THE IMPACT OF TITLE II FOOD AID ON FOOD SECURITY IN ETHIOPIA

Prepared for
United States Agency for International Development
Food and Humanitarian Affairs Office
USAID/Ethiopia

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Second Version: June 2002
Task Order No. AEP-I-807-00-00022-00
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<tr>
<th>ACRONYMS</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACSI</td>
<td>Amhara Credit and Savings Institution</td>
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<tr>
<td>ADCS</td>
<td>Adigrat Catholic Secretariat</td>
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<tr>
<td>ADLI</td>
<td>Agricultural Development Led Industrialization</td>
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<tr>
<td>ADP</td>
<td>Area Development Program (WVI)</td>
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<tr>
<td>AE</td>
<td>Adult Equivalent</td>
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<tr>
<td>ANRS</td>
<td>Amhara National Regional State</td>
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<tr>
<td>BESO II</td>
<td>Basic Education System Enhanced SO (USAID/E SO)</td>
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<tr>
<td>BHR</td>
<td>Bureau for Humanitarian Response (USAID)</td>
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<tr>
<td>CAHW</td>
<td>Community Animal Health Worker (SCF/US)</td>
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<tr>
<td>CBHC</td>
<td>Community-Based Health Care</td>
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<td>CDIE</td>
<td>Center for Development Information and Evaluation</td>
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<td>CFW</td>
<td>Cash for Work</td>
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<td>CIDA</td>
<td>Canadian International Development Agency</td>
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<td>CII/UFFW</td>
<td>Community Infrastructure Improvement/Urban Food-for-Work (CARE)</td>
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<tr>
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<td>Commodity Tracking System</td>
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<td>Catholic Relief Services</td>
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<td>Collaborative Research Support Project (USAID)</td>
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<td>CS</td>
<td>Cooperating Sponsor</td>
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<td>CSA</td>
<td>Central Statistical Authority (GOE)</td>
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<td>CSD</td>
<td>Child Survival and Disease (USAID fund)</td>
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<td>CSB</td>
<td>Corn Soya Blend</td>
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<td>DA</td>
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<td>DA</td>
<td>Development Agent (GOE)</td>
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<td>DAP</td>
<td>Development Assistance Program (USAID)</td>
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<td>DART</td>
<td>Disaster Assistance Response Team (USAID/OFDA)</td>
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<td>DPPB</td>
<td>Disaster Prevention and Preparedness Bureau (regional level)</td>
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<td>DPPC</td>
<td>Disaster Prevention and Preparedness Commission (central level)</td>
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<td>EBSN</td>
<td>Employment-Based Safety Net</td>
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<td>EC</td>
<td>European Commission</td>
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<td>ECHO</td>
<td>European Commission's Humanitarian Office</td>
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<td>EDRC</td>
<td>Emergency Disaster Relief Coordinator (USAID/OFDA)</td>
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<td>EFSRA</td>
<td>Ethiopian Food Security Reserve Administration</td>
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<td>EGS</td>
<td>Employment Generation Scheme</td>
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<td>EMC</td>
<td>Ethiopian Monetization Consortium</td>
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<td>EOC</td>
<td>Ethiopian Orthodox Church</td>
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<td>EMOP</td>
<td>Emergency Operation</td>
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<td>ENCU</td>
<td>Emergency Nutrition Coordination Unit</td>
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<td>EPI</td>
<td>Expanded Program of Immunizations</td>
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<td>ERA</td>
<td>Ethiopian Roads Authority</td>
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ERCS Ethiopian Red Cross Society
ESHE II Family Health Improved (USAID/Ethiopia Strategic Objective)
ETB Ethiopian Birr (unit of currency; 8.6 Birr = US$1.00)
EU European Union
FAC Food Aid Convention
FACS Food Assisted Child Survival
FANTA Food and Nutrition Technical Assistance (USAID Project)
FAO Food and Agricultural Organization (UN)
FATS Food Aid Transport System (WFP)
FD Free Distribution
FDRE Federal Democratic Republic of Ethiopia
FEWS Famine Early Warning System (USAID)
FEWSNET Famine Early Warning System Network (USAID)
FFP Food for Peace (USAID)
FFP/DP Food for Peace, Development Programs Division
FFP/ER Food for Peace, Emergency Relief Division
FFW Food for Work
FHA Food and Humanitarian Affairs Office (USAID/Ethiopia)
FHI Food for the Hungry International
FY Fiscal Year
GDP Gross Domestic Product
GHAI Greater Horn of Africa Initiative (USAID)
GIS Geographic Information System
GNP Gross National Product
GOE Government of Ethiopia
GRAD Garamuleta Rehabilitation and Development (CARE)
GTZ Gesellschaft fuer Technische Zusammenarbeit (German NGO)
HA Hectare
HCS Hararghe Catholic Secretariat
HIV/AIDS Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICRC International Committee of the Red Cross
IDP Internally Displaced Person
IFPRI International Food Policy Research Institute
IHA Integrated Holistic Approach
ILO International Labor Organization
INGO International Non-Governmental Organization
IPP Import Parity Price
IR Intermediate Result (USAID)
ISP Integrated Strategic Plan (USAID)
ITSH Internal Transport Storage and Handling
IUCN World Conservation Union
JEOP Joint Emergency Operation Plan
KA Kebele Association (same as Peasant Association)
KG Kilogram
KM Kilometer
KPC Knowledge, Practices and Coverage
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>LLPPA</td>
<td>Local Level Participatory Planning Approach</td>
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<td>LMA</td>
<td>Livestock Marketing Authority (Government of Ethiopia)</td>
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<td>LFSU</td>
<td>Local Food Security Unit (European Union)</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>MCH</td>
<td>Maternal and Child Health</td>
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<td>MED</td>
<td>Mitigating the Effects of Disaster (USAID/Ethiopia Strategic Objective)</td>
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<td>MEDAC</td>
<td>Ministry for Economic Development and Cooperation</td>
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<td>Monetization Management Unit</td>
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<td>MOA</td>
<td>Ministry of Agriculture</td>
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<td>MOC</td>
<td>Missionaries of Charity</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>MT</td>
<td>Metric Tons</td>
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<td>MTE</td>
<td>Mid-Term Evaluation</td>
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<td>MUAC</td>
<td>Mid Upper Arm Circumference</td>
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<td>MWL</td>
<td>Mean Weight for Length</td>
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<td>NACID</td>
<td>Nazareth Children’s Center</td>
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<td>NDPPF</td>
<td>National Disaster Prevention and Preparedness Fund</td>
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<td>NFSR</td>
<td>National Food Security Reserve</td>
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<td>NPDPPM</td>
<td>National Policy for Disaster Prevention, Preparedness and Management</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>NMSA</td>
<td>National Meteorological Services Agency</td>
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<td>NNFCFS</td>
<td>National Nonfood Contingency Stock</td>
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<td>NRM</td>
<td>Natural Resources Management</td>
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<td>NSP</td>
<td>Nutritional Surveillance Programme</td>
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<td>NTCC</td>
<td>National Transport Coordination Committee</td>
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<td>OCHA</td>
<td>Office for the Coordination of Humanitarian Affairs (UN)</td>
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<td>OFDA</td>
<td>Office of Foreign Disaster Assistance (USAID)</td>
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<td>ORDA</td>
<td>Organization for Rehabilitation and Development of Amhara</td>
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<td>PA</td>
<td>Peasant Association</td>
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<td>PCAE</td>
<td>Pastoralist Concern Association Ethiopia</td>
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<td>PD</td>
<td>Policy Determination</td>
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<td>PEM</td>
<td>Protein Energy Malnutrition</td>
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<td>PL</td>
<td>U.S. Public Law (as in PL 480)</td>
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<td>PRSP</td>
<td>Poverty Reduction Strategy Paper</td>
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<td>R2D</td>
<td>Relief-to-Development (USAID/Ethiopia)</td>
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<td>R4</td>
<td>Results Review Resource Requirements (USAID terminology)</td>
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<td>REST</td>
<td>Relief Society of Tigray</td>
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<tr>
<td>RHPP</td>
<td>Rural Household Production And Productivity (USAID/Ethiopia SO)</td>
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<td>RRC</td>
<td>Relief and Rehabilitation Commission (precursor to DPPC)</td>
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<td>SCF/UK</td>
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<td>SERA</td>
<td>Strengthening Emergency Response Ability (USAID/Ethiopia Project)</td>
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<td>SERP</td>
<td>Southeast Rangelands Project</td>
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<td>SFC</td>
<td>Supplementary Feeding Center</td>
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<td>SN</td>
<td>Safety Net</td>
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<td>SNNPR</td>
<td>Southern Nations Nationalities and Peoples Region</td>
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</table>
SO     Strategic Objective (USAID)
SORDU  Southern Rangelands Development Unit
SpO    Special Objective (USAID/Ethiopia)
STI    Southern Tier Initiative (USAID/Ethiopia)
TBA    Traditional Birth Attendant
TFC    Therapeutic Feeding Center
TFR    Total Fertility Rate
UNAIDS Joint United Nations Program on HIV/AIDS
UNEP   United Nations Environmental Program
UN-EUE United Nations Emergencies Unit for Ethiopia
UNHCR  United Nations High Commissioner for Refugees
UNICEF United Nations Children’s Fund
USAID  United States Agency for International Development
USAID/E USAID/Ethiopia
USDA   United States Department of Agriculture
USG    United States Government
USLE   Universal Soil Loss Equation
VAM    Vulnerability Assessment Mapping Unit (WFP)
VEWS   Vulnerability Early Warning System (CRS)
WFL    Weight for Length
WFP    World Food Programme (UN)
WHDP   West Hararghe Development Project (CARE)
WHO    World Health Organization (UN)
WMS    Welfare Monitoring Survey
WSC    Women’s Savings and Credit
WVE    World Vision Ethiopia
WVI    World Vision, Incorporated
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Introduction

The purpose of this evaluation is to assess the impact of Title II food aid on reducing food insecurity in Ethiopia during the period 1993-2001 and to make recommendations – and propose a “roadmap” – for integrating Title II resources into the overall USAID development strategy for Ethiopia in the period after 2002.

During the 1993-2001 period, USAID has carried out Title II food assistance programs through eight national and international non-governmental organizations (NGOs) or, using USAID’s terminology, ‘Cooperating Sponsors.’ Since 1993 these Cooperating Sponsors (which initiated their programs at different times during the period) have implemented Title II activities to a significant degree as “monetized” development assistance interventions (where Title II food is sold in Ethiopia or other countries for cash resources that in turn are used to finance food security-related development projects), in the form of food-for-work activities (where the food is provided directly to food insecure participants in exchange for labor in creating physical assets intended to improve food security status), as direct feeding in the context of food-assisted child survival, or in the form of “safety nets” to selected categories of incapacitated beneficiaries through indigenous NGOs or community-based organizations.

The evaluation has drawn on empirical evidence provided by the Cooperating Sponsors (CSs) as well as from a series of field visits to their project sites. The evaluation team also had access to an extensive collection of program planning, monitoring, and evaluation reports prepared by cooperating sponsors, USAID and outside consultants. Earlier Title II program evaluations conducted in Ethiopia have been particularly helpful in framing the analysis conducted here and in identifying issues addressed here (USAID/CDIE, 1998; DSA, 2001). Of further significance to this evaluation has been the political and economic debate currently surrounding the Ethiopian Government’s Poverty Reduction Strategy Paper (PRSP). At the time of the evaluation, review of the PRSP at the local (woreda) level was being undertaken and a final draft was nearing completion for an April 2002 submission to the World Bank and IMF. Awareness of and participation in the PRSP appears to be widespread among the private sector, NGOs and government organizations.

Although there have for many years been voices of criticism regarding the utility of Title II food aid, 1 others have argued that it can help significantly in efforts to lift populations out of poverty. A recent USAID multi-country impact evaluation of food aid supports

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1 Among the more recent is Ed Clay’s briefing paper for the Overseas Development Institute entitled “Reforming food aid: time to grasp the nettle” (Clay, 2000). The most cogent summary of the pros and cons of food aid can be found in Roger C. Riddell, Foreign Aid Reconsidered (1987). Arguments in defense of food aid as a valid development instrument can be found in T.N. Srinivasan, “Food aid: a cause of development failure or an instrument for success? (1989) and in P.J. Dearden and P.J. Ackroyd “Reassessing the role of food aid” (1988). The specific issue of whether or not food aid causes disincentives for agricultural production is well-presented in Jim Fitzpatrick and Andy Storey “Food aid and agricultural disincentives” (1989).
the case that US Government food aid has reduced hunger and malnutrition, improved food security, and launched countries on the path to sustainable economic development (USAID, 1998). The development contributions of food assistance are not automatic, however. The evaluation report concludes that a supportive political and economic environment, systematic program planning, and agile implementation are required to assure cost-effective use and sustainable impact of Title II resources in providing relief from hunger and in fostering lasting food security.

Ethiopia – one of the countries included in USAID’s 1998 Title II impact evaluation – presents a set of unique challenges for implementing Title II and development assistance. In Ethiopia, decades of human and natural resources used wrongly have left a least half of all rural households in the country incapable of producing enough for their own consumption and for sale to meet basic food, nutrition, health, and livelihood requirements. Under the best of growing conditions using available cultivation practices, available land, and available water, these rural households are unlikely to achieve sustainable food security or overcome pervasive malnutrition. During adverse weather and market conditions, many still face starvation. According to data compiled for the PRSP, poverty has become a way of life for half the rural population and a third of the urban population in Ethiopia (GOE, November 2000).

In a good crop year, Ethiopia is capable of producing enough food to meet its food needs at acceptable nutritional levels (GOE, November 2000). Potential for yield increases and crop diversification (particularly through realization of untapped irrigation potential) offers scope for long-term national food self-sufficiency and for substantial gains in agriculture exports to help fuel the country’s agriculture-led, industrial development strategy. The failure in past decades to have realized this potential for lifting people out of poverty has deep roots – both structural and policy-based. The causes of chronic food insecurity in rural households and communities are, in the main, still under-addressed and, as such, threaten to undermine achievement of poverty reduction goals.

This is the second draft of this evaluation report. It is intended to be responsive to the concerns raised by USAID/Ethiopia staff in their review of the initial draft. It responds specifically to the issues and guidance contained in the Barberi-McPhelim letter dated May 8, 2002 (see Annex 7). The evaluation report is divided into three sections. Section One discusses the genesis of the concept “food security” and its present status, generally, as an objective of policy and strategy vis-à-vis “nutrition security”, “livelihood security” and “poverty alleviation.” The section describes the food security situation in Ethiopia, its principal causality and trends. Section Two discusses the Title II program as it has been implemented in Ethiopia during the 1993-2001 period, focused on the USAID Special Objective of reducing food insecurity in Ethiopia. It fashions conclusions regarding effectiveness, impact, sustainability and further utility of the many approaches employed by the Cooperating Sponsors in pursuit of reduced food insecurity among their various target populations. Section Three offers a “road map” guiding the use of Title II resources in an expanded 2001-2006 USAID effort using all resources – not just food aid – to substantially reduce food insecurity in Ethiopia.
Section 1: Food Security

As an objective of policy, planning, and programming, the term “food security” must be quite clearly defined in order to focus the strategy for achieving it. From the mid-1970s to the early 2000s the term has been defined and used in many different ways: as a conceptual framework (Maxwell and Smith, 1992), an organizing premise for defining and enacting policy (Riley, 1989), as a goal of development programming (EU/ADE 1995; USAID/Ethiopia, 2000), and as a justification for launching many program proposals having dubious connections to the core concept. It has been used as a proxy for poverty (Hindle, 1990), as a “counterweight” to the “structural adjustment” agenda of the 1990s, as a tool for finding and filling gaps in integrated approaches to rural development focused on the poorest, and as a linking mechanism between concern for the poor, malnourished individual and the need to fix non-working economic “systems”. As Simon Maxwell noted several years ago:

“‘Food security’ is one of those terms – ‘rural development’ – (Chambers, 1983: 146) and ‘farming systems research’ (Merill Sands, 1986) are others – which authors feel obligated to define or redefine at frequent intervals. In the case of ‘food security’, the different definitions on offer partly reflect no more than a desire for product differentiation in a crowded market. In other respects however, they do offer genuine differences of emphasis: on the importance of subjective assessments of food insecurity; on the relationship between malnutrition, access to food, and livelihood security; and on the need for an efficient national food system.” (Maxwell, 1991)

The most commonly used definition has been that developed by the World Bank:

“access by all people at all times to enough food for an active, healthy life. The essential elements are the availability of food and the ability to acquire it. Food insecurity, in turn, is the lack of access to enough food. There are two kinds of food insecurity: chronic and transitory. Chronic food insecurity is a continuously inadequate diet caused by the inability to acquire food…Transitory food insecurity is a temporary decline in a household’s access to enough food” (World Bank 1986:1)

The definition developed by FAO is quite similar:

“…to ensure that all people at all times have both physical and economic access to the basic food they need…Food security has three specific aims: ensuring production of adequate food supplies, maximizing stability in the flow of supplies and securing access to available supplies on the part of those who need them.” (Huddleston, 1990.)

The EC’s definition:

“Food security can most simply be defined as the absence of hunger and malnutrition. For this to be possible, households, villages, or countries must have enough resources to produce or otherwise obtain food. This condition is necessary, but not sufficient because the resources must also be used well.” (Kennes, 1990).

USAID’s definition as contained in Policy Determination 19:
“When all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life.” (USAID, 1992:2)

It should be noted that the text of PD-19 emphasizes that the definition requires focus on availability, access and “utilization.” The latter incorporates “…proper food processing and storage techniques…; adequate knowledge [and application] of nutrition and child care techniques…; and [the existence of] adequate health and sanitation services …” This is important. It takes the USAID definition of food security beyond concerns with food production, markets, and increasing household income into the realm of health and nutrition. USAID’s definition encompasses food and nutrition security – as measured at the level of the individual. In the USAID definition availability and access are essential but not fully adequate to achieve the food security goal defined by PD-19.

Maxwell (1988, et seq.) added emphasis on the need for sustainability by focusing as well on the food “system” and the sense of “security” that must be established in the minds of a population and the relationship between food security and livelihood security:

“A country and people are food secure when their food system operates efficiently in such a way as to remove the fear that there will not be enough to eat. In particular, food security will be achieved when the poor and vulnerable, particularly women, children and those living in marginal areas, have secure access to the food they want. Food security will be achieved when equitable growth ensures that these groups have sustainable livelihoods; in the meantime and in addition, however, food security requires the efficient and equitable operation of the food system.”

Beginning with the 1990 World Development Report (WDR) on “Poverty”, and culminating a decade later with the publication of the 2000/1 WDR “Attacking Poverty” report, the World Bank and most of the major donor entities have shifted the primary focus of programmatic interventions in poor countries to efforts reducing both income and non-income poverty. With the apparent exception of those engaged in provision of food aid, and donor programs in a few of the most food insecure countries (almost entirely in Africa), the goal of reducing food insecurity is now normally viewed as one of several positive outcomes of poverty reduction programs. At the core of poverty-focused planning the concept of “livelihood security” is now widely used in lieu of “food security.” It is now generally accepted among development thinkers that to reduce household poverty, or increase livelihood security in sustainable ways, is to concurrently reduce chronic food insecurity.  

The concept of “food security” has, thus, evolved considerably. It started in the 1970s with the notion of the need for poor countries to attain national food self-sufficiency. Concerns for adequacy of access, even where national food availability was sufficient, were added in the 1980s. By the early 1990s, many had come to believe that not even adequate access was sufficient for achieving a food security goal. Many households with apparently adequate food entitlements were still evincing malnutrition resulting from

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2 While the World Bank’s Food Security Unit argued for several years (1988 to 1993) that a poverty focus would by-pass those who were food insecure but not otherwise poor, the winning argument within the Bank was not to try to undertake separate food security projects, but rather to insure that poverty strategies in food insecure countries were focused on interventions that reduced the causes of that food insecurity.
inadequate health, sanitation, and knowledge about appropriate nutrition. But, even a food and nutrition security definition was found by many to be missing key elements: i) the need to reduce long term and episodic vulnerability through a broadened focus on achieving “livelihood security,” and ii) the need to improve the economic efficiency and social equity elements of “food systems” – local, national, even international systems. Finally, the specific focus on “food security” as a conceptual model for guiding policy and programming has been replaced by poverty reduction models in which food insecurity is to be reduced by broad programs attacking the causality of poverty. Ethiopia is one of only a relative handful of developing countries where food security itself remains a major focus of policy for donors such as the EU, the World Bank, and USAID, as well as for the federal and regional government agencies in Ethiopia. (Manyazewal, 2000)

Just as there have been, over the years, many views regarding what the concept “food security” is supposed to encompass, and what indicators should be used to measure it, there have been numerous strategic approaches to planning and implementing projects promoting “food security” as a goal.

Maxwell and Smith (1992) suggest that there are four core concepts implicit in the strategy of securing access to enough food at all times: i) sufficiency of food; ii) access to food defined as entitlement to produce, purchase or exchange food or receive it as a gift, iii) security, determined by the balance among vulnerability, risk, and insurance, and iv) the time element, where food insecurity can be chronic, transitory or cyclical. This four-aspect approach can be a useful analytical starting point in helping clarify the aspects of food security being evaluated. The programmatic elements of a food security-focused strategy must relate in some way to each of these aspects. The strategy must be clear regarding which of these concepts is being addressed by the program effectuating the strategy and which are not, and why.

“Sufficiency of food” or “availability” is the element of the food security paradigm focused on ensuring that there is enough food available through self-production, carry-over stocks, other entitlements, and the marketplace so that all are able to secure enough food nearly all of the time. If there is inadequate food available, projects designed to increase yields, off-take, production, and productivity are warranted as are projects aimed at removing impediments to efficient marketing of food, adequate transport and storage, reducing operating losses, etc. Availability is adversely affected by drought, floods, insect infestations, plant and animal diseases and the like. Availability can also be adversely affected by physical security problems – e.g., protracted conflicts, banditry, and theft.

Adequacy of continuing “access” is regarded by virtually all food security analysts as the key element in most locations where food insecurity is pervasive. (Sen, 1981; Reutlinger, et al. 1986; Diskin 1995; Maxwell 1992; von Braun, et al. 1991) More often than lack of

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3 Such as draw downs on community stores, traditional sharing practices, transfers from extended families and the sustained availability of safety nets (e.g., from a local church, community-based organization or NGO). Intra-household distribution can also be included as an entitlement issue.
food, lack of access to food is the heart of the food insecurity problem in most developing countries. Championed by the early work of Amartya Sen (Sen 1981; Drèze and Sen 1989) and Reutlinger (Reutlinger and van Holst Pellakaan 1986) the notion that a population could be food insecure even when the nation’s total food supply is adequate marked the beginning of interest in food security as an objective of development strategy separable from ensuring that sufficient food was available. The common thread among the four definitions of food security discussed in USAID’s PD19 is the emphasis on “access” as the principal element of concern. Access to what? Generally, the answer has been: access to adequate “calories” – with lesser consideration given to protein and micronutrients. With average adult equivalent per capita daily caloric consumption in Ethiopia estimated by FAO to be approximately 1810 kcal – i.e., among the lowest in the world,\(^4\) – large numbers of Ethiopians are clearly not consuming sufficient food to be able to lead productive healthy lives. The estimates range between a third and half of the total population in this category.

“Food” is the first half of the term “food security;” “security” is the second half. Maxwell and Smith use the concept of “security” to focus on the reality of risk and the need for risk avoidance at the household level. Security is enhanced to the extent that risks are reduced, or risk avoidance is strengthened. The risks are those of acute food shortages caused by natural or human-caused disasters, large-scale fluctuations of food prices, high variability in entitlements, and declines in the ability of the household to resist crises lowering achieved food consumption (Oshaug 1985), or the risk of “…an ongoing lack of access by people to the food they need.” (von Braun 1991). Maxwell and Smith developed a “risk profile” matrix to relate natural, state, market, community, and “other” sources of risk against a rank of entitlement sources as a method of linking various categories of risk (e.g., asset confiscation, falling real wages, breakdown in social sharing mechanisms) to categories of entitlement (e.g., right to own assets, use of traction animals, good health, productive capital). This underlines the distinction between the risk of entitlement failure and the costs borne in the event of failure. (Maxwell and Smith 1992:12.) This suggests the conceptual separation of risks and outcomes to help clarify the relationship between food security and nutrition:

“A food secure environment is clearly an important determinant of adequate dietary intake. Whether this translates into good nutritional status, however, will depend on a range of other issues, such as health and sanitary factors, methods of food preparation and the adequacy of general child care. Secure access to enough food to meet household food needs is a necessary but not sufficient condition for good nutritional status.” (Maxwell and Smith 1992:13.)

