donkeys. However, distress sales of livestock, including oxen, were reported in all of the agricultural communities visited.

Other Income-Generating Activities: Off-Farm Employment: Farmers from the agropastoral and agricultural zones frequently search for work off their farms in order to provide their households with food during the cropping cycle. Pastoralists do not employ this livelihood strategy. Labor opportunities are usually limited to farms in the highlands, although farmers from Annano, in Khora, occasionally find work at the Metehara sugar plantation for two birr per day. Some Torbeyo farmers employ wage laborers between July and October to weed and harvest crops for one and a half birr per day. Wage labor in the highlands ranges from two birr to four birr a day, usually between July and October when weeding and harvesting are required. From Galessa, farmers seek wage labor in the highlands of Chercher and Boke, where a surplus of labor has driven wages down to the daily rate of two birr plus a meal. They frequently spend one week at a stretch working at wage labor to save enough to purchase food for their families before returning home to devote crucial care to their own farms. One household reported making ten such trips during the last weeding/harvesting season. Some women of Galessa and Torbeyo also mill

grain for other households in exchange for a portion of the grain or in a nearby town for two birr.

Charcoal/Wood Sales: Collecting and selling firewood has become the major livelihood strategy for residents of all of the agroecological zones in Western Hararghe. This activity is undertaken in all of the communities visited except Hardim in Habro, where all of the forests have already been cut down. The process of walking to the nearest forest, cutting down the trees and bushes, collecting the firewood, and hauling it back to the house, usually on a woman's back but sometimes by donkey or camel, takes anywhere from two and a half hours to two days. The wood must then be hauled to market, which is another two to seven hour journey one way by foot. Wood sellers from Mullo can sell firewood at the Miesso market for 7-10 birr per camel-load, four to seven birr per donkey-load, or two to three birr if a woman carries a bundle. Men and women spend two days collecting the firewood and women spend another day marketing it. Women from Kuni, Torbeyo, and Galessa receive only two birr for a backload of wood; a donkey-load fetches three to five birr. At least one member of the household devotes anywhere from three to seven days a week to this income-generating activity.

Trading: Trading is not a common nor apparently effective income-generating activity for any of the communities. A few men from Hardim market salt and some women market injera. Some Annano women occasionally weave baskets to take to market as well.

Sale of Wild Food: Torbeyo and Annano farmers collect and sell wild grass or weeds as fodder for one to two birr per bundle. Otherwise, wild foods are not generally marketed.

Seasonal Migration: Some form of seasonal or semipermanent migration occurs in every community visited except Kuni. Peasants with and without land from four of the five agriculturally-based communities seasonally work on coffee and chat cash farms in the highlands for two to four birr per day. Approximately 30 entire households without access to livestock, particularly oxen to till their land, migrate from Galessa to the highlands annually. Men work on the farms and women work as servants. In addition, people from Annano have migrated to Metahara or Awash in search of work. Household members from at least two communities have semipermanently migrated to as far away as Djibouti; from Mullo at least 250 household members have migrated to Djibouti, and many households hope for remittances.

c. Coping Strategies

Adjustments in Meals and Food Substitution: A common coping strategy in times of food scarcity in Western Hararghe is to reduce the number of meals eaten per day. This practice was observed in all PAs surveyed and was consistently mentioned during both group and individual household interviews. The number of meals eaten per day during food scarcity varied; however, most families indicated that both adults and children cut the number of meals from three to two. Reports of having to reduce from two to one meal per day were more prevalent in female-headed households. Generally, adults sacrificed first, sparing children the reduction until absolutely necessary.

Another coping strategy widely observed in this area was the reduction in the quantity of food consumed. This practice was observed in both male- and female-headed households in most of the PAs surveyed. Both male- and female-headed households in Annano, Hardim and Torbeyo indicated that they had reduced both the number of meals and the quantity of food consumed. Food substitution was also mentioned as a coping strategy in all of the PAs surveyed. The most common food substitution was from injera (made of either sorghum, maize, or teff) to roasted or boiled grain (mostly maize). Other food substitutes mentioned were wild foods such as cactus (in Kurfasawa), "merere" (in Galessa), cactus pear and "kukura" seeds (in Torbeyo), and wild animals such as the greater kudu (in Galessa).

Sales of Assets: The sale of assets is a widespread coping strategy among the households of the PAs surveyed. However, there seems to be some variation between male- and female-headed households in the type of assets sold. Male-headed households reported more sales of productive assets, such as cattle (in Hardim and Galessa), cattle and camels (in Kurfasawa), and goats (in Annano). Most female-headed households reported having no assets to sell, with the exception of some jewelry (in Kurfasawa) and some cattle (in Hardim).

Borrowing Food from Relatives/Friends: Borrowing food items as a coping strategy does not seem to be widespread in these areas. In the words of one householder in Galessa, "nobody has anything to lend; we are all poor." However, some borrowing from relatives was reported in Galessa, Kuni, and Torbeyo, with no interest charged. This differs from the exorbitant rates of interest (2:1) charged even among relatives in Eastern Shewa.

Credit: Officially borrowing money during food scarcity does not appear to be a widespread activity among the people in the Western Hararghe PAs. This is partially due to the fact that there are no formal institutions that provide credit services. Whatever credit is availed takes place among relatives, mainly by male-headed households (in Galessa, Annano, and Kuni) but also by some female-headed households (in Annano and Torbeyo). Again, there were no reports of interest being charged.

Wild Foods: People in all PAs indicated that they resort to foraging for wild foods during severe food shortages. The most common wild food mentioned was the cactus fruit, eaten mostly by children. Some consumption of "merere" was also reported (in Galessa, Kuni, and Torbeyo). Galessa was the only PA that reported hunting and consumption of wild game, the greater kudu.

Alternative Employment and Migration: Seasonal migration was observed in most of the PAs surveyed, the exceptions being Kuni and Hardim. Whereas migration was more prevalent among male-headed households, both male- and female-headed households (in Kurfasawa) indicated that some members of their families migrated to Djibouti in search of jobs during food scarcity. In male-headed households, one of the spouses and/or older siblings migrated to the highlands looking for wage labor. Female-headed households reported that child care was a constraint that precluded them from seeking work elsewhere.

Remittances: Remittance is not a common practice among these PAs where so few family members leave the fold. There was only one case of remittance, in which a daughter migrated to Djibouti and sent 50 Birr to her parents who had been displaced to Kurfasawa.

Household Perceptions of Household Food Security: In all the PAs studied, the perception was that there was uniform inadequacy of household food security. All households indicated chronic shortages of staple foods as well as dairy products. Some people (in Galessa) said that they were heading toward dependency on food aid. Lack of rain and the ensuing drought were among the common constraints to food security mentioned in Western Hararghe. Other constraints included displacement (in Kurfasawa), security problems (in Galessa), pests (in Galessa and Annano), and lack of access to land and farm inputs (in Hardim). In addition, the absence of communal land, limited land for distribution, low per capita livestock ownership, the absence of inputs such as fertilizers, and the lack of government extension services have all contributed to household food insecurity. The most common solution mentioned was the continuation and intensification of food aid. There were also some indications of willingness to try food-for-work (in Annano) if seeds and oxen were provided. One pastoral community (Kurfasawa) that had lost much of its livestock was anxious to try cultivation if some assistance in terms of inputs and training were provided. Other suggested solutions included the provision of health and educational services.

d. Changes in Livelihood Strategies

Under normal circumstances in the agricultural communities, livelihood strategies include cropping of sorghum, maize, beans, and peas. Some cropping of chat (in Galessa) and coffee (Kuni) were also mentioned. In most cases oxen are shared. Women contribute particularly during weeding and harvesting times. In the pastoralist community (Kurfasawa), livelihood strategies mostly depended on livestock products and the sale of firewood. The lack of water and the ensuing drought, not to mention ethnic conflicts, have brought about changes in livelihood strategies among the communities in this area. Two of the most frequently adopted alternative livelihood strategies were selling firewood and low wage labor. This was particularly true in agricultural communities. In agropastoral (Galessa) and pastoral (Kurfasawa) communities, members expressed an interest in learning to cultivate if the necessary inputs such as training and tools were provided.

e. Food Consumption Patterns

Composition of the Diet (24-hour recall): In Western Hararghe 169 households were interviewed to determine household dietary patterns, and 48 were interviewed in-depth regarding their household food security. Western Hararghe households are clearly much less food secure than households in Eastern Shewa. Only 42 percent of households had the resources to consume injera daily; the remainder were consuming their cereal sources in the form of boiled or roasted grains, principally kollo, nefro, and gentro (Annex 3, Table II). These are often reported as snack foods and are eaten without watt. Such consumption was very frequently reported as meals, therefore putting into question the report that 59 percent of households consumed three meals a day.

Injera was composed of the locally grown grains, mainly sorghum and maize, except in the case of the pastoral village of Kurfasawa, where no crops were grown, and injera or boiled cereal from food aid wheat was being consumed by 15 of the 30 households interviewed. Also, in the agropastoral community of Galessa, wheat is not grown but boiled food aid wheat was the only food being consumed in 25 of the 29 households. Consequently, the dietary diversity of the region was low; 42 percent of the households reported only one item in their diets, compared to 6 percent in Eastern Shewa. Consumption of vegetables, fruits, and protein from plant and animal sources was very low in comparison with Eastern Shewa, with the exception of one pastoral village where milk was frequently consumed. Sixty-three percent of the pastoral households had animal protein in the diet, compared to only 11 percent in cereal areas and 18 percent in agropastoral areas. The consumption of oil was very low throughout the region; oil was only reported in 4 percent of the cereal-based communities (Annex 3, Table II). Commonly consumed beverages were oja (prepared from coffee husk), cactus fruit, and camel milk in Kurfasawa.

Sources of Food: In four of the areas, food was obtained mostly from the households' own production, except for the landless households. However, in Galessa nearly all food consumed on the previous day was from food aid. In one pastoral village, cereals were largely purchased or received as food aid. Items bought in all areas throughout the year are salt and coffee husks. For nonproducers and when food stores are depleted, grains are purchased. Prices for sorghum and maize can increase from 50 percent to 100 percent during the rainy season, precisely when the need is greatest. The poorest (such as one landless, female-headed household in Kuni, no. 23), were forced to buy in small quantities at elevated prices during the rainy season. Farmers anticipating a shortfall could buy in bulk at much lower cost late in the harvest season.

Five of the six communities, being in dryer lowland kolla areas, reported consuming cactus fruit. Three areas reported hunting some wild deer and kudu, but were concerned that this was to be prohibited by the government beginning next year. No fishing for consumption was reported.

Food sharing was not widely reported; however, in two communities begging was reported. The one pastoral area contained a large displaced population due to ethnic conflict in surrounding areas. They are given food by the other households, according to the group interview with the community leadership. The female-headed households reported receiving zacha (a Muslim institution in which the wealthy households share 10 percent of their yield with the poor), and in some instances they admitted begging for food.

Food aid had been discontinued or cut back in frequency of distribution (from monthly to quarterly) because of the report of the good 1992 harvest by the RRC monitoring system; however, two communities (Kurfasawa and Galessa) relied on food aid as their primary source of food on the day of the survey. In Galessa, food aid was said to be the most important source of food in the in-depth interviews.

Problems with Food Availability: All areas, with the possible exception of Hardim, reported that production shortfalls due to drought and pests affected their crops. For the

cereal and agropastoral areas, market availability was not cited as a problem but rather prices made the foods inaccessible to the families. The respondents in Kurfasawa clearly understood how drought affected grazing of their animals, reducing milk output while restricting agricultural production, thus driving up the price of grain in the market (e.g., decreasing the terms of trade of animals for grain). The conflicts in the areas of Galessa, Kurfasawa, and Annano were also cited as a cause for food insecurity and the restriction of dietary intake and variety. In Kuni (no. 23) the coffee bean disease was given as a reason for the limitation of cash income needed for food.

Food Conservation/Preservation: Grain is generally ground by hand in the home. Storage was in holes in the ground, in-house dogogos, or plastic sacks. Loss rates were not given; the impression is that there is little or no surplus in storage in these communities. As one farmer put it, "we store in our bellies."

Traditional Food-Sharing Networks: The scarcity of food is placing stress on the usual institutions by which food is shared. Traditionally weddings--an occasion for much sharing--are being replaced by rituals that circumvent the material exchanges between families. In such weddings, the male's family siege the female's family residence and refuse to leave until the marriage is arranged and the couple is married. This is referred to as "chopsa" or norm breaking. Sharing continues to some extent at funerals ("afusha"), on Moslem holy days (Ramadan), and through sharing with the poor or "zacha."

Food Taboos/Specialty Foods: The Islamic prohibition of pig consumption was widely reported, and two villages reported that they would not eat food prepared by Christians.

Changes in Diet: Sharp declines in consumption variety were reported in all the areas surveyed, especially in Galessa, an agropastoral area where many animals have died because of the drought and conflict. Animal, commercial (e.g., pasta), and vegetable foods are all reportedly on the decline in the diet in these areas.

f. Child Care

Care of Children: The pattern of child care in Western Hararghe differs little from Eastern Shewa. Care tends to be shared by the nuclear and the extended family, with fathers playing somewhat less of a role.

Feeding Patterns of Children: Infants are breastfed on demand within the limits of what is convenient for the mothers. Supplementary foods are introduced to young children two to three times per day. However, in contrast to Eastern Shewa villages, household members reported that children were given priority to whatever food was available in the household, especially in the pastoral village, Kurfasawa. Reported weaning age ranged from five months to three years, with most infants consuming other food in addition to breast milk by age one. By the age of two or three years, all children have been completely weaned.

Weaning Foods: No special foods for weaning were identified. The weaning foods reported were milk (both cow and camel) and boiled porridges such as "Laffisso," made

from ground grains, injera, and "kitta." The milk is sometimes mixed with fenugreek oilseed.

g. Nutritional Status

In the six PAs sampled, 169 households with children from six months to five years were selected. Only 142 children (the youngest in each household in the range of one to five years) were used for the analysis. Households with cereal as the major economic support made up 44 percent of the sample (75 households in Hardim, Torbeyo, and Kuni), agropastoral households were 38 percent (64 households in Annano and Galessa), and pastoral households made up 18 percent (30 households in Kurfasawa).

Roughly one in eight of all the households was assetless, without land, oxen, or other livestock, and roughly one-fifth of the households reported the death of a child under the age of five in the past year. The mean age for the study population was 29.4 months; the male-female ratio was exactly one.

The anthropometric assessment of nutritional status revealed a mean WFL of 82.4 percent, ranging from 76.3-88.6 percent in the six villages surveyed. In all of the villages except Torbeyo (a cereal area), the nutritional situation of the children fell in the seriously malnourished range, or a mean percent of standard WFL under 85 percent (Summary Table in Annex 3). Wasting (under 90 percent of standard WFL) was observed in 74 percent of the children (105 children) with 24 (17 percent) showing severe wasting. Forty-four percent of the children were moderately or severely wasted, 10 percent more than in Eastern Shewa (Annex 3, Table I).

Nearly 60 percent of the children from households without land or livestock were moderately or severely wasted, compared to 40 percent of the children from asset-holding households; the mean for the poorer group was 78 percent of standard, significantly less than the wealthier households (Annex 3, Table III). These assetless households are three times as likely to be female headed than male headed (Annex 3, Table IV). In the eight female-headed, assetless households, five children exhibited moderate to severe malnutrition.

In Western Hararghe, the incidence of diarrheal attacks was found in over 60 percent of the children examined, a rate much higher than in Eastern Shewa. Furthermore, there was a strong association between wasting and diarrhea incidence (Annex 3, Table V). Children experiencing diarrhea were 50 percent more likely to be moderately or severely wasted. The children without diarrhea were on average out of the serious malnutrition category, above 85 percent of WFL, whereas the others were on average 80.8 percent of standard, well into the danger zone.

The SCF-UK nutrition surveillance reports for Western Hararghe from December of 1992 and February and April of 1993 indicate a satisfactory level and trend for nutritional status for children one to five years of age at all sites. The most recent report in April of 1993 gives a mean WFL of 92.4 percent as the lowest level recorded for the six sites surveyed. The trend data show no period when WFL percent has fallen below 90 percent of WFL. Our findings, however, paint a much more critical picture of malnutrition. We do not know the precise reason for this; it may be the sampling differences and the

seasonal variation in the survey periods. Our survey was done in fairly remote villages and during the depths of the "hungry season."

The prevalence of vitamin A deficiency is very high, and continues to be a very serious problem in this region. In the 576 children assessed for clinical signs of deficiency, the prevalence rate was 5.2 percent (Annex 3, Table VII). This finding agrees with the 1988 study conducted by Mekaye Darelebu Wareda in Western Hararghe, which revealed the highest level of vitamin A deficiency ever recorded in the world (See the *European Journal of Clinical Nutrition*, 1993, Volume 47).

h. Summary of Constraints to Household Food and Nutritional Security in Western Hararghe

Community, household, and individual nutritional security consists of many interrelated components, which together determine nutritional status. Adequate nutritional security requires health and sanitation--including access to proper health care, water, diet, mother and child care, and household food security. Household food security, in turn, includes access to sufficient factors and means of production (land, livestock, inputs, water, extension services), livelihood options, productive assets, markets, and peaceful coexistence or (better) cooperation with neighbors. By all appearances, the lowland cereal community is demonstrating more signs of stress than the highland cash-crop group. Even without food aid, the highland area appears to be coping better. The agropastoral group is in transition, having lost most of its animals.

Land, Crop Yields and Income Access: Among the agriculturally-based communities, access to land remains the most important determinant of household food security. Landlessness is increasing in all agricultural communities; 50 percent of the households are landless in at least one of these villages. The pressure on land has gradually eliminated communal land, limiting land redistribution potential, and has reduced grazing land of vital importance to agropastoral communities. Faltering rainfall patterns have forced farmers formerly involved in the cash-crop production of coffee, teff, chick peas, and haricot beans to devote more of their lands to sorghum production. Soil erosion, resulting in declining yields, has accompanied the environmental degradation caused by years of chopping down trees in order to buy food to compensate for, paradoxically, poor yields, as well as declining access to land and inputs. The inaccessibility of inputs, including fertilizer, pesticides, herbicides, improved or appropriate seed varieties, farm equipment, oxen, and labor, has prevented farmers from realizing reasonable yields. Farmers in the agropastoral communities in particular have been forced, due to food needs, to migrate to the highlands in search of farm work during crucial stages of the cultivation season, when their labor is required on their farms. Few households possess more than one ox, and increasingly common distress sales of oxen prevent households from timely tilling of their land.

Harvested crops are stored in dogogos or underground; storage losses from weevils, rodents, or moisture range from 20-40 percent. Poor yields and limited access to land and inputs have seriously undermined household food security in agricultural and agropastoral communities. Declining crop production has also negatively affected pastoral communities by worsening the terms of trade for animals, milk, and firewood relative to grain on the market.

Livestock: Per capita livestock ownership is extremely low in all of the agricultural and agropastoral communities. Some agropastoralist groups are now in transition away from pastoral options after suffering significant livestock losses caused by OLF-Government conflict and years of distress sales. Distress sales of cattle, goats, oxen, and even camels (among the pastoralists) in all types of communities have reduced household resilience. The lack of oxen in all communities has prevented farmers from sufficiently utilizing essential traction power. The lack of water sources affects grazing potential. Veterinary services are nonexistent, and animals are very susceptible to diseases. The pastoralist community of Mullo lost its entire goat population two years ago during the drought from diseases associated with the goats' weakened conditions. The community has been unable to recover from those tremendous losses, and today not a single goat can be found in the area. The ownership of goats had provided households with required liquid assets. The same community lost over a hundred camels caused by a conflict in Djibouti. In short, all communities have seen a long-term decline in productive livestock assets.

Access to Water: Crop production has declined and crops have failed completely with increasing frequency in large part because of irregular rainfall over the past few years. There is also no form of water harvesting or irrigation to fill the gap. The lack of rainfall affects livestock production as well, and was ultimately responsible for the decimation of the goat population at Mullo. Access to potable water from wells or other sources is virtually nonexistent. Instead, women spend up to six hours a day during the dry season fetching unclean water.

Access to Government Services: Government extension services, credit facilities, or veterinary services were not found serving any of the visited communities, negatively affecting agricultural and livestock production over time.

Access to Alternative Employment: The livelihood strategy of all but the highland cash-crop producers is highly dependent on selling firewood. Apart from destroying valuable resources, this strategy has a real opportunity cost. Households spend long hours collecting and marketing wood for three to seven days a week for very marginal rewards; firewood can be sold for only two to ten birr a bundle, depending on the type of bundle. Alternative employment opportunities are limited. Many households send at least one of their family members to the highlands to work as wage laborers on coffee and chat farms. The oversupply of labor has kept wages extremely low; two birr and a meal a day appears to be the norm. Potential entrepreneurial activities are severely limited by capital costs.

Access to Markets: Most communities are situated in isolation from markets. This is another type of opportunity cost for households. The poorest households pay higher prices due to their inability to buy in bulk or to buy when prices are favorable. The percent of income devoted to short-term consumption precludes cash market access to other goods or foods. Pastoralists, who have lost virtually all liquid assets to sell, have seen the terms of trade worsen for animals, milk, and firewood (their sources of income) in relation to grain. All groups have increasingly been forced to depend on market purchased food for their consumption as their own agricultural livestock production has declined.

Access to Education: One of the most important long-term constraints faced by all communities of Western Hararghe is the widespread lack of education. Households cannot afford to send their daughters and sons to school, which is usually several miles away and therefore inaccessible to them anyway. Children are valuable labor contributors from a fairly young age. However, because households cannot send their children to receive education, they are forgoing future potential income sources, including remittances.

Deforestation and Soil Erosion: Firewood marketing is one of the most important livelihood strategies throughout Western Hararghe. However, the costs in terms of soil erosion, forest depletion, environmental degradation, and water supply over the long term may be devastating for households as well as communities.

Political Conflict: Half of all Western Hararghe PAs may remain inaccessible due to conflict between the OLF and the Government. Communities that have been caught in the middle of this conflict have lost valuable productive assets. Many cattle, as well as houses or crops, were lost or destroyed at Galessa, in Kuni. The conflict also does not allow the community to pursue long-range productive strategies. Ethnic conflict is another destructive pattern. Oromo and Somali communities used to cooperate for mutual benefit; the pastoralist Somalis rented oxen to the agriculturally-based Oromo during the planting season. Crop production increased for the Oromo, and Somalis gained an income source as well as access to vegetables. Before the conflict, Somalis rented out their camels to transport crops and other goods as well, from as far away as Djibouti for up to 500 birr per trip. That very substantial income source has completely dried up for communities such as Mullo. In addition, Mullo has had to try to support a very large population of displaced people forced to flee areas of conflict between the Oromos and Somalis. These recent arrivals now make up half of the population of Mullo and have severely strained the resources of the community.

Health and Sanitation: Access to adequate health service is a major constraint to nutritional security facing all of the communities visited in Western Hararghe. Child mortality rates are high, yet child vaccination programs are rarely undertaken due to security concerns. Health facilities, government services, and public health education do not exist in the communities; facilities are to five to eight hours away by foot one way. Even if the clinics were accessible, rising costs for treatment and injections are often too high for poor households. Households are therefore forced to consider the trade-off between proper health care to treat a malady and food consumption needs. Medicines drain productive assets. Seeking treatment also carries high opportunity costs. However, household labor needs are so great that losing a day's work due to sickness can result in no food consumption that day for all members of the household. A mother's illness is a real drain on labor. At the time of assessment, households identified a wide variety of health problems and illnesses including malaria, dysentery, diarrhea, and edema caused by eating wild foods.

Access to potable water is virtually nonexistent. Few wells have been installed in rural Western Hararghe. Therefore, river and pond water, which can take up to six hours to fetch, is the only source of water.

Diets lack protein, Vitamin A, fats, often dairy products, and oil (except when distributed by CARE), and are extremely limited in variety and quantity. Several communities are undergoing a long-term shift away from preferred staples toward snack foods as meals. For example, Galessa residents regularly eat boiled or roasted grain, little if any injera, no vegetables, and wild foods with no nutritional value. Pastoralists often drink milk; however bovine tuberculosis occasionally accompanies raw milk consumption.

Mother/Child Care: Maternal and postnatal care is nonexistent. Labor demands that force mothers to gather water and wood negatively affect child care. These demands, combined with a limited diet, may impact the quality of both breast and child feeding. Supplementary feeding is generally not undertaken. The frequency and quantity of food consumed is often not sufficient for both mother and child, and weaning foods are often not appropriate. For example, boiled or roasted grain is difficult for children to digest. Finally, illiteracy impacts on the quality of child care.

1. Beneficiaries' Perception of CARE's Food Aid Activities

In Western Hararghe, the food assistance program is oriented toward emergency free food distribution. Given the very difficult security problems under which CARE is operating in this area, it is to be commended for having any presence at all. It is obvious from the interviews conducted in the areas surveyed that CARE's assistance is much appreciated by the beneficiaries. The food has actually saved lives in many villages, prevented migration, reduced the magnitude of fuelwood sales, and allowed people to attempt agricultural activities as a source of livelihood.

Under such difficult conditions, the food distribution system is bound to operate imperfectly. The major problems cited by the beneficiaries and identified by the assessment team included: (1) the ration amount does not always take into account the size of the family; (2) food sometimes comes too late; (3) last year's harvest was not sufficient to warrant the extent of the FFD reduction; (4) the area-based assessments do not capture the intragroup vulnerabilities; (5) the distribution centers are too far away for people with no means of transport; (6) not all of the people in need of food are on the distribution list due to recent displacement--calling for an updating of the distribution list; and (7) many of the populations being serviced by CARE are becoming increasingly dependent on the FFD.

j. Recommendations

The recommendations outlined for Eastern Shewa also apply to Western Hararghe and will not be repeated here. However, several additional recommendations are proposed for this region.

Food Security Promotion in Conflict Areas: To promote food security in areas prone to political conflict, the following factors may be considered. First, mobile extension teams could be used to train lead farmers to act as community extension agents. These lead farmers could then provide training to other farmers regarding improved seed varieties and vegetable production. Another way to provide extension messages as well as inputs is through the food distribution centers. A training facility could be developed at the distribution center to train members from the PAs that are in more vulnerable areas.

NGO Workshop: An NGO workshop should be held in the near future to discuss: (1) the unequal distribution of activities in the country; (2) opportunities for collaboration; (3) work norms; (4) activities that will promote long-term food security; and (5) ways to facilitate better working relationships with line agencies. In addition to the NGOs, representatives of the line ministries and the donors should be invited to the workshop.