**Chart 1: Chronic food insecurity at the intersection**

The above chart (derived from Maxwell and Frankenberger, 1992) shows notionally how chronic food insecurity is normally found in the intersection of poverty, vulnerability and malnourishment. It is possible to be undernourished without being food insecure, due to health or sanitation shortcomings. It is difficult\(^5\) to conceive of being food insecure without being poor, chronically malnourished, and vulnerable.

The fourth element in the Maxwell and Smith concept is that of “time” in the sense of “secure access to enough food at all times.” They note that, following Reutlinger and Van Holst Pellekaan (1986), it had become standard practice to draw a distinction between chronic and transitory food insecurity. Often development projects are focused on the former and emergency response on the latter. Maxwell and Smith point out that the two are often closely linked in practice. “Successive exposure to temporary, but often severe stress may increase the vulnerability of the household to chronic food insecurity, by causing households to liquidate assets in efforts to stabilize consumption.” (p.13) The relationship between chronic food insecurity and transitory food insecurity is no trivial matter, in practice. The use of large amounts of temporary emergency food aid to deal with chronic causes of widespread food deprivation has been a major area of concern for the major food aid donors and the Ethiopian Government in recent years. As Deryke Belshaw has noted with specific regard to Ethiopia, when food security fails, famine relief is a severe drain on resources that would otherwise be available for broader economic development and macro-economic growth. (Belshaw, 1990)

Frankenberger (1993:2) looks at food security from a nutrition perspective as an underlying cause of malnutrition. He notes that hunger and malnutrition are the result of adverse conditions resulting from immediate, underlying, and basic causes. In this construction, food insecurity, together with “inadequate care” and “inadequate prevention and control of diseases”, are seen as underlying causes. He utilizes the well-known UNICEF model of causality of malnutrition, depicted in Figure 1 on the following page. Here, food security is seen as one of three sets of factors resulting in malnutrition. The reduction of malnutrition requires actions focused on each of these three “underlying causes” and more fundamental improvements on the basic contributing causes. This useful framework helps to clarify the relationship between the domain of program interventions aimed at improving food security outcomes and the domain of program interventions aimed at a nutrition improvement outcome. Enhancing food security is almost always necessary but not often sufficient to reduce the condition of chronic malnutrition. “Care” at the household level refers primarily to the knowledge of, and application of that knowledge by, caregivers improving both the health and sanitation and the provision of nutritionally adequate food to all members of the household. Knowing the importance of increasing the caloric density of weaning foods (by, say, adding, mashed pulses to maize or sorghum porridge) is one example.

\(^5\) But, admittedly, not impossible – at least in the short-term.
Figure 1: The Causes of Malnutrition

- **Symptoms and signs**
  - Immediate causes
    - Inadequate Dietary Intake
    - Inadequate 'Care'
    - Inadequate prevention and control of diseases
  - Underlying causes
    - Food insecurity
  - Basic causes
    - Control and Management of Resources
      - Human, economic and organizational
    - Political and Ideological Superstructure
    - Economic Structure
    - Potential Resources

The above graphic also illustrates an essential element in the design, implementation and evaluation of food security-focused strategies. Like the nutrition causality discussed by Frankenberger in his 1993 Zimbabwe study, the causality of food insecurity in Ethiopia (and elsewhere) is multi-layered. While the immediate cause of inadequate food intake may be inadequate availability in the marketplace, or inadequate exchangeable assets in the household, the underlying causes of what Sen would call “entitlement failure” may be high and variable prices in local markets, or a family size grown too large to be supported from the agricultural-based productive enterprise of the household’s breadwinners. Deeper “basic” causes might be underlying soil infertility in the region, a lack of knowledge about child spacing techniques, or a government policy framework inimical to the interests of basic food producers or rural consumers.

Working from the following definition of food security:

“Food security is defined as the ability of all people to have reliable access at all times to enough food to meet their basic dietary needs”

Patrick Diskin (1995) has fashioned a conceptual framework to help clarify the linkages leading from food availability to nutritional analysis (see following page). This construction will be used later in this report as a means of determining where in the continuum from food production to adequate nutrition the Cooperating Sponsors’ activities fit, in terms of the types of outputs sought and measured and in terms of where among the spectrum of causes of food insecurity progress is intended.

Diskin focuses on clarifying linking hypotheses (often implicit) which are of the type: “if we undertake “x”, “y” will result. He writes:

“The conventional wisdom among many policymakers concerned with food security has been that high degrees of correlation exist between food availability and access, between food access and consumption, and between food consumption and nutritional status. In other words, increased food availability leads to increased access, leads to increased nutritional well-being…However, much evidence in the literature suggests that, in many cases, and for many reasons, assumptions of strong and straightforward linkages along the pathway from food production to nutritional outcomes are not well founded. Many factors, other than household food production and income, for instance, may affect rural food consumption (e.g., intra-household resource allocation resource patterns). Also, many factors other than food consumption may affect nutritional status (e.g., infectious diseases)…While there is no question that adequate food availability, access, and consumption are necessary conditions for attaining adequate food access, consumption and nutritional well-being respectively, there is also little doubt that the former conditions are not sufficient for achieving the latter. In particular, a number of cases suggest that how gains in availability, access and consumption are achieved may matter more than whether they are achieved.” (Diskin, 1995:2)
Figure 2: Linkages from Food Availability to Nutritional Status
(Diskin, 1995:7)

A
Domestic Production
Imports/Stocks
Distribution

AA
FOOD AVAILABILITY
AND PRICES
(National/Local)

B
NEAR TERM:
Incomes/Transfers
Home Production
LONG TERM:
Human Capital
Physical Assets

BB
ACCESS TO
FOOD
(household)

C
Income elasticity of
Nutrient Demand
Intra-household
Resource Allocation

CC
FOOD
CONSUMPTION
(household/individual)

D
Health Care
Water/Sanitation
Child Care

DD
NUTRITIONAL
STATUS
(Individual)
Figure 2 above is helpful in clarifying the relationships and the sequencing among the elements of the Cooperating Sponsor Title II programs considered in Section 2 below, and will help determine where there might be holes or gaps in the totality of individual CS programs if improved individual nutritional status resulting from sustained food security is the ultimate objective. It will also provide the agenda for discussion of whether any one of the boxes in the right-hand column might not be quite an adequate and appropriate objective for a Cooperating Sponsor’s program in a particular geographic region. In other words, might it sometimes be appropriate for a Cooperating Sponsor to focus largely or entirely on achieving results at level “AA” by operating solely in Box “A” programs? Partner NGOs and/or government and/or donor organizations could focus on “B”, “C” or “D” activities in a shared development program intended to improve the box “DD” bottom line (which can be defined as a food and nutrition security goal.) This line of logic is taken up in Section 3 in the discussion of how Title II DAP activities might best be combined with DA-financed activities in USAID’s Ethiopia program.

Before turning to the review of the actual programs, additional commentary on the scope of a food security-focused investigation is required, particularly as it pertains specifically to food insecurity in Ethiopia and its causality.

When improved food security of a target population is the objective of policy, the overall strategy guiding planning and implementation of food security programs must be built on an understanding of the major chains of causality leading specifically to the symptoms of food insecurity evident in the targeted population. While the specific intervention may, for whatever good strategic reasons, deal only with some, but not all, of the causes, or with one or more of all of the levels of causality, the design of the activities constituting programs within the strategy must be informed regarding who, how, and over what timeframe other interventions are dealing with the remaining causative factors. Not to do so is akin to claiming that one has contributed to the building of a house by having poured the foundation or undertaken the plumbing. Yes, a foundation and plumbing contribute to building a house. But if the framers, electricians, and roofers do not show up, no house is built. Care must be exercised to avoid claiming to have made progress toward improved food security when major causative factors are unaddressed.

The following excerpt from an April 2002 presentation by Per Pinstrup-Anderson, Director-General of the International Food Policy Research Institute, helps put the continuing gravity of the Ethiopian food insecurity situation into a global food security perspective:

“The food supply picture varies regionally. South Asia and Sub-Saharan Africa are of special concern. The gap between production and market demand for cereals is forecast to widen from 1 million tons in 1990 to 24 million tons in 2020 in South Asia, and to triple to 27 million tons in 2020 in Sub-Saharan Africa. Unless poverty is significantly reduced, the gap between food production and need will be much larger. Sub-Saharan Africa in particular is unlikely to have the capacity to commercially import the difference between their food needs and production. The central challenges in the next twenty years are to develop the global capacity to produce adequate food in an environmentally sustainable manner, and to increase the capacity of poorer countries to produce food, not only to increase their food supply, but to generate personal income and employment through agricultural growth.” (Pinstrup-Anderson, 2002)
The food security challenge for Ethiopia is virtually identical to Pinstrup-Anderson’s global challenge – i.e., the need to increase per capita agricultural (particularly food) production while at the same time generating widespread increases in incomes and employment which must necessarily be based on accelerated growth in agriculture.

**Food security in Ethiopia**

Looking specifically at the state of food security in Ethiopia, a committee of the senior-most Ethiopian Government officials concerned with poverty and food insecurity noted:

> “Population growth coupled with civil war which ended in 1991, drought, environmental degradation, a largely stagnant agricultural technology, poor institutional arrangements, inefficient output and input markets, inadequate infrastructure and external factors have all contributed to food insecurity in the country.” (Neway, et al., 2000)

Stephen Devereux, in a paper prepared for the British Government’s Department for International Development (2000), echoed much of the same sentiment, suggesting that:

> “Food insecurity incorporates a low food intake, variable access to food, and vulnerability – a livelihood strategy that generates adequate food in good times but is not resilient against shocks. These outcomes correspond broadly to chronic, cyclical, and transitory food insecurity, and all are endemic to Ethiopia. The main triggers of transitory food insecurity in Ethiopia are drought and war. Seasonality is a major cause of cyclical food insecurity. Structural factors contributing to chronic food insecurity include poverty (as both cause and consequence), the fragile natural resource base, weak institutions (notable markets and land tenure) and unhelpful or inconsistent government policies.”

The achievement of improved food security in Ethiopia requires that adequate food is available at a price households can afford. It requires that in locations where a majority of a population is engaged in food and/or livestock production – as in Ethiopia – they are able to produce enough to feed the members of their household from self-production throughout the year or are able to sell enough of their agricultural production, or engage in other remunerative activities, sufficient to provide adequate income to purchase added food needed to cover the household’s caloric requirements. It requires that the “system” operate in way where individuals can feel a sense of assurance they will be able to satisfy their food requirements most of the time through self production, interactions in the marketplace or through other assured entitlements. The USAID definition of food security adds the requirement that the ingestion of food by household members provides satisfactory nutritional status (i.e., sufficient to cover basal metabolism, required physical activity and appropriate growth in physical and cognitive abilities in children). Where poor sanitary practices, opportunistic disease or infection, or lack of knowledge about nutrition prevents adequate absorption of ingested nutrients, this too must be dealt with as part of a USAID food security strategy.

A food security strategy in Ethiopia must be based on an understanding of all that is required to do all of the above. There must be: i) a determination as to the extent to which a target group is (or must be) identified (e.g., an identified community of households, the
people in a targeted geographic area, a pilot group of individuals, a region, a country); ii) definition of the sequence of interventions required to achieve that goal, iii) measuring of effectiveness of the resources applied in the quest of that goal; iv) measuring of the actual outputs achieved; v) a means of determining the relative impacts of endogenous (project) resources and exogenous factors affecting level of outputs in fostering or impeding progress; vi) ways of testing stated or implied hypotheses regarding the relationship between the achievement of those outputs and either short- or long-term progress toward the goal; vii) measures of organizational changes (e.g., farmers’ associations, women’s organizations, water management committees, community development associations, for-profit producers’ cooperatives, community-based assistance organizations) and institutional changes (e.g., changes in traditions, local policies, regional and national policies, laws) necessary to perpetuate the desired changes and create the conditions for sustained, replicated, and expanded success in achieving food security.

Finally, there must be an honest, realistic, balanced, and carefully nuanced assessment of the actual contribution of an activity, project, or total program to the overall goal of sustained food security. This requires several levels of assessment. First, how is progress to be measured (in USAID’s case: what are the indicators)? Second, how is the contribution of the financed resource to be weighed against other factors fostering or inhibiting progress (in USAID’s case how much of the improvement in, say, year-on-year food production is attributable to the project’s inputs and how much to good rain)? Third, how is the subset of outputs, or progress in some of the factors needed to create food security, to be evaluated when they engender necessary, but not sufficient, conditions for the achievement of household or individual food security (in USAID’s case, can one argue progress toward food security because of progress in the production/availability component when there is no advance in household income or in entitlements, or where there are inadequate institutional or organizational changes which are also necessary to the target group to achieve food security)?

This latter issue is akin to assessing the contribution of that plumber to the construction of a house. S/he can say “I helped build that house.” But this is true only if a house is built. If the walls were never put up, or the roof is not completed, there is no house. The plumber may have done good work. The pipes are perfectly installed, the monitoring precise, the expenditures well under budget. But without the inputs of the other skills and materials necessary to produce a completed house, the plumber cannot say “I helped build a house.” S/he built a system of pipes to carry water; only that.

In the food security realm, is it enough to have helped poor farmers to increase their yields and improve their understanding of child nutrition and increased water availability when their lands remain low-yielding because of infertile soils, the prospects for income creating remain minimal, and food prices in local markets remain highly variable? These and related issues of indicator selection, targeting, sustainability, and impact on food security are taken up in the following sections of this evaluation report.
Indicators of food security status

In Ethiopia, where both chronic and acute food insecurity are pervasive and mutually reinforcing, the use of the concept of food security as a goal of policy distinct from poverty reduction or livelihood security goals is employed to help ensure a sharper focus on changes in the indicators used as proxies for determining food security status. Positive changes are taken as signs of progress, and possibly program effectiveness, in attenuating the causes of food insecurity. Since changes in most indicators are also affected by outside factors – notably rainfall, agricultural input and commodity output prices, civil unrest, the macroeconomic environment – great care must be taken not to attribute to project inputs changes that result from these exogenous factors. Indicators used normally include those charting changes in food consumption at the individual and household levels, changes and variability in local consumer food prices, changes in the use of technologies spurring productivity, changes in marketing of household production – crops, livestock and other rural activities. (Wood, firewood, charcoal, honey are among the more common in food insecure areas of Ethiopia.) Others include changes in measures of household expenditures for food as a percentage of the household’s total expenditures, changes in labor availability and labor productivity, changes in nutrition status, changes in production, productivity and income, and changes in the policy and institutional frameworks.

When food security is defined more broadly to encompass nutritional status, additional indicators are added as proxies for food security status. Anthropometric indicators are commonly used. These include height for age (stunting), weight for height (wasting), weight for age (underweight), arm circumference, head circumference, and skin-fold thickness (Galloway, 1991). Measures of micronutrient deficiencies require collection of additional data, often of a clinical nature (e.g., blood samples). Stunting in under-five children is an indicator of chronic under-nutrition caused by some combination of inadequate food intake and physiological inability to convert nutrient intake into growth, usually the result of parasite infestation, infections, other episodic gastro-intestinal ailments, or chronic illnesses.

Several cautions are in order when using any of these data to demonstrate the magnitude and severity of, or changes in, food insecurity. First, there is no “golden standard” indicator of food security or food insecurity. Nothing measures it directly. All indicators are indirect measures of the actual status of food insecurity or of the identification of who are the food insecure and are therefore imperfect. (D. Maxwell, et al., 1998; Frankenberger, 1992; Habicht, et al., 1982; Haddad, et al., 1994). Several such indirect indicators are better than a few, however; a few are better than one.

Second, many of these indicators measure changes that are short-term and may have little lasting effect. An example is measuring yield increases from the application of chemical fertilizers in situations where the availability of fertilizer at affordable prices is itself not assured. Another example is measuring of weight for height in children. “Wasting” or low weight for height is a measure of short-term weight changes caused by transitory food shortages, not chronic food insecurity. Even when measuring physical assets
created, one must be careful when attempting to validate the utility for long term food security of assets which are not well constructed or for which there is no organizational structure to assure their maintenance over time.

Third, there is still need to investigate the related dimensions of “risk” and “vulnerability”. The indicators one might employ in investigating these include surveys of household coping and adapting strategies used to reduce the likelihood of the occurrence of a food security-threatening event or process (e.g., water storage in a semi-arid area, constructing physical assets to reduce soil erosion), or the magnitude of the adverse impact itself (consumption smoothing, social insurance, investing in maternal child-care education).

Fourth, most of these indicators can do no more than point to one or more “suspects” in determining causality of food insecurity or the relative magnitude of the contribution to food insecurity by any individual causative factor. Training programs for extension agents, the provision of improved seed, or the establishing of a micro-credit scheme could, theoretically, appear to be associated with a substantial decline in yields that occurred, in fact, because of poor rainfall. Likewise, doing everything badly could be associated with a record harvest that was really the result of perfect moisture availability. While there are tools of statistics and econometrics to attempt to clarify relations in an untidy real world, they must be used and reviewed with considerable care when the data upon which they are based is often quite imprecise and not carefully collected.

Given these difficulties, it should be abundantly clear that one must be particularly cautious is hypothesizing, and attempting to demonstrate, the relationship between one or more programmatic interventions and food security-related outcomes. As will be seen in Sections 2 and 3 below, this an extremely difficult task. Attempts to do so can often lead to quite flawed conclusions that, in turn, can find their way into the general literature as if they were both valid and validated.

The principal determinants of chronic food insecurity in Ethiopia

Factors affecting availability of food

Chronic food insecurity is the result of a number of long-term contributory factors. While its extent, severity, and rate of change vary quite considerably from one region of Ethiopia to another, and while the particular sequence or array of causes may differ, several factors are characteristic of most of the more food insecure woredas of the country. These factors are almost inevitably long-term. They continue to adversely impact food security status more or less continuously over long periods of time. The distinction is made here between the longer term trends of a demographic, ecological or social/cultural nature which have operated in Ethiopia for decades or millennia to create underlying conditions contributing to inadequate food availability or access, and the factors contributing primarily to increases in acute food insecurity, i.e., repeated rapid-onset events or shocks precipitating famine. Pervasive chronic food insecurity increases vulnerability to experiencing famine when droughts or other rapid-onset shocks occur.
and repeated shocks – by depleting household assets and hampering traditional coping strategies - adversely affect chronic food insecurity.

Demographics

The population situation in Ethiopia as of 2002 is one characterized by rapid past growth slowing over the past decade to approximately 2.8 percent net growth per year (in 2000) and projected to slow further to 2.1 percent by 2025.\(^6\) The impact of the HIV/AIDS pandemic on future population growth is yet to be determined. Chart 1 below depicts this growth.

![Chart 1: Ethiopia: Actual and Projected Population by year, 1950-2050](chart1.png)

Source: U.S. Bureau of the Census data and projections from the International Database (IDB) as of May 2000.

Not only has Ethiopia’s population growth led to increasing numbers existing in persistent poverty, but the very broad-based age-group population pyramid that underlies overall growth means that more than half of the country’s population has not yet advanced into the child-bearing years. UNAIDS/WHO estimate that in 2000 more than 55 percent of Ethiopians were 14 years old or younger.\(^7\) Even with the HIV/AIDS pandemic, Ethiopia’s population will continue to grow as depicted in the above chart.

Bloom and Sachs (1998), writing about Africa generally (but with particular relevance to Ethiopia) state:

“High youth dependency ratios impose a substantial drag on African economies by reducing their productive capacity per capita. Low life expectancies and extremely youth-heavy age distributions also tend to be associated with lower rates of savings and investment (as conventionally measured), and therefore slower economic growth. The youthful structure of Africa’s population pyramid and the sluggishness of its demographic transition to lower rates of

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\(^6\) [http://www.census.gov/cgi-bin/ipc/idbsum?cty=ET](http://www.census.gov/cgi-bin/ipc/idbsum?cty=ET)

fertility indicate that African economies will labor under the burden of rapid population growth for decades to come.”

Sachs, in discussing the demographic and economics consequences to countries in the tropics such as Ethiopia (Sachs, 2000), later concludes that:

“Relatively poor food productivity and poor public health has probably slowed the demographic transition in the tropical countries, which in turn has amplified the difference in per capita income across the ecological divide. The demographic transition, remember, is the transition from a high-fertility, high-mortality society, to a low-fertility, low-mortality society. From the point of view of long-term economic growth, there are several advantages to that transition. Most importantly, investments per child (both at the community and household levels) will tend to be higher in a low-fertility environment. This is the famous “quantity-quality tradeoff” much studied by demographers and economists. Moreover, the transition generally results in slower (or zero or even negative) population growth, and a higher proportion of the population at working age. Slower population growth means less strain on fixed resources (arable land, mineral deposits, soils), and a smaller share of saving that must be devoted to capital widening (equipping the expanding population with the pre-existing level of capital per person) as opposed to capital deepening (increasing the amount of capital per person).

“Recent studies have shown that East Asia’s rapid demographic transition in the past half century added markedly to the increase in GNP per capita, especially in comparison with regions such as Sub-Saharan Africa where the demographic transition has been delayed. (See Bloom and Williamson, 1998; Bloom and Sachs, 1999; Bloom, Canning and Malaney, 1999). Poor food productivity hampers the demographic transition by slowing the shift of population from rural to urban areas. A simple cross-country regression of the percent of population living in urban areas on per capita GNP, proximity to the coast, and ecological zone, shows that indeed the rate of urbanization in the tropics is lower than in the non-tropics, controlling for income level. Household fertility studies have repeatedly demonstrated that fertility rates are higher in rural areas, and especially in farm households, probably because the net economic cost of child raising is much lower, in view of the positive contributions of children to home production in farm households, and in view of the lower opportunity costs of the mother’s time. A high burden of disease directly delays the demographic transition, since households compensate for a high rate of child mortality through a high rate of total fertility. Indeed, given the desire of risk-averse households to raise the likelihood that at least one child will survive until the old age of the parents, it’s easy to show that a high rate of childhood mortality is associated with an even higher rate of total fertility, implying (within a reasonable range of parameters) that high fertility rates more than compensate for high mortality rates, leading to high population growth rates in such economies. The evidence indeed suggests that for a given level of GNP per capita, the total fertility rate (TFR) has been much lower in temperate ecozones than in non-temperate ecozones.”

Ethiopia’s Geography.

Apart from demographics, nothing is more fundamental among the determinants of food security status than the impact of Ethiopia’s geographic situation. It is, in sum, not propitious. Bloom and Sachs8 (1998:5) point out that “At the root of Africa's long-term growth crisis is Africa's extraordinary geography.” Africa is the continent with the lowest macro-economic growth, lowest per capita levels of foreign investment, lowest levels of per capita foreign trade and lowest levels of growth in household income and employment. Sachs and others at the Center for International Development at Harvard

8 The full report is recommended: http://www.cid.harvard.edu/cidglobal/economic.htm#CID%20Research
attribute much of this slow growth and development to geography.\footnote{http://www.cid.harvard.edu/cidglobal/economic.htm}

Ethiopia is landlocked within Africa and far from global markets. It has benefited not at all from economic globalization trends, which have by-passed Africa generally and Ethiopia specifically. With the exception of its coffee exports,\footnote{Coffee consumption globally has been relatively flat; exports – particularly from high volume, low cost new producers like Vietnam – are up; global prices have decreased 40 percent since January 2000 and Ethiopian export earnings have also decreased. See: http://www.ico.org/frameset/priset.htm} Ethiopia produces and exports very little of the types of tropical country commodities for which wealthy country customers are willing to pay high prices.

There has been inadequate attention given to Africa’s geography as an impediment to development. Consider these facts: there is no navigable river in Sub-Saharan Africa enabling access to/from resource rich areas of interior Africa and the sea. Such rivers – the Rhine, Mississippi, Yangtze, and Amazon, for example – have opened up the interiors of entire continents to trade. Africa’s major rivers, the Congo, Nile, and Zambezi, are all interrupted by cataracts or other impediments to access by sea-going vessels. Because of its physical size and shape, much of interior Africa is far from the sea and its terrain, climate, and the expense of road and railroad maintenance have impeded the growth of exportable products – particularly the agricultural goods and livestock which countries like Ethiopia are able to produce – wherever long overland distances are involved. In Ethiopia the mountainous interior increases transport costs even further. The Blue Nile and Takazze rivers have not been associated with foreign trade and economic growth. Ethiopia’s geography has been, and will continue to be, a drag on economic growth prospects.

There is also the historical, economic reality that few countries between the Tropics of Cancer and Capricorn have generated rates of economic growth historically approaching those of the more temperate climes, north and south (Mellinger, et al. 1999). Note the relationship between latitude and per capita GDP on the chart on the following page. Ethiopia is neatly bisected by the $10^\circ$ north latitude band.

The geography and topography of Ethiopia contribute significantly to its poverty and food insecurity and to the difficulty in devising solutions for dealing with food insecurity. So, too, do climate and rainfall.
Climate and rainfall

Climate – particular the climate differential between temperate and tropical countries – has been found to relate significantly to rates of economic performance and growth. (See for example Masters and McMillan, 2000, and citations therein.) Much of Ethiopia is subject to a high degree of inter- and intra-seasonal climatic variability with consequent highly variable annual food production. Often it is not changes in rainfall totals (i.e., those associated with climatological drought), but changes in the patterns of rainfall vis-à-vis moisture needs of key crops and animals that is key. Riley (1993) detected adverse rain sequence patterns in 20 years of monthly and weekly rainfall data from Zambia clearly associated with changes in regional maize harvests undetectable in reviews of annual or even seasonal rainfall patterns. High coefficients of variation in monthly, seasonal, and annual rainfall is characteristic of much of Ethiopia.\textsuperscript{11} This is particularly true in the semi-arid and arid woredas where most of Ethiopia’s food insecure are found. The dryland areas in Ethiopia that fall within the range of UNEP’s definition of desertification cover 860,000 km\textsuperscript{2}, or 71.5\% of the country’s total land area (Hawando, 1996).

\textsuperscript{11} See FEWS and FEWSNET reporting on Ethiopia: e.g., http://www.fews.org/fb971027/hr971027.html#ET
It would be very useful to have reliable data on the variability of rainfall from a large number of areas in each of the five terrains in the above table and map. All that can be ascertained with any certainty is that rainfall is variable both in total amount per year and in the pattern in which it falls during the two ("belg" and "krempt") rainy seasons. This, in turn, means that support for rainfed agriculture in semi-arid and arid Ethiopia is support for livelihoods that are fraught with risk. The obvious implication for food
security strategies in such areas is that they must have important elements dedicated to reducing risk.

Declining soil productivity and land degradation

“Ethiopia is considered to have one of the most serious soil degradation problems in the world.”
(Howard, et al., 1995)

In part because of the aridity in a considerable part of Ethiopia, in part the result of seasonally heavy rainfalls and flooding in the highlands, and in part the result of poor soil husbandry, much of the country has for decades been subject to erosion, land degradation, enormous soil loss, and reduced moisture availability caused by lost vegetative cover. Ethiopia’s problem is part of an Africa-wide phenomenon. According to Per Pinstrup-Anderson (2002) soil degradation in Sub-Saharan Africa now affects 65 percent of arable lands:

“These highlands are the source of much of the water used in the lowlands as well as the home of unique, diverse indigenous tropical highland vegetation. Today, they are where millions of African farmers eke out a living by tilling the soil, sometimes on steep slopes. But the productivity of the highlands is dwindling due to high and growing human pressure. Soil fertility, crop yields, water supplies, forest cover, and biodiversity are all decreasing, while crop pests and diseases are on the rise. Farmers are consequently growing poorer.”

This process has been particularly damaging in Ethiopia where heavy seasonal rainfall in highland regions which have been deforested, overgrazed or otherwise cleared of vegetative land cover has led to particularly heavy losses of soil. If one uses the FAO-suggested (1984) average value of 100 tons/ha/year soil erosion rate, the average annual local loss of soil from the cultivated and grazing lands of Ethiopia is estimated to be 7,800 million tons per year. There are other estimates (Hurni 1988, Hawando 1989, 1995, 1996) that vary widely on either side of the FAO study, but generally support the conclusion that continuing soil losses are heavy and incredibly detrimental to Ethiopian agriculture.

“Soils of the Ethiopian highlands are the outcome of the decomposition of the volcanic material. They are derived from lava rocks, are clayey in texture and are basically quite fertile. However, growing population pressure, increasing number of livestock and the failure to return organic matter to the soil, have reduced soil fertility. Because of severe shortage of fuel wood both straw and manure are used as fuel rather than returned to the soil. The soils in the north, mainly Tigray, Wollo, and northern and eastern Gondar and northern Shoa, are heavily eroded.”
(FAO,1995)

What this enormous loss of soil means is that one of the principal sources of Ethiopia’s wealth and household income-generating capacity is being lost at an alarming rate. It appears this process has been going on for a very long time.

“In the highlands, home to 90% of Ethiopia's population, erosion has led to serious degradation of one-quarter of the area and moderate degradation on another one-third. On over two million hectares (4% of highland area), the soil depth is so reduced that the land is no longer able to support cultivation (GOE/IUCN 1990). Soil degradation is not limited to highland areas. In a recent survey, pastoralists and agro-pastoralists of Eastern Hararghe identified soil fertility and
erosion, evidenced by gully and sheet erosion, as one of their most critical problems (Holt and Richards 1995).” (Howard, et. al., 1995.)

Smallholder agriculture in Ethiopia can be characterized as low input, low yield. It tends to be “extensive” in the use of land rather than “intensive.” As land already low in productivity becomes degraded, it has traditionally been cheaper to open additional land for production rather than investing in maintaining or improving the long-term productivity of previously cultivated land. This tendency is exacerbated by continued Ethiopian government policy preventing private individuals from obtaining legal title to the land they cultivate or graze. The net result, now, is increasingly large areas of deteriorated land and much reduced availability of new lands in areas contiguous to those already cropped. Reardon et.al (2001) argue that “…the low use of fertilizer across Africa (is) as a major cause of concern, from both the food-production and the environmental perspectives.” The authors strongly suggest that the widespread “capital-deficient” unsustainable intensification in Africa is a major force behind farmland degradation and productivity loss. Ethiopia is a case in point.

“It is generally recognized that the greatest threat to sustained rainfed agricultural production, and indeed to the continuing prosperity of many of the developing countries in Africa and elsewhere, is probably uncontrolled soil erosion (Hudson 1981). For example, Brown and Wolf (1985) have suggested that about 1 billion tons of top soil are being lost by erosion each year in Eritrea and Ethiopia alone. Although the basis for such estimates is not clear, there is no doubt that uncontrolled erosion is causing enormous damage to the soils of Eritrea, Ethiopia, and most other African countries.

“Land-use practices are of critical importance to the long-term future of all countries, yet they often seem almost totally neglected by many governments. Although governments may be overwhelmed by a multitude of problems, all needing attention at the same time, and they may have considerable difficulty in having much effect on rural life, their allocation of resources sometimes seems questionable. Instead of attempting to guard, conserve, and build up what is their main productive physical resource, the land, they sometimes almost seem to encourage its exploitation, either by unwise policies such as allowing large-scale mechanized land clearing or deforestation, or by almost total neglect of simple soil-conservation and improvement measures.” (Kerr, 1995)

The impacts of land degradation and soil depletion have profound economic implications for low-income countries such as Ethiopia, where agricultural production is so crucial to development. “The environmental damage that results from soil erosion leads to losses in current and future income for farmers and increases risk, particularly for poor households.” (Barbier, 1998) The income loss in Ethiopia stemming from soil erosion has been estimated at about $150 million per year and the gross discounted cumulative loss at $2.5-3.0 billion. (Bojö, 1996)

Land degradation in semi-arid and arid (ASAL) areas of Ethiopia has become a matter of serious concern because of the adverse food security and livelihood implications for the increasing numbers attempting to make a living from cropping and livestock in these areas, which constitute more than 50 percent of the total land area of the country. (Carucci, 2000:iii) Many years of highly variable and often below normal rainfall, combined with the intrinsically fragile biophysical environment and increasing population, have created circumstances of increasing erosion, deforestation, and
degradation. On-the-ground observations demonstrate these processes are already quite far along in much of food insecure Ethiopia. Once they are well underway, not only does the productive potential decline, but it also becomes progressively more difficult to reclaim the pasturelands, hillsides, soils, and water retention capacity.

Agriculture and livestock development are almost certainly the only viable alternatives for improving the food security status of Ethiopia’s poor majority for at least the next decade, and possibly much longer. These depend on there being sufficient high quality cropland, water, and pastureland to provide enough food and adequate incomes for Ethiopia’s rapidly growing population. In recent decades, the combination of continued, extensive environmental degradation and high population growth has led to severe erosion, overgrazing and declining ground and surface water retention. Continuous cropping with nutrient replenishment is another aspect of the problem. Combined, they represent one of most serious and intractable problems contributing to chronic food insecurity and serve to significantly increase the vulnerability of households to episodes of acute food insecurity.

Rapid population growth and decline in population/arable land ratio

The synthesis of inexorable population growth and extensive land degradation creates a potential problem of great magnitude which is already a cause of growing food insecurity in the more food insecure woredas. Ethiopia’s population now stands at approximately 65 million persons, more than triple the 20 million of 50 years ago. It is presently the 18th most populous country in the world. By 2050, if U.S. Bureau of the Census projections hold, Ethiopia will have moved up to be among the 10 most populous countries on earth.12 Many of these people already (and increasingly as the decades go by) exist on lands that, as noted above, have deteriorated markedly over those 50 years. As Webb and von Braun point out, “High population concentration in areas of limited natural resources increases vulnerability to food insecurity because the asset base relative to population demands is so shallow.” (Webb and von Braun, 1994:23). Estimates based on FAO data on Ethiopia’s arable land and U.S. Bureau of the Census data and projections on the annual population of Ethiopia for the period 1950-2050 yield the following chart depicting the trend in numbers of Ethiopians supported per km² of arable land during this 100 year period. The difference in the height of line A and line B signifies the differing intensity of the population/land pressure up to 2000 vs. the magnitude of the problem by 2050. In 2000, 1 km of cultivatable land had to support approximately 105 Ethiopians. In 2050, 1 km of possibly even more degraded land will have to support 265 Ethiopians.

In the continuing absence of other non-agriculture-based sources of income and wealth for the majority of Ethiopia’s poor, improvements in food security will, to a considerable degree, depend upon improvements in area productivity of the soils (for crops) and of the rangeland (for livestock). Such productivity will have to increase at greater than the rate of population growth and be widely shared among the food poor.  

Chart 4, bad as it might seem in terms of the pace of decreasing arable land per capita, does not tell the whole story. The land now used for the production of food and agricultural income varies between very good to very poor on the basis of soil and moisture characteristics. The present state of deterioration caused by poor soil and pasture husbandry over centuries, but particularly in the past 50 years as a consequence of the exponential increase in the numbers of people on the land in the last half of the 20th century, means, of course, that not only is the land increasing crowded, but it is also increasingly infertile.

An estimate of the relative quality of the land for cultivation and livestock can be obtained, in part, from an understanding of classification of land by elevation and annual rainfall. Table 1 below provides the most recent analysis:

**Table 1**

| Area (% of total land mass**) classified by average annual rainfall and elevation |  
| Year | Persons km² | 
| 1950 | 10 |  
| 1960 | 20 |  
| 1970 | 30 |  
| 1980 | 40 |  
| 1990 | 50 |  
| 2000 | 60 |  
| 2010 | 70 |  
| 2020 | 80 |  
| 2030 | 90 |  
| 2040 | 100 |  
| 2050 | 110 |  

13 The other alternative – projects intended to spur migration out of the most heavily degraded areas, such as much of Tigray or Eastern Amhara – have been attempted in the past with minimal success.
The concept of land degradation – defined as “the progressive reduction of the capacity of the land to sustain life and provide food security” (Carucci, 2000:13) -- consists of erosion, reduction in the fertility of the soil, reduced soil water holding capacity and excessive, exploitative use of the land together with impoverishment of the vegetative cover and biomass caused by climatic factors, over-utilization of vegetation (cutting of trees, overuse of crop residue for animal feed and fuel wood), erosion, and reduced fertility. Such degradation continues largely unabated. It, together with climatological factors and inappropriate farming and livestock practices, contributes in a very direct way to low per capita productivity in the agricultural sector of the Ethiopia economy – the next causative factor addressed.

Low per capita food production

The factors causing food insecurity in Ethiopia interrelate and reinforce one another. The agricultural sector – particularly food production – provides the perfect example.

Partially as a result of all the factors already cited, and partly because of continued use of traditional agronomic practices, reliance on rain-fed rather than irrigated agriculture, farmers’ inability to secure improved seed, fertilizers, pesticides, herbicides, effective equipment and adequate numbers of draft animals, agricultural credit, and relevant and effective training in crop production, grain output is low throughout Sub-Saharan Africa at about 135-140 kg/per capita. (Ayres, 1996:9). In Ethiopia, it is lower still at 120 kg/per capita or less in some years (Howard, et al., 1995). According to Mulat, et al., (1997), at present, cereal yields in Ethiopia are among the lowest in the world. The average yield of teff, barley, wheat, maize and sorghum is 8, 11, 12, 16, and 14 quintals per hectare, respectively. The results of the SG 2000 project, half-hectare extension management plots, have shown that grain yields for maize, wheat and teff can, under carefully managed circumstances, be increased to 55 qt/ha, 31 qt/ha and 18 qt/ha, respectively. This will be difficult in the extreme, given the continuation of soil deterioration and increased population growth. Rainfed agriculture on small plots is not to be the answer to Ethiopia’s food security dilemma.

An extremely low level of irrigated agriculture in Ethiopia is another cause of low rates of agricultural production.

“In 1999, 42 percent of arable land in Asia was irrigated, 31 percent in the Near East and North Africa, 14 percent in Latin America and the Caribbean, and only 4 percent in sub-Saharan Africa…Irrigation increases yields of most crops by 100 to 400 percent. Over the next 30 years,

<table>
<thead>
<tr>
<th>Elevation (m)</th>
<th>&lt;200</th>
<th>200-400</th>
<th>400-700</th>
<th>700-900</th>
<th>Grand total (% of total land)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;500</td>
<td>9.0</td>
<td>2.5</td>
<td>1.6</td>
<td>0.0</td>
<td>13.0</td>
</tr>
<tr>
<td>500-900</td>
<td>7.3</td>
<td>11.5</td>
<td>4.4</td>
<td>0.1</td>
<td>23.2</td>
</tr>
<tr>
<td>900-1200</td>
<td>1.6</td>
<td>8.4</td>
<td>3.6</td>
<td>0.5</td>
<td>14.0</td>
</tr>
<tr>
<td>1200-1500</td>
<td>0.1</td>
<td>5.0</td>
<td>5.6</td>
<td>1.6</td>
<td>12.3</td>
</tr>
<tr>
<td>1500-1900</td>
<td>0.0</td>
<td>2.3</td>
<td>8.7</td>
<td>3.9</td>
<td>14.9</td>
</tr>
<tr>
<td>1900-2300</td>
<td>0.0</td>
<td>0.8</td>
<td>4.5</td>
<td>2.2</td>
<td>7.5</td>
</tr>
<tr>
<td>Grand Total (% of total land)</td>
<td>18.0</td>
<td>30.6</td>
<td>28.3</td>
<td>8.2</td>
<td><strong>85.0</strong></td>
</tr>
</tbody>
</table>

Source: VAM Unit, World Food Programme/Ethiopia. (See: Carucci, 2000:6)

** Total land mass does not equal 1.3 million km² or 100% because elevations above 2300m and rainfall above 900mm are not included in this table.
70 percent of gains in cereal production [worldwide] are expected to come from irrigated land… In Pakistan, 80 percent of food is produced on irrigated land; in China, 70 percent; and in India and Indonesia, more than 30 percent; while in Ghana, Malawi and Mozambique the amount is less than 2 percent.” (FAO, 1995)

In Ethiopia, according to the World Resources Institute, only about 1 percent of food is produced on irrigated land.\textsuperscript{14}

As a result of all the above, the FAO index of per capita agricultural production in Ethiopia for 1970-2000 (Chart 5) should hold little surprise.

\textbf{Chart 5: Index of Per Capita Agricultural Production: 1970-2000}

![Chart 5](chart5.png)

Source: FAO, 2001

According to FAO, the simple average of year-on-year agriculture production growth between 1971 and 2000 was -1.15 percent. During the 1970s, 1980s and 1990s, the estimated average growth rates were -0.84, -1.98 and -0.64 percent respectively. Other African countries, as a group, registered a slightly positive average annual growth rate in per capita agricultural production during the 1990s. While rainfall explains much of the year to year fluctuation in production around the trend line in the above chart, other factors are involved. A main constraint to increased productivity is the size of the average holding. Typically, farms are less than a hectare. While many parts of the central highlands of Ethiopia are relatively flat and agriculture in some of these is mechanized through the services of contractors, which improves the quality and productivity of farming practices in those areas, plots in the more food insecure areas are small, fragmented, and often found on steeply sloping lands. Lack of irrigation, better water

\textsuperscript{14} World Resources Institute 1999, p.286.
conservation, watershed management, and inexpensive modes of transportation constrict farmers and pastoralists from producing more. “Farmers would rather produce in small quantities and sell by the roadside than produce in large quantities and not be able to transport and sell in the central markets.” (FAO, 2001).

Low per capita agricultural production is also a consequence of low application of fertilizers – both organic and chemical. Total chemical fertilizer consumption reached 251,000 tons in 1996, yet at present the average fertilizer use is estimated at just 9kg/ha, compared to about 48 kg/ha in Kenya and 60 kg/ha in Zimbabwe. Application rates by most peasants are well below the recommended rate of 200 kg per hectare (Mulat, et al., 1997). Only about a third of cultivated land (2.8 million hectares) is treated with even these low applications of fertilizer. It is estimated that currently only 20% of Ethiopia's farmers have access to fertilizers.\footnote{http://www.addischamber.com/ethiop/busino.htm}

Other factors which may help to account for the very low agricultural production and productivity in Ethiopia include high morbidity caused by the high incidence of malnutrition, malaria, and other diseases. Among many households a high number of religious saint’s days account for lost days of labor, as does the non-cropping/herding workload of women, particularly in the arid and semi arid areas.

Mellor (1999) argues strongly that, not only is the lack of growth in agricultural production and agricultural income bad for the livelihoods of the producing households, it is bad for the growth of the entire economy. He and his colleagues contend that recent studies of economic growth in the more successful developing countries point clearly to the fact that agricultural growth is central to overall growth. In a recent summary of his theses he made the following points:

a. “Manufacturing growth has essential no effect in reducing poverty (Ravallion and colleagues) or very little (Timmer).
b. Urban growth reduces the dominant rural poverty not at all and has only modest effect on urban poverty.
c. Agricultural growth has an immense effect on poverty.
d. Rural growth reduces rural poverty sharply and reduces urban poverty more than does urban growth.
e. There is a two to three year lag in the effect of agricultural growth on poverty reduction (showing that it is the indirect effects that are most important.)
f. Further corroborating that it is the indirect effects, agricultural growth with Latin American levels of inequality in land distribution has little effect in reducing poverty.
g. Growth per se does little to reduce poverty, it is the structure that matters.”

(Mellor, 1999)

Applying the Mellor thesis to the food insecurity situation in Ethiopia generates the following: improving food and nutrition insecurity requires poverty reduction as a way of increasing household income. This requires strong growth in agriculture which in the
Ethiopian context requires focus on smallholders – a focus on both increasing their per household productivity and on increasing their incomes from on-farm crop production and other on- and off-farm endeavors as the engine of overall growth of the Ethiopian economy.

Gender: Labor productivity and microfinance

If increased household production and income are key to sustained, improved food security, the role of women in the household as both producers and income earners is as important as their role as caregivers. The inequality of opportunity for women in education, in business endeavors, and as decision-makers in their communities is a serious impediment to improving food security in the community and in the household.

An area of intense interest is the area of labor productivity in Ethiopia, particularly that of women in rural households. Research done elsewhere has led to the following conclusions:

- “Sustainable production of food is the first pillar of food security. Women account for 70 to 80 percent of household food production in Sub-Saharan Africa” (Quisumbing, 1995)

- Agricultural productivity increases dramatically when women receive the same inputs as men. A year of primary education for women in Kenya is associated with maize yield increases of 24 percent.

- In general, male and female farmers are equally efficient as farm managers, yet Ethiopian women, despite their significant involvement in agricultural production, have very limited access to relevant extension advice.

In matters of microfinance, women’s participation as borrowers has been key to successes globally in the microfinance approach to rural development. According to global studies discussed in Sharma (2001), women’s status, household welfare, and microfinance interact in the following ways:

- A woman’s status in a household is linked to how well she can enforce command over available resources. Increased ability to tap financial resources independently enhances her control and, therefore, her influence in household decision-making processes.

- Newly financed micro-enterprises open up an important social platform for women to interact with markets and other social institutions outside the household, enabling them to gain useful knowledge and social capital. Many microfinance programs organize women into groups, not just to reduce transactions costs in credit delivery, but also to assist women in building and making effective use of these opportunities.
• Women’s preferences regarding household business management and household consumption goals differ from men’s, particularly in societies with severe gender bias. In such situations, placing additional resources in the hands of women is not a mere equalizer; it also materially affects both the quality of investments financed by the microfinance programs and how extra income is spent. IFPRI studies have underlined the importance of women’s control of resources in achieving better welfare outcomes in food, nutrition, education, and other health statuses of children and their families.

• Women are thought to make better borrowers than men -- timely repayment of loans is more likely to take place when women borrow. An IFPRI study in 1997, for example, shows that Bangladeshi groups with a higher proportion of women had significantly better repayment rates.  

Factors affecting access to adequate food

Poverty

The factors creating conditions of pervasive poverty  are among the principal determinants of food insecurity in Ethiopia (FDRE, 1999:4, et seq.). From an “entitlement” theory perspective this is because poverty has an adverse impact on a poor household’s entitlements to food which, in Ethiopia, stem primarily from small-scale farming or seasonal off-farm employment. A significant reduction in the numbers of the poor in Ethiopia (and a concomitant increase in food entitlements), by increasing per capita returns, would do more than anything else to increase effective demand for food and other agricultural products, raise economic growth rates, increase overall access to food, and consequently reduce the numbers of Ethiopians suffering food insecurity. But the large number of the Ethiopian poor who are also profoundly food insecure are food insecure as a result of many factors, several of which also produce poverty. These include: poor health status and inadequate health delivery; degraded land and deteriorated soils; frequent droughts; an imbalance between the numbers of people attempting to earn a livelihood from the land and the amount of arable land available (using prevailing technologies); seasonally inadequate water availability; inefficient grain markets; a lack of employment opportunities for Ethiopians lacking technical skills; and an inability of Ethiopians – in both the public and private sectors – to afford the foreign exchange costs for importing food needed to fill the existing or projected gap between averaged Ethiopian nutritional demand and averaged domestic production.

16 Sharma (2001) cites a series of studies on gender-differentiated impacts of microfinance, recently completed by the World Bank based on data collected during 1991-92 from 87 villages in Bangladesh. The study found that welfare impacts on the household were significantly better when borrowers were women. For every Bangladeshi taka lent to women, the increase in household consumption was 0.18 taka, compared to 0.11 taka when borrowers were men. Only when women borrowed was there a large and important effect on the nutritional status of both sons and daughters. Assets other than land also increased substantially when women borrowed—but not when men borrowed. Similarly, it was only when women borrowed that education of girls (rather than just boys) increased.