Increasing the Frequency of Free Food Distribution in Western Hararghe: In light of the apparent overestimate of the 1992 harvest, the failure of the maize and sorghum crops in lowland areas, and present household food insecurity in Western Hararghe, **CARE should carefully consider increasing FFD from quarterly to monthly in this region.**

V. CONCLUSIONS

A. Issues of Design

CARE's food-for-work and free food distribution programs are generally consistent with efforts to promote food security objectives in Ethiopia. Food-for-work outputs, such as improved agricultural infrastructure and roads linking rural areas to markets, are important to regional food security. CARE also provides a safety net to help prevent recurrent emergencies in the form of free food, particularly important for the drought prone area of Hararghe. Likewise, the CEFIS strengthens CARE's ability to identify and respond to impending emergencies. In addition, CARE has made a good attempt to involve Government agencies such as the RRC and the MOA in project design activities.

Despite these laudable activities, much could be done to improve project design in order to have a greater food security impact. First, project objectives must have measurable performance indicators. Presently, the performance indicators that are used are not true measurements of the project objectives. Second, communities must participate more in the design, timing and duration of FFW activities. More activities are needed to accommodate all of the people seeking work, particularly during the cropping season when food shortages are the most critical, and a wider array of food security enhancing options could be identified. Third, the food basket provided should be adjusted to take dietary adequacy and the detrimental consequences of grain substitution into account. Consideration should be given to providing grains that people are likely to produce themselves or can be readily obtained in the market. The food basket should also be tailored to family size. Fourth, in addition to food, consideration should be given to providing inputs for work as a way of improving the long-term resilience of the communities targeted.

B. Targeting

As a result of limited resources and accessibility, CARE has relied heavily on the Peasant Associations for compiling beneficiary lists and targeting its FFW interventions. In some communities, this has meant that many of the chronically vulnerable populations such as the landless and female-headed households have been excluded from program participation because they are not PA members. In addition, work norms of project activities have not always taken different levels of vulnerability into account. Work norms tend to be based on outputs regardless of strength or capacity, which obviously disadvantages the sick and the elderly.

To improve targeting, steps must be taken to insure that the chronically vulnerable as well as the households suffering from transitory food insecurity are included in project activities. First, committees should be established to include representatives from the various vulnerable groups (e.g., landless, women-headed households, and elders). Second, the CEFIS is an excellent system for monitoring transitory food insecurity in the program areas. For those areas that are prone to recurring food insecurity, contingency plans should be established to improve the timeliness of response in order to protect livelihoods and any gains made by CARE. Third, the indicators that are used in food security monitoring and performance evaluation should consist of chronic\baseline indicators and transitory indicators that monitor current conditions. Fourth, CARE should consider whether FFW activities could be tailored to different types of vulnerable groups. This would involve designing different types of activities for the landless and the landed, or the weaker members of the community.

C. Performance Indicators

To insure that the CARE projects are having a positive impact on the beneficiaries, output indicators should be defined and periodically measured. These indicators could include changes in the number of meals, the diversity of foods consumed, and food substitutions. Care must be taken to insure that the indicator is not measuring an artifact of food aid, which may not be related to longer term food security. This is why pre- and post-harvest measures are important. Nutritional status indicators can also be monitored as a way to assess CARE's impact on overall well being in the communities in which it is working. However, if CARE intends to have an impact on the nutritional security of the populations it is working with, consideration should be given to incorporating interventions that improve water quality , child/mother care and access to health services.

D. Sustainable Development (Promoting Livelihoods)

CARE has been trying to promote sustainable development initiatives through its focus on soil conservation, vegetable gardening and improved water access. Many more options could be explored as a way to enhance the longer term food security situation of local populations. Every food assistance program should have built into it activities that promote sustainable livelihoods. The ultimate objective is to make the populations more resilient and self-reliant. For example, where free food distribution is taking place, inputs such as improved seed could be provided simultaneously so that the production systems become more viable. Livelihood protection is also important to the long term food security of communities. When transitory food insecurity conditions worsen, timely interventions can prevent households from selling off productive assets and becoming more vulnerable to future food shortages. Contingency plans that monitor location-specific indicators will help determine when a mitigation activity should be implemented to prevent communities from sliding back to a more vulnerable state.

VI. ANNEXES

ANNEX 1

PEASANT ASSOCIATIONS

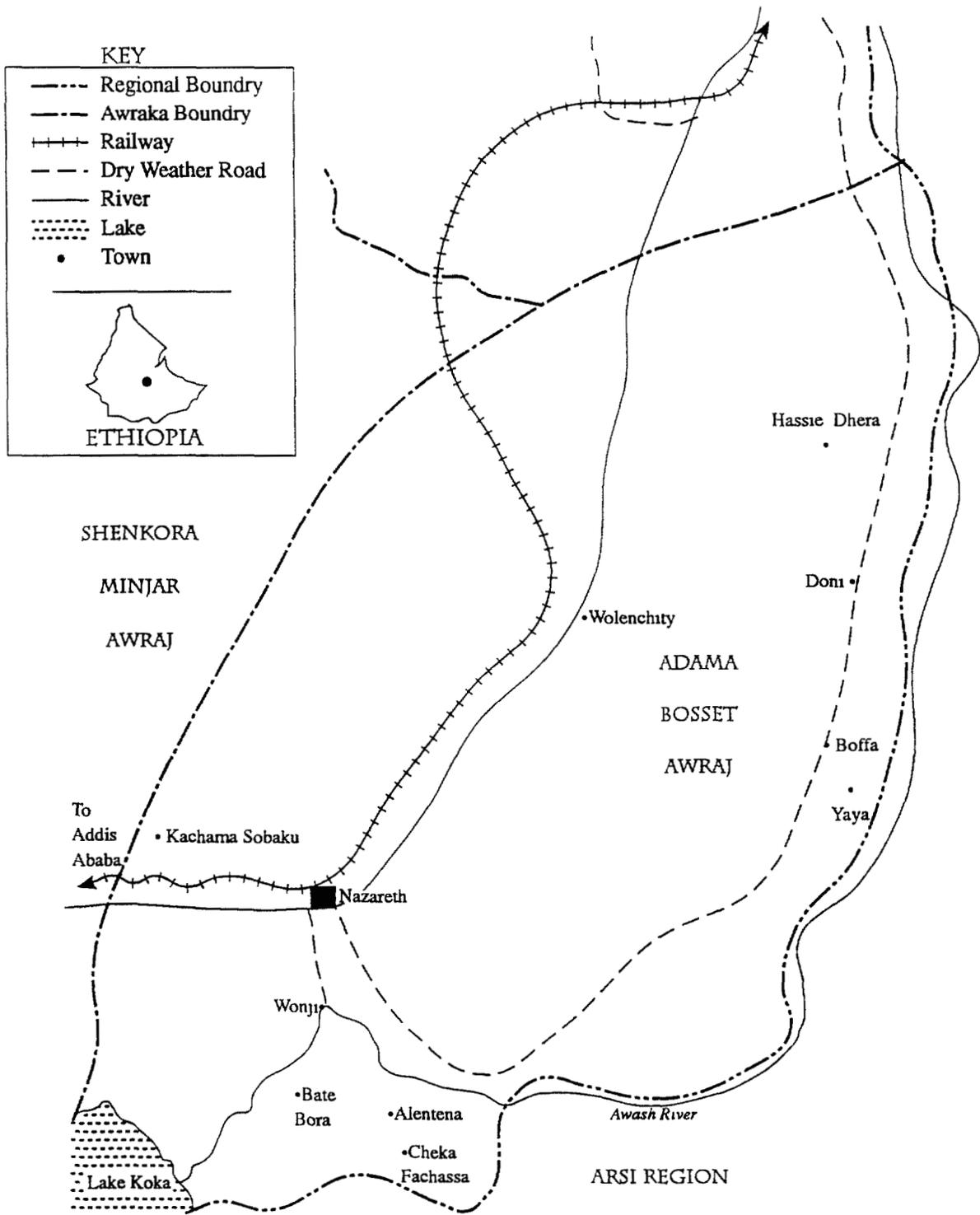
Eastern Shewa:

Bate Bora
Hassie Dhera
Fachassa (Chekafachassa)
Dongori-Wonga
Yaya
Kachama Sobaku

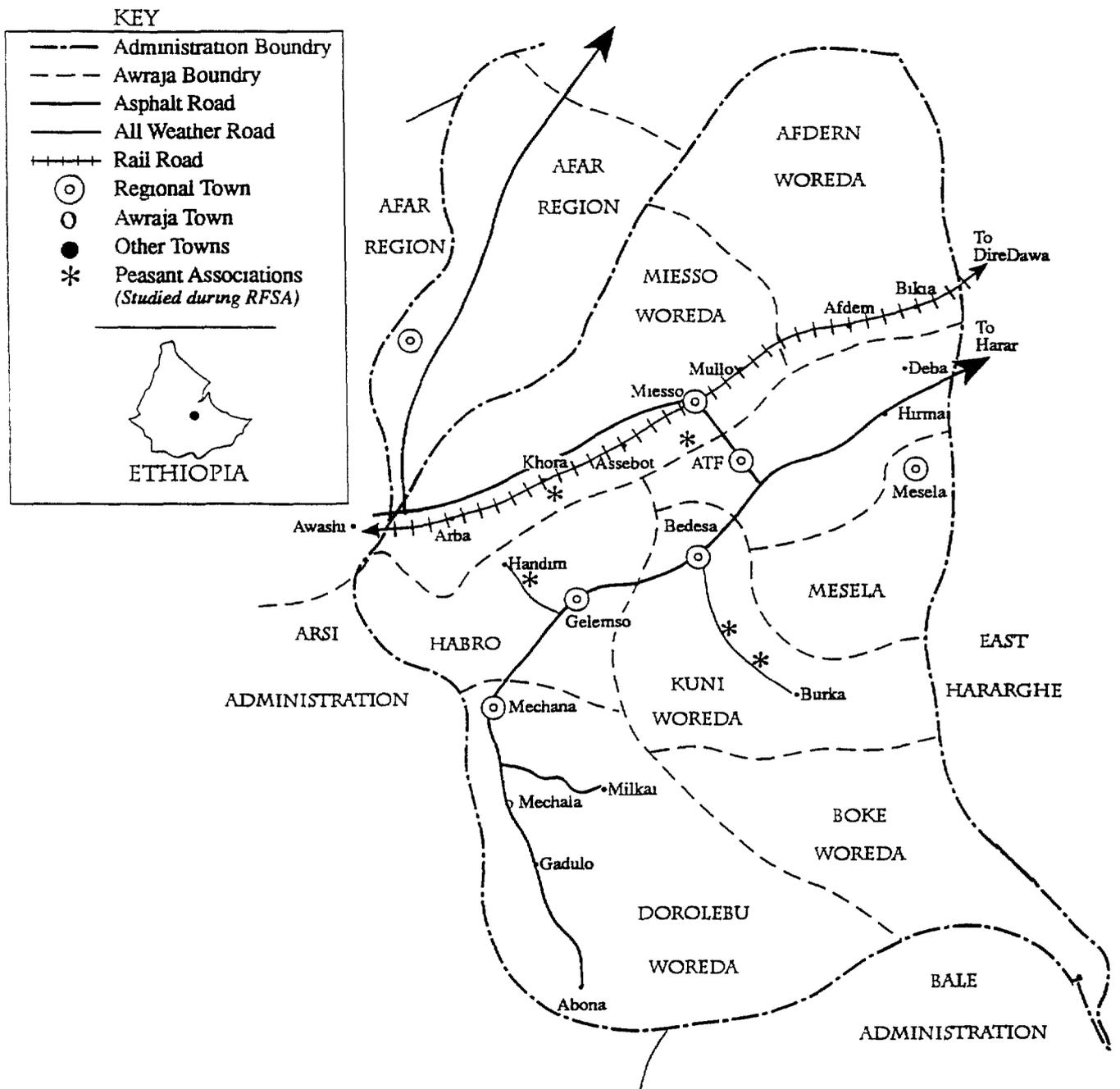
Western Hararghe:

Anneno
Hardim
Torbeyo
Kuni
Kurfasawa
Galessa

SURVEY PEASANT ASSOCIATIONS: EASTERN SHEWA



SURVEY PEASANT ASSOCIATIONS: WESTERN HARARGHE



ANNEX 2
VILLAGES SURVEYED

VILLAGES SURVEYED= EAST SHEWA ADMINISTRATIVE ZONE		
Name of Village	Location (sub-zone)	Population
Bate Bora (cereal major)	Wonji, Adama Boset	500/2000
Hassie Dhera (agro-pastoral)	Doni, Boset	400/2275
Fachassa (Checkafachassa) (agro-pastoral)	Alem-Tena, Adama	88/
Dongori-Wonga (cereal major)	Wolenchity, Boset	374/
Yaya (cereal major)	Bifa	630/
Kachama Sobaku (cereal major)	Adama	365/

VILLAGES SURVEYED=WESTERN HARARGHE ADMINISTRATIVE AREA		
Name of Village	Location (sub-zone)	Population
Anneno (agro-pastoral)	Khora	370/1800
Hardim (cereal & cash crops)	Habro	700/3000
Torbeyo (cereal major)	Mieso	73/200
Kuni (cereal & cash crops)	Kuni	49/
Kurfasawa (pastoral)	Mullu	1000/8000
Galessa (agro-pastoral)	Kuni	216/1300

ANNEX 3
NUTRITIONAL DATA

TABLE I
NUTRITIONAL STATUS BY AREA
(WFL OF CHILDREN 1-5 YRS, 70-110 CM)

Status	Eastern Shewa (N = 161)	Western Hararghe (N = 142)
Well nourished (>90% Standard WFL)	35.4	26.1
Unsatisfactory (<90% Standard WFL)	64.5	74.0
Mild (80-89% Standard WFL)	30.4	29.6
Moderate (70-79% Standard WFL)	21.1	27.5
Severe (<70% Standard WFL)	13.0	16.9
Mean % WFL	85.0%	82.4%

TABLE II**PERCENTAGE OF HOUSEHOLDS (BY ECONOMIC TYPE) CONSUMING THE FOOD ITEMS (24-HOUR RECALL)****A. EASTERN SHEWA (N = 198)**

Household Economy	Injera	Oils/Fats	Animal Protein	Beans and Peas	Vegetables and Fruits*
Cereal	98.5	80.0	3.8	68.5	44.6
Agropastoral	69.2	29.2	18.5	29.2	41.5

B. WESTERN HARARGHE (N = 169)

Household Economy	Injera	Oils/Fats	Animal Protein	Beans and Peas	Vegetables and Fruits*
Cereal	54.7	4.0	10.7	26.7	24.0
Agropastoral	6.3	0.0	18.8	0.0	0.0
Pastoral	90.0	0.0	63.3	18.7	0.0

* Fruits are mainly wild cactus.

TABLE III

NUTRITIONAL STATUS BY HOUSEHOLD ECONOMIC STATUS

A. EASTERN SHEWA

Economic Status of Households	Nutritional Status of Index Child (% WFL)	
	% ≤ 80%	mean
No assets (land or livestock)	43%	81.8
No land but some livestock	42%	81.3
Land but no livestock		85.6
Livestock and land		87.6

B. WESTERN HARARGHE

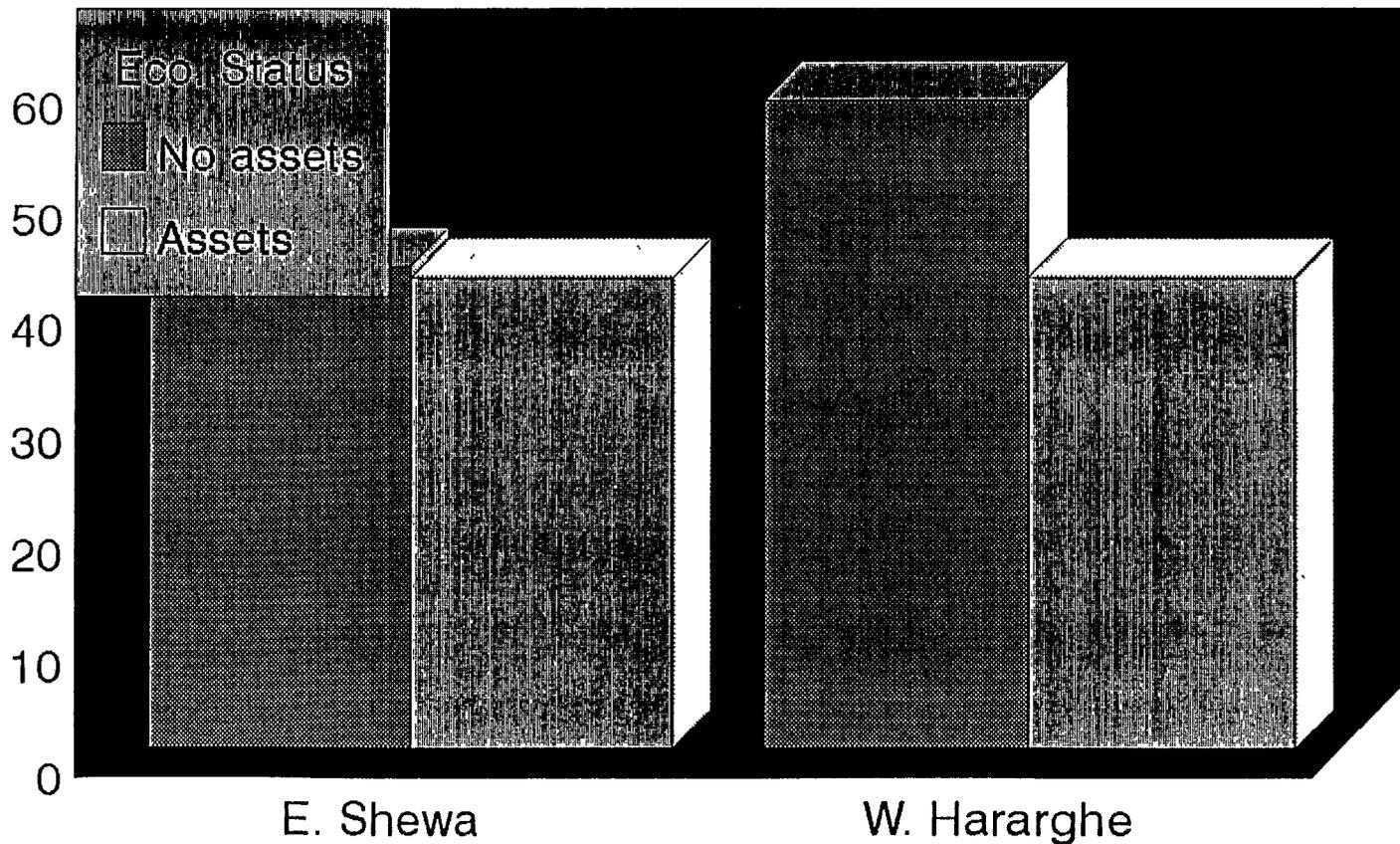
Economic Status of Households	Nutritional Status of Index Child (% WFL)	
	% ≤ 80%	mean
No assets (land or livestock)	58%	78.2
No land but some livestock	42%	84.3
Land but no livestock		80.0
Livestock and land		84.3

FIGURE 1

NUTRITIONAL STATUS BY HOUSEHOLD ECONOMIC STATUS

CHILDREN 6-60 MONTHS; EASTERN SHEWA AND WESTERN HARARGHE

% < 80% Weight-for-Length



64

CARE: quota samples, N=161 E.Shewa,142 W. Hararghe
Youngest child in household; Assets=land and/or livestock

TABLE IV

ECONOMIC STATUS BY GENDER OF HEAD OF HOUSEHOLD

A. EASTERN SHEWA

Economic Status of Household	Gender of Household Head	
	Male (%) N = 124	Female (%) N = 30
No assets (land or livestock)	14	46
Some assets	86	54
Total	100	100

B. WESTERN HARARGHE

Economic Status of Household	Gender of Household Head	
	Male (%) N = 115	Female (%) N = 26
No assets (land or livestock)	10	31
Some assets	90	69
Total	100	100

TABLE V

NUTRITIONAL STATUS OF INDEX CHILD BY INCIDENCE OF REPORTED DIARRHEA

A. EASTERN SHEWA

Reported Diarrhea	Nutritional Status of Index Child (% WFL)	
	% < 80%	mean WFL
Yes, in past one month (N = 53)	40	83.8
No, none in past one month (N = 104)	32	85.3

B. WESTERN HARARGHE

Reported Diarrhea	Nutritional Status of Index Child (% WFL)	
	% < 80%	mean WFL
Yes, in past one month (N = 87)	57	80.8
No, none in past one month (N = 50)	38	85.3

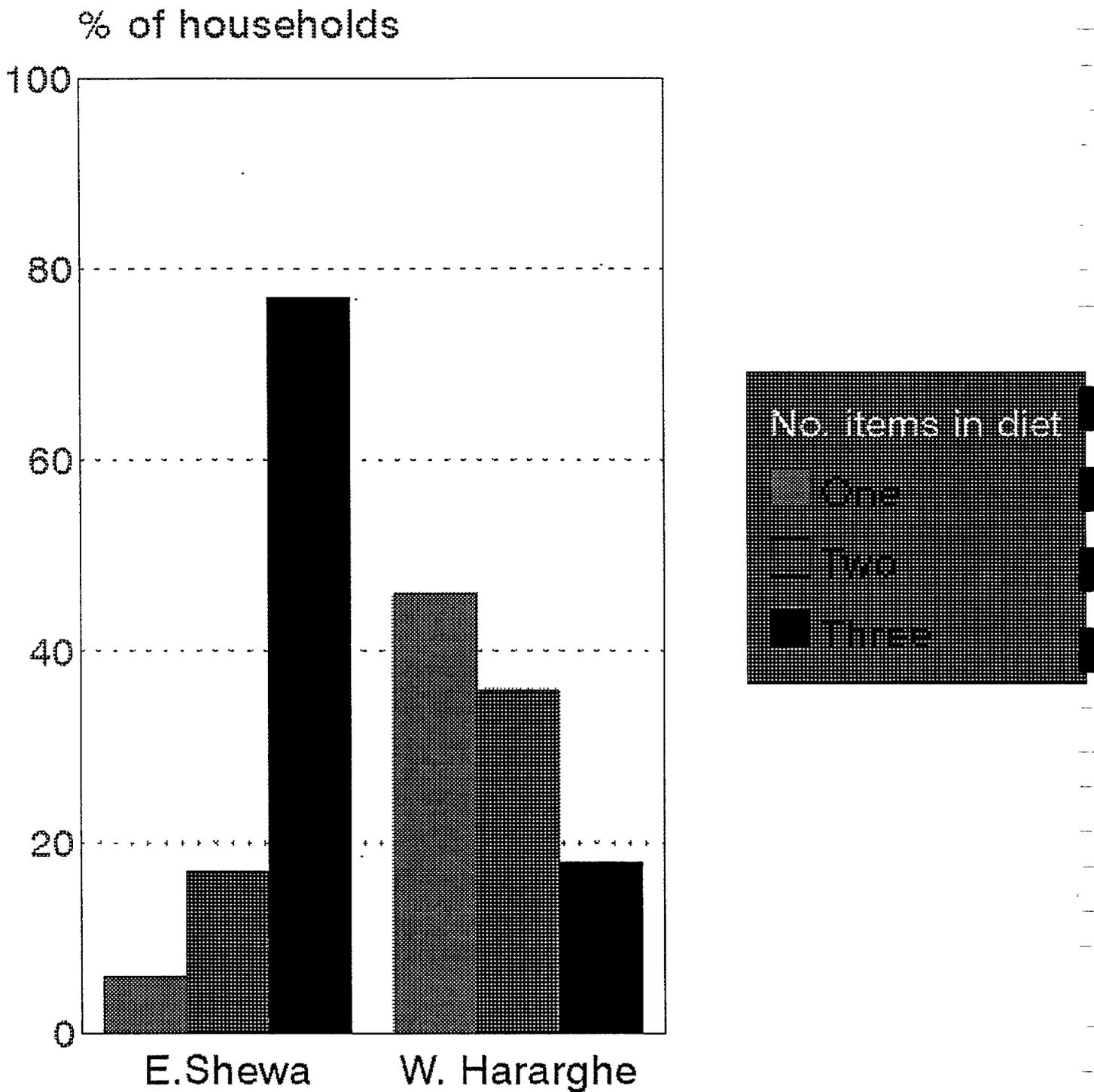
TABLE VI

HOUSEHOLD DIETARY DIVERSITY BY AREA

Number of Items in the Household Diet	Percentage of Households	
	Eastern Shewa (N=198)	Western Hararghe (N=169)
One	6	46
Two	17	36
Three or more	77	18

FIGURE 2
DIETARY DIVERSITY

EASTERN SHEWA AND WESTERN HARARGHE



CARE. Quota sample: N= 198 E. Shewa; N= 169 W. Hararghe

TABLE VII

STATE OF VITAMIN A DEFICIENCY BY AREA

Area	No.	Cases	Prevalence (%) (Bitot's Spot)
Eastern Shewa (Fachassa and Dongori-Wonga)	196	6	3.1
Western Hararghe (all areas)	576	30	5.2
Both	772	36	4.7

SUMMARY TABLE 1

SAMPLED HOUSEHOLDS PROFILE - WESTERN HARARGHE

	HARDIM	KURFA SAWA	KUNI	GALESSA	TORBEYO	ANNANO	SAMPLE TOTAL
No of Sample HH*	28	23	15	21	23	32	142
Food Program Input Period (yrs)	None	FFD 5	FFD		FFD 2	FFD 9	
Major Livelihood	Cereal Production	Pastoral	Cash	Agro- Pastoral	Cereal Production	Agro- Pastoral	
Firewood Selling	Low	Medium	Low	High	Medium	High	Med- High
Access to Water	Medium	Poor	Medium	Medium	Poor	Poor	Poor- Med
Meal Frequency (Avg)	2 17	2 26	2 77	2 77	2.76	2 37	2.5
Assetless HH (%)	21	17	7	0	30	3	13
Female-Headed HH (%)	14	17	0	14	30	25	18
HH <5 Yr Mortality (%) in Past Year	32	9	73	29	17	25	22
Nutr Status 1-5 yrs (mean WFL %)	81.0	84.4	84.0	81.2	88.7	76.3	82.4
Diarrhea Incidence in Study Population (%)	68	30	33	76	83	65	61

* These are households with children from 1-5 years of age. A somewhat larger sample, including children 6 months to one year of age, was interviewed regarding diet and health concerns.