The 1997 Welfare Monitoring Survey (WMS) determined that about 50 percent of Ethiopians exist below the food poverty line (World Bank, 2001), meaning that household expenditures (including attributed expenditures for self-production) for more than 27 million people (in 1995/96) were inadequate to provide 2,200 kcals per adult equivalent (AE) per day. The WMS further identified 27 percent of the population living under conditions of “extreme food poverty”, defined as average daily food consumption of less than 1650 kcals per AE/day. The incidence of food poverty was highest in Tigray and Amhara regions.

Malnutrition

One of the most significant data sets from the WMS, in terms of demonstrating the severe nutritional consequences of food insecurity in Ethiopia, is that showing the prevalence of stunting among under-five children in Ethiopia. These data, contained in Table 2, show that nearly 55 percent of all children in Ethiopia are less than –2 standard deviations below the mean value of height for age when compared to the reference population. By comparison only 2 percent of children in the reference population are stunted at or below that level. The lifelong impact of being stunted in childhood is serious both in terms of the adverse consequences on the individual and the economic costs to the society (Riley, 2000).

<table>
<thead>
<tr>
<th>Place of Residence</th>
<th>Sex</th>
<th>Age group (months)</th>
<th>Country</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>3-5</td>
<td>16.2</td>
<td>15.2</td>
<td>24.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-11</td>
<td>46.1</td>
<td>47.8</td>
<td>29.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12-23</td>
<td>61.8</td>
<td>62.9</td>
<td>50.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24-35</td>
<td>57.3</td>
<td>58.3</td>
<td>45.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>36-59</td>
<td>58.9</td>
<td>60.3</td>
<td>41.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>55.9</td>
<td>57.4</td>
<td>42.7</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>3-5</td>
<td>12.2</td>
<td>12.9</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-11</td>
<td>34.6</td>
<td>35.5</td>
<td>25.7</td>
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<td></td>
<td></td>
<td>12-23</td>
<td>59.8</td>
<td>61.4</td>
<td>43.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24-35</td>
<td>58.2</td>
<td>59.5</td>
<td>46.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>36-59</td>
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<td>58.5</td>
<td>39.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>54.7</td>
<td>55.0</td>
<td>40.5</td>
</tr>
<tr>
<td></td>
<td>Both sexes</td>
<td>3-5</td>
<td>14.2</td>
<td>14.1</td>
<td>15.7</td>
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<td></td>
<td></td>
<td>6-11</td>
<td>40.3</td>
<td>41.6</td>
<td>27.4</td>
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<td>12-23</td>
<td>60.8</td>
<td>62.1</td>
<td>47.1</td>
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<td>36-59</td>
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<td>40.5</td>
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<tr>
<td></td>
<td>Total</td>
<td></td>
<td>54.7</td>
<td>56.2</td>
<td>40.5</td>
</tr>
</tbody>
</table>


When expanded to include known average under-consumption of calories in adults, its nutritional manifestation in present-day Ethiopia is very low daily caloric and micronutrient intake among a large percentage of the population, caused by low average per capita food production and an inability by as many as half of rural households to supplement self-production adequately with market purchases. Its consequence is widespread chronic under-nutrition and increased vulnerability to episodes of acute declines in food intake. This is a primary proxy measure of food insecurity in Ethiopia.
These high levels of stunting result from varying combinations of ill health and under-consumption of calories, protein, and micronutrients. A high prevalence of low birthweight babies (representing, in large part, malnutrition in the womb) not only contributes additionally to the problem but is symptomatic of an even more enduring problem where mothers – themselves malnourished as children – give birth to low birthweight babies who, as they grow, face the same cycle of nutrition deprivation their mothers encountered as infants. They will eventually become malnourished adults, the half of them who are mothers giving birth to yet another round of low birthweight babies and on, and on, indefinitely.

The effects of stunting – or, more correctly, of the factors which occasion stunting – are long-term and serious, not only for the stunted individual, but for any nation where a sizeable percentage of the population is stunted. These adverse bio-cognitive consequences include lowered resistance to infection and morbidity, shortened lifespan, reduced physical capacity, and impaired development of cognition. It is not necessarily that a person’s being short for his/her age is the cause – although it might be part of the cause – it is that whatever in that individual’s history which had led to a stunted condition has also led to these other adverse consequences.

The most likely cause of stunting among Ethiopia’s children is this chronic undernutrition, abetted by chronic or episodic events of gastroenteritic, respiratory, and other parasitic or microbial infection. The reason it is important to recognize the symbiosis (or ‘closed feedback loop’) between undernutrition and ill health as the primary cause of high levels of stunting in Ethiopia is because programs to reduce or eliminate the causative factors of stunting must, perforce, include components for increasing nutritive ingestion as well as reducing factors causing fetal, infant, and maternal ill-health reducing appetite or efficient absorption.

The cycle that contributes substantially to the overall problem of malnutrition in Ethiopia is demonstrated in Figure 3 below which portrays a continuous cycle of mothers, themselves stunted as children, giving birth to babies who will themselves grow to be stunted mothers in the next generation. It is the breaking of this cycle that will greatly reduce the causality of chronic malnutrition and food insecurity in Ethiopia.
32

Figure 3. Intergenerational cycle of growth failure

The cycle of poor nutrition perpetuates itself across generations. Young girls who grow poorly become stunted woman and are more likely to give birth to low-birthweight children. If those infants are girls, they are likely to continue the cycle by being stunted in adulthood if something isn't done to break the cycle. Adolescent pregnancy heightens the risk of low birthweight and the difficulty of breaking the cycle. Support is needed for good nutrition at all these stages – infancy, childhood, adolescence, and adulthood – especially for girls and women.


Markets

"In Ethiopia, marketing costs account for about 40% to 60% of the total price spread between producer and retail prices (GMRP, 1997). The reduction of these costs represents a major opportunity to improve farm production incentives and simultaneously make food more affordable to low-income consumers." (Gebremeskel, et al., 1998)

To be food secure in Ethiopia requires that a household either grows sufficient food or is able to trade for, or purchase, what is needed beyond household self-production. Local markets must stock needed food and make it available at prices that surrounding customers can afford. These customers must have the cash or tradable assets, including labor and/or the ability to defer payment when necessary. For this to happen continually, the market system must move food from where it is in surplus to where it is in deficit. It must do so with the considerable cost efficiency to keep food affordable to a population characteristically poor.

There is much evidence in Ethiopia that market systems do not perform these functions sufficiently well to enable market participants to avoid severe food insecurity. What are the constraints to a more efficient market mechanism? As Gabre-Madin points out:
**Enhanced food security and the expansion of the Ethiopian market economy require the frequent and ready transfer of grain from surplus regions to deficit regions. The effective functioning of the grain market depends on the ability of traders to exchange grain anonymously with buyers and sellers in distant markets, without risk of commitment failure.** (Gabre-Madin, 1999.)

Nearly 80 percent of marketable grain is sold by farmers immediately after their harvest at prices determined by subtracting various costs and the trader’s profit from prevailing wholesale prices in Addis Ababa. Constraints have been grain checkpoints, taxes, unavailability of transport, high transport costs, lack of storage, and lack of market information. Lack of access to working capital and of physical facilities at local markets also hampers efficient marketing. Traders, facing a great number of uncertainties caused by the markets themselves and a number of externalities (weather, civil unrest, banditry, etc.), discount the purchasing prices by another 30 percent or so below what the prices in Addis Ababa and elsewhere might suggest. (Gebremeskel, et al., 1998)

Whether there is “commitment failure” or other causative factors, improving the operation of the food marketing system in Ethiopia is a rich source of possible corrective agendas if improving household food security is the objective. This is a task that needs to involve all donors, the government, and the private sector. It is well beyond the capacities of the Cooperating Sponsors and of USAID/Ethiopia acting alone to accomplish. However, without great improvement in reducing the impediments that prevent more efficient, less costly marketing of the products that can be produced in the drought-prone food insecure woredas of Ethiopia, there would seem to be little hope for the eventual success of efforts to reduce, over the long-term, chronic household food insecurity among the residents of those locations.

**Short-term detrimental factors**

Normally, discussion of shocks such as droughts, floods, locust and armyworm invasions, conflicts, and the like relate to concern for transitory food insecurity and are viewed as adding a temporary overlay of additional food insecurity causality over the pre-existing chronic causes. While true, to a certain extent, there is also the fact that the sequence and timing of these shocks can profoundly impact chronic causality itself. These emergency situations, repeated at relative close intervals – as has been the case in Ethiopia since 1973 – reduce the ability of the affected populations not only to contend with the each new emergency but also their ability to cope with chronic causes.

Closely spaced droughts reduce the ability of affected populations to feed themselves from self production and reduce the size of their asset base and wealth. Their animals die, or are sold at low prices. Their physical assets (tools, furniture, radios, etc.) are also sold to purchase food in order to survive. As a result, more and more households are forced to resort to tree cutting, brush felling and charcoal preparation as often the only local means to earn some cash to purchase or trade for food. Drought followed by flash flooding – as is often the case – lead to even more rapid loss of soil and more rapid development of gullies – even on relatively flat surfaces. Once normal conditions have been reestablished the farming family finds that it has had to consume its seed grain, sell its ox and plow (though those are usually the last items to go), and then attempt to restart its efforts to
perpetuate an acceptable livelihood with fewer resources than before. In addition, in cases where plots allocated to individual households by their peasant association (PA) have not kept up with increasing family size, one or more household members may have left to search for work elsewhere in the country – usually in the towns and cities or in the more productive farming areas at long distances from the areas where food insecurity is the highest.

The mitigation, preparedness, and response capabilities of the regional and national governments – although vastly increased over the past 30 years -- are still not adequate to enable all affected households in Ethiopia to fend off the worst manifestation of these shocks. Large-scale employment generation, of a type common in South Asia, is not sufficiently available or sufficiently well-managed and well-provisioned with resources to enable several million Ethiopians to be able to weather these disasters with minimal loss of assets. The Employment Generation Scheme (EGS) operated by the DPPC and the regional Bureaus of Agriculture has had problems in insuring the sustainability of assets constructed by the FFW brigades. Management problems have been widespread, targeting is often inappropriate (e.g., better-off households are allowed to work while less well-off households are excluded), and the lasting value of the effort has been widely questioned by the food providing donor governments and others. (See, for example, Carucci, 2002.) In sum, even when focused on the long-term causes of chronic food insecurity in Ethiopia, the short-term causes must be factored in because their constant repetition and the magnitude of the adverse impact thus created affects chronic as well as transitory/acute food insecurity.

Box 1 below is an attempt to gather all the information presented in this report and derive a listing of the “top 10” factors contributing to food insecurity in Ethiopia. As they interrelate, there is no ranking intended.

**Box 1:**

The top 10 contributing causes of food insecurity in Ethiopia
(derived from the discussion in this report.)

The top 10 are:

1. Poverty
2. Extreme variability in annual and seasonal rainfall as determined by high coefficients of variation in rainfall over the long term.
3. Inadequate water availability for people, crops and livestock.
4. Dense populations in the highlands and midlands.
5. Severe environmental degradation in areas of high population densities.
6. Low skill and education levels.
7. Lack of alternative employment opportunities in rural areas.
8. Lack of access to productivity enhancing inputs, including credit.
9. High transaction costs associated with inadequate roads, transport, inefficient markets.
10. High levels of infant and maternal malnutrition as contributing factors to high morbidity and mortality.
USAID and food security in Ethiopia

The objective of the Cooperating Sponsors’ Title II programs being evaluated is expressly a food security objective (“enhanced food security in target areas”) as it has existed within the context of the overall USAID development goal and for Ethiopia during the period 1993-2000:

“The overall goal of our program is to support Tangible Progress Towards Peace, Prosperity and Physical Well Being for the Majority of Ethiopians. In support of this goal we have identified three sub-goals: Enhanced Food Security; Smaller, Healthier and Better-Educated Families; and An increasingly Stable and Democratic Ethiopia. To buttress these sub-goals we have picked four Strategic Objectives:

1. Increased staple food production;
2. Key aspects of the rural health care delivery system rebuilt and reoriented;
3. Quality in primary education improves in an expanded system;
4. Increased access to and participation in a conciliatory democratic transition process to a permanent Government of Ethiopia (GOE).

… “The heart of the USAID strategy is food security. However, until this long term goal is achieved, USAID will provide prompt provision of food and other humanitarian assistance to help people through years of shortage…”

For most of the period being evaluated, the Cooperating Sponsors’ DAP programs have been directed at the food security special objective, while the remainder of the USAID program was focused on achieving progress against the above four SOs. Starting in FY 2001, USAID/Ethiopia is operating within a new five-year Integrated Strategic Plan which is devoted in its entirety to reducing chronic household food insecurity:

“USAID/Ethiopia’s 20-year goal is to reduce chronic food insecurity in Ethiopia. It has been estimated that over 40% of the country’s rural households do not produce enough food or income to meet their basic nutritional needs. Chronic food insecurity has eroded household coping mechanisms, making Ethiopians more vulnerable to hardship. In the year 2000, ten and a half million Ethiopians were at risk of starvation.

To address both chronic and emergency food insecurity, USAID/Ethiopia proposes five strategic objectives and one special objective.

<table>
<thead>
<tr>
<th>SO</th>
<th>Sector/Category</th>
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<tr>
<td>ESHE II SO:</td>
<td>Improved Family Health</td>
</tr>
<tr>
<td>BE SO:</td>
<td>Quality and Equity in Primary Education System</td>
</tr>
<tr>
<td></td>
<td>Enhanced</td>
</tr>
<tr>
<td>RHPP SO:</td>
<td>Rural Household Production and Productivity Increased</td>
</tr>
</tbody>
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18 [http://www.usaidethiopia.org/spo1.htm](http://www.usaidethiopia.org/spo1.htm)
19 *ibid.*
20 USAID/Ethiopia has adopted the convention of labeling the new objectives, rather than numbering, until the strategy is approved and objective numbers are assigned for accounting purposes.
MED SO: Mitigate the Effects of Disaster
DG SO: More Effective Governance and Civil Society Developed
STI SpO: Improved Livelihoods for Pastoralists and Agro-Pastoralists in Southern Ethiopia

One quite interesting aspect of the ISP is how much congruence exists between what were the 5 IRs of the previous Title II program and the above SOs. IRs 1 and 2 (agricultural production and household income) relate closely with the RHPP SO and with the new STI Special Objective. IR3 (health and sanitation) is congruent with the ESHE II SO. IR5 (maintaining emergency and the MED SO are clearly linked. The only IR that has no corresponding SO is that intended to focus on natural resources management. The only SOs above that are not fully associated with Title II IRs are the BE SO focused on basic education and the DG SO focused on democracy and governance. In Section 3, the report focuses on this enabling congruence in attempting to lay out the roadmap for Title II food assistance within the ISP framework for 2001-2006 and in the period after 2006.
Section 2: Title II Programs of the Cooperating Sponsors

During the period since the revival of USAID Title II development activities in Ethiopia in 1993, eight development-oriented NGO Cooperating Sponsors have been utilizing Title II resources – either food commodities directly or local currency resources generated from the sale of Title II commodities in Ethiopia or third countries – in a variety of locations and in a variety of ways to make progress toward the objective of reducing household food insecurity among targeted beneficiaries in Ethiopia. These Cooperating Sponsors are:

Africare – operating in Gambella
CARE – operating in Oromiya, Addis Ababa
CRS – operating in Oromiya, Addis Ababa, and Tigray
EOC – operating in Oromiya, Amhara, and Tigray
FHI – operating in Amhara
REST – operating in Tigray
SCF-US – operating in Somali and Oromiya
WVE – operating in Oromiya, Tigray, and SNNPR

The eight Title II Cooperating Sponsors have been operating a total of 39 projects in 17 zones and 39 woredas in all regional states except Afar and Beneshangul-Gumuz. They encompass a combined target participant/beneficiary population of approximately 480,000 in a total of 78,000 food insecure, mostly rural, households (DSA, 2001).

USAID/Ethiopia, the Cooperating Sponsors and the Government working together developed five intermediate results (IR) packages, together with agreed performance and performance proxy indicators, intended to achieve the strategic objective of enhanced household food security by focusing operational projects on specified quantitative and qualitative objectives within these five IRs:

- increased agricultural crop production
- increased household income
- improved health status in target areas
- natural resource base maintained
- emergency response capacity maintained.

A participatory performance monitoring system was established for each CS. Baseline data were gathered by the individual Cooperating Sponsors to enable them to report measurable results annually, or at set intervals during the lifetime of their Title II Development Assistance Programs (DAPs).

The Title II food resources were used either directly as food-for-work, incentives for participation in food-assisted child survival/community-based health care efforts, and targeted “safety net” transfers, or were “monetized” by selling a portion of the Title II food in Ethiopia or third countries to generate local currency to finance other costs of operating food security-focused development programs. These costs included the salaries
of local staffs of the Cooperating Sponsors, training, transportation, monitoring, evaluation and other necessary project costs.

This evaluation report now looks at the Cooperating Sponsors’ Title II food interventions to help determine what has been their effectiveness in making progress against their individual IR targets, food security among their target beneficiaries, and for the country as a whole. The interventions examined during the evaluation were implemented over the eight-year period from 1993 to 2001 by the eight Title II cooperating sponsors primarily in poverty-stricken, environmentally degraded rural food-deficit woredas. The definition of food security used was that contained in USAID’s Policy Determination 19 as described earlier in this report. However, reference will be made to other definitions as a tool in clarifying analysis of impact on food availability, household access to food, and nutrition/health/utilization separately from each other.

As a rule, activities of the cooperating sponsors were designed to increase crop yields, livestock feed, wood for fuel and construction, household income, and enterprise opportunities for women, and to improve health conditions, farming practices and social infrastructure (mainly feeder roads), through labor intensive interventions using Title II food for work resources. It should also be noted that at various times and in various areas of Ethiopia, these same Cooperating Sponsors also provided emergency relief assistance to those suffering from acute food insecurity occasioned by severe drought and by the Ethio-Eritrean conflict of 1998-2000. Their maintenance of a capacity to provide such emergency assistance is also evaluated.

The next sub-section briefly describes the Title II activities of each of the Cooperating Sponsors. The subsequent sub-section evaluates overall performance in terms of the extent to which food security objectives were attained, or were likely to be attained subsequently. This discussion will relate back to many of the themes discussed in Section 1 of this report.

Each of the eight Cooperating Sponsors have had mid-term and, in some cases, final DAP evaluations completed. All have submitted annual “Results Reports” including detailed performance of indicators and proxy indicators used to measure achievement of indicator targets at set intervals. In addition, a “Title II Projects Final Evaluation” (DSA, 2001) was completed in December 2001 and a report entitled “Multi-Sectoral Food Security Development Initiative: The Case of USAID-Supported Program in Ethiopia” (Berhanu, et al., 2002) was finalized in June 2002. All have been consulted in the preparation of Section 2 of this evaluation report. The purpose here is to summarize, but not to repeat, what these many evaluative reports have already provided in much greater detail and at greater length than is desirable here. All are included by reference.

The task of the present report is to attempt to determine the totality of what the Cooperating Sponsors have accomplished in terms of improving the food security of their target beneficiaries. As will be clear, much of what has been accomplished is significant but partial progress toward the full food security goal as defined by USAID. If one disaggregates “food security” into its three constituent parts – adequate availability,
adequate access, and adequate utilization, one can determine that progress is often greater in one or two of these components than in the other(s). What is the significance of that in terms of claiming progress against the full food security objective? Also, much of the progress made is, necessarily, short-term. What is the potential for longer-term sustainability and further progress? What is the contribution of the whole Title II program arrayed against the totality of food insecurity in Ethiopia? These issues are addressed after presentation of the capsule summary of each program.

**Africare:**

Africare initiated its DAP-supported operation in Gambella Region in 1998.

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**Map 1 Gambella Region**

Length of time operating in this project area: 3 years.
Overall goals: Sustainable improvement of household food security
Geographic Coverage: Gambella Region
Major Activities: Increase agricultural production, post-harvest storage, diversification of agricultural production, counterpart capacity-building
Total beneficiaries claimed in 2001: 19,500 (regular); 0 (emergency)
Partners: Bureau of Agriculture, Regional DPPB
2001 Metric Tons: 3,768
Africare has been operating its “Ethiopia Food Security Initiative” (EFSI) in Gog Woreda in Gambella region since October, 1998.\textsuperscript{21} It has, thus, been in operation less than four years. Gambella region was selected because of its numerous, un-addressed food security problems and because the Government of Ethiopia had designated it as a priority region for development. Its location in the far west of Ethiopia, along the Sudan border, has long hampered its ability to secure the resources necessary for even minimally adequate development. Access is difficult, the road net is poor, especially in the rainy season, and communications are intermittent. In many ways, the people of this region are more closely tied into the rural economy of Sudan, than of Ethiopia.

Other non-government development assistance to the region is insignificant. There are a few international, church-based and non-governmental agencies in the region and these are mostly focused on the significant but fluctuating numbers of refugees from the long-term conflicts in Sudan. Food insecurity among the people of Gambella is serious, possibly more serious, because of difficulty in reaching the area by road and the convergence of so many adverse factors, than in the traditionally drought- and famine-prone areas of the country. There are indications that severe malnourishment is rampant, especially among rural children under five years of age and lactating mothers (ACORD, 2000).

There have been two primary food security objectives in Africare’s program: i) increasing agricultural production among targeted households, and ii) reducing post-harvest grain losses for approximately 20,000 households in 37 of the woreda’s more accessible villages. As such the Africare program responds principally to IR 1 (increased agricultural production) and is linked to that component of food security that seeks to increase food availability. In the Diskin framework (Figure 2, page 10). The program is very much operating in Box A to influence Box AA, and in the Home Production element of Box B.

Unlike the other regions in Ethiopia where DAP activities are in place, this is a hot, humid, tropical lowland area with ample rain where it is difficult to store harvested crops without suffering substantial losses to rodents, insects, molds, and moisture. In 2001, the project, with approval from USAID/Ethiopia, added a third objective: “to increase nutrition and income diversification” – responding to IRs 2 and 3 and adding elements of the program focused on improving access and utilization of food as components of a more fully rounded food security strategy for the region. Within this new focus, bee-keeping, expanded fishing and diversifying production to include fruits and vegetables are being added to help engender both nutritional and income earning outcomes. In the Diskin framework, the impact on nutrition would operate down from Boxes BB to CC to DD, not directly from operations within Box D. Success in increasing the incomes of targeted households will depend in part on improvements now underway in the all-

\textsuperscript{21} A second woreda, Jor, was dropped because of inaccessibility.
weather road from Gambella to Jima (a distance of 470 km from the project site) and the road from the project site to Gambella town.

Africare’s approach has necessarily centered on farmer and extension agent training, given the low level of technology employed in agriculture in the area. Both woreda-level agriculture Development Agents (DAs) and members of farming households have received training in improved cultivation practices. Training opportunities offered to rural farming and fishing households have included: ox plowing, post harvest grain handling and storage, improved fishing methods, training of blacksmiths, and women farmers’ training in the agronomics of vegetable, root/tuber and oil seed production. Training was also provided in bee-keeping techniques, in improved fishing techniques for leaders of fishing groups, in the supervising of self-help road construction and maintenance, and in the formation of PA development committees. In its training and demonstration elements, the project has enjoyed good working relationships with the Gambella Regional Bureau of Agriculture and with local Development Agents. Eleven DAs received training under the Africare project in 2000-2001 and eight of these are still working on project activities – each working with a separate Peasant Association (PA).

Looking at specific objectives of Africare’s program in Gambella Region, the following are among the more notable results:

**Objective 1: increase food production**
As measured against the 1997 baseline yields in per hectare of 900 kg for maize and 700 kg for sorghum, project beneficiaries produced 1,195 kg of maize per hectare in 2001, and 970 kg/ha for sorghum. Both figures represented increases of more than double target values. While in 1997 only 100 farmers in the project area were using improved seeds, 400 farmers were using these improved varieties in 2001, slightly above the target. The number of households employing at least four of the seven recommended practices had jumped from zero in the baseline to 500 by 2001.

Progress in assisting farming households to preserve stored food was more difficult to achieve. The principal evidence of progress has been in the number of farmers (658) who have installed metal rat guards on the poles supporting their grain stores. While there have been opportunities in the past two years for farmers who had managed to grow sorghum or maize in excess of their needs to sell into rising market prices, low productivity and difficulty in storing surplus grains has greatly hampered their ability to take advantage of market prices. During 2001 there was a collapse in cereals prices in Gambella (as was the case throughout Ethiopia) that dampened incentives for growing grain for the local market. Some of the softness in local prices may be the result of large amounts of food aid going to Sudanese refugees in the area.

As indicated in the most recent Results Report (Africare, December 2001), the project has more than met its targets related to its increasing food production objective as measured by: i) increases in per hectare production of grain (2001 per ha yields and
production as against the 1997 baseline), ii) the numbers of households using improved seed varieties, and iii) the numbers of households continuing to use at least four of the seven recommended production practices. The project’s M&E system has not tracked the household income effects of these activities, although the Results Report suggests the “perception” of both rising income and improving nutrition among participating household members.

Lessons from the Africare project

The narrative of Africare reporting and project evaluation suggests that the behavioral changes among target beneficiaries that would indicate an environment for sustained improvements brought about by project interventions do not yet exist. The introduction of vegetables for both income and nutritional benefits has been slow, in part because many of the crops proposed have not traditionally been part of the local diet. The need for using chemical fertilizer to significantly increase the traditional low cereal yields in the woreda is offset by the high price of fertilizer in the local market and the variability in market prices that might be obtained from the sale of grain surpluses. This is particularly the case given the large amount of food aid that is periodically made available to refugees encamped in the area – a large share of such food aid often finding its way into local markets.

Thus far, the project has done a very good job of providing training to local agricultural extension staff and involving them in core Africare project activities – particularly those involving improving agronomic practices and expanding the numbers of crops grown for local consumption and for sale. There are few other potential partners in the area, however, and post-Africare sustainability will have to depend on regional and woreda government agencies being in a position technically, managerially and financially to pick up back-stopping responsibilities. This does not seem feasible, without more budgeted resources. Because of shortfalls in monetization proceeds (see “Issues” sub-section of Section 3) a considerable share of post-harvest training had to be curtailed, however – a significant deterrent to eventual sustainability of the project.

The nutritional and growth monitoring elements of the project are just now being installed. These are being supported – in part – by regular USAID Development Assistance (DA) funds, apart from Title II resources. The ability to chart nutritional changes resulting from project interventions will take a minimum of two to three years and good results will take longer. Therefore, one assumes it is USAID’s intention to maintain a development presence in Gambella. If so, it would probably make sense to support the entire effort with DA rather than food resources, although both can be combined to good effect, particularly in the light of continued difficulties in securing adequate monetization proceeds from the present arrangement. Africare staff in Washington have proposed that Africare take over the responsibility for generating its own monetizing resources, pointing to its excellent record in handling monetization in other countries in Sub-Saharan Africa.

As discussed later in the report, the evaluation team is quite skeptical of the utility of measuring crop output gains as an on-going indicator of individual project success, or the lack of it.
Three years is too short a period to be able to determine whether there are replicable elements in this project and whether particular approaches are sustainable under the very difficult circumstances in which this project is operating. Given Africare’s documented track record for success in Title II efforts elsewhere in Africa, it should be given the time and the resources to do so in Gambella as well. This, however, depends on whether USAID/Ethiopia is able to find a way to reduce its own management burden in dealing with eight separate Cooperating Sponsors and, more importantly, decides to continue the effort in Gambella over the time period that undoubtedly will be required for success.

The contribution of the Gambella project – even if very successful over the longer term – to overall progress in reducing food insecurity throughout the food insecure areas of the country appears likely to be marginal given the relatively few beneficiaries involved, the likely slow pace of the effort in Gambella, the site-specific nature of the technological packages required, the fact that any macroeconomic growth in the rest of Ethiopia is likely to affect far-away Gambella less than other more central parts of the country, and the high per beneficiary costs associated with the difficulty of overland access of commodities to Gambella and its agricultural products out of Gambella.

**CARE**

CARE operates three separate projects in East & West Hararghe and a fourth in carefully selected poor *kebeles* (neighborhoods) of Addis Ababa.
Length of time operating in Ethiopia: 17 years
Overall goals: Improve household food security and reduce malnutrition
Geographic Coverage: Oromiya and Addis Ababa Regions
Major Activities: Increase agricultural production, improve health status, increase household income, natural resource base maintained, emergency response maintained, urban infrastructure in poor Addis Ababa neighborhoods improved.
Total beneficiaries claimed in 2001: 40,000 (regular); 505,000 (emergency)
Partners: Education, Water, Health and Agriculture Bureaus, Regional DPPB
2001 Metric Tons: 47,023
2001 Dollar Value: $17,980,000
202(e) expended: $366,527
ITSF for Emergency: $3,647,000

CARE’s DAP-supported rural activities focus primarily on increasing crop production (IR1), increasing household income (IR2), improving health status (IR3), improving natural resources management (IR4), and the maintenance of an emergency response capacity (IR5).

In the Garamulata Rehabilitation and Development (GRAD) project in East Hararghe, CARE operates four project components targeted on approximately 5,000 highly food insecure households in 42 peasant association in the lowlands of Bedenu, Grawa and Kurfachelle woredas. The component intended to increase agricultural production (IR1) has provided improved seed to most of these households, promoted improved agronomic practices for about half of the participating households, and constructed irrigation structures. The introduction of vegetable growing has been very successful in this area – less so in the other CARE sites. Efforts to improve health status (IR2) have been focused on provision of potable water supplies, both to reduce the incidence of diarrheal diseases and reduce women’s time spent hauling water. 20,000 people and 10,000 head of livestock are presently benefiting from this effort. Community-based committees to manage the water supply schemes are operational. Efforts aimed at increasing household income (IR3) have involved food-for-work local road improvement and maintenance activities. There are some NRM efforts (IR4) involving soil conservation and environmental conservation, the production of tree seedlings and the provision of fuel-efficient stoves. Counterpart staff training was curtailed because of monetization-related budget shortfalls. Emergency response capability has been well maintained (IR5) through food distribution to more than 50,000 beneficiaries.

In the West Hararghe Development Project (WHDP), there has been a somewhat greater focus on water development activities (which have been the most appreciated by project beneficiaries) in irrigation and potable water supplies. Increased access to clean water has reduced the incidence of diarrheal diseases and improved health status. The final DAP evaluation document suggested that more attention could be paid to improving performance in water sanitation and hygiene where progress is more dependent on enticing behavior changes that can be maintained over the long run. As in the GRAD activity, progress against indicators and proxy indicators in agricultural production and NRM efforts was generally very good and in the majority of cases exceeded targets.
However, and this will be a common theme throughout the review of all the Cooperating Sponsors’ activities, there are few good indications of the means to maintain progress (i.e., sustainability), or that adequate attention is being given to insuring that the prospects for sustainability improve over the longer term.

The Shoa Health, Extension, Water and Agriculture (SHEWA) project includes about 5,000 households. As with the previous CARE projects, it is a multi-faceted effort focused on increasing household agricultural production, income, improved health and sanitation, improved natural resource conservation efforts and maintaining an effective emergency response capability in the area. The most recent result report shows good progress against targets in most indicators. In particular, the fact that 40 percent of households had access to clean water at the end of the project against a baseline figure of nine percent is a particularly noteworthy accomplishment.

The DAP evaluation drew attention to several elements needing further attention, if sustained progress was to be made more likely. First, there appears to be a strong emphasis on the building or rehabilitation of assets – roads, irrigation, and sources of potable water, with less attention given to strengthening the institutional arrangement that will be needed to maintain these structures over the longer term. There are several instances – in all of the projects – where roads have been built without involvement of the regional or woreda road authorities and little apparent hope that these local governmental bodies will assume responsibility for their continued maintenance after the projects end.

In the three rural projects, overall, maize and sorghum yields and per household production have increased substantially from the baseline figures, but the contribution of the project to these increases was described by the final evaluation as “limited” and the ability of the communities to maintain these gains over the longer term unlikely. Farmers selected to attend training in improved agronomic practices had, by and large, failed to implement what they had learned. Composting, as an alternative to chemical fertilizer, has been enthusiastically adopted by a sub-set of farmers, but they are unable to generate enough composting material to cover more than about 1/8th of an hectare. Additional work is need to convince a majority of farmers to expand the use of compost and to extend its use to the majority of their arable lands. Availability and use of protected water are well above targeted values, but daily use is below target. Reduction in diarrhea associated with increased water use is less than expected. The number of households using latrines is above expectations, but there appears to be little on-going demand among the non-user majority of households. Added training and sensitization is required in order to expand the demand for latrines.

The Community Infrastructure Improvement (CII/UFFW) Urban Food for Work project has been a model of how an NGO can bring about exceptional, highly-participatory urban infrastructure improvements in an extremely poor set of urban neighborhoods. The selection of participating neighborhood associations, the manner in which the activities were planned and implemented, the manner of selection of FFW participants, and the way in which the entire 12-14 month process was managed provide ample justification
for continuing this type of project in Addis Ababa and in other urban locations in the future. The discussion at the end of Section 2 will return to the CARE urban project.

However, for all its many small-scale successes in both rural and urban areas, there was some concern that the total impact had not made a great deal of difference in the bigger picture, as the following observation from the mid-term evaluation suggests:

“Although the benefits of the DAP project have touched a large number of people in widespread areas, the mid-term evaluation showed that the initial needs that originated the current DAP (food shortages, water shortages, and high prevalence of diseases) are still overwhelmingly present in the project’s operational area. One lesson learned from this experience is that to generate the synergy required to reach significant levels of food security, a more focused program and geographic concentration are needed.”

In reviewing the documentation and in the several interviews with CARE staff, the evaluation team noted that CARE was very willing to cite mistakes made and problems encountered in the context of successes and lessons learned. There is a clear willingness to learn from experience and apply lessons stemming from this learning. There is a good appreciation of the importance of forming lasting community institutional structures intended to carry on the processes and methodologies of particular interventions after the departure of the development catalyst. Referring to the CII/UFFW urban project, the final DAP evaluation had this to say:

“The CII/UFFW is a typical development catalyst intervention. Although short in duration in each kebele (average of 12 months) the project literally replaces dirt and mud with a solid foundation on which participants continue to build their own development initiatives.”

In many ways, this is the essence of what DAP programs using food aid as a primary resource are meant to accomplish. While the progress reporting is largely focused on setting and meeting targets at the output level, the more important progress is in changing of mindsets and behavior of participating beneficiaries and potential beneficiary “observers” in ways that enable them to continue to make progress toward overall economic growth, social development, health, production, and income objectives contributing to the overall goal of lasting food security at the household level.

The DAP final evaluation concluded that the water and sanitation component had the greatest impact in terms of health, time savings and reducing caloric expenditure by women and children who are usually responsible for fetching water. The irrigation schemes in the SHEWA component not only improved the agricultural production prospects, but have increased employment opportunities for the landless poor.

CARE’s most recent performance evaluation notes that:

“Progress in DAP implementation over the past 4 years has been steady in spite of an over-ambitious 5-year plan and difficulties posed by the unreliability/shortage of monetization funding. Many farmers who have benefited with irrigation have increased their income up to 10-fold; school enrolment has almost doubled through school construction. Yields for maize and sorghum have increased by 65 and 74%….use of clean water and latrines has
increased 5 and 12-fold respectively...Complimentary to these development efforts and progress is the emergency response component which in CY 2000 provided food assistance to 158,518 people in the three DAP rural operational areas.”

Lessons from CARE’s experience helping to guide USAID thinking regarding the use of Title II resources in the next planning period include the following:

- The need, identified in CARE’s own final DAP, is to devote more attention to cementing good working relations with local government entities who, as sources of public support after CARE’s termination of activities, will be responsible for backstopping the continuation and expansion of CARE’s efforts. Examples include the need to work closely with local entities engaged in public works – especially rural roads – to ensure they are willing to pick up responsibility for ongoing maintenance of roads built or rehabilitated under CARE auspices.

- The need for a more solid effort at popular participation, local level capacity-building, and institutional development aimed at perpetuating the progress made during the project. Sustainability of the progress initiated under CARE’s auspices is a major concern, as it is with all of the Cooperating Sponsors’ programs. This is true for all elements – agricultural production, natural resources maintenance, the continuation of an environment in which household incomes can grow, monitoring of community health and nutrition progress, and managing the ongoing safety nets and disaster mitigation apparatus built up under CARE’s auspices. In the WHDP activities, there is need, according to the final DAP evaluation, to do a better job of involving the community in implementation and management. The project tended to be “a huge construction project” with insufficient attention devoted to the longer-term sustainability of the assets.

- The utility of CARE’s CII/UFFW activities as a model for replication in other kebeles in Addis Ababa and in other urban communities in Ethiopia. In this regard, there is added supporting evidence contained in the “Assessment of the Impact of Ethiopia’s Safety Net Program” (Reutlinger, et al., 1996). In the review of the safety net program in the Amhara region, considerable evidence was found in the urban program in Bahr Dar of the lasting utility of these programs not only in developing skills among the urban poor that they could later convert into long-term employment, but of the positive psychological impact of paved sidewalks, paved markets, public toilets and showers.

- The most appreciated element of CARE’s DAP activities was improved water availability, especially paved ground catchment and cisterns. Rates of diarrhea and women’s time spent collecting water both declined. Irrigation structures in the SHEWA project were particularly well done and there was evidence that the smallholders living within their proximity would be able to grow two, and sometimes three, crops per year as a result of access to water more or less throughout the year. This is the type of sub-activity with the best combination of food security impact (both in terms of generating production and eventually in incomes) and popular support of any of the CARE activities.
CRS

CRS operates programs through Ethiopian counterparts in several regions of Ethiopia.
Length of time operating in Ethiopia: 43 years

Overall goals: Improve household livelihood and food security

Geographic Coverage: Oromiya, Addis Ababa, Somali, Harari, Tigray, Dire Dawa, SNNPR and Amhara regions

Major Activities: Agriculture and natural resource management, health, water, sanitation, safety net, women’s savings and credit, emergency preparedness.

Total beneficiaries reported in 2001: 75,000 households 23 (regular); 845,000 individuals (emergency)

Partners: Regional governments, Catholic Church based organizations, NGOs

2001 Metric Tons: 84,500
2001 Dollar Value: $32,306,000
2001 202(e) expended: $194,249
ITSH for Emergency: $6,286,000

CRS is the largest and longest-lived U.S.-based NGO operating in Ethiopia. Unlike the seven other Cooperating Sponsors, the CRS program works entirely through local counterpart organizations to plan and implement CRS activities. The geographic scope and numerous components of the CRS program make it difficult to summarize and analyze. However, thanks to an extensive and extremely comprehensive final DAP evaluation and detailed annual reporting by the resident CRS office, several important themes emerging from CRS’ long experience in Ethiopia and the progress made in the DAP elements can be identified and discussed.

CRS/ET uses Title II commodities in four ways: i) generation of local currency through monetization; i) food for work in NRM and agricultural activities, iii) FACS/CBHC (as an incentive and supplementation/rehabilitation “therapy”); and iv) as a safety net for the truly indigent. Of these, the safety net activities have in recent years accounted for just under half of total food use (provided through charitable organizations such as the Missionaries of Charity, (MOC)), monetization for about one third, and FFW and FACS/CBHC about 10 percent each.

As was the case with CARE, significantly less income from monetization than had been programmed and approved in the 1997-2001 DAP hampered achievement of overall program objectives. CARE was forced to reduce staff and curtail activities. Even greater reductions in staff and operations would have been required had not CRS “borrowed” resources from non-USAID sources of funding to keep essential elements of the DAP program alive. These borrowings need to be repaid. Currently, CRS is $1.4 million in debt and is awaiting the outcome of a proposed third country monetization, now being negotiated, to be in a position to reduce that indebtedness to other, non-DAP accounts.

CRS operates presently through the following counterpart organizations: Adigrat Catholic Secretariat (ADCS) in Eastern Tigray Region, the Hararghe Catholic Secretariat (HCS) in Eastern Oromiya and Dire Dawa regions, Cheshire Foundation in Addis Ababa, Meki Catholic Secretariat and Wonji Catholic Secretariat, both in Eastern Oromiya and,

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23 Per CRS Performance Monitoring Plan Spreadsheet for 2001 results.
for safety net programs through the Missionaries of Charity (MOC) operating in many regions in Ethiopia. Because it is CRS operating philosophy to always work through locally-based intermediaries, the successful implementation of programs requires the additional task of strengthening and reinforcing these counterpart organizations. Mid-way through the DAP period, CRS terminated its operations with Nazareth Children’s Center (NACID) because of continued poor performance. During the 1997-2001 period, two other counterpart organizations were dropped because of management and oversight shortfalls. Two counterpart organizations – Adigrat Catholic Secretariat and Hararghe Catholic Secretariat – made considerable progress toward being fully capable indigenous development agencies. Another four local NGOs have been identified as partners and potential new counterparts – Sidama Development Corporation, Team Today and Tomorrow, Water Action, and the Organization for Social Services for AIDS.

CRS has activities arrayed against all five of the IRs and has made substantial progress against each of them as measured by the impact and proxy indicators which CRS and USAID/Ethiopia had agreed would be used to measure such progress. In Tigray, Dire Dawa and Eastern Hararghe cereal crop production during the period increased for all crops grown – teff, wheat, sorghum, and barley. There were positive changes over the 1996-2001 period in three of the four proxy indicators used: cropland bunding accomplished, manure application of fields, and use of small-scale irrigation. There were also changes in the percentage of farmers using improved seeds and fertilizer (from non-DAP sources), which also influenced the higher yields and production levels achieved.

Natural resource management successes related directly to agriculture were not achieved at the level anticipated because of: i) the impact of the Ethio-Eritrean war on ADCS activities; ii) erratic rainfall – particularly in the HCS area; iii) competition for FFW manpower with the Ethiopian government’s drought-related Employment Generation Scheme (EGS) during the 1999-2001 period; and iv) monetization-related budget cuts limiting the amount of required training that could be provided.

Performance against IR 2 – increased household income – was adversely affected by the government’s introduction of new policy on micro-credit institutions mid-way through the DAP period and the need for CRS to curtail its “Women’s Savings and Credit” (WSC) activity at that time. A small element of this program was able to continue, however, using savings that a few women’s groups had already generated. The results of this small-scale women’s credit operation provide important lessons regarding the utility of such micro-credit operations in the generating of significant streams of women-controlled household income. The food security impact of the WSC activity on those 1,848 women able to continue to access small lines of credit to underwrite income-earning initiatives was positive and may prove to be enduring. Household savings achieved by these women were more than double the end-of-project target. Sixty-four percent of the women sampled reported that they actively participate in the household decision-making processes on how to use loan profits vs. a baseline figure of 44 percent. There are a large number of anecdotal accounts from both the mid-term and final evaluations regarding women who have converted small initial loans into substantial businesses and considerably increased streams of household income.
The CRS Food Assisted Child Survival/Community Based Health Care (FACS/CBHC) activities have been the primary tool for making progress against IR3. Indicator data suggest that CRS activities have helped reduce the percentage of under-twos who are significantly stunted. In the HCS areas of East Hararghe and Dire Dawa, stunting rates over the five-year DAP period have dropped from 52 percent to 22.6 percent vs. 42 percent for Oromiya generally and 31 percent for Dire Dawa. Similar but less dramatic decreases in stunting among CRS beneficiaries were recorded elsewhere in Oromiya and Tigray. The subcomponent intended to increase health education and awareness at the community level, however, only achieved about a third of its target because of the phasing out of three counterparts (NACID, IHA, and ACS) and major monetization-related resource shortfalls. Other progress in achieving IR3 objectives has been made in immunization, antenatal care, and reduction in the incidence of diarrheal diseases. An important element of the CRS approach has been the continued heavy use of the KPC survey technique, which focuses on whether beneficiaries are practicing in the home what they have learned at the health clinic or from their local community health practitioners.

Progress against IR4 – natural resources management – appears also to be good. Many kilometers of bunds have been constructed to reduce water run-off and help prevent further soil losses in 23 target watersheds in East Hararghe, Dire Dawa and East Tigray. Area closures have been practiced for several years to help regenerate growth in vegetative cover and the results in many areas have exceeded expectations (see Annex 4). As measured using the Universal Soil Loss Equation (USLE), soil losses have been reduced by as much as 96 percent in one area and 98 percent in another. Other areas show reductions in losses ranging from 87 to 96 percent.

CRS is the largest U.S.-based NGO in Ethiopia in terms of the size of its response to emergency capability and the amount of relief food it handles in emergencies. It has implemented a large-scale joint relief operation with CARE, SC-US and World Vision and also works closely with EOC in some areas. It maintains itself in a high state of readiness. Interestingly, in response to a mid-term evaluation recommendation it divested itself of its own early warning system (VEWS) because it found it could rely on other existing warning systems (FEWSNET, VAM and the government’s DPPC systems) and did not need to duplicate their information gathering and reporting systems.

As noted earlier, approximately 50 percent of CRS food resources are used for safety net (SN) programs providing assistance to those physically unable to help themselves. Operating largely through the Ethiopian network of the Missionaries of Charity (MOC) and a few smaller local NGOs, CRS has been involved in a form of emergency mitigation in a large way. Among those increasingly in need of such assistance are households impacted by the HIV/AIDS pandemic.
Lessons from CRS’ experience include the following:

- The CRS resident staff have several times expressed their concern “…that some of the indicators are not accurately measuring real impact.” The concern regarding the indicators that USAID has required the Cooperating Sponsors to use was raised in the MTE, by FANTA consultants and vigorously in the final DAP evaluation. In general it is felt that too much data gathering is being undertaken with much of the data of a “nice to know” rather than a “need to know” characterization. Some indicators are vague. Some information is less useful than information not collected. There is a lack of standardization not only within the counterparts, but also among the eight Cooperating Sponsors themselves. The staff’s particular concern was with proxy indicators used to measure changes in income generation, which the staff argue are not reflective of real changes in income. Outside evaluators have also been concerned with the validity of data on production increases over the five year period of the DAP and the quality of the data collection process and the validity of data collected by several counterparts using differing methodologies.

- The integrated approach used in the Lege Oda Mirga watershed in Dire Dawa Region by HCS has been highly praised in the MTE and the Final DAP evaluation as a potential model for projects in similar semi-arid mixed cropping situations. The popular participation by the participating Peasant Association leadership and members, the integrated focus on virtually all aspects of the Title II SpO – increased production, increased household income, improved health and nutrition, NRM, and continuing disaster preparedness - can be found in this on-going activity (see Annex 4.) This may be a fully appropriate model for replication elsewhere in food insecure areas of Ethiopia. It should continue to be carefully analyzed to determine the on-going reality and likely sustainability of its successes. Information about this integrated project should be shared with, and utilized by, others.

- Concerns have also been raised about the sustainability of some of the local institutional structures established at the community level. The final evaluation team suggested that community water management committees are not strong enough in most cases to function effectively over the long term. The same is true regarding the ability to continue to maintain roads and other engineered works, without the active participation by local governments.
The EOC operates Title II projects in Tigray, Amhara, and Oromiya Regions.
Length of time operating in Ethiopia: 29 years
Overall goals: Sustainable improvement of household food security
Geographic Coverage: Amhara, SNNPR and Tigray Regions
Major Activities: Agricultural development, water and sanitation, social services development, emergency response.
Total beneficiaries claimed in 2001: 127,000 (regular); part of CRS coverage (emergency)
Partners: Regional governments, Orthodox Church-based organizations
2001 Metric Tons: 10,397
2001 Dollar Value: $3,975,000
2001 202(e)expenditures: $186,000
ITSH for Emergency: $0

The Ethiopian Orthodox Church Development and Inter-Church Aid Commission (EOC-DICAC) has been engaged in DAP-supported activities in four woredas in three regional states (Endamehoni woreda in Tigray, Mekdela and Wadla in Amhara and Sodo in Oromiya). Their present DAP covers the period 1998-2003. It describes EOC activities in each of four sites aimed at improving household food security in 4 IR categories: i) increased agricultural production; ii) increased household income; iii) improved health status; and iv) maintaining the natural resource base.