SUMMARY TABLE 2

SAMPLED HOUSEHOLDS PROFILE - EASTERN SHEWA

	HASSIE-DHERA	BATE BORA	KACHAMA SOBAKU	DONGORI WONGA	YAYA	FACHASSA	SAMPLE TOTAL
No of Sample HH*	36	10	31	19	37	19	
Food Program Input Period (yrs)	FFW 2	FFW 4	MOA	FFW 4	FFW 4	FPO 6 FFW. 4	
Major Livelihood	Agro-Pastoral	Cereal Prod	Cereal Production	Cereal Production	Cereal Production	Agro-Pastoral	
Firewood Selling	Medium	High	Medium	High	High	Medium	Medium-High
Access to Water	Poor	Poor	Good	Poor	Medium	Medium	Good-Poor
Meal Frequency (Avg)	2.9	2.8	3.0	3.0	2.8	2.9	2.9
Assetless HH (%)	3	21	23	21	22	32	19
Female-Headed HH (%)	19	10	19	21	8	42	14
HH <5 Yr Mortality (%) in Past Year	19	0	19	10	22	21	16
Nutr Status 1-5 yrs (mean WFL %)	89.0	81.6	83.4	90.3	80.6	85.0	85.0
Diarrhea Incidence in Study Population (%)	50	42	29	36	16	26	33

* These are households with children from 1-5 years of age. A somewhat larger sample, including children 6 months to one year of age, was interviewed regarding diet and health concerns.

CARE FOOD SECURITY ASSESSMENT -- NUTRITIONAL ASSESSMENT

ECONOMIC TYPE _____ *
ID NO. _____

PA NAME _____ NAME OF HH HEAD _____

AGE OF CHILD (MOS) _____ SEX _____

WEIGHT (KG) _____ HT (CM) _____ DIARRHEA (<1 MO) y / n
<5 CHILD DEATH (<1 YR) y / n

HOUSEHOLD DIETARY RECALL (24 HOURS)

NUMBER OF MEALS _____

	FOOD	BEVERAGE
BREAKFAST		
LUNCH		
SUPPER		

INTERVIEWER _____ DATE _____

* CODE

- CEREAL -
1. NO LAND NO OX
 2. <3 TIMAD (KIRL) NO OX
 3. <3 TIMAD ONE OX
 4. >3 TIMAD >ONE OX

- PASTORAL -
1. NO LAND NO LIVESTOCK
 2. LAND BUT NO LIVESTOCK
 3. LIVESTOCK BUT NO LAND
 4. LAND + LIVESTOCK

CROPPING ACTIVITY CALENDAR= EAST SHEWA AREA

ACTIVITY	ENTERPRISE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation	Maize		X	X	X								
	Tell				X	X							
	Sorghum		X	X									
	Haricot bean					X	X						
	Barley				X	X							
	Wheat				X	X							
	Chick peas						X	X					
	Broad beans					X	X						
Planting	Maize				X	X	X						
	Tell						X	X					
	Sorghum				X	X							
	Haricot bean						X	X					
	Barley						X	X					
	Wheat						X	X					
	Chick peas								X				
	Broad beans						X	X					
Weeding	Maize							X	X				
	Tell								X	X			
	Sorghum							X	X				
	Haricot bean							X	X				
	Barley								X				
	Wheat								X				

CROPPING ACTIVITY CALENDAR= EAST SIHEWA AREA

ACTIVITY	ENTERPRISE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	Chick peas									X			
	Broad beans									X			
Harvesting	Maize										X	X	
	Teff										X	X	
	Sorghum											X	
	Harcot beans										X	X	
	Barley										X		
	Wheat										X	X	
	Chick peas										X	X	
	Broad beans										X	X	

CROPPING ACTIVITY CALENDAR=WEST HARARGHE AREA

ACTIVITY	ENTERPRISE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Land Preparation	Matze		X	X	X	X							
	Sorghum		X	X									
	Haricot bean					X	X						
	Barley				X	X							
	Chick peas						X	X					
	Millet					X	X						
	Sesame					X	X						
	Soybeans					X	X						
	Planting	Maize				X	X	X	X				
Sorghum				X	X	X							
Haricot bean						X	X						
Barley							X	X					
Chick peas									X				
Millet						X	X						
Sesame							X	X					
Soybeans							X	X					
Weeding		Matze						X	X	X			
	Sorghum						X	X					
	Haricot bean							X	X				
	Barley								X				
	Chick peas									X			
	Millet							X	X				

CROPPING ACTIVITY CALENDAR=WEST HARARGHE AREA

ACTIVITY	ENTERPRISE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	Sesame								X				
	Soybeans							X	X				
Harvesting	Maize									X	X	X	
	Sorghum										X	X	X
	Haricot beans									X	X		
	Barley										X		
	Chick peas										X		
	Millet									X	X		
	Sesame										X	X	
	Soybeans									X	X		

ANNEX 5

TEAM MEMBERS

Timothy R. Frankenberger	CARE Consultant and Team Leader
Getachew Diriba	CARE Ethiopia Staff and Co-Team Leader
Anne Leonhardt	CARE Consultant and Co-Team Leader
Tom Marchione	USAID
Jude Rand	CARE Canada
Phil Sutter	CARE Regional Food Technical Advisor
Tezera Fisseha	CARE Ethiopia Consultant
Aklilu Kidanu	CARE Ethiopia Consultant
Amdie Kidane Wold	CARE Ethiopia Consultant
Moges Tefera	CARE Ethiopia-Eastern Shewa
Zewdie H/Meskel	CARE Ethiopia-Eastern Shewa
Aben Ngay	CARE Ethiopia-Eastern Shewa
Kefelegn Ketybelu	CARE Ethiopia
Yonis Berkele	CARE Ethiopia-Western Hararghe
Hailu Bekele	CARE Ethiopia
Gelalcha Negassa	CARE Ethiopia
Abera Oljirra	CARE Ethiopia-Western Hararghe
Kassu Senbetu	CARE Ethiopia-Western Hararghe
R. Chander	CARE Ethiopia-Western Hararghe
Ken Litwiller	CARE Ethiopia-Eastern Shewa
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Mulugeta Debebe	CARE Ethiopia-Western Hararghe
Israel Tadesse	CARE Ethiopia-Western Hararghe
Samuel Gizaw	CARE Ethiopia-Western Hararghe

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Paul Barker	CARE
Mamo W. Berhan	USAID
Kay Sharp	FEWS/USAID
Richard L'Heureux	CIDA Food Aid Evaluation Mission
Jonathan Rothschild	Canadian Embassy/CIDA
Ed Cayer	CIDA Food Aid Evaluation Team
Abnezer Ngowi	WFP

Rapid Food Security Assessment Training Module
Sponsored by CARE-Ethiopia
Trainers: Tim Frankenberger and Getachew Diriba
September 30-October 2, 1993
Nazareth, Eastern Shewa
Workshop Agenda

Day 1: Thursday, September 30, 1993

- 01.30-01.45 Opening Remarks and Participant Introductions
Getachew Diriba
- 01.45-02.00 Introductory Remarks- Tom Marchione, USAID
- 02.00-03.00 An Introduction to Food Security
a) Conceptual Issues-Nutritional
Security, Livelihood Security
and Household Food Security
b) Production-Consumption Linkages
c) Food Systems Analysis
- 03.00-03.15 Break
- 03.15-04.00 Group Activity: Describe the food system of a
area from which one of the
participants originates
- 04.00-04.30 Plenary Discussion: Presentation of Working
Groups' Findings, Discussion and
Conclusions
- 04.30-05.00 Coping Strategies
a) Risk-Minimizing Strategies
b) Loss-Management Strategies
c) Changing Strategies-Trends
- 05.00-05.30 Household Food Security and Environmental
Degradation
- 05.30-06.00 Indicators of Household Food Security

Rapid Food Security Assessment Training Module
Sponsored by CARE-Ethiopia (cont.)

Day 2: Friday, October 1, 1993

- 08.00-08.30 Indicators of Household Food Security (cont.)
- 08.30-09.30 Group Activity: Choose one of the participants to act as a key informant and identify local food security indicators
- 09.30-10.00 Plenary Discussion: Presentation of Working Groups Findings
- 10.00-10.15 Break
- 10.15-12.00 The Emergency- Development Interface
Promoting Sustainable Livelihoods in Areas Prone to Droughts, Vulnerability Mapping
Contingency Plans
- 12.00-01.00 Lunch
- 01.00-01.30 Introduction to Rapid Rural Appraisals-General Characteristics
- 01.30-03.00 RRA Methodology
- a) Sampling
 - b) Unit of Analysis
 - c) Relationship Between RRA and PRA
 - d) Tool Kit/Collection Techniques
 - 1) Group Interviews
 - 2) Focus Group Interviews
 - 3) Key Informant Interviews
 - 4) Household Interviews
 - 5) Interactive Data Gathering Tools
 - Maps and Models
 - Transect
 - Calendars
 - Flow Diagrams
 - Matrix Scoring
- 03.00-03.15 Lunch
- 03.15-04.30 Group Activity: Choose one member to act as the key informant and use the RRA tools to characterize their village

Rapid Food Security Assessment Training Module
Sponsored by CARE-Ethiopia (cont.)

04.30-05.30 Plenary Discussion: Presentations of Working
Groups Findings

Day 3: Saturday, October 2, 1993

08.00-09.00 Procedure For Conducting Rapid Food Security
Assessments
a) Objectives
b) Composition of Survey Team
c) Use of Secondary Data
d) Interviewing Guidelines
e) Target Area Selection, Survey Area Selection
f) Interviewing Procedures
g) Writing up the Results

09.00-09.30 Constructing Topical Lists for Guiding
Interviews

09.30-10.30 Group Activity: Develop an interview guide to
elicit information from a
designated key informant

10.30-10.45 Coffee/Tea Break

11.00-11.30 Plenary Discussion: Presentation of Working
Groups Findings

11.30-12.00 Promoting Participation Through PRAs

12.00-01.00 Lunch

01.00-01.30 Alternative Uses of RRAs
a) Exploratory RRAs
b) RRAs Used for Monitoring and Evaluation

01.30-02.30 Information Relevant to Intervention Design
a) Types of Interventions
1) Development Type Interventions
2) Mitigation Type Interventions
3) Relief Type Responses
b) Institutional Assessments

Rapid Food Security Assessment Training Module
Sponsored by CARE-Ethiopia (cont.)

- 02.30-03.30 Group Activity: What Are the Various Types of Interventions that Could be Feasible to Implement Through Farmer and Community Participation?
- 03.30-3.45 Coffee/Tea Break
- 03.45-5.30 Group Activity: Planning an RRA Exercise in E. Shewa and W. Hararghe
a) RRA Procedure-Scheduling
b) Developing Topical Guidelines
- 05.30-6.30 Plenary Discussion: Presentation of Working Groups Findings
- 06.30-07.00 Closing and Reception

RAPID FOOD SECURITY ASSESSMENT TOPICAL OUTLINE

Group Interview for Survey Area

Name of Peasant Association(s)

Location

Population:

- number
- ethnic groups
- household types (male/female-headed households)

Major Crops Grown,

- Trends (in crops grown, fertilizer, etc.),
- Calendar

Access to Infrastructure

- health facilities, local healers
- schools
- markets (prices)--how far, how often, connection
- roads--all weather or dry weather
- storage--losses
- water sources--good potable water

Access to Natural Resources

- forests reserves/wetlands
- mining resources (quarry)
- fish resources
- livestock--rental arrangement, veterinary service
- wild game
- wild foods--local names, whether still available, toxicity
- trends--any changes over the past 10 years
- access to land

Access to Government Services

- agriculture
- forestry
- veterinary
- health
- outreach services

other

Community Participation in Food Aid--do they feel they participate in design/decisions? What do they think of the impact?

Population Trends (outmigration--are they returning? Displacement?)

Climatic Trends--past 10 years

Social Organization (PAs political leadership, food sharing networks, self-help organizations)

Other Income-Generating Activities

General Responses to Food Scarcity

Access to Development Projects-Design Participation

- a) government
- b) NGO and donor programs

Land Tenure Arrangements--inheritance, renting, sharecropping; the landless; communal land

Access to Credit-- formal and informal, terms of credit

Community Problems and Needs--what they think about FFW, what are their priorities

RAPID FOOD SECURITY ASSESSMENT TOPICAL OUTLINE

Specific Household Interview

Name of Peasant Association

Name of Head of Household

I. Demographic Information

Gender of Household Head

Marital Status (widow; polygamous)

Age

Family Composition (adults living in household, children, other dependents)

Health status--any present illnesses; aids

Educational Background of Household Members

Ethnic Group/Tribe

Religion

Occupations of Household Members

II. Access to Resources

Access to Land: tenure (timad, kert); land renting

Access to Common Property

forests

pastures

water resources

Access to Means of Production

farm equipment (plows, tools)

traction animals (oxen, hoe)

Access to Livestock
types and number
selling patterns (within one-year time frame)

III. Livelihood Strategies

Crops Grown--focus on major staples grown (teff, maize, sorghum, wheat, barley, peas, broad beans, haricot beans, lentils, chat, sweet potatoes, onion, other vegetables)

For each crop ask about:

- cultivation practices (use of oxen, hoe or combination)
- division of labor
- timing of different stages of cultivation (crop calendars)
- inputs used (seeds, fertilizers, manures, insecticides)
- where obtained
- use of crop (quantity produced, marketed, consumed)
- constraints to production
- solutions to problems
- effect of lack of oxen on time of planting (how late)

Other Income-Generating Activities

- off-farm employment (wage labor)
- seasonal migration
- hunting
- firewood or charcoal sales (price per bag)
- trading
- brewing (Tella, Arakie, Teji)
- sale of wild foods, products (honey)
- other (milk, butter, eggs)

IV. Coping Strategies

Adjustment to Meals (number, amount, diversity); compare good and bad days

Food Substitution (main staple, and whether they substitute)

Sale of Assets (liquid; productive)

Borrowing from Relatives/Friends

Credit (who, interest rate, terms)

Migration (permanent, seasonal)

Wild Foods\Unusual Foods (seasonality)

Alternative Employment

Redistribution of livestock

Redistribution of Children

Remittances (quantity, frequency)

Food Aid (consumed; sold--what they buy with it)

Other (wood selling)

V. Food Consumption Patterns

Composition of Diet (seasonal access)

- types of staples

- main pulses and protein food (vegetables, meat, fish)

- snack foods (supplementary energy foods)

Sources of Food

- own production

- market purchases

 - types of food purchased

 - seasonality

 - prices

- hunting/gathering

- fishing

- sharing/borrowing/begging

- credit

- food aid

Problems of Food Availability (market access, price, income, production shortfall)

Food Conservation/Preservation

- food processing (what, how, who)

 - access to mills

 - access to oil press (where they go)

food storage

types of structures

types of food stored

duration of storage

other preservation techniques (drying? what preserved? problems?)

problems (losses do to pests, moisture damage, theft)

Traditional Food Sharing Practices (including ceremonies and festivals)

Food Preferences (qualities)

staples

pulses and energy foods

snacks

Food Taboos/Specialty Foods

Changes in the Diet (trends in last 10 years)

VI. Child Care

Care of Children When Mother Is Working

Number of Feeding Times

Weaning Foods (types, weaning age--partial and full)

VII. Household's Own Perception of Household Food Security

Perceived Adequacy of Access to Food (and if not adequate, why?)

Constraints

Competition Between Food Needs and Other Livelihood Needs

Proposed Solutions

VIII. Participation in Food Aid Programs

Participation in Food for Work Programs

history of program participation (how they became involved, who in the family participates, was it a priority?)

wage earnings (type of foods, whether food is obtained locally or imported), impact of earnings on livelihood, and whether it was significant
impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of program to total food consumption (dependency?))
impact on health and nutritional status (do they feel better when FFW is received?)
seasonality of employment (slack season? at the right time? what is their preferred calendar of FFW?)
types of projects and participants; perception of impact (household or community based), land-use changes resulting from FFW program
availability of complementary resources (tools, supplies)
level of training (was there training?)
maintenance and sustainability of project
change in time of allocation/opportunity cost (what would you be doing if there were not FFW? What were you doing before FFW?)

Participation in Emergency Feeding Program

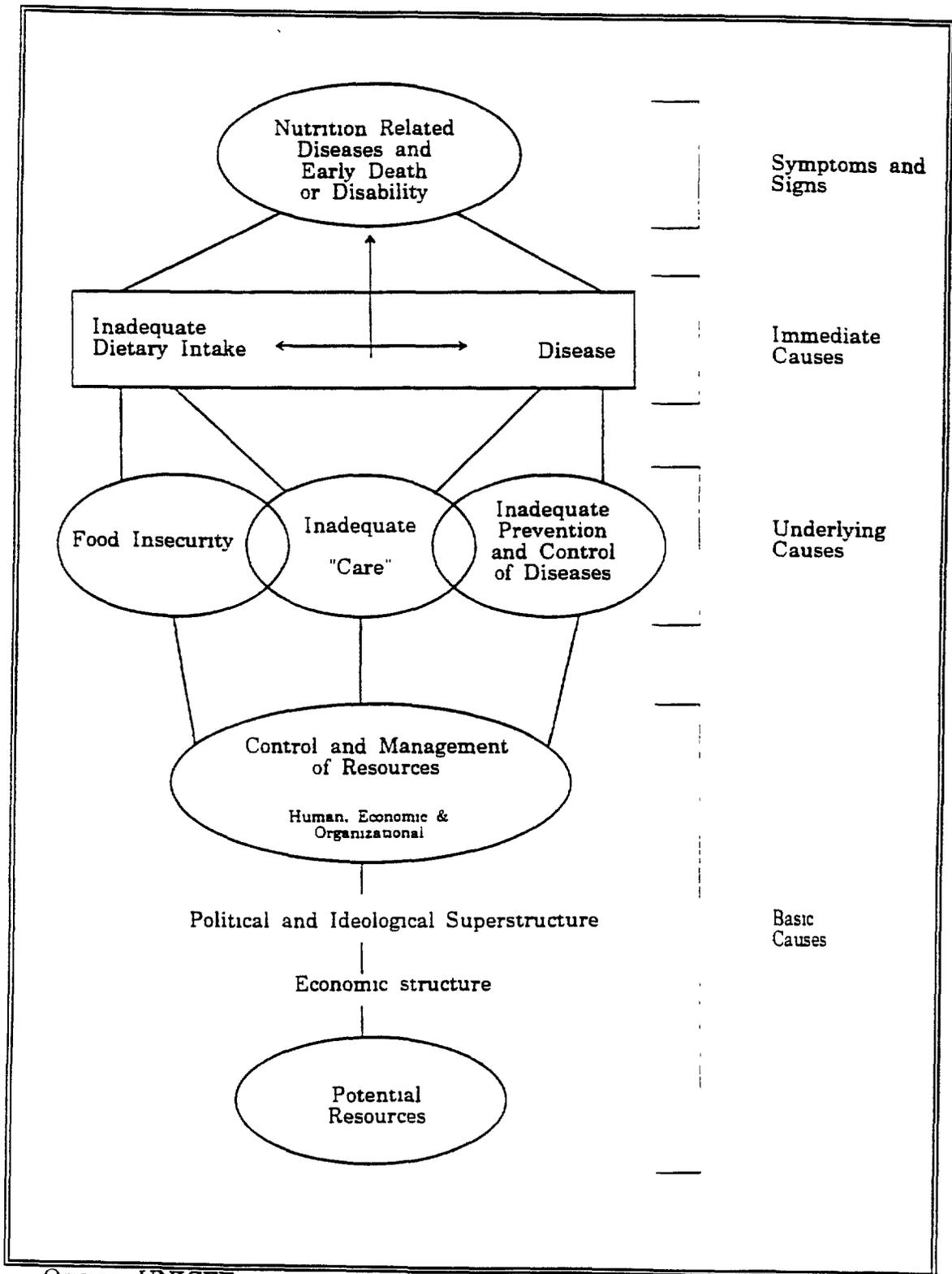
nature of disaster or chronic food security problem (production failure, civil conflict, drought, etc)
history of program participation (how they became involved, who in the family participates)
impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of program to total food consumption (dependency))
impact on health and nutritional status
ration size and commodity mix (imported or local, adequacy, frequency of distribution)
timeliness and effectiveness of response (degree of asset depletion, perception of monitoring and participation); over a one-year period? how much of FFD did you sell, when and why?
involvement in complementary programs (FFW/CFW, supplemental feeding, etc.); distance travelled to FFD points

Participants' Perception of Strengths and Weaknesses of Food Aid Program

Recommendations for Improvements

ANNEX 8

CONCEPTUAL MODEL



Orign: UNICEF

Rapid Food Security Assessment Matrix	Bate Bora	Hassie Dhera
GROUP INTERVIEW FOR SURVEY AREA		
Livelihood	Cereal Major	Agro-Pastoral
Location	West of Wonji town (Adama Bosset Woreda)	About 12 kms northeast of Domi
Population number ethnic groups household types	≈ 2000 Oromo Female-headed HH ≈ 30, Male-headed HH ≈ 470	≈ 2275 Oromo Female-headed HH ≈ 50, Male-headed HH ≈ 350
Major Crops Grown, and Trends	Maize, teff, wheat, barley, haricot beans, haricot beans peas, sorghum, lentils, chickpeas Don't grow chickpeas due to lack of seed, sorghum due to bird problem Migratory birds came due to sugar plantation nearby No improved seed access, no oil seeds, not aware either	Maize, teff, haricot beans, barley, sorghum, wheat, chickpeas Used to grow peas, chickpeas, cotton and more sorghum Reduced sorghum due to birds, locusts and seed shortage, cotton due to worm and seed shortage, chickpeas due to pest
Access to Infrastructure		
health facilities	No access to clinic - nearest is Wonji and it is a factory clinic Can't afford medicine No traditional healers	No health facilities They have to go to Domi or Nazareth (3 hrs from Domi) No traditional healers
schools	No access to schools Church school was destroyed The nearest is Wonji Only 10% can read and write	No school, the nearest is 10 kms away Only five families send their kids 90% are illiterate
markets (prices)	The nearby market is Wonji No buyers come to the area	No market except Domi (once a week on Sunday)
roads	Accessible road is CARE FFW-built road (dry season road)	CARE has built road, but they have a transport problem - no public transport
storage	Each house has storage (gotera), sometimes bags Rats and insects destroy 1/3 of the stored grain	They use traditional "gotera "
water sources	Nearby water source is Awash River and Koka Lake, 3-4 hrs round trip There is potential for wells	They use Awash River, 6-8 hrs round trip They have ponds which last 3-4 months Access to 5 ponds, three have water, distance is 30 min - 2 hrs
Access to Natural Resources		
forest reserves/wetlands	15-16 years back, the hills were covered with trees Now the hills are cleared down The community is replanting trees through CARE But the problem is that the livestock are grazing the seedlings	They have access to forest because they cannot use it for cultivation, it is too stony
mining resources	None	None

Rapid Food Security Assessment Matrix	Bate Bora	Hassie Dhera
access to land	Range 2-10 kerts; average 4 kert (4 kert = 1 ha) 300 HH have no access to land	≈ 200 families are landless They gain access by cultivating lands of their families
fish resources	No one knows how to fish. They lack fishing tools	They don't have the technique of fishing, although they will eat it
livestock	50-60 HH have cattle (from 1-10)	Half of the HH have livestock They have cattle (5-17), goats, sheep, donkeys, camels No horses, mules
wild game	They trap and catch fox and guinea fowl, hyena, hippo and monkeys	Guinea fowl, they eat and sell it
wild foods	Wild mustard (Chemerda), ziziphus and other wild greens	Cactus, ziziphus They eat cactus for four months
trends	Wild foods have been disappearing for the last 16 years	<ul style="list-style-type: none"> - There used to be more game, but all were killed off - There used to be more trees - Cactus is increasing due to drought - Increasing environmental degradation
Access to Government Services		
agriculture	No access to MOA people	No agricultural extension service
forestry	No access to forestry people They had an orientation on deforestation a year ago	No forestry
veterinary	Veterinary services are in Wonji, and a year ago the vet service visited their village	Vet service came one year ago to vaccinate for rinderpest They came on request
health	No health service or education	No health vaccination since 5 years ago
other		
Community Participation in Food Aid	(see Community Problems)	In 1984 only 40 HH received FFD two times They started IFW 4 years ago 200 HH participated Priority was given to people who have less food Registration was done by the PA, and only able-bodied people were allowed to participate For 17 days work they received 50 kg of wheat and 1 litre of oil provided only 2 times a yr They collect the food at Doni
Population trends (out-migration)	There is outmigration to other PAs They have immigration (return of ex-soldiers)	People seasonally migrate for pasture and water Outmigration due to drought Some immigration

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
Access to Common Property				
forests	Limited access to forests and grazing lands People harvest trees from shrubs around the lake	No access to forest	Everybody has access to forest	Same
pastures	Govt pasture land	Govt pasture land	Everybody has access to pasture on communal land	Same
water resources			Awash river, ponds	Same
Access to Means of Production				
farm equipment (plows, tools)	None - having equipment (3 don't have)	Only one has equipment, one has none	No equipment - 2 Having equipment- 6 (One got 3 sets)	No equipment
traction animals	0-4 oxen Rent oxen with grain or with labour (3 days on owner's land, 1 day his own) and by providing land (3 kerts)	None own oxen Gain access through sharing production (equal share) Bega for oxen for 2 kerts	Two HH have no oxen Four HH have 1 ox One HH has 4 oxen	One HH has no oxen and 1 HH has 1 ox
Access to Livestock				
types and number	- Five HH have no animals - Well-to-do HH have 4 oxen, 2 cows, 7 sheep, 15 chickens - Other (poor) 1 ox - Other has 3 goats and 2 chicks - One has chickens - One has a donkey	None - 2 chickens		
selling pattern (within one year time frame)	Sale of chickens when in need ** Seasonal changes in prices: Bull 1000 birr Nov/Dec, 500-600 birr May-Sep Goat 60 birr Nov/Dec, 20-30 birr May-Sep	- Sold ox to treat sick baby - Sold ox to bury husband	<u>Cows</u> 3 HH - none, 4 HH - 1, 1 HH - 2, 1 HH - 6 <u>Bulls</u> 1 HH - 3 <u>Calves</u> 0-3 <u>Heifers</u> 0-3 <u>Goats</u> 0-7 <u>Sheep</u> 0-1 <u>Donkeys</u> 0-3 <u>Chickens</u> 0-2. One farmer sold 8 cattle and 5 goats for health expenses and food expenses Another sold 3 cattle for health expenses	<u>Cows</u> 1 HH - none, 1 HH - 3 <u>Goats</u> 0-5 <u>Sheep</u> 0-4 No <u>donkeys</u> or <u>chickens</u> Only products are sold

Rapid Food Security Assessment Matrix	Bate Bora	Hassie Dhera
Climatic Trends	Frequency of rainfall changed Falls hard and then stops When it falls hard it floods the farm, people with no oxen have difficulty replanting, and replace the field with other short crops (maize and sorghum with haricot beans, chick peas and teff)	The drought is increasing and they are more dependent on charcoal However the government is confiscating charcoal at checkpoints
Social organization (peasant associations, political leadership, food sharing networks)	Food is not sufficient to share	They have PA and traditional burial ceremony ("iddir")
Other Income Generating Activities	Charcoal production, sale of grass, fuel, daily labour in Wonji, shepherding	Charcoal is a source of income Firewood sales Seasonal state farm employment Selling grain from FFW
General Responses to Food Scarcity	They use what they stored They sell animals, do FFW, sell charcoal and grass, take loans, send children to Wonji for daily labour.	They eat wild food, increase charcoal sales and participate in FFW Seek government assistance (also NGOs)
Access to Development Projects - Design Participation		
government	None	No access to government
NGO and donor programs	CARE works in the area roads, soil conservation, ponds, area closure, nursery	CARE has been operating in the area for 4 yrs with FFW programs, constructing ponds and roads, getting access to trees
Land Tenure Arrangements	(See natural resources) Women become landholders when they inherit from their husbands	Half of the population does not have access to land When land was distributed, each husband and wife got 6 kert and each child 1 kert in 1976
Access to Credit	Credit is obtained from Wonji, women need sponsors to get credit Credit interest is 100%-125%. Credits are in cash and in kind	Grain loan and cash through PAs with interest of 100% to be paid within 3-4 months.