EOC’s Results Reports for 2000 and 2001 show increases over the lifetime of the DAP in many but not all indicators associated with these IRs. In collecting the data for these
reports, EOC used focus group discussions and key informant interviews to supplement survey data from 760 household questionnaires in the three project areas.

Progress against IR1 (agricultural production) shows that barley, wheat and sorghum production had increased and that of teff and maize were slightly less than the baseline values. Farmer interviewees reported that they had benefited from soil and water conservations activities, especially farmland bunds. The use of chemical fertilizer had decreased largely because of the increasingly high cost of fertilizer, the use of improved seeds had increased slightly. Farmers complained that input supply was untimely and inadequate. The household survey detected that household income (IR2) had risen, as indicated by increased ownership of household items and slightly increased consumption of luxury foods (meat, milk, butter). Average size of livestock holding, while higher than in the previous year, was still below baseline levels because of drought losses in recent years.

Significant progress had been made against IR4 targets (natural resources maintained). The total amount of land enclosed to protect it from livestock (2,260 ha) was on target, and much of this space had been planted with indigenous trees. Progress made against IR5 was limited to the on-going collection of meteorological data.

In terms of the on-going food security status of the target beneficiaries, EOC reported that stunting rates remained extremely high in all project areas – in Endemahoni it had increased to 83.7 percent against the base year value of 73.4 percent. In Wadla it had decreased from 72.2 to 55.8 percent. Household production in 1999 was on average sufficient to cover 5.3 months of household food requirements, as compared to a base year value of 4.6 months.

In a mid-term evaluation completed in November 2000, there were a number of findings indicating problems in several project components in the four sites. The problems identified included:

- years of bad land management practices were not being appropriately addressed in the project.
- There was too much emphasis on building stone bunds.
- The quality of conservation efforts was not high enough.
- The balance between physical and biological conservation was less than optimal.
- There was little evidence of a watershed approach in the implementation of the conservation program.
- Community-based conservation was insufficiently demand-driven.
- There was a tendency in the water development component to stay with the same design regardless of site differences.
- The relationship between region-based credit organizations (e.g., Dedebit in Tigray and ACSI in Amhara) and the administration of the input and income generating elements of the projects were not well understood or well utilized.
- Health interventions were few in number and limited in approach.
- Sustainability was not being given needed attention in some project components.
• Overall community participation was insufficiently emphasized. (“With regard to community participation there is a feeling that sectoral task forces envisaged in the DAP to promote community participation and contribute to the evolution of community-based organizations has not been given attention.”)

With regard to the overall impact on the Special Objective of reducing household food insecurity, the MTE found little evidence of impact:

“A positive trend towards achieving the special objective is not evident measured by the three indicators specified to monitor the attainment of the SO. It would be unrealistic to expect a discernable trend towards achievement of the special objective without implementing the core project activities such as input credit and women’s credit. The delay in the implementation of almost all project activities is another reason for not expecting a positive trend as yet.”

The MTE further recommended that crops such as enset in Sodo and Irish potatoes elsewhere might profitably be substituted for cereal crops in order to increase yields and incomes and noted that “household production in which cereals dominate cannot [be considered] feasible anymore.” Fertilizer and related credit should be restricted to those households using irrigation or to carefully selected households in “moisture reliable zones.” Credit for inputs to poor households in rainfed areas is simply not feasible and should be stopped. On the other hand, were improved service cooperatives to continue to emerge, they might prove feasible as channels for credit to individual households. The MTE noted that the very popular demonstration plots used to train farmers in forage and vegetable crops could also be used to provide training in nutrition. Finally, the evaluation turned again to NRM and noted that: “Proper land management, including systematic crop rotation, fallowing and soil and water conservation, should be promoted to maintain and restore fertility.”

A member of the evaluation team for this report visited the Sodo project in SNNPR. His trip report evinces a considerable amount of FFW activity in road rehabilitation, functioning seed nurseries, a well-constructed and well-used health clinic, considerable work undertaken in water development and pit latrine construction, training of beneficiaries in precepts of EWS and pre-planning and preparations for disasters, and monitoring of market prices at times when rainfall is late or insufficient. He noted evidence of good cooperation between EOC staff, local PA leaders and local governmental staff at both the zonal and woreda levels. At the input/output level, efforts in Sodo seem to be operating reasonably well. However, evidence of capacity-building and of long term sustainability of physical assets are not as visible.

Lessons from EOC’s experience include the following:

• There is a good collaborative spirit between project managers and local authorities and woreda-level line agencies; there is a growing sense of “program ownership emerging among staff of the later two. There is also considerable enthusiasm among beneficiaries for some of the project interventions – especially the water programs.
• There is some evidence that project conservation efforts may have increased moisture availability in the soils, particularly since the MTE team found considerable evidence of receptivity to this element of the project among beneficiary farmers.

• The EOC DAP-supported project is still relatively new, however. Much of the evidence in the mid-term evaluation leads to a conclusion that the project is as yet insufficiently focused on the need for considerably more institutional strengthening of assisted PAs and of the local NGOs and government units that will have to pick up the elements of the projects at the end of the DAP period. What constitutes sustainability of the effects of the EOC interventions has yet to be well understood and instilled among beneficiary farmers, their PA leaders, and local agency staffs. While over time, EOC is quite likely to grow into a competent and experienced development entity capable of generating lasting progress toward improved household food security, it still has a considerable way to go.

FHI

FHI operates Title II activities in four woredas in Amhara region which were selected because they are among the most food insecure in Ethiopia.
**Length of time operating in Ethiopia:** 17 years  
**Overall goals:** Sustainable Improvements in household food security  
**Geographic Coverage:** Amhara Region  
**Major Activities:** Agriculture, health, conservation, reforestation, water, sanitation, community leaders training.  
**Total beneficiaries claimed in 2001:** 268,000 (regular); 204,000 (emergency)  
**Partners:** Line departments of agriculture, health, water and energy, and ORDA  

### 2001 Metrics  
- **Metric Tons:** 18,138  
- **Dollar Value:** $6,935,000  
- **202(e) expenditures:** $184,272  
- **ITSH for Emergency:** $1,342,000

The overall objective of Food for the Hungry International (FHI) activities during the period under review is “…sustainable improvement in household food security in its target areas.” Those target areas are Lay Gayint, Tach Gayint and Sidama woredas in South Gondar zone, and Gubalafto woreda in North Wollo. All are in Amhara region. The rationale for selecting these particular woredas is that their inhabitants are among the most food insecure in Ethiopia. In South Gondar, for example, infant and child stunting levels were in excess of 85 percent of all children – among the worst such figures anywhere in the world. Surveyed households in the zone were without sufficient food for more than eight months of the year, on average. In North Wollo, the causes of chronic food security are particularly numerous and intractable.

In the three woredas of South Gondar, the FHI strategy was to increase cereal and non-cereal production in targeted PAs as a means of increasing food availability and, at the same time, increasing the number of hectares of community grazing lands converted into commercial fodder production and the production of non-cereals crops. To cope with severe malnutrition, FHI focused on immunizations of children, increasing maternal and child food and micronutrient intake, increasing the availability of reproductive health information, increasing availability of potable water, and improving sanitation.

The strategy in North Wollo was to use highly participatory project design and implementation techniques in nine selected PAs, working closely with the Organization for Rehabilitation and Development of Amhara (ORDA) as a capacity building endeavor for this important local NGO. The project focused on increasing production of wheat, barley, sorghum, potatoes, other root crops, fruit, and cash tree crops. In addition, the project aimed to strengthen the capability of ORDA to increase the availability and use of potable water and proper sanitation.

Sustainability was a central theme in all four woredas and was to be measured in terms of **technical, social, and economic** sustainability. Technical sustainability insured that the fodder crops in South Gondar, and the crop diversification strategy were technically sound and feasible. Social sustainability was to be achieved by the communities themselves determining the equitable distribution of the benefits from the communal fodder plots and the strong emphasis on partnering of all stakeholders. Economic
sustainability was to be promoted by increasing the diversification of crops produced – food and cash crops alike.

Among the more notable achievements reported in the most recent (December 2001) Results Report were:

- Five small-scale irrigation schemes providing water for 129 hectares were completed in South Gondar Zone.

- Yields in the project’s five most important crops (teff, barley, wheat, sorghum, potatoes) were above target values in 2001 in all three project areas. Much of this increase, however, was to a large degree the result of what DPPC has reported as the best rainfall pattern in this area in ten years.

These increases were achieved in South Gondar even though fertilizer use had significantly declined. According to the FHI DAP evaluation this was the result of farmers having bought fertilizer at relatively high prices in 1999 and 2000 only to encounter quite poor, variable rains, low production and slack markets for their sales. FHI’s FY 2001 Results Report also noted that:

“…the application of fertilizer especially on some types of crops such as barley is not viable in all project areas…financial gain from the use of improved wheat seed and the application of chemical fertilizer shows lower gains [in some areas]. Teff seems relatively better off with fertilizer but is still not economically viable compared to results without the use of fertilizer.”

Only 4.6 percent of 800 sampled households were users of both improved seeds and fertilizer. Between 36 percent and 58 percent of that sample indicated they were using crop rotation, intercropping, composting, and soil conservation in the four woreda survey areas – results that surpassed 2001 target values in all four cases.

Looking at IR2-related performance (increased household income), FHI’s proxy indicators were: i) increases in livestock ownership, ii) increased number of household assets owned, and iii) increased number of households consuming “luxury foods.” The livestock ownership was found problematic because of the 1999-2000 drought and its impact on household livestock ownership. It further noted that the ways families used livestock – as part of drought coping strategies – made it a difficult proxy indicator as a signal of accumulating assets. FHI also noted that expenditures for kerosene were being tracked in nominal values and were not adjusted for inflation. Other indirect indicators, including households with access to irrigation, households growing vegetables and changes in number of households with mature stands of eucalyptus, all showed modest gains – nearly all of which were accounted for by the completing of the five small irrigation activities in South Gondar referred to earlier.

Results related to IR3 (improved health status) reflected mixed results. Seven indicators were reviewed: i) reduced prevalence of diarrhea, ii) changes in percent of under-5s underweight, iii) increased access to potable water, iv) births attended by TBAs, v) number of households with at least two visits to health posts within the previous six
months, vi) percent of households using modern family planning methods, and vii) changes in amount of water used in the households per day. Access to potable water had increased significantly because nine hand dug wells had been completed, 24 more wells had received maintenance, and 22 springs had been developed. All of these together provided additional potable water to 18,000 households. By the end of 2001 nearly 50 percent of these areas had access to improved water sources. On the other hand the survey data showed that, in some of these areas, per household water consumption dropped.

Results against IR4 targets (natural resources maintained) was reported by FHI as the most difficult to measure, although the Results Report noted that land conservation measures were above the 1991 targets in two woredas.

According to the Final Evaluation of August 2001 (ITAB-Consult, 2001) the FHI projects achieved several important outputs:

- A large number of physical output targets met, particularly in soil and water rehabilitation/restoration
- Conversion of substantial areas of communal degraded grazing areas into productive fodder plots
- Introduction and dissemination of multi-purpose plant species, e.g., pigeon peas
- Creation of awareness of the need for environmental protection
- Introduction of vegetables, root crops, improved poultry, and provision of local sheep breeds for income generation
- Construction of a large number of potable water schemes
- Creation of community capacity for sustainable management of physical assets
- Training of large numbers of farmers, agricultural staff and project staff in appropriate agronomic techniques, and in NRM techniques
- Health education which led to a measured decrease in diarrhea prevalence and improved maternal and child nutrition.

Problem areas and weaknesses identified in the final evaluation included:

- Weakness in management of community fodder plots
- Water committee members proved unable to maintain the water facilities
- Too much reliance on FFW for implementing virtually all aspects of the supply of clean water facilities
- In developing small scale irrigation, plan was too ambitious and the achievements too few because of “...failure to consider the available technical capacity and experience of the institution and the difficult topography and inadequate water resources of the area.”
- Costly fertilizer and improved seed packages failed to deliver promised yield increases.
- Weak integration with local government offices in the Sidama project
• Lack of likely sustainability in the de-worming health activity because of lack of capacity in local health office.

In addition, interviews with FHI staff indicated that problems with regular non-availability of monetization proceeds and with delays in arrivals of food commodities significantly hampered achievement of targeted project output levels and of objectives. The monetization-related problems were, in fact, so intractable that FHI has decided not to seek Title II resources to finance their development activities in the future.

Following are some lessons from FHI’s experience applicable to future USAID Title II efforts:

• It is difficult to ascertain true impacts when many indicators and proxy indicators are being used to gather data, which provide sometimes contradictory readings about magnitude – even the direction – of changes from baseline values.

• The importance of adequate and timely cash resources to accompany food resources or to keep all aspects of a program in the correct alignment is extremely high. The adverse impact of the monetization problems of the past three years are hard to pick up in the indicators but they include: training not provided, backstopping not available, site visits not made, institution-building not achieved. These were the actual results of the shortfalls, but, interestingly, their impact cannot be detected in the indicators.

• FHI staff have been particularly diligent in the consideration of sustainability of their projects (See Annex 5). In the last year of the activity all partners – particularly regional and woreda-level government partners -- were kept appraised of the need to be developing plans for continuing their support after the phase out of FHI. Community members also participated in these discussions and helped develop the phase out plan. Over the years of FHI’s partnership with government, the relationship continued to strengthen. It will be of considerable benefit to USAID for there to be a post-project evaluation after two or three years to see how much of what was initiated under FHI auspices has continued after their departure.
REST operates throughout Tigray Region. DAP assistance was employed in the most food insecure woredas of this very food insecure region.

Length of time operating in Ethiopia: 23 years

Overall goals: Sustainable improve in household food security

Geographic Coverage: Central Zone, Tigray Region.

Major Activities: Sustainable utilization of natural resources, agricultural production, potable water, increased access to information.

Total beneficiaries claimed in 2001: 127,000 (regular); 416,000 (emergency)

Partners: Regional Government, Bureaus of Water and Agriculture.

2001 Metric Tons: 53,514
2001 Dollar Value: $19,967,000
2001 202(e) expenditures: $156,000
ITSH for Emergency: $1,239,000

The Relief Society of Tigray (REST) implements a broad development strategy among the poorest, most marginalized communities in the most drought-prone, environmentally degraded areas of central Tigray Region. Its mandate is to be people-oriented and people-driven. It employs a fully participatory approach to poverty reduction and promotion of household food security focused on natural resource rehabilitation, crop and animal diversification, health and nutrition improvement, and the expansion of women’s opportunities and socio-economic status.
Between 35 and 40 percent of all households in Tigray are female-headed. They form a majority of Tigray’s most resource poor households which are REST’s primary target group. Between 60 and 80 percent of its beneficiaries are women, in FFW programs, income-earning activities, MCH efforts, and as participants in credit and savings schemes. REST has more micro-finance clients (200,000 – a large share of them women) than the Commercial Bank of Ethiopia.

REST has a total staff of 600 in Tigray, many of them engaged in training. It is at the core of REST development philosophy that every project must have a training component undertaken by REST staff or, more often, through its partners in the regional bureaus. Much of what it undertakes begins with relief which is closely tied to the region’s Employment Generation Scheme (EGS) and gradually moves into more sustainable asset creation almost entirely focused on rehabilitating Tigray’s heavily eroded lands and soils and in water retention schemes.

The “Food Economy Model” first developed by Save the Children/UK is used as the principle targeting tool for REST’s Title II-assisted projects. Given the enormous chronic food deficits of the region, “food is like gold,” reported one senior REST official. In the past the European Commission had been a major source of food aid, but the EC had stopped providing food and were, instead, providing some cash for Cash-for-Work (CFW) schemes. USAID is now the major source of food aid, either through REST or through the World Food Program. REST receives approximately 10,000 MT of Title II food annually.

The Final REST DAP Evaluation of February 2002 contains a number of important findings, conclusions, and recommendations regarding REST’s development approach, program, and results. They include:

- Impressive gains made under the project have come about largely as a result of profound levels of community participation.
- REST “…is a uniquely indigenous development institution in Tigray, to the extent that the communities consider REST accountable to the people of Tigray.”
- Adoption rates by farmers on their own private lands of activities promoted by REST on communal lands are impressive.
- “The implementation of REST activities requiring food resources may not be sustainable over time as currently designed. Food insecure communities continue to depend on FFW and external support.”
- Although women participate in REST activities at the grass roots level and REST has made the effort to target women, women are absent from DAP management, mid-management, and decision-making positions in REST.
- Monitoring and evaluation systems are currently weak and require further development. Coordination and integration of DAP activities within REST, where departments are not kept abreast of each other’s activities, requires improvement as well.
The following paragraphs reflect the findings of the final DAP evaluation regarding performance by IR – as supplemented by information transmitted to USAID/Ethiopia in the final 2001 Results Report:

**IR1: Increasing agricultural production**

**Cereal Production per hectare**: overall average per hectare cereal production was 624kg/ha vs. the 1997 baseline figure of 475kg/ha. The per household figure in 2001 was 302 kg as against the baseline value of 207 kg.

**Agriculture extension and training**: i) adopting rates are extremely high, ii) a number of production manuals in Tigrigna have been produced and distributed, iii) women farmers are “enthusiastically adopting vegetable production, and iv) livestock development has focused on increasing carrying capacity of pastures.

**Small-scale irrigation and micro-dams**: six river diversions and one micro-dam completed under the DAP, enabling 2,000-3,000 farming households to cultivate 60-70 ha per site with a resultant significant increase in incomes. The area irrigated under the DAP projects is 225 ha, just over 100 percent of the 2001 target value. Farmers’ associations (tabbias) have formed in these sites. There may be signs of increased malaria and possible bilharzia.

Factors which REST believes account for the good performance against this indicator include: expanded use of soil conservation techniques and structures reducing moisture stress; increased numbers trained in improved agronomics techniques; and improved rainfall in 2000 and 2001.

**IR2: Improved incomes**

This element has been focused on livestock development, including dairy cows and goats as well as bee-keeping for honey production and sale. The measurement of apparent increases in household income over the course of the project are indirect: increases in possession of livestock and other physical assets such as a plow, radio and iron-framed bed. In REST’s DAP areas, average household livestock holdings in 2001 were 35 percent higher than in the 1997 baseline. The 2001 survey found that ownership of all categories of assets being monitored had increased by about 5-10 percent over the 1997-2001 period. In 2001 27,350 persons in the DAP-sponsored program were participating in the region’s Dedebit Credit and Savings Institution, with deposits of more than 16 million birr.

**IR3: Improved health status of households**

The focus is on increasing rural water supplies for humans, animals, and crops. The activities are hand-dug wells, boreholes, and spring development. Water and sanitation committees have been formed to manage all REST-assisted water points. However, some water points are no longer functioning for lack of replacement parts. The final DAP
evaluation noted that this element of the project would have been more effective had it included nutrition, sanitation, and hygiene education. The Results Report, however, indicates that survey results show a decrease in average incidence of diarrheal diseases of between 23 and 53 percent compared to the 1997 baseline figures. In 2001, 94 percent of under fives had been immunized against polio, 27 percent of households were using protected water sources, and 58 percent of births were attended by a TBA.

IR4: Natural Resource Base Maintained

This has been the premier set of REST activities under the DAP. The Final Evaluation reported that the NRM activities “…are among the best uses of FFW resources ever observed by the evaluation team.” The soil and water activities, involving improved physical structures, biological measures, and effective soil management, have “profoundly” improved the environment of large areas surrounding targeted tabbias (PAs). NRM activities have resulted in: i) increased grasslands for livestock and other uses; ii) reduced soil erosion; iii) improved moisture retention; iv) the emergence of new perennial springs; v) allowing farming communities to reclaim gullies and rehabilitate farms and range lands; and vi) improved communal land management. The Results Report notes that as of 2001, 21,000 ha of communal land have been protected from human and animal use, with 2,100 guards employed to ensure the areas remain closed. More than 4,500 ha of these enclosed areas had been placed under direct community supervision, without further REST involvement, for the implementation of the communities’ own development plans.

In addition, reforestation, seedling production and planting, and the promotion and enforcing of area enclosures, have resulted in numerous instances of successful regeneration of natural vegetation in three of the four DAP-assisted woredas in Tigray.

IR5: Improved emergency response capability

This is the area needing the most improvement in REST performance under the DAP:

“REST information systems require substantial restructuring. Data gathering, analysis and dissemination are inadequate and not systematic. Mechanisms for information sharing in order to develop programs and measure program impact are inefficient and do not in the end provide decision-makers with the information required to improve programming efforts and strategies. Monitoring and evaluation systems are only able to report aggregate results directed toward tracking process or output indicators for donor requirements; M&E is currently not structured to disaggregate by geographic region or by critical variables such as gender to allow program managers to improve programmatic performance.”

Looking at the use of Title II food, the Final Evaluation found the FFW had “.been extremely important in protecting and rebuilding household livelihoods.” They saw no improprieties in the food distribution system and reported that FFW participants were pleased with the program. Nutrition elements of the REST program could, however, be improved. There needs to be a nutrition hygiene program. Nutritional surveys have generally not produced information useful for programming, targeting or decision-making. True nutritional surveillance is lacking.
While partnering with tabbias, regional government agencies, and women’s groups has been exemplary, partnering and information sharing with other Cooperating Sponsors has been poor. Nor has REST been a partner to similar programs operated on a much larger scale in Tigray by the World Food Program.

Lessons for USAID consideration from the REST experience include the following:

- The extensive involvement of local communities in all aspects of REST’s DAP activities, from planning through the “turning over” phase, is impressive by any standard. Much of the geographic area under the DAP is arid – the result of overgrazing and centuries of inappropriate agriculture. The level of achievement in these particularly degraded areas is substantial in magnitude and significant in terms of capacities and achievements. FFW activities have been going on in Tigray for more than 35 years and there is broad popular understanding that there has to be a positive contribution in terms of quality asset creation – terraces, bunds, ponds, road rehabilitation and other tasks.

- REST, however, has demonstrated some difficulty in partnering with organizations other than local government entities and tabbia leadership. There is need for REST to be able to participate more willingly with other NGOs.

- The emphasis given to women and women’s groups in the DAP activities in Central Tigray deserves special mention. The benefits derived from major improvements in household access to potable water, primarily in terms of women’s labor saved and the resultant improved household nutrition and health. As many as 35 percent of households in particular areas of Tigray are women headed. Women’s groups are provided visible and sustained support. Small-scale credit to women is a major theme of REST programs outside the DAP activities. In the future, DAP efforts should be even more supportive of efforts to focus particularly strongly on increasing sustainable income to women operating within women’s development organizations in the region.
SCF-US

SCF-US is the only Cooperating Sponsor operating entirely in pastoralist woredas.
Length of time operating in Ethiopia: 17 years

Overall goals: Sustainable improvement in availability of, access to, and utilization of food for pastoralist households.

Geographic Coverage: Oromiya and Somali Regions

Major Activities: Supplementary feeding and nutrition education, health care, water supply, natural resource management, community savings, livestock improvement, training of government and voluntary groups.

Total beneficiaries claimed in 2001: 73,000 (regular); 273,000 (emergency)

Partners: DPPB and Bureau of Agriculture

2001 Metric Tons: 30,513
2001 Dollar Value: $11,667,000
2001 202(e) expenditures: $548,000
ITS for Emergency: $4,348,000

The SCF-US project operates in two woredas in two adjacent districts in two adjacent regions – Liben woreda in the Borena zone of Oromiya Region and Filtu woreda in the Liben zone of Somali Region. This is a region of Ethiopia in which “Recurrent drought coupled with human and livestock population levels raised beyond the carrying capacity of local resources has made these pastoralist communities vulnerable to disasters.” The people of these contiguous woredas are subject to high levels of both chronic and transitory food insecurity.

These are relatively new activities, initiated in 1999. SCF-US operates the program directly in Liben and a local NGO – Pastoralist Concern Association of Ethiopia (PCAE) – operates the activities in Filtu. The overall goal is “sustainable improvement in household health and food security for approximately 17,500 households in Liben and 7,500 households in Filtu.”

Because these are not crop-growing areas and livelihood is dependent upon livestock (and the livestock dependent on water and forage), the activity focuses on three SCF strategic objectives: i) improved household health and nutrition, ii) increased household income and livestock related food production, and iii) strengthening community and institutional capacities for emergency response and sustainable development.