Rapid Food Security Assessment Matrix	Bate Bora	Hassie Dhera
Community Problems and Needs	<p><u>Problems</u></p> <ul style="list-style-type: none"> - FFW does not start when the community needs it (in slack periods) - Not enough activities to participate in - FFW grain is not coming in time Food is not enough for one HH - Problems with selection of participants - Landless have difficulty in participating - Women are not informed about the work norm - Planning takes too long before the work starts - Community does not participate in designing (the whole) - Exposed to malaria, mumps, marasmus, diarrhoea, meningitis, pregnancy problems, xerophthalmia. <p><u>Needs.</u></p> <ul style="list-style-type: none"> - Construct more bunds - Construction of schools - Clinic, more ponds, nurseries, check dams, terraces, church, area closures - Other needs grinding mills, cooperative shops, improved seeds, fishing equipment and skills <p><u>Production Constraints</u></p> <ul style="list-style-type: none"> - Inadequate pattern of rainfall, lack of oxen - Scarcity of pasture - Access to land 	<p><u>Problems with FFW program:</u></p> <ul style="list-style-type: none"> - More people would like to participate in more activities - Payment is not timely Work done in April-May is still not paid for - The food distribution site is far from the village and the Dom town people are jealous - Many people sell their grain due to transport problems - Uneven distribution of projects within the PA - Many people would like to be registered to participate in the work <p><u>Recommendations for FFW</u></p> <ul style="list-style-type: none"> - More road construction - More ponds - Nursery for seedling production - School building - FFW to avoid future flooding, area closures - Health clinic - Residence for an EA in the village <p><u>Other recommendations</u></p> <ul style="list-style-type: none"> - Access to improved seed varieties (chick peas)

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
SPECIFIC HOUSEHOLD INTERVIEWS				
I. DEMOGRAPHIC INFORMATION				
Gender of HH head	Male	Female	Male	Female
Marital status	Married (9)	Widow (2)	Nine married (3 of these are polygamous)	Widows (2)
Age	25-52	25-30	25-57	27-35
Family Composition (adults living in HH, children, other dependents)	HH size 2-10 2-5 adults (including 2-3 adult dependents), 1-6 children	HH size 4-6 2 adults, 3-4 children, 1-2 other children	HH size 4-16 2-6 adults, 1-12 children, 0-1 dependents other than children	HH size 2-5 1 Adult, 1-4 children, no dependents
Health Status	Malaria, ear problems, old age sight problems	Malaria, diarrhoea, eye problems with children	Malaria (2 cases), stomach problems, smallpox (or measles?)	Malaria, spleen and swollen legs
Educational Background of HH Members	Majority illiterate Some are 3-6 grade in literacy programs. No children going to school.	Illiterate - grade 3. No children going to school	One Koranic school One adult literacy program, one second grade, 6 illiterates.	Both illiterate
Ethnic Group/Tribe	Oromos Clan Gulale.	Oromos	Oromos	Oromos
Religion	Christian	Christian	Both Muslim and Christian	Same as at left
Occupations of HH Members	Agriculture, daily labourers	Agriculture	Agriculture, charcoal & fuelwood production	Agriculture and agro-pastoral work
II. ACCESS TO RESOURCES				
Access to Land, Tenure (timads)	Range 3-8 kerts Three HH landless	2-7 kerts	3-16 kerts	5-8 kerts

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
Access to Common Property				
forests	Limited access to forests and grazing lands People harvest trees from shrubs around the lake	No access to forest	Everybody has access to forest	Same
pastures	Govt pasture land	Govt pasture land	Everybody has access to pasture on communal land	Same
water resources			Awash river, ponds	Same
Access to Means of Production				
farm equipment (plows, tools)	None - having equipment (3 don't have)	Only one has equipment, one has none	No equipment - 2 Having equipment- 6 (One got 3 sets)	No equipment
traction animals	0-4 oxen Rent oxen with grain or with labour (3 days on owner's land, 1 day his own) and by providing land (3 kerts)	None own oxen Gain access through sharing production (equal share) Begs for oxen for 2 kerts	Two HHH have no oxen Four HHH have 1 ox One HHH has 4 oxen	One HHH has no oxen and 1 HHH has 1 ox
Access to Livestock				
types and number	<ul style="list-style-type: none"> - Five HHH have no animals - Well-to-do HHH have 4 oxen, 2 cows, 7 sheep, 15 chickens - Other (poor) 1 ox - Other has 3 goats and 2 chicks - One has chickens - One has a donkey 	None - 2 chickens		
selling pattern (within one year time frame)	Sale of chickens when in need ** Seasonal changes in prices Bull 1000 birr Nov/Dec, 500-600 birr May-Sep Goat 60 birr Nov/Dec, 20-30 birr May-Sep	<ul style="list-style-type: none"> - Sold ox to treat sick baby - Sold ox to bury husband 	<u>Cows</u> 3 HHH - none, 4 HHH - 1, 1 HH - 2, 1 HHH - 6 <u>Bulls</u> 1 HHH - 3 <u>Calves</u> 0-3 <u>Heifers</u> 0-3 <u>Goats</u> 0-7 <u>Sheep</u> 0-1 <u>Donkeys</u> 0-3 <u>Chickens</u> 0-2 One farmer sold 8 cattle and 5 goats for health expenses and food expenses Another sold 3 cattle for health expenses	<u>Cows</u> 1 HHH - none, 1 HHH - 3 <u>Goats</u> 0-5. <u>Sheep</u> 0-4 No <u>donkeys</u> or <u>chickens</u> Only products are sold

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
III. LIVELIHOOD STRATEGIES				
<p>Crops Grown</p> <p>For each crop, ask:</p> <p>cultivation practices (use of oxen, hoe or combination)</p> <p>division of labor</p> <p>timing of different stages of cultivation (crop calendar)</p> <p>inputs used (seeds, fertilizers, manures, insecticides), where obtained</p> <p>use of crop (marketed, consumed)</p> <p>constraints to production</p> <p>solutions to problems</p>	<p>Maize, teff, haricot beans, barley, lentils, beans</p> <p><u>Timing</u> see at right</p> <p><u>Cultivation</u> Use oxen</p> <p><u>Div of labour</u> Men- land preparation, planting, and harvesting</p> <p>Women- weeding</p> <p><u>Inputs</u> Most don't use inputs One uses manure Rich HH uses DAP, urea, manure got from MOA Agrico</p> <p><u>Yield</u> Teff- 50-500kg Maize- 200-750 kg. H beans- 30 kg</p> <p><u>Use of crop.</u> Sell teff to buy maize</p> <p>Consume rest of grain, sell when he needs money</p> <p><u>Constraints to production</u> Access to land, oxen, fertilizers, improved seeds, pesticides. Pests, drought</p> <p><u>Solutions</u> More fertilizers and improved seeds, more food aid</p>	<p>Maize, teff, h beans</p> <p><u>Timing:</u></p> <p>- Teff: land prep - April, plant- Jul/Aug, weed- Aug/Sep, harvest - Oct</p> <p>- Maize land prep - Feb-Apr, plant- Apr/May, weed- Jun/ July, harvest- Nov</p> <p>- Haricot beans. plant- Jun/July, harvest- Oct. <u>Cultivation</u> Use oxen</p> <p><u>Div of labour</u> same Men and women</p> <p>harvest</p> <p><u>Inputs</u> Fertiliser on teff</p> <p><u>Yield:</u> Teff - 100-150 kg Maize - 150-250 kg H beans - 50 kg</p> <p><u>Use of crop.</u> Sell teff to buy maize</p> <p><u>Constraints:</u> Access to male labour (rest the same as left)</p> <p>Proposed solutions: FFW to help women, access to credit</p>	<p>Maize, teff, h beans, sorghum, chickpeas, lentils, rarely barley</p> <p><u>Timing:</u></p> <p>- Teff. planting- July/Aug, Weed - Sep, harvest - Oct</p> <p>- Maize: land prep- Apr/May, planting - June, weeding - Aug, harvest- Oct/Nov</p> <p><u>Cultivation</u> All farmers use oxen</p> <p>Rents oxen by ploughing 3 days & 1 day for himself.</p> <p><u>Div of labour</u></p> <p>Wife helps in planting, weeding and harvesting</p> <p><u>Inputs</u></p> <p>Improved maize seeds (1), herbicides (1)</p> <p><u>Use of crop</u></p> <p>Sale of teff to buy maize (5 farmers), 1 farmer sells maize; rest consume all produced</p> <p><u>Constraints</u> flooding (3), drought (3), lack of oxen (2), pest problem, soil-borne disease</p> <p><u>Solutions</u> improved seeds, farm inputs.</p> <p>Solutions to the above problems</p>	<p>Maize and teff</p> <p><u>Timing:</u></p> <p>- Teff: land prep-June, planting- July, harvest- Oct.</p> <p>- Maize: land prep- May, planting - June, harvest - Oct</p> <p><u>Div of labour</u></p> <p>Land prep is done by male labour, weeding and harvesting by women</p> <p><u>Inputs:</u> None</p> <p><u>Use of crop:</u> One sells half and one sells all of teff produced. None sell maize</p> <p><u>Constraints</u> drought (1), flooding (1), no ox (1)</p> <p><u>Solutions.</u> Stop flooding Others the same.</p>
Other Income-Generating Activities				
off-farm employment (wage labor)	Several depended on off-farm. 6 birr/day	One woman sends children to do daily labor	- Worked at state farm - On teff harvest for others (2) - Wife works to be paid in grain (1)	None
seasonal migration	None	None	None	None
hunting	None	None	None	None

Rapid Food Security Assessment Matrix		IV. COPING STRATEGIES				
Bate Bora	♂	firewood or charcoal sales Husband sells charcoal (2) Wife sells wood	trading Buy left in Arsi and sell it in Woyji	brewing (Tella, Arakie, Tej) None	sale of wild foods None	other - Receives pension 85 birr/month - FFW None
	♀	firewood and charcoal 18-19 birr/sack last year, 25 birr/sack this year Sell firewood and charcoal (5) Produce 15 bags a year Price varies (8-16 birr) depending on season Wife also sells firewood	Buy goat and sell when he faces a problem (1)	None (1) None because brings trouble with men	The wife sells cactus fruits	None (1) - Selling animal products - milk, animal fats
Hassie Dhera	♂	No charcoal. They sell firewood, price 2-4 birr/bundle	Buy green chillies to sell in the market for 3-4 months (1)	None (1) None because brings trouble with men	Buy goat and sell when he faces a problem (1)	None
	♀	firewood or charcoal sales Husband sells charcoal (2) Wife sells wood	trading Buy left in Arsi and sell it in Woyji	brewing (Tella, Arakie, Tej) None	sale of wild foods None	other - Receives pension 85 birr/month - FFW None
Adjustment to Meals (number, amount, diversity)		Decrease the amount and frequency from 3 to 2 And from 1 injera/person to 3 shared by 5	Cut down on coffee consumption, reduce sauces and go for salt in water	Cut down from 3 to 2 meals a day (2)	Cut down no. of meals from 3 to 2 1/2 Give up coffee, add salt or green chillies to water	Adjustment to Meals (number, amount, diversity)
Food Substitution		Switching from injera to fried grain	The same as at left	Supplement injera with boiled and fried meal (2) No substitution (1)	From injera to boiled and roasted food (1) From coffee to no coffee (1), wat to water and salt or green chillies	Food Substitution
Sale of Assets		None	None	- Sold cattle and goats for medical purposes - One had to sell oxen and sheep due to flooded farmland	None	Sale of Assets
Borrowing from Friends/Relatives		Borrow food from relatives in April	One woman borrowed from a relative	Borrowed 50 kg Some share with relatives	Borrowing from relatives in other localities (1) No borrowing (1)	Borrowing from Friends/Relatives
Credit (who, interest rate, terms)		People go for credit Borrow 60, paid back 100 Have to repay within 3-4 months	One took credit Borrowed 50, paid back 100, within 3-4 months	Difficult to get credit because of lack of collateral	No credit	Credit (who, interest rate, terms)

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
Migration	None	None	- One moved to the nearest state farm - One planning to migrate.	None
Wild Foods/ Unusual Foods	Wild cabbage, wild mustard	None	Collection of cactus (3) in June-July.	Eat cactus when available
Alternative Employment	Sale of labour	Sending children out to labour	See income generating activities	Same
Redistribution of Livestock	None	None	None	None
Redistribution of Children	None	None	One sends his child to relatives outside the PA	None
Remittances	None	None		
Food Aid	FFW 17 days for 50 kg Wanted to do more but not allowed	FFW One worked once and the other twice	FFW Two projects this year Wife part once (1)	FFW once (1) FFW twice (1)
Other	Charcoal production			
V. FOOD CONSUMPTION PATTERNS				
Composition of Diet (seasonal access)				
types of staples	Injera prepared from maize, teff, barley, kitta wheat from FFW	Injera from maize and kitta from wheat	PorrIDGE (gonffo), injera from maize, sorghum Kitta from wheat. Toasted maize Supper - injera, haricot bean wat, milk, coffee, maize, sorghum, wheat	Injera of maize and grasspea Coffee The same
main pulses and protein foods (vegetables, meats, fish)	Wild cabbage, spinach, haricot bean and pea sauces Buy oil from Wonji	Spinach sauces. Eat meat on holidays (Easter)	Haricot beans, milk, meat once a year Peas, wild cabbage	Grasspea and haricot bean, spinach, cabbage, meat once a year
snack foods (supplementary energy foods)	Food supplement provided by missionary every month Toasted barley, toasted corn, boiled green corn Many don't snack.	Combine cereals and boil for snack	Cooked bean and maize, roasted maize	Roasted maize (seasonal), boiled maize

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
Sources of Food				
own production	From own production, wage labor, sells charcoal, participates in FFW	Same	Mostly from own production	Same
market purchases				
types of food purchased	Salt, spices, oil, onion, vegetables	Same	Purchase grain from the sale of animals and firewood Salt, maize, coffee, grasspea	Spinach, pulses, onion, pepper, salt
seasonality	Purchase maize May-Sept Sorghum, May Landless, throughout the year	Same	See below	Maize as soon as they sell their teff
prices	Maize 50 kg = 70 birr May-Sep, 40 birr Nov/Dec	Same	Maize 100 birr for a quant in rainy season 70-80 birr after harvest	1 sack teff = 2 sacks maize
hunting/gathering	Gather wild mustard and cabbage	None	No hunting They gather wild cabbage and cactus	Same
fishing	None	None	None	None
sharing/ borrowing/ begging	Share food with relatives - borrowing	None	Borrow maize, share with relatives	The same: begging from relatives
credit	People go for credit to buy grain at very high interest rates	Women go for credit	Credit of money and grain with interest	None
food aid	FFW 1-2 months they depend on FFW	Same	FFW for 34 days to collect 100 kg of wheat All except one participated	They participated in FFW for 20-30 days food supplies
Problems of Food Availability (market access, price, income, production shortfall)	Production shortfall, seasonal high prices, transport problems	Storage losses	Drought, flooding, soil fertility problems, market prices	Flooding, drought, high prices

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
Food Conservation/Preservation				
food processing (what, how, who)				
access to mills	No access to grinding mills in the village They take the grain to Wonji and use local hand grinding (3 hrs one way)	Same	Home processing They take it to Doni for milling	Same
access to oil press	No oil mills They purchase oil from Wonji Oil from FFW	FFW oil	No oil press Access to oil is only through FFW	Same
food storage				
types of structures	Gotera above ground, sacks	One had gotera above ground, the other kept in sacks	Gotera (above ground)	Same
types of food stored	Maize, teff			
duration of storage	6 months, until April	Same		
other preservation techniques and preservation problems (losses due to pests, moisture damage)	Rats, weevils, moisture	Rats, for grain in sacks	Pest problems 25% losses	Rat problems 25-33% losses
Traditional Food Sharing Practices (including ceremonies and festivals)	Cost sharing of bulls for Easter holiday Share tella at Meskel (Epiphany), and share meat at Christmas Share food at funerals. "Dabo" - sharing food traditionally for social activity	Same	Sharing food during wedding, public holidays Three days fasting after funerals Sharing food only with men	They share food during weddings, funerals and in labor
Food Preferences (qualities)				
staples	Teff, maize Whatever he produces, he eats.	Teff, because no pest problems, high value, and lasts longer in stomach	Teff, maize, wheat, no preferences.	Teff
pulses and energy foods	Beans, haricot beans, chickpeas	Chickpeas	Haricot beans. Lack of access makes it difficult to decide	Chickpeas
snacks	Toasted corn	Roasted chickpeas, broad beans	None	Broad beans, haricot beans

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
Food Taboos/Specialty Foods	None Chicken and goat due to religion Can't eat pig	Vetch grass with milk not good for children	None	Pig and wild pig for Mushms None for the Christians.
Changes in the Diet (trends in the last 10 years)	- Sorghum but due to bird problem, does not eat. - Switch from teff to maize - Butter-oil	None	- Barley eaten less frequently because of drought. - No change - Used to eat butter, meat and injera of teff Now maize	Used to eat beans, peas
VI. CHILD CARE				
Care of Children When Mother is Working	Grandmother, neighbors	Grandmother, grandfather	- Leave with neighbors or eldest child - Mother carries with her	Leave with neighbors
Number of Feeding Times	The child is fed whenever it cries Fed three times a day Breastfed	Breastfeeding whenever child cries Grown-ups eat with adults	Eat until the family eats 2-4 times Milk and supplementary breast feeding	Only when adults eat, except the one on breast feeding
Weaning Foods (types, weaning age)	Beans with maize and salt, porridge and egg, injera	Porridge at 6-8 months (partial) Injera and kitta when 3 years old	Injera in a liquid form, injera with oil, milk Partial weaning 1.5 years. Full 2-3 years	Linseed Partial weaning 1-2 years Full weaning 2-4 years
VII. HOUSEHOLD'S OWN PERCEPTION OF HOUSEHOLD FOOD SECURITY				
Perceived Adequacy of Access to Food	Not enough food to last the whole year, especially if he has to pay credit	No husband, bad season, no storage, no food	The amount in storage = total amount he has access to Various sources are not enough Permanently insecure.	Food in storage, the rainy season, food aid access
Constraints	No land, no oxen, no inputs = no food Bad land, no fertilizer, no oxen = no food	See above	See Production Constraints	Same as above
Competition Between Food Needs and Other Livelihood Needs	Medicine, clothing Lives as per his capability	Clothing, increased number of family members, medicine	Medicine	Same as above
Proposed Solutions	- More FFW - Working hard - Access to means of production - No idea	Help from outside, not from community	- Do not know - FFW - Access to credit	- Health from God (1) - No comment

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
VIII. PARTICIPATION IN FOOD AID PROGRAMS				
Participation in Food for Work Programs				
History of program participation (how they became involved, who in the family participates)	1-3 times/year Head of the family, also the wife sometimes. Wanted to participate more, but not allowed by PA FFW committee	They participated because of their husbands' deaths	Participated in FFW for 2 years Problem of targeting the poor (he was poor and couldn't participate) Both wives of the polygamous family took part.	They worked on road construction They began to participate after their husbands' deaths
Wage earnings (type of foods, if food is obtained locally or imported) and impact of earnings on livelihood	51 kgs for 17 days	50 kgs of gram, 1 - 1.5 liters of oil	50 kg for 17 days, range for oil between 1-2 liters Maximum days = 34	50 kg and 1 liter of oil = 17 days
Impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of programs to total food consumption (dependency))	Positive impact on food consumption Prevents them from taking credits or producing charcoal Landless benefit a lot from FFW Minimized food shortage of the family Changed eating pattern to wheat and oil Helps fill the food gap Supplies 1-2 months' food needs.	Eat more on on a regular basis Prepares better using the oil	- No significant impact because the amount so little - 100 kgs he received lasted for two months - significant impact - Indirect impact stops the destruction of forest, because he is not forced to cut so many trees - Fills the food deficit gap	No change in taste or quality Lasts 20-30 days
Impact on Health and Nutritional Status	No impact on adult nutrition	Children look healthy No impact on adult nutrition	Improved their health and nutrition	
Seasonality of Employment	They want FFW year-round because they don't feel it would be a deterrent to their agricultural practices	They want FFW year-round.		
Types of projects & participants' perception of impact (HH or community- based)	Road construction, tree planting, terracing Replanting is good for the soil terracing Grass in the closure is better Ponds are good for people and animals Roads are helpful	Road construction, tree planting, terracing One said road has no impact other than as a means of food Other said road is good to bring more people into the village Trees improved the look of the hill Learned the importance of forest, how to build a road, and how to arrange stones.	Roads, ponds Ponds provide water for people and livestock	Road Helps them use safely at night

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
Land-use changes resulting from FFW Program	Skills of conservation practices and afforestation	Sold FFW grain and bought fertilizers	He has seen grass-enclosed areas areas (other locations) and sees the value of it	None
Availability of complementary resources (tools, supplies)	Not enough tools for FFW activities	CARE doesn't provide tools for FFW and could exclude people		None
Level of training			- Short training provided for contact farmers - Received training in pond construction	None
Participation in Emergency Feeding Programme				
Nature of Disaster or Chronic Food Security Problem (production failure, civil conflict, drought, etc)				
History of Program Participation (how they became involved, who in the family participates)				
Impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of program to total food consumption (dependency))				
Impact on health & nutritional status				
Ration size & commodity mix (imported or local, adequacy, frequency of distribution)				

Rapid Food Security Assessment Matrix	Bate Bora		Hassie Dhera	
	♂	♀	♂	♀
Timeliness & effectiveness of response (degree of asset depletion, perception of monitoring & participation)				
Involvement in complementary programs (I I W/ CFW, supplemental feeding, etc)				
Participants' perception of strengths & weaknesses of food aid programs	<ul style="list-style-type: none"> - Too few projects - Maintenance is a problem - Delayed payments 	<ul style="list-style-type: none"> - Too few projects - Maintenance is a problem - Delayed payments 	<ul style="list-style-type: none"> - FFW is not offered long enough - Payments not made on time - More activities are not designed, e.g., more ponds 	Same as at left
Recommendations for improvement	<ul style="list-style-type: none"> - Should be a continuous program all the year - More people to participate - Recommendations of community should be initiated, such as roads, school, clinic, ponds, private reforestation - More training - More community involvement 	<ul style="list-style-type: none"> Same as column to left, and - Continuation of FFW for widowed women - Building wells, schools and a health center 	<ul style="list-style-type: none"> - Gullies created as a result of recent flood should be protected - More rural roads - Nurseries - Area closures - Want water pumps - Continued ITW (See recommendations under group discussion)	Same as at left

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10	Dongori Wonga, E. Shewa, Boset 4/10/93
GROUP INTERVIEW FOR SURVEY AREA		
Livelihood	Agropastoral	
Location	1450 meters Fachassa Peasant Association Zone Alamatena, Adama Attended meeting 64 (46 males, 18 females, 7 children) 58 were present at group discussion	1600 meters Dongori Wonga Peasant Association Zone Wolenchiti, Boset, E. Shewa Attended meeting 216 (63 males, 43 females, 110 children)
Population number ethnic groups household types	88 Oromos 34 landless (12 female-headed) 13 had less than 3 timads and no oxen 12 had less than 3 timads and one ox 20 had more than 3 timads and two oxen 1 had more than 3 timads and more than two oxen	≈ 374 ? 19 landless (2 women) 4 had less than 3 timads and no oxen 2 had less than 3 timads and one ox. 21 had more than 3 timads and more than one ox (including 1 woman) 18 had more than 3 timads and no oxen (including 3 women)
Major Crops Grown, and Trends	Maize, barley, teff, wheat	Maize, sorghum (?), wheat, teff Maize, sorghum, haricot beans, barley, teff, beans, peas, kale Trends land fertility depleting, irregular rainfall, more pest infestation, lack of fertilizer Therefore production declining.
Access to Infrastructure		
health facilities	Wonji (2h - male, 3h - female) and Dhera (3 5h), outreach	Wolenchiti is the nearest clinic, 2 hrs walk one-way Pay for services No outreach
schools	Primary Cheka, 30-60 min Very few attend	Wolenchiti is the nearest school No children attend
markets (prices)	Wonji (Sat), Dhera (Tues)	Nearest market is Wolenchiti Women go once a week
roads	CARE road, 5 km from main	CARE-made road Not used by commercial vehicles Dry weather road, 9 km from main road
storage	Shift in pattern due to insufficient harvest from bean to dogogo (50-150 kg)	Use traditional beans
water sources	Rainy season ponds Other seasons borehole (7 PAs, 50/mo, 15 min), and broken irrigation discharge (dirty)	Water is the biggest problem Dry season every day women walk to Wolenchiti for water 7-10 birr per barrel Wet season pond (CARE) 4 birr/1 inner tube
Access to Natural Resources		
forest reserves/wetlands	Land too little arable land Those unable to pay tax lost land Forests/wetlands Scarce, but they gather some	Size of individual landholding declining due to population increase No forest

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10	Dongori Wonga, E. Shewa, Boset 4/10/93
GROUP INTERVIEW FOR SURVEY AREA		
mining resources	Quarry = govt Village day labor only	No quarry
fish resources	No fish (would eat if they had)	No fish, but wouldn't eat it anyway (against cultural tradition)
livestock	Share livestock resources with exchange of labor, no rental (\$)	Oxen, cattle, sheep, goat, donkey, chickens Oxen rental terms based on land sharing Oxenless pays 50% of yield or 3/5 of his labor on ox-owner's land or 400 kg per ox per year
wild game	Dove available Female taboo, male too hard to catch	Dove plentiful but hard to catch
wild foods	Wild cabbage when cultivated, not available	Cheberda, when times very difficult
trends	--	Land fertility depleting, irregular rainfall, more pests, lack of fertilizer, therefore production declining
Access to Government Services		
agriculture	MOA 1 devp agent for 7 PAs	Occasional extension but no inputs
forestry	--	None
veterinary	1/year If problem, sevice co-op writes, MOA vet comes.	Okay, but no medicine for small ruminants
health	Outreach	Closest hospital, Nazareth Closest clinic, Wolenchiti
other	--	None
Community Participation in Food Aid	Took part in site selection Enough food, sell only to buy medicine	Yes Made big difference to accessibility by road, fodder for cattle, pond variety of foods Problem late payment
Population trends (out-migration)	Before FFW, outmigration Since FFW, return to no land Population increasing	No outmigration, seasonal or otherwise
Climatic Trends	Since 30 years, change Then, livestock, agriculture, milk ++ Now, irregular rain, little pasture, animals dying, harder	Irregular
Social organization (peasant associations, political leadership, food sharing networks)	No sharing, equally poor No social organizations Idir services (funeral)	Social networks exist Idir and Mahabir are observed No sharing, but grain borrowing and pay back

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10	Dongori Wonga, E. Shewa, Boset 4/10/93
GROUP INTERVIEW FOR SURVEY AREA		
Other Income Generating Activities	Casual labor, charcoal, wood, no assets to sell Sugarcane labor not accessible Charcoal too hard	Fuelwood gathering This PA employs outside laborers to harvest its teff and barley, more than it seeks labor elsewhere
General Responses to Food Scarcity	Never fill stomach Buy used clothing Wild foods, unripe crops	Sharing No general starvation Problem is water Even paid 100 birr/head for borehole (lost)
Access to Development Projects - Design Participation		
government	--	None
NGO and donor programs	Orthodox Church gave oxen to some families CARE - road, terracing, ponds, trees	CARE Sufficiently consulted, participation by turn-takings 1-2 times/year per IIII All IIIIs participate.
Land Tenure Arrangements	Changed 17 years ago Now no inheritance, but entitlement transfer Sharing between landowners with no oxen and landless with oxen DPs integrated, able to share land, no sale of land, but rental at 20 birr/kert	Access defined by PA and oxen ownership and/or fathers bequeath to sons
Access to Credit	Available Men defaulted in 1991, cut off in 1992 Women too afraid, don't access	Informal from each other Rate of return is double (1 2) Formal none
Community Problems and Needs	1 Water, 2 health, 3 transport, 4 school, 5 seeds and fertilizers, 6 oxen, 7 tools, 8 clothes, 9 no employment in sugar factory ** Finding a dramatic shift in the base of the economy Ratio of livestock to cereal production changing Number of animals has declined such that the area can no longer be described as AP What remains is mostly cereal production	<ul style="list-style-type: none"> - Water, health clinics, school, fertilizer - Dig more ponds with FFW - Bigger program to serve more people - Food less important an input than pond construction - Where a man has two or more wives, PA should not dictate that only one wife can participate CARE should intervene

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
SPECIFIC HOUSEHOLD INTERVIEWS				
I. DEMOGRAPHIC INFORMATION				
Gender of HH head	5	5	6	2
Marital status	5 married	5 widows	6 married	2 married
Age	31-65	25-50	25-48	27-36
Family Composition (adults living in HH, children, other dependents)	(Confusion re question) Wives, children, grandchildren Children ages 3 mos - 20 yrs Number of children 1-9, average 8.2	Children, siblings, grandchildren Children ages 2-18 yrs Number of children 1-8, average 5.8	People/HH range 4-11, average 7.2	People/HH range 2-3, average 2.5
	Average household 7 Average number of dependents 5.5		People/HH range 2-11, average 6 Average no dependents/HH 3.75 (n=8) Average no children/family 4.8 (n=6)	
Health Status	Malaria, intestinal, incomplete vaccination	Same as at left	Chronic parasites, eye problems, diarrhea	Same as at left
Educational Background of HH Members	Read and write None 2 HH 4/10 1 HH 2/7 1 HH HH/6 1 HH	Read and write None 4 HH One boy (shortly) 1 HH	Only one had some school (grade 5)	None
Ethnic Group/Tribe	Oromo	Oromo	Oromo	Oromo
Religion	4 Christian, 1 Muslim	4 Christian, 1 ?	Christian	Christian
Occupations of HH Members	Farmers	1 FFW, 3 farmers, 1 laborer	Farmers	Farmers
II. ACCESS TO RESOURCES				
Access to Land, Tenure (timads)	5 kerts - 4 hectares	0-2 hectares Transfer of entitlement to widows	Range 0.5-10, average 3.3 Inheritance, PA allocation	Range 0-1.25, average 0.6 Widows' entitlement
Access to Common Property				
forests	None	None	None	None

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
pastures	common		Some access to common grazing land	None
water resources	--			
Access to Means of Production				
farm equipment (plows, tools)	Plows, tools sickle Access to father's tools	No plows or tools		
traction animals	0-1, sharing	0-2, sharing		
Access to Livestock				
types and number	Oxen, cows, heifers, calves (8), sheep (2), goats (12), chickens (5), donkeys (4)	0-2		
selling pattern (within one year time frame)	Selling 0-2 goats Sold 1 goat Sold 84, no recovery			

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
III. LIVELIHOOD STRATEGIES				
<p>Crops Grown</p> <p>For each crop ask cultivation practices (use of oxen, hoe, or combination) division of labor timing of different stages of cultivation (crop calendar) inputs used (seeds, fertilizers, manures insecticides), where obtained use of crop (marketed, consumed) constraints to production solution to problems</p>	<p><u>Cultivation</u> Oxenless plant late Oxen on main fields, hoe on gardens No failures</p> <p><u>Div of labor</u> Families help weed Women weed, men plow</p> <p><u>Timing</u> see at right</p> <p><u>Inputs</u>. No fertilizers, no insects, no manure</p> <p>Use of crop sold (1), no sale (4)</p> <p><u>Constraints</u> Irregular rain, lack of seed, tools, oxen and fertilizer, wind, soil infertility</p> <p><u>Solutions</u> seeds, oxen, fertilizers, land, CARE, resow after lack of rain</p>	<p>Same, and 0-4 Q</p> <p><u>Timing</u></p> <p>Maize Prep- Mar, Sow- Apr/May, Weed- Jun, Harvest- Oct</p> <p>Barley Prep- Apr, Sow- Jun/Jul, Harvest- end Sept</p> <p>Teff Prep- Apr, Sow- Jun/Jul, Weed- Aug, Harvest- Oct/Nov</p> <p>Wheat Prep- Apr, Sow-Jun/Jul, Weed- Aug, Harvest- Oct</p> <p>Use of crop none sold</p> <p><u>Constraints</u>: No oxen, no fertilizers and sharing yield</p> <p><u>Solutions</u> more CARE to vulnerable groups, CARE vegetables and cash crops</p>	<p><u>Cultivation</u> All ox-plow</p> <p><u>Div of labor</u> Children and women help weed and harvest Two wives reported no activity on crops due to childcare and/or wood-gathering</p> <p><u>Timing</u> see at right</p> <p><u>Inputs</u> Fertilizers and insecticides used by some, but not by women</p> <p><u>Use of crop</u> Range from large-scale sale to partial sale, but all sold some, esp to buy water Reports of selling teff to buy maize</p> <p><u>Constraints</u></p> <p>Rich land shortage (despite 101), rain, pests, fert shortage, high fert price</p> <p>Poor Rain, oxen shortage (delays planting), time spent fetching water, lack of fert</p> <p><u>Solutions</u></p> <p>Rich more land avail, subsidized fert sold directly to farmers, pesticides</p> <p>Poor Oxen, manure, water, no solution</p>	<p>Same, and.</p> <p><u>Timing</u></p> <p>Maize and Sorghum Prep- Feb/Mar, Plant- Apr/May, Weed- Jul/Aug, Harv- Nov</p> <p>H bean Prep- Jun, Plant- Jul, Harv- Oct</p> <p>Barley Prep- May, Plant- Jul, Weed- Aug, Harv- Oct</p> <p>Teff Prep- May, Plant- Jul, Weed- Aug, Harv- Oct/Nov</p>
Other Income-Generating Activities				
off-farm employment (wage labor)	None	One family weeding	None	None
seasonal migration	None	None	None	None
hunting	None	None	None	None
firewood or charcoal sales	Two wood-gatherers		Most sold wood One sold charcoal	Wood-selling
trading	None	None	None	None

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
brewing (Tella, Arakie, Teji)	None	Tella (1)	None - limited tella brewing	None
sale of wild foods	None	None	None	None
other	Tool-making (6 birr each)	Hairdressing (1)	None	None
IV. COPING STRATEGIES				
Adjustment to Meals (number, amount, diversity)		3 --> 1 Amounts decrease	3x --> 2x Plenty of teff, shortage of maize Sell teff to buy maize	Reduction in frequency and type (from injera to cooked maize)
Food Substitution	Wilds, chambanda, early cereals	Wilds, early cereals	Teff --> maize	Teff --> maize
Sale of Assets	- Sold two goats - Sold silo	None	Sold livestock (goats and donkeys)	None
Borrowing from Relatives/Friends	None	None to borrow from	Most had borrowed, terms 1 2	Women had not borrowed
Credit (who, interest rate, terms)	Two borrowed AISCO and one paid back (2 5 birr/50 kg)	None	1 2. informal	Same
Migration		One ARSI as laborer	None	None
Wild Foods/Unusual Foods	3 chambanda	--	Dove and fowl eating reported	None
Alternative Employment	--	1 weeds, 1 brews Hararghe (3-4 birr/wk)	Fuelwood, charcoal	Wood selling
Redistribution of Livestock	1 lends	None	None	None
Redistribution of Children	2 children --> care cattle	1 daughter (sick) --> sister	None	One reported 3/5 children living with mother
Remittances	None	None	None	None
Food Aid	Five (HHs) For two, part of it is sold	Five One sells to buy medicine	6/8 participate in IFW (both women participate)	

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
Other	--	Other NGO - monthly food allocation for infant	None	None
V. FOOD CONSUMPTION PATTERNS				
Composition of Diet (seasonal access)				
types of staples	Maize, barley, wheat, teff		Mostly maize and sorghum, some wheat, some teff	Sorghum
main pulses and protein foods (vegetables, meats, fish)	Peas, cabbage, meat (1x), teff	Lentils Rare. meat, eggs, milk No fish	Quite varied diet includes peas, grass peas, salt, oil, pepper, kale, potatoes, some eggs, meat at ceremonies, oranges, banana	Report more limited diet
snack foods (supplementary energy foods)	Kollo, nefro (these are breakfast sometimes) Early harvest	Early harvest.	Kollo (maize), nefro (maize), II bean	None
Sources of Food				
own production	(Implication)		Own production plus market	Own production plus market
market purchases				
types of food purchased	Maize, wheat, salt, coffee, oil, potato, haricot, peppers, peas, lentils	See at left	Salt, coffee, pepper, onions, tomato, potatoes, peas, eggs, meat	Very limited maize, kale, grass peas
seasonality	When no FFW	Before FFW	Purchase grain in July	
prices	(1) 8-10 birr/mo		Iteff 140-240/Q Fluctuate with time of harvest (information available from CEFIS)	Maize 40-80/Q Fluctuate with time of harvest (information available from CEFIS)
hunting/gathering	None	None	Fowl and dove by trap	None
fishing	None	None	None	None
sharing/ borrowing/ begging	No sharing	No sharing	Borrowing at 1 2, sharing from parents	Sharing from sister, ceremonial sharing

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
credit	Some borrowing from AISCO at 2.5 birr/50 kg	None	--	None
food aid	All had had food aid. Several had sold portion to buy medicines or other foods	As at left		
Problems of Food Availability (market access, price, income, production shortfall)	The food is there, but they can't afford to buy it. Price fluctuates wildly pre- and post-harvest. When it's most expensive, they're most poor.	As at left	Lack of water --> short production Market availability but price fluctuation Income shortage is constraint	As at left
Food Conservation/Preservation				
food processing (what, how, who)				
access to mills	Women responsible. 3 birr/50 kg. 5 km away, 50/5 kg maize		All use mill in Wolenchiti. Teff 5 Q/7 birr, maize 5 Q/4 birr	?
access to oil press	No need	No need	None	None
food storage				
types of structures	Storage bean and dogogo	Little need to store, beans being replaced by dogogo	Beans, problems with rats. One reported 0. Insecticide used	None
types of food stored	Cereals		Grains	None
duration of storage	0-6		3-12 months, average 5	None
other preservation techniques and preservation problems (losses due to pests, moisture damage)	No losses due to no storage. Pests		DDT. Rats, rodents	--
Traditional Food Sharing Practices (including ceremonies and festivals)	Holidays and relatives	Mahabir, but can't afford to partake	- Yes, by rotation - Mahabir - Assist poor first	Yes

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
Food Preferences (qualities)	--	Wheat, barley, teff		
staples	Injera with maize	Potato wot	Maize, barley, teff, sorghum	'
pulses and energy foods	Peas, haricot beans, cabbage, wild cabbage	As at left	Pea, chickpea, grasspea One has meat 2x/year	'
snacks	Barley kollo, maize nifro, haricot bean	Nifro	Barley kollo	
Food Taboos/Specialty Foods	Christian meat	Dove, thelbah (flax)	- Not supposed to eat goat, but he would - Pregnant women extra meat, eggs - Lactation barley porridge and butter	'
Changes in the Diet (trends in the last 10 years)	Wheat new Never gets milk, butter or gamfu anymore	--	Ranged from no change to (1) change since children were born (2) no more butter	Teff --> maize Injera --> bread
VI. CHILD CARE				
Care of Children When Mother is Working	Father cares, neighbors, older child, or accompany woman	Sister cares, grandmother, children accompany, or mother-in-law	Older children or grandmother take care Neighbors	Children go with mother when she works One boards children with grandchildren
Number of Feeding Times	1-4 x/day Children 3x	2x/day Children 2-3	Ranged from 3x-2x	2-3x
Weaning Foods (types, weaning age)	Full 24-36 mos Porridge, goat milk	- Partial 9, full 18 - Partial 12, full 24 - Partial 7, full 36	Late weaning (3-3 5) and no weaning foods Exception milk made from barley	As at left
VII. HOUSEHOLD'S OWN PERCEPTION OF HOUSEHOLD FOOD SECURITY				
Perceived Adequacy of Access to Food	- Variety - Land, oxen and production - Can eat 3x - Can pay tax or repay food debts - Ability to buy animals - Sad to see children	When she has daily needs	- When no need to purchase from market - When he is able to feed self and family	There is no shortage and prices are low

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
Constraints	Drought, seeds	No land, no oxen	Lack of oxen and small holdings (see Constraints to Production under Crops Grown) FFW participation on equal rotation, therefore not enough access	Water, widowhood
Competition Between Food Needs and Other Livelihood Needs	Everything invested in food		Can't buy oxen because of family's food needs	Water for both human and animal consumption.
Proposed Solutions	Work hard and CARE helps	God and CARE Land, oxen	<ul style="list-style-type: none"> - CARE should let poor people take more turns - Credit for oxen purchase - More land, more oxen, subsidized fertilizer - Water - Clinic 	More FFW
VIII. PARTICIPATION IN FOOD AID PROGRAMS				
Participation in Food for Work Programs				
History of program participation (how they became involved, who in the family participates)	<ul style="list-style-type: none"> - (6 yrs) FFD --> FFW - [Various HHs] 4 yrs, 3 yrs, 5 yrs, beginning, marriage made eligible - Different members, sometimes 2 children and self [who participates] 	<ul style="list-style-type: none"> - [Various HHs] Begged to be included but landless -- finally allowed last year 3 yrs, 2 yrs, beginning, 5 yrs - Only one [family member participates] 	Participation dates back 4 years PA members entitled. Equal turn-taking	One female head said she participated 3x last year because when task is too far or too hard, some refuse to do it, and she gets to take their turn The work is very hard, but she is no needy that she can't refuse
Wage earnings (type of foods, if food is obtained locally or imported) and impact of earnings on livelihood	Essential	50 kg wheat, 2 kg oil	<ul style="list-style-type: none"> - Two respondents said "no impact" - One would have preferred credit to buy oxen - Especially in July, August, solved problem - Would have sold cattle without FFW - Only got one month, could have used six - Worries re lack of maintenance if CARE leaves - If no FFW, would have to collect firewood - Cost of time if during harvesting 	<ul style="list-style-type: none"> - Needed more desperately - Absolutely no opportunity cost
	<ul style="list-style-type: none"> 1-3 x/year Substantial contribution; not enough, only source of food - One said "yes we will" [re maintenance] - Doesn't believe they have motivation or capacity to do on own, if CARE doesn't pay for maintenance, we won't do it for free - Woman I won't do roads but ponds, yes 			

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
Impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of programs to total food consumption (dependency))	<ul style="list-style-type: none"> - Pattern improved 50% - Many would have died - Injera 1x/day Now more 	<ul style="list-style-type: none"> - Changed preference to wheat - CARE's food tastes better - One relies on FFW for 75% of food needs 	<ul style="list-style-type: none"> - Oil is added to diet - More food available - Rich no change 	<ul style="list-style-type: none"> - Contributes to well-being - Stretches maize and sorghum and improves variety
Impact on Health and Nutritional Status	Can feed children	Improvement	<ul style="list-style-type: none"> - Feel better - Not really because it is not continuous 	
Seasonality of Employment	<ul style="list-style-type: none"> - No problem, they can do both - Absolutely no opportunity cost - Women said do it more often 		<ul style="list-style-type: none"> - Too infrequent - One couldn't participate because he owed too much labor to ox-owner 	Too infrequent
Types of projects & participants' perception of impact (III or community- based)	<ul style="list-style-type: none"> - Terraces collect soil and water, therefore can plant seed - Knows how to build road 	Water access, road access, bunds, trees	<ul style="list-style-type: none"> - Pitting, road, contours, ponds - Now more able to conserve, terracing prevents soil erosion; experiments on his own land as a result - Roads allow access but lack of maintenance if CARE leaves - Pond has helped with water shortage 	
Land-use changes resulting from FFW Program	See above	Bunding adopted on private land	See above	
Availability of complementary resources (tools, supplies)	None	None	No tools	No tools
Level of training	Demonstration on the job	As at left	Training on the job Have learned new techniques, understand conservation better	

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
Participation in Emergency Feeding Program				
Nature of Disaster or Chronic Food Security Problem (production failure, civil conflict, drought, etc)				
History of Program Participation (how they became involved, who in the family participates)				
Impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of program to total food consumption (dependency))				
Impact on health & nutritional status				
Ration size & commodity mix (imported or local, adequacy, frequency of distribution)				
Timeliness & effectiveness of response (degree of asset depletion, perception of monitoring & participation)				
Involvement in complementary programs (FFW/CFW, supplemental feeding, etc)				

Rapid Food Security Assessment Matrix	Chekafachassa, E. Shewa, Adama 3/10/93, n=10		Dongori Wonga, E. Shewa, Boset 4/10/93	
	♂	♀	♂	♀
Participants' perception of strengths & weaknesses of food aid programs		Disqualification of landless is a weakness	Equal turn-taking not fair because poor need FFW more	More frequently, please
Recommendations for improvement	<ul style="list-style-type: none"> - More frequently (especially for food input) - Oxen lending - Seeds, fertilizers 	<ul style="list-style-type: none"> - Allow the landless - Special provisions for vulnerables 	<ul style="list-style-type: none"> - More ponds - Water cleansing and inputs - Water, water, water! 	

Rapid Food Security Assessment Matrix	Yaya, E. Shewa	Kachama Sobaku, Adama
GROUP INTERVIEW FOR SURVEY AREA		
Location		
Population number ethnic groups household types	630 HH 330 with land 300 without land Oromo 200 female-headed HH of which 150 are landless	365 HH 1/2 without land 50% Oromo 50% Amhara 65 female HH of which 50 are landless
Major Crops Grown, and Trends	Maize, sorghum, haricot, teff, tobacco Shortage of rainfall over past ten years has led to decreased production	Teff, barley, wheat Shortage of rainfall had led to decreased production. looking forward to a good year
Access to Infrastructure		
health facilities	2 miles away, due to costs of medicine often don't use	12 kilometers in Nazareth, most go to private clinics, cost of transport and medicine is high
schools	2 miles away, up to 8th grade, none of women reported sending children, price of clothes and materials are high, need children's labor	4 kms elementary school, junior high in Nazareth, 80% women don't send children, need for labor
markets (prices)	Boffa, 2 kms, away, Saturday, for grain and Donni, 12 kms away, Sunday livestock	Nazareth, go by donkey or car
roads	Access to basic services and markets adequate	easy access
storage	Above ground, 25% loss to rodents	above ground
water sources	Awash river, 2 hours distant, women fetch daily	1 pump well but problem with fuel and pump repair
Access to Natural Resources		
forest reserves/wetlands	None in area, cut down within past ten years, 12 hours to gather in Arsi, wood used in construction and for fuel	nearby
mining resources	None	quarry, privately owned, many people work in quarry, 25 birr/6-7 days labor, but not stable source of income
fish resources	Awash river, fish to sell during fasting season	none
livestock	Oxen most important HH ownership, cattle 0-20, sheep and goats 0-20, chicken and eggs taboo foods as Kalichis (witch doctors) have ordered they not be eaten	75% of landowners have some livestock, cattle, sheep, and goats, landless group own at least one ox
wild game	guinea fowl	none

Rapid Food Security Assessment Matrix	Yaya, E. Shewa	Kachama Sobaku, Adama
GROUP INTERVIEW FOR SURVEY AREA		
wild foods	none available	none available
trends	wild game and foods previously not available in area	none
Access to Government Services		
agriculture	extension agent in Boffa considered useless, last training four years ago	provides free seedlings and forest development
forestry	none	none
veterinary	none	none
health	too costly, mobile unit has provided immunizations	mobile vaccinations every 1-4 months
other	service cooperative covering 6 PAs makes available salt, sugar, fertilizer, and soap	service coop supplies fertilizer on credit w/o interest with 4-5 months to pay, but program stopped this year
Community Participation in Food Aid	meeting of CARE extension agent and PA chairman and elders to identify project	MA/WFP/FFW program, forest terracing, checkdams, ponds, bunds, 50 kg wheat, 2 liters oil, 19 days work
Population trends (out-migration)	some women go to Harar to work as domestic servants, some seasonal agric work	none
Climatic Trends	irregularity of rainfall over last ten years	rainfall has always been good
Social organization (peasant associations, political leadership, food sharing networks)		
Other Income Generating Activities	selling wood and charcoal, exchange help during planting, weeding, and harvesting,	
General Responses to Food Scarcity	collecting/selling wood, daily farm labor	distress cattle sales borrowing money, reduction of meals, food substitution, eat more cabbage, collecting/selling manure
Access to Development Projects - Design Participation		
government	none	FFW forestry project
NGO and donor programs	FFW project	same

Rapid Food Security Assessment Matrix	Yaya, E. Shewa	Kachama Sobaku, Adama
GROUP INTERVIEW FOR SURVEY AREA		
Land Tenure Arrangements	4-6 kerts per HH, plots dispersed, average plot 3 hours away, 9 years ago land reform benefitted many, some unofficial redistribution, no selling, inheritance to sons	50% hold land, after death land goes to new PA member if holder doesn't have children, some renting, no communal land
Access to Credit	from wealthy, 100% interest per month	loans from wealthy farmers, interest 10% per month
Community Problems and Needs	food shortages, need free health services, oxen shortage, lack of water, no school, fertilizer costs	young landless, need mills, fertilizer too expensive, need health services, houses need repair, need land, fertilizer, oxen, need work in factories

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
SPECIFIC HOUSEHOLD INTERVIEWS				
I. DEMOGRAPHIC INFORMATION				
Gender of HH head	n=8 (91%)	n=1 (9%)	n=8 (91%)	n=1 (9%)
Marital status	100% married	divorced	100% married	divorced
Age	28-60	36	25-52	26
Family Composition (adults living in HH, children, other dependents)	a # HH 4 6/ 4-16 b # dependents 3 0/ 1-14 c # children per HH 2 9 d Range of childrens' ages 3 mon - 22 yrs	4 3 3 4-9 yrs	a 6 3/ 5-9 b 4 0/ 3-6 c 3 5/ 2-5 d 7 mon - 17 yrs	4 2 2 3 mon - 5 yrs
Health Status	32% report diseases, 2 diarrhea, 1 coughing, 1 eye infection, 1 birth complications - long term effects	none	75% reported one person with illness (2 recurrent malaria, 2 stomach, one yellow fever, 1 malaria)	headaches
Educational Background of HH Members	7% literacy campaign	none	2 persons completed 8th grade, one 6th grade, one 5th, one 3rd, 25% had none	none
Ethnic Group/Tribe	Oromo	same	4 HH Amhara, 2 Oromo, 2 mixed	Amhara
Religion	Christian	same	Christian except for one Muslim HH	same
Occupations of HH Members	farmer, firewood collector, day labor	firewood, beer brewing	Farmer, day labor Landless, working others' lands, quarry work, daily farm labor	brewing Tella, trading teff, working on mother's farm
II. ACCESS TO RESOURCES				
Access to Land, Tenure (timads)	2 HH landless, 8 HH with land (0-9 kerts)	0 kerts	0-16 kerts, PA chairman reported an average of 9 kert/HH	0 kerts
Access to Common Property	land available along Awash river			
forests				
pastures				
water resources				