Although the baseline was developed in 1997 and SCF-US was supposed to have initiated the project in 1998, monetization problems prevented the startup until 1999. Therefore, progress against the 1997 baseline is from only three years of implementation: 1999, 2000 and 2001. Throughout the three years, monetization uncertainties continued to hamper performance.

Four intermediate results were established for SO 1: i) improved access to health services; ii) improved nutritional status; iii) increased immunization rates; and iv) increased access to and availability of potable water for humans. There are two indicators: prevalence of diarrheal disease in children under five and percentage of children underweight. While in 2000, in the midst of a serious drought, these indicators worsened, particularly in Liben, by 2001 they had improved significantly in both areas.
This was due, in part, to regular supplementary feeding for children and pregnant and lactating mothers – particularly in Liben. The Mid-Term Evaluation found that the impact of the supplementary feeding program on child malnutrition (stunting) was very limited. Nutrition surveillance and annual monitoring did not reveal any changes in the prevailing levels of malnutrition in children. However, the evidence that feeding of severely malnourished (wasted) children had very positive outcomes was much more positive, with findings of significant reduction in severe malnutrition resulting from feeding.

The strategy for the human health component was based on selecting and training motivated community health workers to improve the care and “health-seeking” behavior of members of their communities. Its components were an expanded program of immunization (EPI), family planning services, supplementary feeding for pregnant and lactating mothers and their infant children, and nutrition education of the community health workers.

To improve nutritional status in these areas, the project trained a variety of local health workers: TBAs, “Bridge to Health” team members and Health Action Committee members. These community health workers “volunteer” their labor. While, in many such programs elsewhere in Africa, the “voluntary” aspect eventually dooms the activity because of the high opportunity cost of the lost labor productivity of the volunteer, in this pastoralist area the SCF staff have found that the motivation remains high even in the absence of remuneration:

“It would be no exaggeration to state that the most impressive achievement of the Liben project is the creation of a wide network of highly trained and motivated community health workers. The staff members at Liben have had tremendous success in fostering community participation through training of these community members.”

Family planning promotion activities were initiated in Liben in 1999 featuring community-based distribution as part of a larger Bureau of Health effort. In each of the three years since then, the contraceptive prevalence rate has risen. The baseline value of the contraceptive prevalence rate was 5.4 percent in 1997; by 2001 it had risen to 24.4 percent.

Despite expansion in the availability of immunizations for both women of reproductive age and children, the percentage of those who had been fully immunized did not reach targeted levels. The reasons are not well understood. SCF-US staff surmise it may be the result of a general deterioration in the health infrastructure in which there are too few staff and too few outreach sites to cover a large geographic area.

With regard to water development, the strategy of the interventions has been to introduce improvements, including the development of physical assets, in ways that are easily integrated in the prevailing patterns of behavior. Thus, with the exception of boreholes and gravity-flow pipelines, the water program utilized the same technologies traditionally used by the pastoralists. Project staff have worked closely with 38 pastoralist associations in developing, rehabilitating and maintaining project-assisted water facilities – boreholes, pumps, ponds, troughs, etc. As one project staff member commented: “At Save the
Children, we always plan with the community. Without their participation, nothing will last.”

Interventions associated with SO2 involve efforts to improve household income and livestock-related food production. Here the emphasis is on animal health and ways to improve the quality of the animals. A major FFW activity in this regard has been the de-silting of ponds so that, when the rains come, the ponds will be able to fill to maximum capacity and retain water for longer periods. A significant problem encountered is the loss of labor for de-silting when other NGOs and government agencies distribute free food in the areas in direct competition with SCF’s FFW program. This underlines the need for the national and regional governments to enunciate and enforce policies with regard to the relief-to-development and Employment Generation Scheme interface, wherein free food distribution is limited to those unable to work – orphaned children, the elderly, and the physically incapacitated. Whether for this reason, or for social or cultural reasons, SCF staff found that, at times, the local pastoralist communities were unwilling to work or lacked the capacity to contribute to the project.

Other interventions associated with SO2 include livestock vaccination and treatment, bush clearing of undesirable plants, construction of veterinary posts, provision of backpack sprayers to control ticks and mastitis, dipping bath rehabilitation, provision of improved milk processing equipment, and the training of veterinary scouts. In addition, a scheme to increase savings by linking the banking system to pastoralist communities was introduced. A Community Managed Saving Plan has been established in Liben. The 2001 Results Report indicates that beneficiary households in 13 communities had deposited approximately 160,000 birr – about half of it from community income generated indirectly from FFW. One community has started using these funds for maintaining cattle troughs, pond spillways and hand pumps.

SCF’s SO3 initiatives relate to improving community and institutional capacities for responding to emergencies and engendering sustainable growth. The focus in the first three years has been on setting up means for sharing of early warning information widely at the community level. Early warning committees have been established, training sessions of local level staff have been held and contingencies, such as early de-stocking, have been adopted.

Among the lessons learned in the water development component was the importance of staying with the least complex technology (e.g., cement cattle troughs, rehabilitation of hand-dug wells) and avoiding the more difficult to maintain technology (hand pumps). Project staff realized that they should have had a well-qualified engineer on the project staff. But none had been budgeted in the DAP. They also learned that the original design of the water development component of the project had been too ambitious. Originally, the plan had been to stay with a single water technology – the development of 24 ponds, each with a hand pump and a cattle trough, which, it had been assumed, would work at each site. The reality was somewhat different in that universally-applied technology could not be easily adapted to the differing terrains, soil and other characteristics of individual locations. Another lesson learned: adapt to local conditions.
Due to the relatively limited amount of time the project has been implemented, it would not be surprising to discover that significant progress toward the SO of increased household income and livestock related food production had not been established. The indicators selected to measure this component – increase in quality of livestock held, increases in personal assets owned, and percentage of households adding new foods to diet – are all greatly affected by transitory changes in the overall environment. They are not particularly reflective of permanent increases in resilience to shocks or structural improvement in household food security. If the rains are good, if water is available in the ponds, and if the forage is green all these indicators will go up. When the rains are poor, or even if it happens to be late in the dry season, the numbers of lactating animals will decrease, mortality of animals will increase, household assets will be exchanged for food and the number of different foods in the diet will decrease. These seasonal fluctuations are normal. To measure them as a possible consequence of project interventions is to introduce much potential error. What is needed is a measure of the direction of the underlying trend line around which these fluctuations occur. That requires establishing a baseline moving average of at least three years and long-term (say, ten or more years) data to measure against that baseline. Little, if anything, in terms of impact on food security status, can be deduced from year-on-year changes unless there is a carefully established control group and rainfall amounts are very precisely measured – preferably on a weekly or monthly basis. These short-term data are, however, extremely useful for early warning purposes or for use in determining coefficients of variation and short-term resilience to shocks.

Lessons for USAID from the SCF-US experience to date include the following:

- This is a small, but highly relevant project in an area representative of a substantial portion of Ethiopia. There have, over the years, been insufficient development (as opposed to emergency relief and response) activities in the arid, pastoralist regions. This project, thus, is much more important than its relatively small size would suggest.

- There is considerable difficulty involved in relating project inputs to outcomes because the scarcity of water and variability of rainfall bulk so large as determinants of food insecurity and livelihood insecurity in this region. The testing of methods and approaches in order to identify those that are cost effective and productive in these conditions will require a long period of time.

- Even where there are likely to be successes, it will be difficult to replicate and expand them because the needs for backstopping and support infrastructure in terms of staff, roads, the number and dispersal of wells, ponds, watering troughs are all high in comparison to the relatively small number of widely scattered beneficiary households. The resultant cost per beneficiary is also high.

- There is also the dimension – not mentioned in the SCF-US evaluations and results reporting – that will increase the cost and reduce the effectiveness of
whatever interventions are carried forward – security. There are already large numbers of heavily armed quasi-military or bandit groups operating throughout pastoralist areas of the Horn of Africa. Cattle rustling, lineage conflict, and disputes over rights to water points are endemic in these areas and the advent of modern rapid-fire weapons has made it difficult for pastoralist households – by their nature widely dispersed over the landscape – to protect their livestock. There is no evidence that this growing problem will abate in the near future.

WVI/WVE

World Vision operates DAP activities in three of Ethiopia’s regions.
Length of time operating in Ethiopia: 26 years  

**Overall goals:** Enhance food security.  

**Geographic Coverage:** Tigray, SNNPR, and Oromiya Regions  

**Major Activities:** Introduction of new cash and food crops, demonstration of appropriate technology, potable water, small scale irrigation, improved access to markets  

**Total beneficiaries claimed in 2001:** 196,000 (regular); 212,000 (emergency)  

**Partners:** Agriculture, Water, Health departments and farmers associations.  

2001 **Metric Tons:** 26,093  

2001 **Dollar Value:** $9,977,000  

2001 **202(e) expenditure:** $19,800  

**ITSW for Emergency:** $2,334,000  

World Vision Incorporated (WVI), working through its Ethiopian counterpart, World Vision Ethiopia (WVE), has been operating its FY1998-FY2002 DAP program in five economically marginal, extremely food insecure areas: Adama in Oromiya, Damota in SNNPR, Kilte Awlaelo in Tigray, Shone in SNNPR, and Tiya in Oromiya. In all cases, and in all activities, the overall goal is the reduction of food insecurity among the Kebele Associations (KAs) assisted. In most of the WVE Area Development Programs (ADPs) operating in these woredas, DAP assistance represents between 10 percent and 22 percent of total WVE resources at work. This has created problems for WVE in being able to report progress against the five USAID IRs because, in each case, DAP funding is a only a small part of the whole. Attribution has proved a difficult science; nevertheless it has been attempted.  

In 47 KAs in Adama and Bosset woredas, DAP funds (amounting to about 22 percent of total expenditures) have supported farmer training in crop production and reforestation, feeder road construction, increased water supplies, the construction of bunds and terraces, and tree planting. The mid-term evaluation (MTE) had this comment: “Although community benefits are beginning to appear, questions remain about the sustainability of some of these labor-intensive activities, if FFW support should disappear.”  

The Damota ADP covers activities in two woredas – Sodo Zuria and Humbo – in SNNPR which are both densely populated (280-400 persons per km²) and semi-arid (average rainfall of 300mm). The ADP is implementing 12 projects, only one of which is DAP-funded. During much of the DAP period relief feeding was required in the area and drought adversely affected crop production. In addition, early in the DAP period, the regional government halted all FFW activities on the grounds that these projects were creating a dependency attitude among the workers. Gradually, during the period, this prohibition was relaxed and, by 2000, was no longer a problem. Check dams, tree planting, and potable water activities generated small but promising results, but drought held back any progress in agricultural production and income generation. In terms of building an emergency response capacity, the MTE noted that: “DAP-funded…annual nutrition surveys over the past two years have increased awareness among the local communities and government officials of the changing nutritional status of the population and provided a solid basis upon which to mount relief operations when needed.”
The Kilte Awlaelo ADP operates in 37 KAs in two woredas in East Tigray Zone. As with Damota, this is an area of extremely low rainfall (250mm/year) and is relatively disaster-prone and heavily food insecure. DAP funds constitute 21 percent of WVE expenditures in this area. The activity has focused on training of farmers in increasing production through water conservation and small-scale irrigation, where practicable. Income generation activities were limited to apiculture, which requires flowering plants – a problem in severely dry areas. Health improvements introduced included borehole drilling and pumps plus a micronutrient intervention supported by CIDA. NRM activities in the area have been of excellent quality; DAP funds helped in the construction of water catchment, water protection, the construction of several Gabion check dams on large gullies, and rehabilitation of eroded areas with various grasses.

The Shone ADP is located in Hadia Zone of SNNPR. Population is dense at 400 people/km$^2$, but rainfall is relatively good at 1,100mm/year, although highly variable. High population growth rates (3.1 percent) have led to serious land pressures, extensive deforestation, and serious soil erosion. “In the presence of low-productivity soils and growing population pressures, cropping systems have moved increasingly toward enset cultivation in efforts to maximize calorie production from a limited arable area.” There have been some successes in increasing crop production, attributable to the availability of improved seeds and fertilizer from the Sasakawa Global 2000 project. The DAP has been instrumental in introducing multi-use tree seedlings, coffee seedlings and horticulture seedlings as a means of diversifying crop production, a small number of capped wells for safe water, and a considerable amount of effort in NRM.

The Tiya ADP works with 51 KAs, mostly in Kersa and Kondaltiti woredas in Oromiya. Although the rainfall is good at 900-1,000 mm/year, years of poor cultivation practices and continuous cropping have left the soils in very poor shape. DAP funds account for about 12 percent of total expenditures and are focused on food security-related activities. Wheat and teff yields have been increasing due to improved seed varieties and good weather. DAP funds have been used to train farmers in improved agronomic and livestock practices. The development of commercial woodlots is becoming a good income generation activity for many households; the ADP is the source of most of the seedlings used. Pond and safe water development seems to be a factor contributing to reduced diarrheal diseases among children. “Farmers have been enthusiastic participants in DAP-supported tree-planting efforts.” About 1.5 million seedlings were planted per year, with reasonably good survival rates.

Common themes include the now-familiar problems with monetization which required WVE to borrow from other sources of funds to keep activities going. The debt is still not repaid. A second theme is the problem of insuring sustainability. The MTE had this say about the problem:

“…the sustainability of DAP-supported activities varies considerably among interventions. The tree nursery and tree planting activities are the most sustainable. In all of the target ADPs, these activities are highly valued by farmers, in large part because they see the income potential of trees as sources of fuel wood, charcoal, or construction material. Already, a growing number of farmers are developing house lot tree nurseries,
either to provide seedlings for their own use or, increasingly, as a source of income through sale. On the other hand, sustainability of some of the physical assets created through food for work, e.g., check dams, stone bunds, terraces, some feeder roads, is more questionable. For these assets benefits are less clearly identified, dispersed widely among the population and not generally appropriable by the individuals who construct them…In these circumstances, questions remain as to how well the assets will be maintained. In a few instances, the offer of food for work programs appears to have been the principal motivating factor behind community involvement, rather than expected future benefits from the activity. In circumstances where the underlying activities are clearly not sustainable, FFW would appear to be a questionable use of DAP resources."

Overview of impact and effectiveness of Cooperating Sponsors’ Title II programs

There is an important distinction to be made in the beginning of this section of the evaluation. The USAID’s special objective specifically states that it is the food security of targeted populations that is the concern of the Cooperating Sponsors individually and as a group – not improving the general food security of all the food insecure in Ethiopia. Thus, in assessing the impact of the program from the perspective of the stated goal of the Title II program, the evaluation focuses first on issues related to ascertaining the impact on the food security status of the approximately 480,000 Ethiopians (DSA, 2001) in the 34 sites in the 17 woredas that are benefiting from Title II DAP (i.e., non-emergency) programs. In the following pages that will be undertaken.

However, there is a larger issue that goes to the very heart of USAID’s food security special objective as it existed in the 1993-2001 period and of the overall food security goal of its 2001-2006 ISP. Is USAID willing to be satisfied with attempts to improve the food security of less than one percent of the population (and perhaps two percent of those who are – and will in all likelihood remain – extremely food insecure) into the indefinite future? The number of Ethiopians born into extreme poverty in any given year is more than the number listed by the Cooperating Sponsors as beneficiaries. Is that really the purpose of the Title II program past, present and future? The scale of the effort, the potential for replication and multiplication and the resources needed to undertake the replication of successes must all be increased during the 2001-2006 period and afterward.

In looking at the overall impact and effectiveness of the 1993-2001 Title II program in the following pages, the revised evaluation report responds to the requirements set forth in the Barberi-McPhelim letter of May 8, 2002. The following sub-sections respond specifically to these questions in organizing the analysis of the effectiveness and impact of the Cooperating Sponsors’ Title II programs.

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24 The definition of beneficiary is not precise. A farmer attending a one-day seminar on growing of vegetables is claimed as a beneficiary, even though s/he never grows a potato or a tomato. A child immunized for life against a multitude of diseases is counted equally as a beneficiary. Given the very loose definitions used for beneficiaries, the numbers used in this report, which are taken from CS reporting and DSA’s final DAP evaluation, should be considered as orders of magnitude only.
1. What have been the top interventions in terms of impact on nutrition, household income and assets? Have Title II resources helped beneficiaries build up sustainable productive assets that increase the opportunity to move out of poverty into increased productivity?

In responding to these questions, this section reviews Cooperating Sponsor results reports and internal evaluations and evaluation team site visits and interviews to determine what outcomes have been achieved thus far. These are related to apparent or likely impacts on nutrition, income and assets.

a. Agricultural production.
This section reviews improvements in agricultural production over time by households whose livelihoods are dependent upon growing food or other agricultural products either for home consumption or use or sale. Short-term positive production gains experienced as result of a Cooperating Sponsor’s DAP program must be translated into long-term gains that result in net additional productivity over the longer term. In general, what can be seen from the 1993-2001 experience in improving agricultural productivity is evidence of short-term gains in output having been achieved by beneficiaries, without much assurance that these gains can be perpetuated over the longer term – i.e., after the Cooperating Sponsor has completed its program.

The interventions that have been employed by the eight Cooperating Sponsors to increase agricultural outputs include:

- Training of local extension staff
- Training of farmers in better techniques, agricultural diversification, moisture management, post-harvest grain storage
- Livestock development among pastoralists, mixed farms and, in Gambella, training in ox plowing
- Small-scale irrigation development
- On-farm and communal soil and water conservation, including bunding
- Small-scale credit for inputs
- Increased application of chemical fertilizers
- Increased use of composting and organic fertilizers
- Improved seeds

These intervention were provided singly or in differing combinations with a greater or lesser emphasis on training and the use of government or of Cooperating Sponsor extension staff. In some cases only a few farmers were involved; in others, many hundreds at a time were involved. Training was a mainstay for most of the Cooperating Sponsors. Much of the training involved one-day courses, or one-day observational field trials.

A number of problems make comparisons of effectiveness of these differing approaches and combinations of approaches difficult. For example consider Box 2 below.
The indicators used to measure effectiveness of the interventions to increase agricultural production almost inevitably measure yield or production increases over the baseline value (usually 1996 or 1997) for the most recent year reported on (usually 2001). The majority of the indicators reviewed for this report show positive changes. The presumption is that project interventions in the agricultural production component were part of the reason for these increases. Perhaps so, but no assured method has been employed that can distinguish project input influence on outcomes from other significant influences – particularly the influence of rainfall.

Most of the baselines were done in either 1996 or 1997. Assuming that the above national rainfall patterns prevailed in those years in the areas of the survey, it would make a great difference which of those two years were selected; the relatively good year, 1996, or the quite bad year, 1997. Second, 2000 and especially 2001 have been very good years for rainfall in Ethiopia and it would be unlikely that yield and production would be less in the in the very good 2001 growing season than in either 1996 or 1997 – although, of course there will always be areas that are exceptions to general findings about rainfall.

Generally, one would expect that most farms would show production increases in 2001 over 1996 or 1997, with or without the Cooperating Sponsors’ interventions. In order to be in a position to say something meaningful about the combined effect of Cooperating Sponsor interventions on measured changes in productivity, there would have to have been a control group of like farms in the same geographic areas experiencing all pertinent variables except Cooperating Sponsor interventions. Without controls, and even with the helpful addition of econometric analysis of survey data collected from a sample of farm households in the Cooperating Sponsors’ areas of operation (Berhanu, 2002) nothing can be said with acceptable certainty about the utility of one or another Cooperating Sponsor agricultural production programs in terms of their impact on changes in agricultural outputs. In the future, if there is a continuing desire to make use of these indicators, monitoring of the outcomes associated with Cooperating Sponsors’ interventions should include control group monitoring.

BOX 2: Rainfall in Ethiopia 1992-2001

1992: generally good rainfall.
1993: belg (short rains) poor; krempt (long rains) erratic. Food prices relatively low.
1995: good rains, record crop levels in some areas. Large food aid program.
1997: poor belg; erratic krempt. Harvest 51 percent below previous year.
1998: both belg and krempt erratic.
1999: total belg failure, worst since 1984; krempt below average, late starting.
2000: a second failed belg; krempt late but ended late with normal amount of rain.
2001: better than average belg; krempt late but nearly normal rainfall.
Another part of the problem is the lack of good rainfall data. Even where considerably is known about seasonal rainfall, it is often the intra-seasonal patterns that account for substantial differences in yield and production outcomes – depending on the crop. During the 100-150 day growing season for maize in the tropics, rainfall is particularly beneficial at specific stages of growth (e.g., just before and just after tasselling) and a detriment in the last two-three weeks before full maturity. Because rainfall patterns in Ethiopia are quite variable, even within a single woreda, it becomes virtually impossible to distinguish the impacts of rainfall and of other inputs on crop yields and production without very careful rainfall monitoring. Many of the Cooperating Sponsors’ results reports, when discussing crop yield and production differences from baseline data, indicate their understanding that rainfall may have been a dominant influence in the reported production/yield changes over baseline numbers.

That said, enabling farmers in food insecure woredas in Ethiopia to learn about better production techniques, to have access to improved seeds, credit, fertilizer, improved storage, and better extension backstopping are very good things in various combinations. There is little doubt that they are associated – in combination with the aforementioned good rain or (better yet) irrigation – with increased crop yields and increased per farm production. The recent econometric analysis of the Cooperating Sponsors’ programs determined that: “…household calorie production and household cash income reduce the incidence and length of severe food shortages faced by households” (Berhanu, et al., 2002), i.e., they increase availability and they increase access. The intervention packages intended by the Cooperating Sponsors to increase yields and production are all likely to be associated with household calorie production that is greater than would be the case in their absence. This, of course, raises the issue of whether increased caloric production at the household level – even if sustainable – translates into improved nutrition of household members. As shown in the Diskin framework earlier, there are other layers of interventions required before improvement in agricultural production can lead to assured improvement in nutritional status of household members.

Of the input packages focused on increasing agricultural production, those that reduce the risk of there not being enough water for crops or animals would seem to have the best opportunity for increasing production, by smoothing out water availability. Several of the Cooperating Sponsors noted that these were among the most popular interventions among their beneficiaries. As noted earlier in the report, where irrigation is most practiced in the developing world is where agricultural growth has been the strongest. Africa lags the rest of the world in percentage of agriculture that uses irrigation, and Ethiopia lags most countries in Africa. On the other hand, there is the somewhat disconcerting finding from the Berhanu et. al., study (2002) that the data used for their analysis seem to show that the amount of irrigated land a household has access to is inversely correlated with increased calorie production. This would suggest that reliance on rainfed agriculture is a more certain path for increasing household calorie availability than reliance on an assured source of water. This is highly unlikely. There are a number of possible reasons for such

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a finding, but at a minimum it calls for further study since it runs counter to the experience of smallholder agriculture in other parts of the world.

The experience with collaboration between Cooperating Sponsors and woreda and regional bureau staff has been mixed. CRS, for example, experienced initial difficulties with woreda or zonal officials in some areas – in one case even being required by zonal officials to terminate its program in that zone. In Dire Dawa, there were initial difficulties, but gradually collaboration has improved to the point where the program in that region is, according to outside evaluations, among the most effective in the country. Africare has sought and achieved close collaboration with the Regional and woreda officials in Gambella. On the other hand, CARE evaluators have suggested that CARE has not done enough to collaborate with local government staff. Ensuring close collaboration with local government organizations is essential for gains in production and productivity achieved in the short-term to be perpetuated over the longer term within a purposefully enabling policy environment, supported by budgeted government services and continued backstopping.

Other interventions aimed at increasing agricultural production have included: efforts to increase household access to credit in order to purchase inputs or productive assets (including draft animals), the provision of fertilizer and improved seeds, efforts to increase crop diversification, and use of improved storage technology.

With regard to credit, a policy change by the government early in the DAP period effectively inhibited the Cooperating Sponsors from being able to provide credit to smallholders. An important exception is the CRS experience with credit made available to women farmers under the Women’s Savings and Credit (WSC) activity. In this case, because approximately 2,000 women already organized into women’s associations had, through their own savings, generated sufficient paid-in capital, they were able to continue borrowing from what was essentially their own money. The experience, described in both the MTE and Final Evaluation as well as CRS Results Reporting provides a number of examples of very successful credit operations where individual borrowers have been able to initiate small-scale rural enterprises, repay the initial loans, and grow these small-scale efforts into viable income-earning entities. This is an important model for further study since, as noted earlier in this report, there is much evidence in the literature suggesting a strong link between increased women’s income and improved household nutritional status.