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
Access to Means of Production				
farm equipment (plows, tools)	plows 7, oxen 14, tools 8	none	plow 7, oxen 7	none
traction animals	oxen 14	none	oxen 7	none
Access to Livestock				
types and number	cows 0-7 each, average 0.9/ goats and sheep 0-1, average 0/ donkey 0-2, average 0.5	1 cow	cows, 2/ goats 4/ donkey 3 chickens 6 IIII	1 donkey
selling pattern (within one year time frame)			distress only	

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
III. LIVELIHOOD STRATEGIES				
<p>Crops Grown</p> <p>For each crop ask:</p> <p>cultivation practices</p> <p>division of labor</p> <p>crop calendar</p> <p>inputs used</p> <p>use of crop</p> <p>constraints to production</p> <p>solution to problems</p>	<p>Teff, maize, sorghum, haricot</p> <p>Use combination of oxen and small tools</p> <p>Men prepare, women and children weed, women harvest</p> <p>Maize plant Apr/July, harvest Oct/Nov</p> <p>Teff plant July, harvest Nov</p> <p>2 HH use fertilizer, 1 occasionally uses insecticides</p> <p>Low yields, so little marketed</p> <p>Shortage of rain, too poor to buy fertilizer and improved seeds (nearly all agreed on these problems) Shortage of oxen</p> <p>Proposed improved access to credit</p>	no farming	<p>Teff, barley, peas (yields >600 kg), wheat, sorghum, maize, broad beans, lentils Some HHs have home gardens</p> <p>Reported 25% teff and wheat, and 50% of peas sold</p> <p>Men prepare land, plant, weed, harvest</p> <p>Women weed, do some seeding, pea harvesting Children weed, herd</p> <p>One HH hired daily labor</p> <p>Teff prepare land Feb-June, plant July/Aug. harvest Nov</p> <p>Barley and peas prepare Feb-June, plant June, harvest Oct</p> <p>Peas prepare April, plant May-early July, harvest Oct</p> <p>Fertilizer widely used (145-50 birr/Q), but expensive and no credit available</p> <p>Pesticide - some small use Seeds - only one HH used special variety seeds</p> <p>Teff, peas, some wheat and barley sold, all other crops consumed</p> <p>Constraints price of fertilizer (one HH sold two Q of teff and one a sheep in order to buy fertilizer), too much rain, not having own land</p> <p>Solutions cheaper fertilizer</p>	no farming
Other Income-Generating Activities				
off-farm employment (wage labor)	Most of landless households receiving 15 - 4 birr/day, or 20 birr/kert for harvesting		Seven HHs in FFW, one worked in the quarry (quarry labor 25 birr/truckload/6-7 days) Landless generally could participate in FFW, but complained that they were selected less often than PA members	FIW
seasonal migration	none		none	none
hunting	none		none	none

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
firewood or charcoal sales	Very important in all but 2 HHs 2-5 birr/bundle for firewood, 12 hour trip to collect Charcoal 18 birr/bag, 10 sold per year on average Both female- and male-headed households, and elderly women For many, it is the main income source	Important income source	none	none
trading	One HH selling eggs, and one trading in sorghum			Trading in grains - usually teff, once a week (up to 10 birr profit, sometimes nothing)
brewing (Tella, Arakie, Teji)	Four HHs sell Tella (7 birr/2 weeks), including the female-headed HH One also sells Arakie (Arakie and Tella 15 birr/2 weeks)	Important income source (Tella brewing)	Two HHs sell Tella once a week	Selling of Tella once a week (25 birr/week)
sale of wild foods	none		none	none
other	Renting out land, basket weaving/selling Seasonal work -- two months in neighboring PAs	Helps on family farm	none	none
IV. COPING STRATEGIES				
Adjustment to Meals (number, amount, diversity)	Drop in meal frequency 3 --> 2		Decrease in meal frequency from 3 to 2 Decrease in quantities consumed Landless in worst period of the year (June- July), eat one meal a day	
Food Substitution	Decrease in injera consumption, with greater maize/ncfro and cabbage consumption	Decrease wheat consumption and increase sorghum	Substitution toward cabbage and potatoes (one HH maintains reserve stocks), away from teff Shift from teff to maize and wheat	
Sale of Assets	Three households sold oxen last year, and one a goat Three HHs said they have nothing to sell		none	

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
Borrowing from Relatives/Friends	Female-headed HH borrowed from brother Others said there was no one to borrow from	Borrowed from father and other relatives	Five HHs could borrow from relatives (food and seeds) PA chairman borrowing reported from relatives (10% interest) and grain (5 kg repaid with 15 kg), June-Sept	
Credit (who, interest rate, terms)	One HH borrowed 50 birr for four months with 100% interest		Two HHs currently owe money (10% interest), but some HHs felt that loans are not easy to obtain Landless borrowing of money and teff, to be replaced by labor	Has loan (10% interest)
Migration	none		none	
Wild Foods/ Unusual Foods	none	none	none	none
Alternative Employment	1 firewood collection	none		
Redistribution of Livestock	none	none	none	none
Redistribution of Children	1 HH sent two children away for 1 year (200 birr)	none	none	none
Remittances	none	none	none	none
Food Aid	Perceived trade-off with firewood-gathering - important for all HHs		1 I-W	
Other				
V. FOOD CONSUMPTION PATTERNS				
Composition of Diet (seasonal access)				
types of staples	Very monotonous, little variety, absence of meat and vitamin-rich vegetables Maize, sorghum, wheat, teff	Injera three times/day with bean wat, meat rare Likes CARE wheat	Injera, kollo, busso (sweet bread), nefro Landless 2 meals a day reported, vs 3 meals for most landholding HHs interviewed	injera
main pulses and protein foods (vegetables, meats, fish)	Peas, cabbage (seasonal), beans (seasonal)		Butter and meat on holy days	meat every four months

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
snack foods (supplementary energy foods)	Coffee and beer 2-3 day in most III		roasted maize	
Sources of Food				
own production	Nearly all own production Purchases for landless (maize, beans, coffee, sorghum, teff)	Food sources 1) purchase, 2) food aid 3) borrowing from family	mostly own production	most purchased
market purchases				
types of food purchased	peas, some oil, sugar, salt, coffee		Salt, coffee, pepper, spices, lentils, sugar, oil	Same as at left, and cereals
seasonality			Cereal purchases in hungry season	
prices	Wheat doubles in price between dry and rainy season FFW wheat more expensive than local wheat		Prices particularly high in rainy season	
hunting/gathering	none		none	
fishing	only for sale		none	
sharing/ borrowing/ begging	mainly during holidays		none	
credit	none		none	
food aid	dependence variable between IIIs, appears better off III participate more regularly		FFW - evidence of selling, but some consumed	
Problems of Food Availability (market access, price, income, production shortfall)	prices, rainfall, and overall shortages of inputs		availability good, problem is price fluctuations	
Food Conservation/Preservation				
food processing (what, how, who)				

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
access to mills	Boffa, 80% HH use Boffa mill		Nazareth, costly, time consuming, some robbery on road, wait may be long	
access to oil press				
food storage				
types of structures	about 1/2 HH had raised storage		raised	
types of food stored	all cereals		no stocks presently, teff, wheat	
duration of storage			teff 8 months to 1 year	
other preservation techniques and preservation problems (losses due to pests, moisture damage)	loss due to rats and weevils , farmers unable to afford better storage		moisture damage, rats, weevils	
Traditional Food Sharing Practices (including ceremonies and festivals)	mainly during holidays and ceremonies		holidays, 4 times per year	
Food Preferences (qualities)				
staples	teff for 7 HH		Teff, injera, barley, meat, milk	
pulses and energy foods	meat, milk, and butter, haricot for 7 HH			
snacks				
Food Taboos/Specialty Foods	chicken		none	
Changes in the Diet (trends in the last 10 years)	marked decrease in animal products		less milk and butter, one hh felt diet better now	
VI. CHILD CARE				
Care of Children When Mother is Working	children go with mother during work, extended family, older siblings or husband		taken with mother, older sibling, husbands care for infants	

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
Number of Feeding Times	weaning foods started 3 months - 1 year, weaning ended between 1-3 years		begun 1/2 to 1 year using wheat porridge and milk if available	
Weaning Foods (types, weaning age)				
VII. HOUSEHOLD'S OWN PERCEPTION OF HOUSEHOLD FOOD SECURITY				
Perceived Adequacy of Access to Food	spend so much time gathering and producing food, selling normally in order to plant more		1984-85 food shortages, since then no problem	
Constraints	storage losses, rain, oxen, land, soil erosion, 1 hh reported only being able to buy clothes once in three years		lack of variety	
Competition Between Food Needs and Other Livelihood Needs	2 HHs would send children to school if they had enough money			
Proposed Solutions	credit, fertilizer		start mill, get oxen for the poor	
VIII. PARTICIPATION IN FOOD AID PROGRAMS				
Participation in Food for Work Programs				
History of program participation (how they became involved, who in the family participates)	4 HHs husband and wife trade-off according to work schedule		landowners work an average of 2-4 times per year	
Wage earnings (type of foods, if food is obtained locally or imported) and impact of earnings on livelihood	earnings follow established norms, some delay reported between work completion and payment		50 kg wheat, 1 liter oil per 19 days on rotation basis	
Impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of programs to total food consumption (dependency))	would not normally have oil, some sell oil, landless HHs report selling oil		one HH sold wheat received, 2 HH said food saved them from having to purchase needed food during year	

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
Impact on Health and Nutritional Status	positive		positive impact on children's nutritional status	
Seasonality of Employment	no problem because can trade between family members		no conflict with normal work, trade between HH members	
Types of projects & participants' perception of impact (HH or community based)	roads, reforestation, check dams, dams, trees important for area, trees still too young to cut, helps with erosion, felt not enough food for work, training weak, would like amount of food increased		forestry, terracing, ponds, weakness in wheat quality, want more activities, has had positive impact	
Land-use changes resulting from FFW Program			large forest reserve, saw importance of tree planting and soil erosion	
Availability of complementary resources (tools, supplies)	weakness, all workers bring own tools			
Level of training	weak,			
Participation in Emergency Feeding Program				
Nature of Disaster or Chronic Food Security Problem (production failure, civil conflict, drought, etc)				
History of program participation (how they became involved, who in the family participates)				
Impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of program to total food consumption (dependency))				
Impact on health & nutritional status				

Rapid Food Security Assessment Matrix	Yaya, E. Shewa		Kachama Sobaku, Adama	
	♂	♀	♂	♀
Ration size & commodity mix (imported or local, adequacy, frequency of distribution)				
Timeliness & effectiveness of response (degree of asset depletion, perception of monitoring & participation)				
Involvement in complementary programs (FI-W/ CI-W, supplemental feeding, etc)				
Participants' perception of strengths & weaknesses of food aid programs				
Recommendations for improvement				

Rapid Food Security Assessment Matrix	Annano, Khora (Agro-Pastoral) ♂	Hardim #68 (Habro Woreda) ♀	Annano, Khora ♂	Hardim #68 ♀
Location				
Population number ethnic groups household types	1800/ 370 HH/ 300 MHH/ 70 FHH Oromo	3000/ 700 HH/ 600MHH/ 100F-HH Oromo		
Major Crops Grown, and Trends	sorghum, maize, soybean, ch baens, teff- they stopped due to rainfall, sesame- sue to pest and shortage of rain soybean- due to rain and pest problem	sorghum, amhara, argobas, maize, h beans, soybeans, lentils, sweet potato, chatt, coffee barley- due to seed problem other variety of sorghum due to pest and shortage of rain		
Access to Infrastructure				
health facilities	no health facilities in the PA the nearest is in Khora 1-2 hours walk	they have access to a clinic		
schools	no access to school, looted during the change of govt 3 years ago have Koranx school in the middle of the vilage. Only 3 % can read and write Arabic and 10% are illiterate (Koranx letters) the Koranx school meets on Saturdays	school in the PA but interrupted due to the change of govt girls do not attend school		
markets (prices)	sorghum and maize, prices range from 80-150 birr	Hardim market on Saturdays Gelemso market 13 kms away on Sundays		
roads	there is a road but no access to public transportation	no public transportation 6 hours round trip		
storage	underground storage due to raids and 30-50% loss due to moisture and insects when underground storage is full, they use above ground storage	storage underground if not touched, the stored grain will keep for 7 years		
water sources	access to ponds during the rainy season 6 ponds, but only three contain water for 3-4 months per year access to the river at Khora	have access		

Rapid Food Security Assessment Matrix	Annano, Khora (Agro-Pastoral) ♂	Hardim #68 (Habro Woreda) ♀	Annano, Khora ♂	Hardim #68 ♀
Access to Natural Resources				
forest reserves/wetlands	acacia forest women spend 6-12 hours collecting wood	the forests are cut down		
mining resources	no mining	none		
fish resources	none	none		
livestock	cattle, goats, sheep, camels, donkeys 100 HH do not have any livestock	goats, cattle, chicken, sheep, donkey		
wild game	antelope, wild pig	antelope, porcupine		
wild foods	cactus Large variety of wild foods have disappeared due to deforestation	cactus and hudhu a variety of wild foods have disappeared due to deforestation		
trends				
Access to Government Services				
agriculture	no access to agric services but is minimal	there is an extension agent from MCID sales of coffee seedlings and supply of coffee protection medicines		
forestry	no services no input			
veterinary	vet service available upon request	vet service available upon request vet service visits twice a year		
health	must pay for medication too many people Must wait a long time for treatment	they have a clinic		
other	none	none		
Community Participation in Food Aid	the HH received between 20-70 kgs of wheat three times last year	none		
Population trends (out-migration)	immigration due to access to land outmigration to Djibouti, Awash, Meteharaly for employment	immigration due to tribal conflicts in other areas (Anchar) outmigration due to drought		
Climatic Trends	less rainfall	less rainfall		

Rapid Food Security Assessment Matrix	Annano, Khora (Agro-Pastoral) ♂	Hardim #68 (Habro Woreda) ♀	Annano, Khora ♂	Hardim #68 ♀
Social organization (peasant associations, political leadership, food sharing networks)	the PA plays the role of mediator between people and the NGOs and the govt traditional labor sharing for special holidays	women reported that they are not satisfied with the PA leaders "Affusha" funeral assistance "Guzza" working group		
Other Income Generating Activities	basket production by women, firewood, and charcoal off-farm employment	day labor chatt sales sell water, enjera, wood, cactus		
General Responses to Food Scarcity	collecting cactus not normally eaten apply for food aid collect more firewood sell grass	increased labor collecting wild cactus		
Access to Development Projects - Design Participation				
government	none	have access to MCID		
NGO and donor programs	none	CARE - CBP- Program Revolving fund for purchase of oxen Tools at a subsidized price Soil conservation		
Land Tenure Arrangements	there is access to land average size holding is 1-5 hectare/person access to labor and oxen limits production	there are landless rnage from 1-15 timads in the holding they share produce		
Access to Credit	none	ccess to credit for purchase of oxen		
Community Problems and Needs	needs food, medicine, water, firewood, reduce tribal conflicts, agric inputs (oxen, seed, fertilizer, quality grazing land), health facilities, tools, irrigation, problems reduction in registration coverage, quantity of Ratum reduced, need updated list of participants, no servie cooperatives functioning in the PA, community must purchase items at a higher price in the local markets, clothing	problems drinking water, pest/insect problem, oxen, tood and inputs, shortage of land, school expansion, health needs food aid, clothing, improved road, public transportation, motor pump, affordable medicine		

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Assessment Matrix	Specific Household Interview	Name of Peasant Association	Name of Head of Household	I. Demographic Information	Gender of HH Head	Marital Status	Age	Family Composition	Health Status	Educational Background of HH Members	Ethnic Group/Tribe	Religion	(Occupations of HH Members	II. Access to Resources	Access to Land, tenure (umads)	Access to Common Property	(forest)	(pastures)
Rapid Food Security Assessment Matrix																		
Annano, Khora (Agro-Pastoral) ♀					Number of MHH = 5	all married	25-65	Average family size 4-11, Mean 6.4, Av number of adults 2-4, Mean 2.6, Av number of children 2-7 Mean 3.8	malaria, diarrhea, respiratory	4 read and write Arabic	Oromo	Muslim	Farming = 5, firewood = 3	average 6-32 umads, mean 17	8 hectares = 1			
Hardim #68 (Habro Woreda) ♀					Number of MHH = 3	all widowed	30-40	average family size 5-6, mean 5.6, av number of adults 1-3 mean 2, av number of children 3-5, mean 4	epilepsy, malnutrition	illiterate	Oromo	Muslim	Farming = 1, firewood = 3					
Annano, Khora ♀					Number of MHH = 5	all married	28-70	average family size 5-13, mean 7.8, av number of adults 2-6 mean 3.2 av number of children 3-7, mean 4.4	diarrhea, eye diseases, malaria parasites, joint disease	6 interviewed/27% literacy, children are illiterate	Oromo/Amhara	Muslim, Christian	Farming, day labor	landless = 1, land 0-8 umads = 4	landless = 1, land 0-10 umads = 3			
Hardim # 68 ♀					Number of FHH = 4	widowed = 2 / divorced = 2	25-45	average family size 2-8 mean 5.8, av number of adults 1-3 mean 1.5 av number of children 1-7, mean 4.3	diarrhea, stomach problems, joint disease	3 interviewed/32% literacy, children illiterate	Oromo/Argobx	Muslim, Christian	Farming, selling enjera, selling water, day labor					

Rapid Food Security Assessment Matrix	Annano, Khora (Agro-Pastoral) ♂	Hardim #68 (Habro Woreda) ♀	Annano, Khora ♂	Hardim # 68 ♀
Access to Means of Production				
(farm equipment)	farm equipment = 5		farm equipment = 3	no equipment
(traction animals)	access to oxen through labor and Guzza collaboration	no oxen	1 oxen, 2 cows, sold 1 ox to purchase food	1 ox, 1 calf, 1 goat, sold 1 oxen for medication, sold pair of oxen to purchase food
Access to Livestock				
(Types and Numbers)	cattle 1-5 (3), goat/sheep 0-5 (1), chicken 0-10 (2)	cattle 0-1		
(selling patterns) within one year time frame	selling to purchase food, clothing, medication, and due to lack of adequate pasture	selling due to husband's sickness and death		
III. Livelihood Strategies				
Crops Grown	maize, sorghum, soybeans, chick peas, sesame	sorghum, maize	sorghum, maize	sorghum, maize
Cultivation Practices	they use oxen, men farm, women collect wood. land preparation Feb -March, planting April-May, harvesting Sept. - Nov no inputs; production for consumption, sell small quantity to purchase salt, sugar, and clothing drought and pests; Access to oxen, lack of inputs, need more rain, need food aid	no cultivation, no input because no money firewood collection and some weeding need labor	land preparation in March; planting in April; Harvest in December, January sell about 30% for clothing; last year had crop failure, problem with rainfall, no access to land or oxen, need food aid, need subsidized tools	production for consumption, shortage of land; problems with rainfall, pests, seeds, labor, oxen, need government help with inputs and oxen
Other Income Generating Activities				
Off-farm employment	labor in Metahara sugar plantation for 2 birra/day	none	wage labor earns 4 birra/day	none
Seasonal migration	none	none	none	none
Hunting	none	none	none	none
Firewood or charcoal sales	firewood	firewood	none	firewood
Trading	none	no trading because don't have a burro		none

Assessment Matrix	Breeding	Sale of wild food	IV. Coping Strategies	Adjustment to Meals (number, amount, diversity)	Food Substitution	Sale of Assets	Borrowing from Relatives/friends	Credit (who interest rate, terms)	Migration	Wild Foods/Unusual food	Alternative Employment	Redistribution of livestock	Redistribution of Children	Remittances	Food Aid	other	V. Food Consumption Patterns	Composition of Diet (seasonal access)	types of staples	main pulses and protein
Rapid Food Security Assessment Matrix	none	none																		
Annano, Khora (Agro-Pastoral) ♂	none due to religion	none sell cacti		the same	substitute boiled maize for enjera	sold 10 goats to purchase medication	borrow with no interest		none	cacti	none	none	sent child to uncles		yes	increase sale of firewood		sorghum, maize	h bean, fenu greek, kale	
Hardim #68 (Habro Woreda) ♀	none	none		the same	same, drop snacks, substitute milk with tena greek and salt and water	sold oxen to buy food	borrow with no interest		none	cacti	day labor	none	none					sorghum, maize, kolo	h bean	
Annano, Khora ♀	none			reduce meals from 3 to 1 meal per day, quantity decreased also		sold oxen to buy food			none	cacti	nursery 4 birra/day	none	none					sorghum, maize, kita, bread	meat, cabbage, beans	
Hardim # 68 ♀	none					sold oxen to buy food			none			none	none					beans, cabbage		

Rapid Food Security Assessment Matrix	Annano, Khora ♀	Annano, Khora ♀	Hardim #68 ♀
snack foods	none	none	none
Sources of Food			
own production	cereals	cereals	
market purchases			
types of food purchased	maize, sorghum	maize, sorghum	maize, sorghum
seasonality			
prices	maize, sorghum 100kg = 150 birr	same	maize, sorghum 100-150 birr = 100 kg
hunting/gathering	antelope, ccti	cacti	cabbage, cacti
fishng	none	none	none
credit			
food aid	yes	yes	
Problems of Food Availability (market access, price, income, production shortfall)	shortfall, price fluctuation	same	price
Food Conservation/Preservation			
Food processing			
access to mills	mill at home due to cost	same	same
access to oil press			
Food Storage			
types of structures	underground	same	same
types of food stored	sorghum	sorghum	same
duration of storage			
other preservation techniques/problems (losses due to pests, moisture damage)	sorghum for seed hung from roof		

Rapid Food Security Assessment Matrix	Annano, Khora (Agro-Pastoral) ♂	Hardim #68 (Habro Woreda) ♀	Annano, Khora ♂	Hardim # 68 ♀
Participation in Food for Work Programs				
History of Program Participation (how they became involved, who in the family participates)				
Wage Earnings (type of foods, is food obtained locally or imported) impact of earnings on livelihood				
Impact on Family Eating patterns (taste preference, types of food eaten, meal frequency, contribution of program to total food consumption, dependency)				
Impact on Health and Nutritional Status				
Seasonality of Employment				
Types of Projects and Participants Perception of Impact (household and community)			CARE/CBD, extension work, nursery, provision of tools, revolving credit, oxen subsidized price for tools, Impact: positive, better soil conservation, technical assistance, more tree planting	
Land-Use Changes Resulting From FFW Program				
Availability of Complementary Resources (tools, supplies)				
Level of Training				

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Rapid Food Security Assessment Matrix	Annano, Khora (Agro-Pastoral) ♂	Hardim #68 (Habro Woreda) ♀	Annano, Khora ♂	Hardim # 68 ♀
Traditional Food Sharing Practices (including ceremonies and festivals)	Fetersisa when someone dies, marriages,	same	last food sharing 2 years ago	when someone arrives at home they are invited to share food
Food Preferences (qualities)				
staples	enjera with milk	same, wheat with II beans and broad beans	past with meat, wheat, teff	sorghum, wheat
pulses and energy food				
snacks				
Food Taboos/ Specialty Foods	wild pig	same	same	same
Changes in Diet (trends in last ten years)	more boiled maize, no snacks,	less or no meat	less enjera, now salt and water, no milk, no snacks	same
VI. Child Care				
Care of Children When Mother is Working	older sibling, relative	same	same	same
Number of Feeding Times	twice and when cries	twice		twice
Weaning Foods (types, weaning age)		milk, pourage, weaning/ two years	weaning/ 7months-2 years	milk, weaning 2 years
VII. Household's Own Perception of Household Food Security				
Perceived Adequacy of Access to Food	inadequate	same	chronic shortage	same
Constraints	rain, insects, oxen labor	male labor	drought, access to land, oxen	drought, access to land, labor, oxen
Competition Between Food Needs and Other Livelihood Needs	food, clothing	clothing, medication	clothing, soap	clothing, medication
Proposed Solutions	FFD, FFW, oxen, seeds	free medical care, clotng, food aid	food aid to support and solve other problems	
VIII. Participation in Food Aid Programs				

Rapid Food Security Assessment Matrix	Annano, Khora (Agro-Pastoral) ♂	Hardim #68 (Habro Woreda) ♀	Annano, Khora ♂	Hardim # 68 ♀
Participation in Emergency Feeding Programs				
Nature of Disaster or Chronic Food Security Problem (production failure, civil conflict, drought, etc)	production failure due to drought and tribal conflict	same		
History of Program Participation (how they became involved, who in family participates)	there was a meeting 5 years ago people signed up list was submitted to CARE no revision of list since then			
Impact on Family Eating Patterns (taste preferences, types of food eaten, meal frequency, contribution of program to total food consumption, dependency)	amount only cover up to one week just enough for survival	they make bread and contribute to the diet, reduces purchase of grams, a benefit		
Impact on Health and Nutrition	no impact on health			
Ration Size and Commodity Mix (imported or local, adequacy, frequency and distribution)	60 kg 3 times per year for 11 person household, 30kg wheat for 4 person III	45 kgs for 4 person III		
Timeliness and Effectiveness of Response (degree of asset depletion, perception of monitoring and participation)	last payment was in August, no regular pattern 2-6 months,	same, no regular pattern of distribution		
Involvement in Complementary Programs (FFW/CIW, supplemental feeding, etc)				
Participants Perception of Strengths and Weaknesses of Food Aid Program	not adequate, not enough supplemental food, not dependable timing			

Rapid Food Security Assessment Matrix	Annano, Khora (Agro-Pastoral) ♂	Hardim #68 (Habro Woreda) ♀	Annano, Khora ♂	Hardim # 68 ♀
Recommendations for improvements	better targeting, FFW should replace FFD to be more regular, first free food then to FFW, irrigation scheme on Khora river, proper selection of recipients	same	CBD/ expanded form, increase inputs from CARE, decrease cost of tools, provide more tools, cash for work should include the disabled	same

Rapid Food Security Assessment Matrix		GROUP INTERVIEW FOR SURVEY AREA	
		Torbeyo	Kuni
Livelihood	Cereal		Cash major
Location	Mieso, Western Hararghe		Kuni, Western Hararghe
Population number	(Attending meeting: 77 men, 32 women, 77 children) 200		(Attending meeting: 43 men, 34 women, 80 children) 157
ethnic groups	Oromos		Oromos
household types	63 male-headed (including 11 landless), 10 female-headed (including 8 landless)		39 male-headed (including 12 landless), 10 female-headed (including 7 landless) < 3 imads, no oxen < 3 imads, one ox < 3 imads, one ox < 3 imads, one ox < 3 imads, no oxen > 3 imads, no oxen
Major Crops Grown, and Trends	Major crops sorgnum, maize, dukhun (millet), chickpea, haricot beans Trends no change in diversity, but lower yield Fertilizers not used, no money to buy		Major crops sorgnum, maize, barley, coffee, chat, teff Trends female-headed HHS irregular
Access to Infrastructure			
health facilities	Clinic in Mieso (1 hr one way), hospital in Asbetferi (25 km) Men traditional healers Women no outreach, no locals		No hospital Clinic 3 hrs, 15 birr injection Registration 10 birr (ICRC?)
schools	4 village Koranic schools School in Huse (1/2-hour walk), but no children go literacy		Ball closed for last 2 years, abandoned School in Bedessa used to be 50% (3 hr walk), now abandoned Local Koranic school
markets (prices)	Mieso (1/2 hr walk) for crop selling Asbetferi (25 km), Asebot (15 km) Use Asbetferi market to sell wood (walk 3 hrs each way) and to buy food		Bedessa to sell every day (wood, 2 birr per backload) General market once a week
roads	4 km from main, weather road		Extremely bad, no bridges 15 hrs to Bedessa, 10 km
storage	No bins, dogogo and underground Anyway, no grain to store Storage loss estimated 20% (weevils, rodents, moth)		Sorghum storage in hole, maize and barley in bins Loses great Store in bellies 20% lost
water sources	Seasonal rivers (2), springs (1/2 to 1 hr walk), 17 hand-dug wells, 4 dry ponds (CARE FW). Water not a big problem Water is OK for drinking, needed for irrigation		River near Bedessa (Medelu), 1-2 hrs walk.

Rapid Food Security Assessment Matrix	Torbeyo	Kuni
Access to Natural Resources		
forest reserves/wetlands	<u>Forest</u> bush type (3.5 hr walk) <u>Land</u> no communal Percentage of <u>landless</u> is very high. 1975 redistribution according to proclamation, since then, no redistribution, landless growing to probably 50% Villagers claim 384 out of 584 are landless, CARE says the number of landless is more like 283	No forest, only scrub Farmland sloped and rocky Land was too little even at the time of land reform PA stopped redistribution in 1984 Landlessness increase estimated at 2 times registered Landless PA members migrate to downland areas Land is a major constraint, there is more emphasis on cereal than on cash
mining resources	None	None
fish resources	None.	None
livestock	Cattle, oxen, goats, sheep, chickens Rental available on share basis	Some cattle, no ruminants, some chickens (reluctant to admit), one ox per person, goats, donkey (limited because of limited grazing land) Oxen use limited by stony land Holdings are very small No ox rental, only sharing.
wild game	No, traditionally unacceptable	No wild game ("afraid of leopards"), problems with monkeys and wild boar, porcupines
wild foods	30% of population resorts to wild foods Cactus fruit and marare only Raful shimbiro (bird cabbage)	None
trends	"Over the last 16 years, life is evaporating like a dying flame "	Population increase, land decrease. Production of cereal depends on rainfall This year, they do not expect barley and maize 1988-91 production below average Cash crops affected by CBD Chat good in irrigated areas, poor in others Before 1970, famous for chat and coffee CBD and drought led them to grow more sorghum
Access to Government Services		
agriculture	Female MOA agents used to come and coordinate with CARE, but not in the last year. No male agents	Women no government services Men more in recent years
forestry	None	See above
veterinary	Never regularly, only for epidemic or vaccination Need to walk to Mieso with sick cattle, but cattle die on the way	See above
health	Women no outreach, no traditional medical people, no midwife Men they come, but we can't afford to hang around ** <u>Idea</u> training for midwives	See above
other	--	See above

Rapid Food Security Assessment Matrix	Torbeyo	Kuni
Community Participation in Food Aid	FFW CARE did for 2 years, all worked Consulted No problems Ponds dried up Trees Food was major impact FFD (free food distribution) since mid-91 No food since Sept 92 Family size not taken into account Some HHs missing from distribution list Impact extremely helpful, saved lives, stopped migration New families not yet on list	No food aid
Population trends (out-migration)	No outmigration Immigration returning soldiers and DPs (displaced persons) settling Problems 1/3 of DPs from Mulu being assisted by RRC	Women no outmigration Displaced can reclaim their land Men seven soldiers returned, some migration due to land shortage
Climatic Trends	Limited diversity, increased crop failures, irregular rainfall	Irregular, impacting upon cropping
Social organization (peasant associations, political leadership, food sharing networks)	Afosha (burial/disaster) is broader than Idir, includes helping the sick, orphans, etc Zacka (religious alms) decreasing due to crop failure Sadaacka (charity to beggars) still strong	Afosha crisis help Only self-help for funerals No sharing of food Lending 50% interest PA is elected, no women can be on it - settle dispute
Other Income Generating Activities	Women wood-selling Men wood and wage labor in Mieso and the highlands	Women fetch water, pound and grind Men dig soil for houses and exchange plowing labor for livestock Wood selling, charcoal selling A few sell chat (capital limitation for chat trading -- no cash)
General Responses to Food Scarcity	Food aid women and children reduce to one meal/day Sale of livestock Nothing else to sell Men migrate FFD, life saved New generation of children called "children of wheat" When all else fails we "die like flies"	Migration, charcoal and fuel selling, and land sharing Women reduce from 3 to 2 meals "Always" have injera and pea watt, in bad times --> kollo and nifro
Access to Development Projects - Design Participation		
government	No government aid	None Government knows how to collect money Coffee and tea Cheat instead of pesticide Must fill quota of planting new seeds of coffee which farmers don't like
NGO and donor programs	No others	None
Land Tenure Arrangements	Small common forest Landholding by family shares, no renting, no sharecropping DPs reclaiming Oxen/yeild swapping	Women only men can inherit equally, no communal land (see "Access to Natural Resources," above)
Access to Credit	No formal credit Lending on 1:1 when food is available MOA used to lend seeds 1 year ago	None from government Pay back 1:1, no interest

Rapid Food Security Assessment Matrix	Torbeyo	Kuni
Community Problems and Needs	<p>Men lack of basic life support system: no food, no drink, no seeds, nothing</p> <p>Women food, clothing, oxen</p> <p><u>FFW Recommendations</u>: River diversion (they will arrange the distribution); terracing, integrate landless through land-sharing; FFD before FFW (too weak otherwise), PA chairmen intermediate regarding design of FFW, but people need to be brought in</p> <p><u>Getachew's reflections</u> conflict may arise over distribution of water and labor allocation between landless and land-owning HHs</p>	<p>Women food, water, clothing No solutions, only God and government Men</p> <p>Priority #1 is female-headed HHs, resource-poor (including oxenless HHs); #2 timely fertilizer delivery, #3 health, #4 water, #5 education Recommendation women's group should target the poorest and help them</p>

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
SPECIFIC HOUSEHOLD INTERVIEWS				
I. DEMOGRAPHIC INFORMATION				
Gender of HH head	5 men	3 women	5 men	2 women
Marital status	3 married, 3 polygamists	3 widows	5 married (mono)	2 widows
Age	22-66	40-50, ages unknown	45-50	30-70
Family Composition (adults living in HH, children, other dependents)	Polygamists Average #/HH 6.3 Average # of children 5.4 Average # of dependents 5.4 (Father in law) One wife had lost 5/10 babies	Average #/HH 7.8 Average # of children 5.3 Average # of dependents 5.3 (Grandchild)	Average #/HH 9 Average # of children 6.8 Average # of dependents 7.0 (Grandmother)	Average #/HH 5 Average # of children 5 Average # of dependents 4.5
Health Status	Wife sick with thakesa, fever, gastritis, diarrhea	Stomachache, diarrhea, head injury, malaria, fever	Paralyzed elderly, malaria, eye problem, wife aborted, stomach illness	Malaria
Educational Background of HH Members	None to 1-2 years of schooling	None to one child with literacy.	Koranic school, 1 child grade 4, 1 child grade 2 Discontinued due to tribal conflict	All children of one family (7) started and discontinued long ago
Ethnic Group/Tribe	Oromo	Oromo	2 Oromos, 1 Amhara, 1 Tigray	Oromo
Religion	Muslim	Muslim	2 Muslim, 2 Christian	Muslim
Occupations of HH Members	Farmers	1 farmer, 2 wood cutters	Farmers	Farmers/collecting firewood
II. ACCESS TO RESOURCES				
Access to Land, Tenure (timads) (* land sharing)	1 landless Landowners have 6, 3, 8, 8 timads, average 6.3 timads	2 landless, 1 landowner (5 timads)	Dist in salasi time not even 2.5 - 8 timads, average 4.1 timads	One landless, one with 4 timads
Access to Common Property				
forests	Bush forest, 3 hrs walk one way	Same as at left	Scrub "forest" for collecting wood	1 HH Shararata forest to collect wood, 2 hrs
pastures	1 hr walk	--	None	None (private grazing)
water resources	--	--	--	--

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
Access to Means of Production				
farm equipment (plows, tools)	Shared plow, borrowed yoke, basic tools, axes	None - husband's tools	Plow (4 HH), hoe (4), pick (2), others (2)	None.
traction animals	One ox each, access to borrowed ox (exchanges for 3 quintals of sorghum)	Shared/swapped, no oxen	Ox (3 HH have 1, 1, and 2 oxen) None (2 HH) Never sold productive assets	None
Access to Livestock				
types and number	By household - All ruminants sold last year in distress sale - One cow, in distress sale, sold rest - 2 chickens, one ox - Sold all nine years ago - Two cows	- One cow, one chicken. - None - None	- One cow - 3 goats, one donkey - 2 cows, 2 goats - 1 bull, 1 goat, 1 donkey - 1 goat Distress Oxen and 2 goats lost, April 1993 bull, Aug 1992 cows and three calves	None
selling pattern (within one year time frame)	See above	See above	See above	See above

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
III. LIVELIHOOD STRATEGIES				
<p>Crops Grown</p> <p>For each crop ask cultivation practices (use of oxen, hoe or combination) division of labor timing of different stages of cultivation (crop calendar) inputs used (seeds, fertilizers, manures, insecticides), where obtained use of crop (marketed, consumed) constraints to production solution to problems</p>	<p>Sorghum, maize, tukhun (millet), chickpea, haricot bean</p> <p><u>Division of labor</u> Men plow, otherwise families help</p> <p><u>Crop calendar</u></p> <ul style="list-style-type: none"> - Sorghum Prepare Mar, sow Apr, weed June-Aug, harvest Oct-Dec - Maize, tukhun and haricot bean Prepare May, sow May/June, weed June/July, harvest Oct - Chickpea Prepare June/July, sow Aug, weed Sep, harvest mid-Oct <p><u>Inputs</u> Oxen shared. Land sharing working portion of father's land is livelihood strategy Manure Some report no inputs.</p> <p><u>Use of crop</u> All consumed, nothing to sell</p> <p><u>Constraints</u> Lack of rain, tractors, seeds</p> <p><u>Solutions</u></p> <ul style="list-style-type: none"> - Assistance from government or CARE, like seeds and oxen - Diversion of river, FFW, make ponds - Pray for rain - Pesticides 	<p><u>Cultivation practices</u> Swap yield for oxen</p> <p><u>Use of crop</u> All consumed</p> <p><u>Constraints</u> Lack of rain and oxen, water, pests</p> <p><u>Solutions</u></p> <ul style="list-style-type: none"> - Give us food aid until the next harvest - Continue selling firewood 	<p>Yields last year. Sorghum 5-6 quintals, maize 5 q (intercropped with sorghum, 3 HHs), barley none, coffee better</p> <p><u>Cultivation practices</u> Two hoe only, other both</p> <p><u>Division of labor</u> All male labor</p> <p><u>Crop calendar</u></p> <ul style="list-style-type: none"> - Sorghum (women) Prepare Mar, sow Mar/Apr, weed May-Oct, harvest Nov/Dec - Maize Prepare June (3 HH intercrop with sorghum), sow July, weed Sep, harvest Oct - Barley ? - Coffee (CBD, coffee-berry disease) Prepare May, sow Aug, harvest Oct <p><u>Inputs</u> MOA promised fertilizer on credit, 70-80 birr, but did not deliver (1 HH), fertilizer (1 HH), manure (2 HH), insecticide (1 HH).</p> <p><u>Use of crop</u> Sorghum sold (2/6) Consumed green</p> <p><u>Constraints:</u> Flooding, weeds (2 HH), pests (5 HH) (monkeys destroyed 50%, porcupines), rain (4 HH), land 1 HH).</p> <p><u>Solutions</u> Herbicides (5 HH), dams (3 HH) (farmers too weak), provide fertilizers on time, good seeds, NGOs, government</p>	Same as at left
Other Income-Generating Activities				
<p>off-farm employment (wage labor)</p>	<ul style="list-style-type: none"> - Wage labor on other PA farms (15 birr/day, July-Oct) - 30-40 birr/year on friend's chat - 3-4 birr/day seasonal labor - Wife pounds grain in town to earn 2 birr. 	<p>One pounds grain and fetches water for families in town</p>	<ul style="list-style-type: none"> - None in regular year - Off-farm cash farm labor, 2 birr/day, July-Oct 	--

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
seasonal migration	--	--	No migration for income	No migration for income
hunting	None	None	None	--
firewood or charcoal sales	Firewood 3 birr/donkey-load. Price decreases in rainy season	Firewood 1 5-2 birr/back-load	1 IIII firewood sale	2/2 firewood 2 birr/day, --> purchases grain
trading	None	None	Wife trades pepper and onion, daughter brews and sells	--
brewing (Tella, Arakie, Teji)	None	None	See above	--
sale of wild foods	None	Son collects grass or weeds to sell as fodder, 1 birr/bundle	Would collect kukuras in forest if not for monkeys	--
other	Milk sales (2 III)	Milk sales (1 IIII), Feb-May	None	--
IV. COPING STRATEGIES				
Adjustment to Meals (number, amount, diversity)	Reduction in frequency (skip lunch) Reduce quantity	Small breakfast, no lunch Kollo for dinner Sometimes miss dinner 1-2 meals/day	Meals from 3 to 2 or 1 Children eat first Priority husband (See "Changes in the Diet," Section V)	2 meals (kollo and injera), 2 days in a week Children, however, eat 3 times
Food Substitution	Maize porridge, less injera Wild foods cactus pear, kukura seed Nifro, kollo instead of injera	--	Nifro and kollo instead of injera	--
Sale of Assets	2 distress sales of livestock	1 distress sale of calf Nothing to sell	1985. tools sold for neighbors' ox and goat 1992 bull 1993 cows and 3 calves Sold 1 donkey, ox, 3 goats	None
Borrowing from Relatives/Friends	From relatives Few can afford to lend	Borrow both money and food (1:1) Received zacha	Borrow from relatives (3 HH), from lender (1 HH)	None
Credit (who, interest rate, terms)	No formal credit	Gets food from market in advance of wood sales	Credit at no interest (1 HH)	No credit
Migration	Brother left area in search of work	None	None	None
Wild Foods/Unusual Foods	Cactus fruit, marere (nafoul) eaten with boiled cereal	Cactus fruit Children eat regularly during hard times	Would collect kukura in forest if not for monkeys "Pembura," cactus, hums dukala (deer)	Marare weed

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
Alternative Employment	- Increase sales of firewood - Daily labor	Daily labor	Wife fuel wood daily in hard times (but she is sick) Cash crop farm labor near Bedessa	Fuel wood daily (See Section III)
Redistribution of Livestock	None	Boards cow with relative	None	None
Redistribution of Children	In very bad times (2 HH)	None	None	None
Remittances	None	None	None	None.
Food Aid	A year ago, worked FFW two years ago	3 years ago No sales, ate all	None	None
Other	Land sharing, swapping yield for oxen power	--	Share oxen, begging Was at group meeting to beg for food	None
V. FOOD CONSUMPTION PATTERNS				
Composition of Diet (seasonal access)				
types of staples	Sorghum, maize, nifro of sorghum, maize porridge, kollo	Sorghum porridge and injera, maize porridge (breakfast)	Sorghum injera, porridge	Sorghum injera, maize kollo
main pulses and protein foods (vegetables, meats, fish)	Good times chickpeas, oil, pepper No meats. animal foods	Some fenugreek, watt, some salt water only Some cabbage, beans	Meat rare, cabbage seasonal Watt beans and grasspea Poor farmer: sorghum and maize (salt water)	Broad bean at harvest
snack foods (supplementary energy foods)	Nifro, kollo, chiro	Kollo, nifro		--
Sources of Food				
own production	(1) own (2) buying (3) sharing	3 quintals sorghum, 2 q maize	--	Market only (1 IIII), market and own production (1 III)
market purchases				
types of food purchased	Sells goats to buy sorghum, maize Used to buy sugar, oil, beans, etc., but can't anymore	All market Mieso Maize flour, maize	Salt, sorghum, maize, oil	Sorghum

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
seasonality	--	--	Purchase March-April to plan for rainy season	Daily purchases June-Dec until green maize is available
prices	One fellow sold 6 goats = two months' worth of food, a calf = one month's worth	Maize flour 1 50/kg, maize 1 brrr for 0 8 to 1 kg.	Seasonality of prices March-April 60-70 brrr/quintal, May-Oct 100 brrr/q Oil 1/2 month 8-12 brrr/liter	Sorghum July-Dec 1 5 brrr/kg, Dec-June 1 0 B/kg
hunting/gathering	None	None	Hunted deer last year; now prohibited (1 HH)	--
fishing	None	None	None	--
sharing/ borrowing/ begging	Zacha = 10% of yield given to poor Below a certain production, zacha is not required Zacha is virtually non-existent in this village	One received zacha (share of zacha 6 months) Begg occasionally	Begging.	--
credit	None	None	No credit purchases	--
food aid	A year ago.	A year ago	None	--
Problems of Food Availability (market access, price, income, production shortfall)	Access, not availability problem Maize = B1 60/kg Lack of money, production shortfalls, insufficient wage earnings		The market has everything, but we can't afford it Oil prices have risen Not enough income.	Market shortage of gram sometimes No land, no sources of income -- poor
Food Conservation/Preservation				
food processing (what, how, who)				
access to mills	Pounding at home In a good harvest, use Mieso mill	Pounds and grinds In a good harvest, uses mill Otherwise, pounds (2B/25 kg)	Must use hand mulling. Mill only for weddings 1 farmer goes to Bedessa as required	Pound gram at home.
access to oil press	None	None	--	--
food storage				
types of structures	Underground for sorghum Years ago, bin for maize	Dogogos	Storage underground (4 HH) Dogogo (2 HH) Bms (2 HH) Actele from MOA for weevil (2 HH)	Little need for storage

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
types of food stored	See above	--	--	--
duration of storage	--	--	--	--
other preservation techniques and preservation problems (losses due to pests, moisture damage)	30% losses underground	--	Problem of flooding, 25% loss (underground, 4 HH) Dogogo weevil problem	--
Traditional Food Sharing Practices (including ceremonies and festivals)	Zacha 10% alms Zadecha money to beggars Afosha funeral/disaster assistance Weddings Years ago, they used to have large, expensive weddings with lots of food and drink Now, due to scarcity, a new tradition has emerged called "chopsa," which means "breaking of the norm " The man and his family storm the woman's family and refuse to leave Within 24 hours, all is arranged, the couple is married, and what little food the neighbors have is shared	Same as at left	Weddings and funerals Afosha, zacha	Same as at left
Food Preferences (qualities)				
staples	Teff, sorghum, maize, chickpeas	Sorghum for injera, maize for kollo	Teff, sorghum, maize	Eat better if I get it (e.g., wheat) Sorghum and maize
pulses and energy foods	Would like spaghetti, rice, meat, etc., but can't have	--	Teff and meat watt (Teff is high labor and needs water, therefore not grown)	--
snacks	Wheat, because it can be prepared in various ways.	--	--	--
Food Taboos/Specialty Foods	None	- None - Islamic slaughter - No special foods for pregnancy	Taboos Muslim "cut" meat, wild pig	--

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
Changes in the Diet (trends in the last 10 years)	- Used to have more livestock, higher production. - It's hard now but 1977 was worse	Decline in quantity	Decreases in production and consumption Teff --> sorghum Injera --> nifro --> kollo (hides from friend to eat alone) No meat now	Decreased since she is a widow Only injera (2 days/week) Quantity decreased
VI. CHILD CARE				
Care of Children When Mother is Working	- Older sibling cares for children - Whoever is home cares for baby - No one	- Children hang on Older child could babysit but baby wants mother	Mother and father share Wife cares for (doesn't work) neighbor, elders	Leaves with neighbor
Number of Feeding Times	2-3 times	1-2 times	--	Feeds 3 times
Weaning Foods (types, weaning age)	Fenugreek cream, maize porridge Partial 8 months, full 2 - 2.5 years	Partial 5 months with porridge Full 2 years	Weaning 1-3 years No weaning foods Survival is left to God after weaning	Weaning 3 years, injera and porridge
VII. HOUSEHOLD'S OWN PERCEPTION OF HOUSEHOLD FOOD SECURITY				
Perceived Adequacy of Access to Food	--	--	If 3 times/day, some variety, if food in storage, then feel secure	Insecurity, too many children, becoming poor, no husband, no land, too many wives Purchasing power is very low
Constraints	Water, agricultural inputs	Food is solution	Flooding, weeds, land too small/dep Production shortage, price, market distance.	Lack of help, failure of crops
Competition Between Food Needs and Other Livelihood Needs	Clothing and medicine	Medicine and clothing	Could not buy clothes, blankets and cow skin cover Health limited	Cannot buy clothes, ox, cow All invested in food

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
Proposed Solutions	<ul style="list-style-type: none"> - Farming tools and oxen - Food aid till next harvest - Free food, then water development and FFW - Irrigation canals - God and CARE have the answer 	<ul style="list-style-type: none"> - Food aid - FFW - Selling wood - Solution is food 	<ul style="list-style-type: none"> - Weed control (herbicides) - Dams - Pray for rain - Well - Tools - Food aid - Agricultural inputs - Pesticides - Fertilizers - "First time CARE has asked " - "Government knows only how to collect taxes " - Need help from government, NGO, government expected to help. 	Food aid
VIII. PARTICIPATION IN FOOD AID PROGRAMS				
Participation in Food for Work Programs				
History of program participation (how they became involved, who in the family participates)	<ul style="list-style-type: none"> - Men, women and children participate, based on identification of people with the capability to do the work - Terracing, ponds, roads - One participant said doesn't know how it started, the P A asked him to participate - Chosen by community leader 	<ul style="list-style-type: none"> - Community leaders chose, two years ago - FFW - Woman and two daughters take turns 		
Wage earnings (type of foods, if food is obtained locally or imported) and impact of earnings on livelihood	3 kg wheat/person-day, 120 g oil/person-day	Same as at left		
Impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of programs to total food consumption (dependency))	The only source of food at that time Loved the CSM (kinche)	100% dependent during the FFW program		

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
Impact on Health and Nutritional Status	Improved feeding pattern	Health improved during FFW		
Seasonality of Employment	<ul style="list-style-type: none"> - Men work on the harvest, so women do the FFW - Had to leave food production to do FFW Too tired to till own soil - Had to do FFW on top of normal production work 	Take turns		
Types of projects & participants' perception of impact (III or community-based)	<ul style="list-style-type: none"> - Wouldn't do projects without food aid - Very few projects maintained - No time to do own agricultural production - FFW was discontinued because PA members looted food 	Roads useful, but big impact is the food		
Land-use changes resulting from FFW Program	<ul style="list-style-type: none"> - Pond silted up - No time to do it without food input - Sort of benefitted, especially water projects - Satisfied - Roads made visits of government workers and NGOs possible 	--		
Availability of complementary resources (tools, supplies)	No inputs	<ul style="list-style-type: none"> - No tools - Farmers' tools 		
Level of training	None	Yes		
Participation in Emergency Feeding Program				
Nature of Disaster or Chronic Food Security Problem (production failure, civil conflict, drought, etc)	<ul style="list-style-type: none"> - Shortfall of production due to low rain and pest infestation - 1985 drought 	Failure of production, especially sorghum, due to moisture stress		

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
History of Program Participation (how they became involved, who in the family participates)	<ul style="list-style-type: none"> - FFD (free food distribution) 84/85, switched to FFW in 1986, mid-91 back to FFD - Registered by team, doesn't know who team is - Received wheat and oil three times - Registered by executive committee members, all family members registered - Loved wheat flour from Save the Children Fund (SCF) 	Husband was alive, whole family registered, received 50 kg wheat and one liter oil		
Impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of program to total food consumption (dependency))	Preferences wheat better because less labor-intensive Conclusion food aid has created a taste for wheat	Family had 3 meals/day and no one had to collect fuelwood		
Impact on health & nutritional status	Filled food gap, generally helped strength	All felt healthy		
Ration size & commodity mix (imported or local, adequacy, frequency of distribution)	About one year ago, CARE-Asbeteferi received one shipment of CSM, and so gave one free food allocation This was raved about, it improved energy, skin, everything	<ul style="list-style-type: none"> - Wheat and oil 3 times/year - One time wheat flour - Four allocations/year 		
Timeliness & effectiveness of response (degree of asset depletion, perception of monitoring & participation)	<ul style="list-style-type: none"> - Two children had died in 1985, so I-I-D had come too late - Too much weight at pick-up - Too little too late 	--		
Involvement in complementary programs (FFW/ CFW, supplemental feeding, etc)	None	None		

Rapid Food Security Assessment Matrix	Torbeyo		Kuni	
	♂	♀	♂	♀
Participants' perception of strengths & weaknesses of food aid programs	<p><u>Strengths:</u></p> <ul style="list-style-type: none"> - Lifesaving - Prevented migration <p><u>Weaknesses</u></p> <ul style="list-style-type: none"> - When FFW changed due to the change of government, he was left owed food for work he had done - Reduction of family members - CARE doesn't provide blankets, clothing 	<p><u>Strengths:</u> saved lives, improved health</p> <p><u>Weaknesses:</u> doesn't include sugar and nutritious foods.</p>		
Recommendations for improvement	<ul style="list-style-type: none"> - More food - Preference for FFW because all members could work on it, but can't work yet because too weak Please do FFD first and then FFW <p><u>Recommendations for new FFW</u></p> <ul style="list-style-type: none"> - River diversion - Pond maintenance - Non-stop program Even if food sufficiency is maintained, create more activities and keep program going 	<p>Ration size and mix should include nutritious food and sugar for vulnerable groups and children</p>		

Rapid Food Security Assessment Matrix	Kurfasawa	Galessa
GROUP INTERVIEW FOR SURVEY AREA		
Livelihood	Pastoral group	Agro-pastoral group
Location	12 kms north of Meiso in district Meiso	27 kms south of Bedessa town in Kuni district
Population number ethnic groups household types	≈1000 HHs, ≈8000 people Somali Hawya 200 female-headed HHs 880 male-headed HHs	≈216 HHs, ≈1300 people Oromo, Etu clan 28 female-headed HHs 188 male-headed HHs
Major Crops Grown, and Trends	None	- Maize, sorghum and chat - They used to grow haricot bean and chickpea, but too dry to grow them now - They used to grow potato and sweet potato
Access to Infrastructure		
health facilities	None existent in the area They go to Meiso or Asbeteferi if it is serious	No health facilities except Bedessa which is 5-8 hours walk They have 5-6 traditional healers
schools	- None except Kurani school Nearer school is in Meiso, but nobody goes - Almost all the population is illiterate	Nearest school is 7 kms away, but not working for two years Will start up now
markets (prices)	Marketplaces are Meiso and Mullu, Meiso on Tuesday and Mullu everyday They sell firewood and cattle at Meiso, and milk at Mullu They buy grains from Meiso	- Marketplaces Burka (2 hr walk), Gebiba (3 hr walk) and Bedessa (7 hr walk) - They sell firewood at Bedessa and Burka, and buy grain from Bedessa - Firewood 2 birr back carrying and 4-5 birr by donkey
roads	One road built by the previous government The train passes by as well	People built road under the direction of a landlord 18 years ago The road is maintained yearly by the people
storage	No storage structures	Underground storage 20-40% storage loss due to moisture and weevil
water sources	They fetch water from seasonal river and ponds It takes five hours for round trip	Seasonal spring 1 hr walk during rainy season and River Saketa which is 6 hr round trip People with donkey fetch water one time and without donkey two times
Access to Natural Resources		
forest reserves/wetlands	Have access to Acacia forest They collect fire woods from this forest	Galessa forest To collect firewood, they have to walk 2.5 hrs round trip
mining resources	No mining resources	None

Rapid Food Security Assessment Matrix	Kurfasawa	Galessa
fish resources	No fish resources - people don't eat fish	Fish is available at Saketa River People work as laborers to people who came from town to fish using poison (Birbira seed)
livestock	90% of the people have camels, average 5-10/HH 40% of the people own cattle, average 3-5/HH Goats and sheep all died two years ago	Goat, cattle, donkey, chicken and oxen 150 HHs do not have livestock Maximum number of cattle is 5 and of goat 3 They lost their animals due to the conflict 3 years ago
wild game	There is wildlife in the area leopard, hyena, wild pig, lion, fox and kudu They hunt the kudu	Greater kudu and lesser kudu, but they do not hunt
wild foods	Cactus - it serves as food 2-3 months for children and women	Wild berry, wild weed (merere) and wild fruit (oladi)
trends	They lost goats due to drought and other animals due to war	Their access to natural resources is declining
Access to Government Services		
agriculture	They have no access to agricultural resources	Four years ago they received seeds, but nothing since
forestry	They have no access to forest resources.	None
veterinary	They had veterinary services in the past, but none in the last two years	Three years ago received veterinary services, but nothing since
health	No health services They have to go to Mullu and Meiso to get vaccinations, but they have to pay for other health services	No health services Malaria, dysentery, swelling of body
other	None	None
Community Participation in Food Aid	250 HHs (889 people) are on the list for emergency food assistance, only about a quarter of the people Emergency food programme started 2.5 years ago Food distribution is every three months. People are not on the list because they emigrated recently from Bordede, Khora and Asebot due to ethnic conflicts People who received food are sharing with those who don't have it	Free food distribution every 3-4 months Previously they received every month Beneficiary list prepared by kebele
Population trends (out-migration)	Large numbers of people (500-600 HHs) were migrating into the area 250 families outmigrated to Djibouti	<ul style="list-style-type: none"> - Migration to Boke and Chercher (people without animals) for working as laborers - Immigration of soldiers, returnees and seasonal immigration of nomads (Oromos) There is an exchange between the nomads and the inhabitants milk for chat and grain

Rapid Food Security Assessment Matrix	Kurfasawa	Galessa
Climatic Trends	There was drought during the last two years Access to fodder is a real problem for cattle, especially during the dry season Camels can survive well on existing resources	<ul style="list-style-type: none"> - The rainfall was declining for the last 5-6 years and the rain was bad this year It affects the maize They compensate by growing more sorghum to chickpea and field beans - There is a dry spell during the long rainy season - Shifting more land to sorghum
Social organization (peasant associations, political leadership, food sharing networks)	They have PA and female self-help groups (help displaced groups resettle) There is food sharing (people invite others and share food) They share milk with widows who have children	<ul style="list-style-type: none"> - PA consists of 17 leaders, 5 elders and 5 female members - Self-help organization (Afosha or Olla) whereby people get together for house construction, funerals, weddings
Other Income Generating Activities	<ul style="list-style-type: none"> - Selling firewood 7-10 birr for one camel load, 4-7 birr for one donkey load, 2-3 birr on back of woman - Sell milk, they get 50 cents a tin 	<ul style="list-style-type: none"> - Wage labor in the Dega (highland) areas Get two birr per day with meal - They also produce charcoal and sell firewood - Women are milling for others
General Responses to Food Scarcity	<ul style="list-style-type: none"> - Selling of more firewood - They cut down on the amount of food eaten per day - Women sell jewelry and men their traditional knife 	The only option is to look for daily labor in Dega
Access to Development Projects - Design Participation		
government	There is no government project presently In the past the government tried some agricultural activity	None
NGO and donor programs	CARE emergency feeding programme	CARE's emergency food aid for 3 years
Land Tenure Arrangements	There is no land tenure. They share land as a communal resource They compete with Oromos on grazing land	Everybody has got access to land No landless in the area The average landholding is 3 timad (8 timad = 1 hectare) The major constraint on access to land is access to ox and labor
Access to Credit	No credit	<ul style="list-style-type: none"> - Credit in kind with no interest - Informal credit without interest among the women selling firewood

Rapid Food Security Assessment Matrix	Kurfasawa	Galessa
Community Problems and Needs	<ul style="list-style-type: none"> - They want peace with the Oromos - They would like to learn to grow crops (several displaced people already know how to grow crops and are willing to teach the others) - Health service - They need water resources development - Veterinary services - Schools - They want the food list expanded - new registration - They want the food to come more frequently or in greater amounts - Willing to do food for work - Improved storage to protect from moisture damage 	<ul style="list-style-type: none"> - Access to food is the key problem - Security problem is the second key problem, guerrillas and government are fighting in the area - No good clean water - No health services for both human and animals - 20 people in the list are not receiving food - The amount received per family is decreasing steadily - They are willing to do FFW to construct pond, maintain roads and to establish coffee. They saw FFW activities in Boke and are aware of the importance - The distribution center is far away from the area

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
SPECIFIC HOUSEHOLD INTERVIEWS				
I. DEMOGRAPHIC INFORMATION				
Gender of HH head	8 male-headed HHs	2 female-headed HHs	6 male-headed HHs	2 female-headed HHs
Marital status	4 polygamous, 4 monogamous	Widows	6 monogamous families	Widows
Age	25-70 years	27-35 yrs	25-45 yrs	30-45 yrs
Family Composition (adults living in HH, children, other dependents)	Family size range. 4-22 Children below 15 yrs. 1-18 Adults 2-4 Dependents other than children 0-2	Family size range. 5-8 Children below 15 yrs. 5-7 Adults 1-2 Dependents other than children. 0-1	Family size range 5-9 (average 6.7) Children below 15 yrs. 2-5 (average 3.7) Adults 2-5 Dependents other than children 0-3	Family size range 5-8 Children below 15 yrs. 4-6 Adults 1-2 Dependents other than children 0-1
Health Status	<ul style="list-style-type: none"> - One family lost 10 children due to several diseases - One family (wife and 4 children) has malaria - A young son in one family has pneumonia - One family (a kid 18 months old) has diarrhea - One HH head has malaria - Unknown disease which causes fever 	<ul style="list-style-type: none"> - Malaria adults suffering - Children suffering from diarrhea - Adults have scabies 	<ul style="list-style-type: none"> - Malaria, dysentery, diarrhea - 1 child is suffering from swelling - Almost all HHs have someone ill 	Malaria, diarrhea and tooth problems
Educational Background of HH Members	<ul style="list-style-type: none"> - One is 4th grade, the rest are illiterate - One family sends sons to school 2 hrs away 	All are illiterate No children go to school	1 HH has 3rd grade education and son is going to school The school is 2 hrs away All other families are illiterate	All HHs are illiterate
Ethnic Group/Tribe	Somali Hawya	Somali Hawya	Oromo Etu	Oromo Etu
Religion	Muslims	Muslims	Muslims	Muslims
Occupations of HH Members	Livestock (camel) herders and firewood sellers	Cattle herders Widows use other men to look after their camels	Agriculture and firewood sellers The livelihood system has changed dramatically because of the loss of animals	Firewood selling and grinding for others for money

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
II. ACCESS TO RESOURCES				
Access to Land, Tenure (timads)	Communal grazing lands No farmland	Communal grazing lands No farmland	Land holding range 2-10 timads (avg. 6.5) Everyone has access to land Labor and ox-power are the main constraints	1 HH has access to 3 timads The other has access to land, but no means to cultivate it
Access to Common Property	As above	As above	All have access to forests and pastures	As above
forests			1-2 hrs to get to forest	Same
pastures				
water resources	Water resources are seasonal rivers and ponds Five hrs walk		Seasonal spring 2 hrs round trip Saketa river 4-6 hrs round trip	Same
Access to Means of Production				
farm equipment (plows, tools)	Axes for cutting wood		- Three HH have 1 ox and equipment - The other 3 HH only have a hoe	Both have 1 axe each
traction animals	No traction animals	As at left		No access to traction animals
Access to Livestock				
types and number	Camel - range 0-16, average 5	Camel - range 0-3	- Two HH have 1 cow each - Three HH have 1-2 goats - Two HH have 1 donkey each - One HH has 1 bull	No animals

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
selling pattern (within one year time frame)	<ul style="list-style-type: none"> - One HH sold 4 camels during the famine 3 yrs ago - One HH sold young camels at the rate of 300 birr each - One HH sold a camel to buy grain - Another HH gave 2 camels as bride price - They sell camels to cover health costs - The whole community lost 100 camels during the last year due to the conflict between Djibouti Govt and Issa tribe - Two camels were born to 1 HH - <u>Cows</u> - range 0-7, average 3 - <u>Calves</u> - 2 HH have 2 each - One HH sold 2 cows at the rate of 350 birr each - Selling range 350-500 birr - <u>Donkey</u> - 0-1 Two HH have 1 each - No <u>sheep and goats</u> because all died - One HH lost 100 goats to diseases. - <u>Milk</u> One HH gets 6 tins milk and 4 tins go to market (2 birr) and the rest is consumed 	<ul style="list-style-type: none"> - One HH sold camel to find out who killed her husband - Cattle - range 0-2 - Calves - range 0-1 - No sale of cows - No donkey - No sheep or goats - Sell both camel milk and cow milk Cow milk 1 50 -3 birr/day Camel milk 1-2 birr/day (maximum when camel and cattle are doing well) 	<ul style="list-style-type: none"> - One HH sold 1 calf for 150 birr during the last 7 months - One HH sold baby goats, sell milk 4 months of the year and receive 2 birr/day 	No selling pattern for the last year

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
III. LIVELIHOOD STRATEGIES				
Crops Grown I or each crop ask cultivation practices (use of oxen, hoe or combination) division of labor timing of different stages of cultivation (crop calendar) inputs used (seeds, fertilizers, manures, insecticides) where obtained use of crop (marketed, consumed) constraints to production solution to problems	No crops grown	No crops grown	<ul style="list-style-type: none"> - Sorghum, maize, haricot beans, oats, little chat - Ox, hoe cultivation - Land preparation starts in March, planting April (maize), weeding May-Aug, harvest Sept (maize), Dec (sorghum) - Chat takes up to 2 yrs before reaches consumption - Haricot beans intercropped with maize and sorghum and harvested late August - One HH rents oxen through labor - Men all cropping operations Women sometimes weed, harvest <p><u>Production</u></p> <ul style="list-style-type: none"> - Good harvest range for sorghum (3-6 quintals) and maize (5 quintals) - One farmer reported 10 quintals in a bad year Sorghum production 0-3 quintals - Three farmers apply manure - Almost all the yield is consumed - One farmer used to purchase seed during bad year 	None
Other Income-Generating Activities				
off-farm employment (wage labor)	None	None	All HHs go to Dega (Chercher, Kum, Habro) for wage labor, 2 birr with meal per day This occurs for one week, interval, several weeks, whenever there is shortage of food	Milling grain (daily activity) One-third of the grain milled is the wage
seasonal migration	In search of pasture and water during dry season	Same as at left	See above	None
hunting	One HH hunts the kudu for eating Most HHs don't hunt	No hunting because hunting is done by men	None	None

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
firewood or charcoal sales	- They sell firewood 1-3 times/wk: 7-10 birr/bundle (camel-load), 4-7 birr per donkey-load - One HH sells charcoal, 8 birr per sack	They sell firewood 7-10 birr per load of camel, 2-3 birr per back of woman	Almost all HHs sell firewood (2-5 birr/bundle) and charcoal They do it anywhere 2-4 times a week	Sell firewood but not charcoal Collect wood 4-7 times a week for 2 birr/bundle
trading	None	None	None	None
brewing (Tella, Arakie, Teji)	None	None	None	None
sale of wild foods	None	None	One HH sold wild berries in Bedessa During drought, trees do not produce	None
other	- Rent camels to Issa and Guraghe, 200 birr per trip for 5 days - Rented ox and bulls to Oromo farmers previously (2-4 quintals of sorghum for rent of oxen and bulls) Now they don't because of tribal conflict - Rent camels for carrying, 20-60 km gram per two days - Rent camels to smugglers, 300-500 birr per trip for ten days	None	None	None
IV. COPING STRATEGIES				
Adjustment to Meals (number, amount, diversity)	3 HH cut down from 2 meals to 1 meal	Both adults and children cut down meal frequency from 3 to 2 And in times of food shortage, adults stop drinking milk Children still drink milk, but a reduced quantity	Several families reduce meals from 3-2 times, and one family from 2-1 times One family reduces only the quantity In one family, whenever the husband or wife is sick, no one eats	Meals reduced for adults from 2-1, and for children 3-2 times
Food Substitution	- Change from eating sorghum to maize - Eating more cactus instead of grain - Change from injera to roasted gram	Change from sorghum injera to boiled grains	- Two HHs substitute wild food (Merere) - Three HHs substitute roasted and boiled gram	Same as at left

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
Sale of Assets	- A lot of camel and cattle sales to buy food or for health costs Over half the households sold cattle - Men also sell knives	No livestock sale, but sell jewelry	Two HHs sell cows and calf when they need food	None
Borrowing from Relatives/Friends	Borrowing from relatives	None	- Most people said that borrowing is not possible because nobody has anything to borrow, they are all poor - Two HHs borrow gram and money from relatives in other towns	Borrow money and gram from friends who sold firewood
Credit (who, interest rate, terms)	No credit	None	No-interest gram loan	None
Migration	- Sons and daughters of some of the households migrate to Djibouti for wage labor - In one HH, wife migrates to Bordede	One household's daughter migrated to Djibouti to search for wage labor	Seasonal migration to highlands for wage labor	Widows do not migrate, they have to stay to take care of their families
Wild Foods/Unusual Foods	They consume cactus during dry season	Children and women consume cactus	- Will eat more Merere, Handude and wild fruits (Oladi, Hudha, Kashim and fruit from Bika tree) - One HH kills the greater kudu	Same
Alternative Employment	None	None	None	None
Redistribution of Livestock	There is redistribution of livestock when times get hard and serious problems in grazing	None	None	None
Redistribution of Children	Redistribution of children is a common phenomenon They redistribute children before or at the same time as livestock It may be a coping strategy for the families receiving children	Both families redistribute children for food and shelter	None	None
Remittances	One HH received remittances from daughter in Djibouti	One HH received cloth from daughter in Djibouti	None	None

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
Food Aid	Six HH out of 8 received food aid Two HH did not receive food aid because they had recently arrived in the area, but other people share food with them	One HH received food aid and one does not because of recent migration to the area	Every HH receives emergency food aid every 2-3 months but the quantity and frequency has reduced over the years	Both do not receive food aid One missed the registration due to illness and the other was dropped when husband died
Other			Begging in the highlands	
V. FOOD CONSUMPTION PATTERNS				
Composition of Diet (seasonal access)				
types of staples	- Sorghum, wheat, maize - Injera with milk or water and salt - In evening, injera (of sorghum or wheat) or boiled wheat or sorghum	- Injera made of sorghum with milk - Boiled sorghum or wheat with milk	- Injera and water, boiled grain - One HH eats roasted grain 1-2 times a day - Porridge from sorghum and maize	Same
main pulses and protein foods (vegetables, meats, fish)	None	None	Cabbage (wild), kale haricot beans Meat is rare No fish	No meat, no fish
snack foods (supplementary energy foods)	- Camel or cow milk with coffee husk - Cactus fruit for children - Boiled sorghum or wheat with tea	Same	- Boiled grain (shumo) - Tea (Hojja) made from coffee husk	Same
Sources of Food				
own production	From their own animals and they purchase grain	Same	Own production is the 3rd important source of food due to drought	No own production
market purchases				
types of food purchased	Sorghum, salt, coffee husk, sugar and barley oil	Same	Purchased grain is one of the most important sources of food	Same
seasonality	All year round	Same	For some HH purchase is seasonal and for others all year round	Same
prices	Sorghum 1 birr/1 kg in dry season and 2 birr/kg in rainy season Approx 2 birr spent per day on purchase of sorghum	Same	Sorghum and maize 1 birr/kg in dry season while in rainy season 2 birr/kg	Same

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
hunting/gathering	Occasionally to rarely	None	Gathering of wild fruits is most important (see coping mechanisms)	Same
fishing	None	None	No fishing	No fishing
sharing/ borrowing/ begging	There is sharing of cooked food	Same	Most families do not borrow. A few families borrow from relatives in other villages. Several people beg.	As at left, but no begging
credit	None	None	No-interest grain loan	
food aid	1/4 of the total HHs receive food every 2-3 months The food lasts 15-30 days	Same The food lasts 1 5 to 2 months	Almost every family relies on food aid as the second most important source of food	None
Problems of Food Availability (market access, price, income, production shortfall)	Shortage of rainfall makes grass unavailable, which lowers milk production and also affects farm production, making grain prices higher in the market The terms of trade are bad for firewood No goats to sell	Same	<ul style="list-style-type: none"> - Drought and pests affect agricultural production - Labor shortage and access to oxen - Political conflict. - High market prices for food items 	Same
Food Conservation/Preservation				
food processing (what, how, who)				
access to mills	Most people do not use grinding mill, but one HH uses mill in Meiso	Grind by hand	No local mills Nearest mill is at Bedessa. Grinding and pounding is done at home by women	Some women grind for other families
access to oil press	No oil press	Same Use animal fat.	No oil press	Same
food storage				
types of structures	No structures, but use sacks	No structures, but keep grain gourd and sacks	Underground storage	None
types of food stored	Sorghum and wheat	Same	Sorghum and maize	N/A
duration of storage	Temporary	Temporary	1 - 5 months Nothing else is preserved	N/A

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
other preservation techniques and preservation problems (losses due to pests, moisture damage)	None	Moisture damage	Storage loss due to pests, moisture and rats ranges 20-30%	N/A
Traditional Food Sharing Practices (including ceremonies and festivals)	Share food during religious holidays (Ramadan)	Share food during wedding, funeral and religious holidays (Ramadan and birth of Prophet)	Share food during weddings, funerals and at religious holidays (Etd)	Same
Food Preferences (qualities)				
staples	Sorghum, wheat, maize	Rice, sorghum	Injera made of sorghum	Same
pulses and energy foods	Milk, oil Would like to eat potato and carrot, but not available	Milk with sugar or tea with sugar	Peas and beans Meat if available	Same
snacks	Nifro (boiled gram)	Sugar and dates	Milk	Peanuts, milk, boiled peas and beans
Food Taboos/Specialty Foods	Pork, anything slaughtered by Christians Mixing camel milk with injera	Same	Pork and Christian-prepared food	Same
Changes in the Diet (trends in the last 10 years)	- They used to eat vegetables, but due to the conflict with the Oromos, they do not get them anymore - They used to eat manufactured foods (spaghetti)	They consume less sugar	They used to eat more in quantity and consume more milk, but due to drought and war the animals all died CARE has played an important role in providing a minimum diet for survival	Same
VI. CHILD CARE				
Care of Children When Mother is Working	Wives, elder children and neighbors take care of children	Neighbors take care of kids	The wife, grandparents and older siblings take care of younger children	Leave children with the women neighbor
Number of Feeding Times	- They are provided milk when hungry. - Four of the HHs feed children 1-2 times a day at the same time that the adults eat	- Get food 3 times during non-dry years and 1 time during dry years - Get milk frequently	- Children fed 3-4 times (3 HHs) - The same number of times as adults (2 HHs)	Children are fed 2-3 times
Weaning Foods (types, weaning age)	Camel milk, cow milk, crushed grain and injera Weaning age 1-2 years	Adult food Weaning age 6 months (partial), 2-3 years (full)	Porridge, milk, kita and ground grain Weaning age 1 year (partial), 1-2 years (full)	Milk and fenugreek Weaning age 6 months (partial), 2-3 years (full)

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
VII. HOUSEHOLD'S OWN PERCEPTION OF HOUSEHOLD FOOD SECURITY				
Perceived Adequacy of Access to Food	<ul style="list-style-type: none"> - Unable to feed children - The availability of milk - Reduction in livestock number and high market price 	<ul style="list-style-type: none"> - When there is not enough food to keep in the house - When the price of milk goes down relative to the grain 	<ul style="list-style-type: none"> - One HH is able to produce enough, if the rains are available - All other HHs are not self-sufficient and greatly depend on CARE food aid 	Do not have enough food because they do not have access to free food and do not have access to oxen
Constraints	<ul style="list-style-type: none"> - Drought and displacement - Crop loss in Highlands - Absence of farming 	Drought and conflict (displacement)	<ul style="list-style-type: none"> - Major drought - Lack of oxen, tools - Access to labor - Lack of health services - Access to fertilizer - Pests, especially monkeys, pest attack on the crops - Security problems 	Same as at left
Competition Between Food Needs and Other Livelihood Needs	Chat, health needs, cloth	Health care	To buy cloth and medicine, have to sacrifice food consumption	Same
Proposed Solutions	<ul style="list-style-type: none"> - Government should train people how to farm (4 HHs) - "Our solution is our death" 	Increase in food aid amount	More food aid, health services, irrigation, veterinary services, fertilizers	Food aid and oxen
VIII. PARTICIPATION IN FOOD AID PROGRAMS				
Participation in Food for Work Programs				
History of program participation (how they became involved, who in the family participates)				
Wage earnings (type of foods, if food is obtained locally or imported) and impact of earnings on livelihood				

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
Impact on family eating patterns (taste preferences types of food eaten, meal frequency, contribution of programs to total food consumption (dependency))				
Impact on Health and Nutritional Status				
Seasonality of Employment				
Types of projects & participants perception of impact (HH or community-based)				
Land-use changes resulting from F-I-W Program				
Availability of complementary resources (tools, supplies)				
Level of training				
Participation in Emergency Feeding Program				
Nature of Disaster or Chronic Food Security Problem (production failure, civil conflict, drought, etc)	Drought and tribal conflict	Same	Drought and war caused food insecurity	Same
History of Program Participation (how they became involved, who in the family participates)	Started 2 yrs ago Participants HHH heads and usually wives	Started 2 yrs ago HHH head	Most HHH are participating for the last 3 5 years	Do not participate because of registration problems and the other was dropped when her husband died

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
Impact on family eating patterns (taste preferences, types of food eaten, meal frequency, contribution of program to total food consumption (dependency))	- Some HH said it has little or no impact and in other HH it has an impact of 4-6 months food supply, but unfortunately large numbers of the population are not participating - Prefers sorghum but what choice does he have?	"No impact on taste and nutritional status but there is something to eat"	- They are very much dependent on emergency food aid for their survival It also prevents them from migrating permanently - People perceive that they are not getting enough	N/A
Impact on health & nutritional status	Has little impact on nutrition unless supplemented by market-purchased food	No impact on health	It is keeping them alive	N/A
Ration size & commodity mix (imported or local, adequacy, frequency of distribution)	Ration size is decreasing	They do not know ration size	They used to receive every month, but now once in 2-3 months	N/A
Timeliness & effectiveness of response (degree of asset depletion, perception of monitoring & participation)	- There are more needy people who are not on the list - Sometimes delivery can be late by one month	Delay in delivery cuts down the amount of milk consumption	- Some of the HH are not included in the list - Wait at Bedessa for 3-4 days for distribution	N/A
Involvement in complementary programs (FFW/ CFW, supplemental feeding, etc)	Willing to do FFW	-Willing to do FFW but do not know what to do - Time constraint to participation in other programmes	No complementary programs	N/A
Participants' perception of strengths & weaknesses of food aid programs	<u>Strengths</u> "We get food and it comes when we are in need " Emergency aid saved a lot of lives <u>Weaknesses</u> More people are in need of food than on the list, new list is not created Not enough food given Distribution is not according to the ration scale	<u>Strengths</u> They could support their displaced relatives <u>Weaknesses</u> Newcomers are not registered The amount and the frequency is not enough Male-headed HH get more food than female-headed	<u>Strengths</u> The people (especially the children) rely very much on the food <u>Weaknesses</u> The list does not include all the people Amount of food reduced Sometimes food distribution is late Distribution centre is too far	<u>Strengths</u> N/A <u>Weaknesses</u> Same as at left

Rapid Food Security Assessment Matrix	Kurfasawa		Galessa	
	♂	♀	♂	♀
Recommendations for improvement	<ul style="list-style-type: none"> - Make up new list and give more food - Introduce activities through FFW in relation to agriculture (tools for cultivation, ponds) - Training in cultivation 	<ul style="list-style-type: none"> - Same - Canvas to be distributed to reduce moisture loss 	<ul style="list-style-type: none"> - Increase in quantity & frequency of supply and more distribution close to the villages - Create new list for targeting purposes and update regularly - Consider FFW activities such as ponds, roads 	Same