The experience with the provision of fertilizer as a means of increasing food production seems on balance to have not worked well. The majority of Results Reports and internal evaluations indicate farmer displeasure with chemical fertilizer. In some cases the apparent increased return was viewed as insufficient to cover the high cost of the fertilizer. The use of certain fertilizers in periods of drought can have adverse rather than beneficial yield consequences. In one case, the fertilizer was viewed as having contributed to such a large production increase by farmers that the surplus production

http://www.cangrow.com/lang_plant/corn.html Maize, for example, responds negatively to nitrogenous fertilizer in the absence of adequate moisture.
resulted in much lower prices and lower per-household financial returns. The curtailing of agricultural credit and reduced availability of local currency resulting from monetization shortfalls also reduced the availability of financing for chemical fertilizers. It is difficult to determine whether any of the fertilizer provided to Title II participants was subsidized, but, if so, this would have further disguised the utility of chemical fertilizer to generate positive returns for the purchasers. Whether or not the application of fertilizer is economically rewarding on the more productive fields in Ethiopia, it is apparently not a worthwhile element in programs aimed at increasing sustainable production on the generally less productive fields of the food insecure, poor beneficiaries of the DAP projects. Cooperating Sponsors who report on increasing the use of composting and organic fertilizers report generally favorable reactions by the households. A problem with composting is that in some areas, e.g., the REST activities in Tigray, farmers had other uses for compost materials and manure (fuel) and were reluctant to use these materials in their fields. In another activity, farmers complained they did not generate enough compost to cover more than about a quarter of their holdings.

Integrated projects – e.g., CRS’ Lege Oda Mirga – have done well by combining cropland bunding, organic fertilizing, and spate irrigation. As the FHI December 2001 Results Report pointed out “Increased use of improved farming techniques such as intercropping, use of compost and soil conservation schemes have enabled target populations to make the best use of the relatively better rainfall in FY01.” This is probably very true. What is also important about Lege Oda Mirga and several other projects reported on by the Cooperating Sponsors is that community or farmer associations have been used as the organizing mechanism to enable individual farming households to cooperate in the purchasing of inputs, the sale of outputs, the building of community-based assets, overall planning and monitoring, and information sharing. No indicator was established for this element which is so obviously essential for maintaining productivity growth, preserving assets created and improving the ability of association members to operate more effectively as players in the marketplace. This needs corrective action in the monitoring element of future DAP programs.

This primary issue with the agriculture production component, as it is to a greater or lesser degree with all Cooperating Sponsors interventions, is the lack of significant progress in linking the client groups to systems that will ensure that backstopping they have been receiving from the CS will continue, in some form, over the longer term. It is one thing to have a production success when a CS provides the seeds, the training, sometimes other inputs, and supervises implementation. It is quite another to have the success continuing five and ten years later, long after the CS has phased out. The link between improving agricultural production and productivity, increasing household income and productive assets and, eventually, adequate food and nutrition security is not yet firmly established.

The Cooperating Sponsors’ efforts, which are almost certainly moving in the right direction, have not been operating long enough for there to be assurance that agricultural production increases thus far achieved are clearly the result of Cooperating Sponsor

27 By whatever name – peasant association, kebele association, tabbia, etc.
interventions, that there might not be even better interventions available, that they can be sustained, or that they can result in assured reduction in the number of weeks or months the households experience food deprivation. More time is needed to continue with differing approaches and a better means of measuring effectiveness needs to be devised.

b. Increasing household income
The various Cooperating Sponsors have demonstrated quite different approaches in efforts to increase household income as part of their present programs. The total impact on this IR, however, has not been sufficient to enable claims of success.

Africare reports that the project’s M&E system is not able to show income impacts although, as they further state, “..the perception is that there is rising income and improved nutrition…” resulting from the total impact of their program in Gambella. CRS efforts to increase household income were focused on increasing women’s incomes by means of the WSC activity. As noted earlier, the Cooperating Sponsors suspended all credit activities as a result of the government’s changed policy on micro-credit. The 2,000 or so women who were able to continue their savings and credit operations in the CRS WSC activity present a rich set of experiences regarding the potential of such programs for increasing women’s incomes and household nutritional status. It is deserving of serious study, particularly now that micro-credit activities are again being pursued. CARE’s Results Reporting related to IR2 focuses on the construction and rehabilitation of local roads as a means of improving access to markets. The eventual maintenance of these roads is still in question and their long-term viability is not assured. Their eventual contribution to sustained increases in household income is hypothetical.

EOC reports that proxy indicators of increasing household income (items owned, livestock owned and luxury foods consumed) all increased over the lifetime of the DAP. Both reporting and the final evaluation do not focus specifically on the relationship among the assets created under the project (primarily soil bunds), production increases and land conservation efforts, and progress toward the IR2 income objective. FHI, likewise, reports on proxy indicators for demonstrating increased in household-owned assets. The problem here is that change in livestock ownership is a large component of the reporting. Like cash in the pocket rather than money in the bank, livestock are used as currency to exchange for other assets, for food in the dry season, for settling disputes. Changes in the ownership of livestock assets occur for many reasons, not all of them associated with coping mechanisms. CRS, among others, has argued that this particular indicator of the status of asset ownership is misleading. This evaluation report agrees with this argument. While other assets reported on (i.e., chairs, tables, iron-bound beds, etc.) may be an indication of disposable income, they may also be an indication of purchasing decisions by those in the household unaware that there is under-nutrition among some of the household members. It is argued here that these indirect indicators not be used in the future as indicators of changes in household income. Surveys focused on household expenditures are normally a better approach.

If changes in asset holdings are to be used in the future as somehow being associated with progress toward improved food security, at a minimum the changes ought to reflect
something about the nature of the assets being reported on. A useful framework for improving the measurement of changes in assets as a signal of movement toward – or away from – a state of improved food security is possibly a modified version of the following chart relating sources of entitlement to the types of risk faced by each. Such an approach helps distinguish between three types of capital: assets (productive, non-productive and human); income; and claims, each of which is a potential source of improved food security status, but with a separate clientele of risks associated with it.

Table 3: Assets and Other Entitlements and Associated Risks

<table>
<thead>
<tr>
<th>Sources of Entitlement</th>
<th>Types of Risk</th>
<th>Natural</th>
<th>State</th>
<th>Market</th>
<th>Community</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productive capital (land, machinery, tools, animals, farm buildings, trees, wells, etc.)</td>
<td></td>
<td>Drought contamination (e.g., of water supplies)</td>
<td>Land or other asset redistribution/confinement</td>
<td>Changes in cost of maintenance</td>
<td>Appropriation and loss of access to common property resources</td>
<td>Loss of land as a result of conflict.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Land degradation</td>
<td>Fire</td>
<td>Flooding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-productive capital (jewellery, dwellings, granaries, some animals, cash savings)</td>
<td></td>
<td>Pests</td>
<td>Compulsory procurement. Villagization. Wealth tax.</td>
<td>Price shocks (e.g., fall in value of jewellery, livestock). Rapid inflation.</td>
<td>Breakdown of sharing mechanisms (e.g., community stores, sharing of oxen)</td>
<td>Loss of assets as a result of war. Theft.</td>
</tr>
<tr>
<td>Claims (loans, gifts, social contracts, social security)</td>
<td></td>
<td>Reductions in nutrition programs (e.g., school feeding, supplementary feeding.)</td>
<td></td>
<td>Rises in interest rates. Changes in borrowing capacity.</td>
<td>Loan recall. Breakdown of reciprocity.</td>
<td>Communities disrupted/displaced by war.</td>
</tr>
</tbody>
</table>

Categorized in a manner similar to the above, future reporting on changes in assets (or entitlements) would provide an assessment of relative changes in household food security status which would be somewhat more useful than, as is presently done, measuring the numbers of cups of coffee consumed in a household, or the number of chairs in the home. It might also allow for associating changes in assets or entitlements with the particular events or trends (in the accompanying “risk table”) causing the changes. At that point something really quite useful might emerge from the reporting process.

c. Reduced Malnutrition

The eight Cooperating Sponsors devote considerable resources to efforts to improve the nutritional status of their target beneficiaries. Their approaches and intermediate targets differ considerably, however. Africare, for example, is combining nutrition and income diversification in a modest experiment to help increase river fish catches combined with smoking the fish using methods that are successful in West Africa. It is too early to know whether there will be a significant or sustained nutritional or income effect, or whether more than a few beneficiaries will be affected. CARE deals with nutrition from a broader health improvement perspective, with a major focus on the provision of potable water in pipes from springs that are sometimes several kilometers away from the users, from cisterns used to collect and hold ground water, wells, and roof catchments, supported by training and the development of water and sanitation committees at the community level. This is resulting in a number of different types of benefits. Women’s workloads have
been significantly reduced. In Garamuleta, women who used to spend four to eight hours in search of water now need only travel less than one kilometer. However, CARE’s final evaluation concluded that the water and sanitation committees were still very weak and did not seem at present to be sustainable.

CRS has perhaps the most extensive involvement in the health and nutrition area of any Cooperating Sponsor. Under the Food Assisted Child Support/Community Based Health Care activity CRS has, for many years, been providing rations to malnourished children under 24 months and to their mothers. In East Hararghe and Dire Dawa the prevalence of underweight children has dropped from the 1996 baseline of 52 percent to 22.6 percent in 2001. In other sites, the reduction has been less dramatic but still significant. Perhaps more important than continuing to provide supplementary feeding to children is raising community awareness through targeted education aimed at changing behavior. During 2001, more that 6,600 pregnant and lactating women participated in community-based health education on a monthly basis. While this was only 34 percent of the target, (due to the phasing out of three counterparts because of problems with partnership and monetization shortfalls) it was still, under the circumstances, significant. A problem to be resolved is the fact that participation rates drop significantly when the participant’s time-limited food ration is finished. CRS is working to solve this problem because it is aware that “…sustainability of CBHC activities depends on retained interest of community members even after external inputs have been phased out.”

One additional element of the CRS approach is important: the work done by community health workers in targeted areas to provide follow-up growth monitoring and follow-up counseling. A recent KPC survey in East Tigray discovered that while 85 percent of mothers of children under 24 months possessed a growth monitoring card (up from 21 percent in 1997), only about half of these mothers were actually having their infants measured monthly. “Given the fact that CBHC programming aims to develop sustainable growth monitoring systems which continue long after project inputs have phased out, it is of concern that only half of registered mothers are actually measuring their child on a regular basis.” Further investigation determined that the problems stemmed not from indifference or lack of knowledge, but from the distances that have to be traveled to have their infants measured and the other daily workload requirements that prevent them from bringing their babies for measurement. The answer seems to be to provide more community health centers, closer to the mothers. CRS efforts also support immunization, antenatal care, breastfeeding advisory services, and support for clean water and sanitation intended, among other things, to reduce the high prevalence of diarrheal diseases as the second leading cause of mortality and morbidity in under-five children.

EOC focuses on increasing the percentage of its beneficiary households with access to sources of clean water. While only 1.75 percent of households in EOC areas had access to safe water in 1997, an EOC survey determined that 17.61 percent had access at the end of 2001. Otherwise, as the EOC final evaluation pointed out “Health programs of the projects are few in number and limited in scope.” Linkages between EOC field staff and woreda health officials were cited in the evaluation as “poor.” FHI, like most of the Cooperating Sponsors, focuses on increasing the availability of clean water and has
assisted in the construction of springs and hand dug wells now providing clean water to 18,000 families. The prevalence of water borne disease in the two project areas has shown moderate decline. REST has also focused on the provision of water. In its project areas where hand dug wells and spring development have occurred, the incidence of diarrheal diseases has dropped by between 27 and 53 percent from the 1997 base values. Other health and nutrition-related interventions included assistance in immunization programs, and increasing the number of traditional birth attendants.

SCF-US, working in areas with more difficult-to-reach pastoralists has had a strong health and nutrition focus in its two project areas where the population, according to SCF-US’s DAP evaluation, “occupy a state of chronic malnutrition.” SCF uses two indicators to chart progress: prevalence of diarrheal diseases and percentage of children underweight. During 2000, in large part due to the severe drought conditions, both indicators worsened dramatically. In 2001, thanks in part to project interventions including emergency feeding, but also due to vastly improved rainfall and the recovery of forage and animal health, these indicators showed major improvement. Diarrhea prevalence in Filtu dropped to 23.9 percent in 2001 compared to 57.7 percent in 1997. In Liben the comparable figures were 11.4 percent vs. 30.1 percent in 1997. Underweight measures had shown similar, but less dramatic, improvement. The project has trained several hundred TBAs, community health workers and Health Action Committee members in both areas. Two health posts have been constructed. The WVI/WVE program in health and nutrition was heavily focused on providing training to community members and water committee members in the precepts of health and sanitation and water scheme management. The extent to which they have retained the training and are putting it to use is unclear. The final DAP evaluation suggests that there is some weakness in this area.

In general, the primary focus for virtually all of the Cooperating Sponsors was on increasing access to clean water, training of community health workers, and raising the consciousness of community members in the basic precepts of health and sanitation. It is difficult to measure the utility of what has been accomplished so far because so much of it is still relatively new and the sustainability of these interventions, both in terms of the physical improvements in water points and water delivery and the behavioral changes in household members in project-assisted communities, is unproven. Little weight should be given to year-on-year changes in many of the indicators tracked in Results Reports, in the absence of evidence of changes in the ability of communities – aided by local governments – to maintain upgraded assets. Several of the DAP evaluations call attention to the apparent poor capability of these new community-based, health-focused organizations to operate without outside assistance. Given that most are only two or three years old, this should come as no surprise. To the extent that water points require ongoing maintenance requiring locally-derived funding, the real test will come when it is time for community members to find the cash to undertake this maintenance and repair. It is also disquieting that with the principal exception of CRS, with its KPC surveys, none of the Cooperating Sponsors are tracking the extent to which there are health and nutrition-related behavioral changes occurring and continuing to be implemented in the households of those who had been previously trained.
d. Natural Resource Base Maintained
In many areas where the Cooperating Sponsors operate, this category ought to be entitled “natural resource base improved” since the existing landscape is so degraded, the water retention capacity is so compromised and the vegetative cover – even on the steepest slopes -- is so decimated. Many of the productive assets created in the DAP programs are intended to halt or reduce soil erosion, gully formation, and continued loss of vegetative cover. In the greater scheme of things it is this widespread – and well advanced – environmental degradation that could set back all other advances made by the Cooperating Sponsors in the food insecure woredas where their programs are being implemented.

The Africare program, given its location in a high rainfall lowland area, is not, in the main, concerned with environmental degradation as are the other DAP programs, although good soil conservation and nutrient replenishment is, rightly, part of Africare’s approach. CARE has promoted training in soil and environmental conservation, the provision of fuel efficient stoves to reduce household requirements for firewood, and the production of tree seedlings in project and private nurseries. The DAP final evaluation of the Africare program suggested that the tree seedling sub-component needed redesign and improvement. CRS’ counterparts have been active in hillside terracing, dams and vegetative barriers to reduce or reverse gully expansion, and extensive area enclosures to prevent further animal and human-related deterioration. In the latter, once 80 percent of grass cover had been restored, people have been allowed to harvest the grass for fodder on a “cut and carry” basis. This is proving to be a rewarding cash crop sold as fodder to livestock herders. In addition, there is strong evidence in Dire Dawa and elsewhere that these area enclosures are resulting in slowed water run-off and increased percolation rates. In some places, long-dry water points are producing water again. Soil loss reduction surveys using the Universal Soil Equation show dramatic improvement where appropriate soil conservation techniques and proper bunding have been utilized.

EOC has also engaged in area enclosures, but on a much small basis than CRS. There has apparently been less emphasis on NRM than would seem appropriate. The EOC Final DAP Evaluation Report provided several recommendations for expanding NRM activities. Among them, “Stabilization of physical conservation measures with multipurpose vegetation is to be given priority. In line with this, a greater emphasis will have to be given for multiplying grass seeds, fruit trees, leguminous shrubs and forage plants…It is preferable to have a few kilometers of bunds stabilized with useful plant material than thousands of kilometers of bunds not planted to some kind of vegetation…Participatory land use planning should be promoted [utilizing] a watershed management approach.” FHI has relatively little to report in terms of measured progress against its IR4. The four indicators established are: i) change in the size of communal land protected or reclaimed; ii) estimate of soil erosion; iii) change in the amount of soil deposited behind terraces; and iv) percentage of farmers practicing soil conservation. Of these, the most recent Results Report (December 2001) lists only improvement in two woredas in terms of areas of communal land reclaimed (ahead of target) and nothing on the other indicators.
REST places considerable priority on IR4. Community participation in the planning and implementation of land rehabilitation is a well established tradition in many parts of Tigray. REST is able to capitalize on deep popular support for the concept of participation in community-based endeavors. Under DAP auspices nearly 21,000 ha of land have been put under area enclosures and 1,100 guards have been selected to ensure that neither humans nor animals use those lands for the designated period of time (usually about four years). During 2001, REST turned over to local communities 4,500 ha of land that had been revived and was now ready for community management. In many areas community-based development of integrated water catchment and gully reclamation is popular among community members. Seventy-five sites in project areas have been surveyed by woreda-level Bureau of Agriculture staff. Soil is re-accumulating at a rate of between 5.6 and 7.1 cm/year, depending on slope steepness. This is slightly under target values but still an impressive achievement, assuming, of course, that the measurement techniques are valid.

As noted earlier, Save the Children-US activities are focused on pastoralist groups in arid regions of Southern Ethiopia. They are focused on three IRs: i) improved household health and nutrition, ii) increased income from livestock, iii) strengthening community and institutional capacities for emergency response and sustained development. To date, the Cooperating Sponsor has not had an element in the program looking at issues of sustainability of the rangelands, or of issues of the balance between the number of livestock and the “carrying capacity” of the larger region. This should be addressed in the next phase of the program (See Annex 3).

WVI/WVE has a very active program in all of its sites aimed at natural resource management. As is the case with all sectors of the WVI/WVE approach, the emphasis is on training and, subsequently, in turning that training into actions. Seedling development, the planting of millions of seedlings in local reforestation programs, soil bunds, stone bunds, check dams, micro-basins, and other structures were active elements in all of their sites. The final DAP evaluation noted that WVI/WVE has been engaged in large NRM activities in which “residents have reported that due to the conservation activities appearances of springs and increased fodder for their animals…” has occurred.

There are a number of wide-ranging issues associated with the interventions intended by the Cooperating Sponsors to make progress against the overall goal of enhanced food security for their beneficiaries.

1.) The level of impact is difficult to determine. The presented evidence of progress consists primarily of reporting on inputs provided (training, improved seeds, fertilizer, etc.) and the immediate outputs that can reasonably be associated with the Cooperating Sponsors’ inputs (numbers of farmers trained, per hectare production changes, kilometers of road rehabilitated, numbers of pregnant and lactating women attending community-based motherhood training, etc.). In some cases, e.g., providing assistance to local bureaus of health in immunization campaigns, it is difficult to sort out how much of the output (e.g., increased percentage of infants inoculated) can be attributed to Cooperating Sponsor inputs and how much to the regional or woreda health bureau’s efforts. How
much of an annual cereal production increase is attributable to DAP-financed inputs and how much would have happened without the project’s presence? Even the econometric analysis presented in Berhanu et al., (2002) does not help a great deal because, as a one-time snapshot, it can only identify that relationships between variables are significantly different than chance. (e.g., that improvement in water availability and quality appear to be strongly related to improved infant nutrition; or that where households produce more food their need to use coping strategies is lessened, etc.). What is not apparent is the effectiveness or impact of any particular set of interventions in producing more water or more food – or the likelihood that these improved situations will endure long enough – especially in these drought-prone semi-arid regions – to constitute changed food security status.

2.) Have these DAP-financed activities enabled households to be more resilient to droughts and other disasters that otherwise lead to substantial requirements for relief? Given the need to reduce the numbers of people in Ethiopia requiring permanent relief assistance, it is important to consider the potential contribution of these activities to moving households toward the development end of the “relief-to-development” continuum. To be able to answer that question authoritatively would require solid evidence that there have been permanent changes in the productive capacity of the beneficiary households. Either their capital assets (primarily land and labor) would have to have become more productive, their incomes permanently increased or their “claims” made more robust. Consider the Buchanan-Smith and Maxwell (1994) framework shown in Table 3 above. For the Cooperating Sponsors’ programs to have helped move their beneficiaries away from relief and toward development, they would have to have increase the resilience of the assets, income, and claims categories (shown in the left-most column) against the natural and human-caused “risks” shown in the other five columns. For example, in the Africare effort to decrease post harvest storage losses in food there would have to be evidence that, as a result of the rat-guards and other measures, stored grain losses to natural causes had been permanently reduced. Further, assuming that some of that stored grain were to be sold to increase cash income, the project would have to help ensure to their beneficiaries that the market risks were reduced, that the risk of theft, of not being able to transport the grain to points of sale, and of not being able to purchase food with that cash income when the time came, etc. had been reduced – endogenously or exogenously. At this stage of project implementation, it does not appear as if much of the progress made by the eight Cooperating Sponsors in their Title II development programs has reduced the risks sufficiently to have enabled significant and measurable progress away from the “relief” end of the “relief-to-development continuum.” These programs are still relatively new – and there remains much to be done. There should be no surprise in this conclusion.

That said, there are several programming elements that offer considerable promise in being able to make relatively permanent progress in the economic development of these beneficiary groups – types of development that would strongly imply such movement toward the development end. First, when farming households are able to participate in strengthened associations (e.g., PAs, tabbias, women’s savings and loan groups, community development committees, marketing cooperatives, water development
committees) there is greater opportunity for sustainable development action. Several of the Cooperating Sponsors have been working to strengthen these associations. Oda Mirga Lege in Dire Dawa is an example that seems to be working particularly well and it potentially signifies sustainable progress toward increased productivity and household income for a significant percentage of the PA members.

The efforts to change the behavior of rural communities regarding the importance of maintaining or reviving their soils, lands, groundcover, and forests can have a substantial long-term pay-off in increasing the productivity of their capital assets. The evidence from areas where these activities are now 15-20 years old (WFP’s Project 2488 areas in Wollo, for example) of revived aquifers and increased availability of ground water resulting directly from these efforts is particularly noteworthy. The focus on small-scale irrigation as a means of reducing the risk of insufficient moisture for crops and livestock is clearly a key component in changes that permanently improve the capacity of communities to withstand droughts and other adversities and hence move away from the relief end of the continuum. All of these elements are promising, but they are only partial progress at this point.

3.) The scale of the efforts is small. The numbers involved are still an insignificant share of the total number of Ethiopians confronting like situations. It is difficult to make permanent progress away from relief when dealing with small microcosms of a problem that really requires massive, national-level, extended economic growth and economic and social development. It seems almost too much to ask of a Cooperating Sponsor that it succeed in enabling small clusters of food insecure beneficiaries to become more resilient in being able to confront drought and other shocks, when regional and national food systems remain weak and unstable.

4.) Another element is whether relief food aid itself is contributing significantly to the problem. Emergencies are disruptive of development. The resources required for relief efforts are massive and, as the need continues year after year in countries like Ethiopia, the donors and the government find that a high percentage of food and other resources tied up in relief are resources unavailable to help increase the long term ability of affected populations to better withstand the effects of these shocks. The food provided for relief can create problems for local producers and traders because they can be disruptive to efforts to increase local production and trade. What is needed, at a minimum, are efforts by the Cooperating Sponsors to ensure that their relief efforts are not contributing to the problems that their DAP-financed development assistance are trying to overcome.

5.) “Safety nets” are often presented as an important element of a strategy aimed at moving populations away from continuous reliance on relief. There are many different types of safety nets and they are employed for many different reasons. According to Subbarao et al., (1997) “Safety nets are programs that protect a person or a household against two adverse outcomes: chronic incapacity to work and earn (chronic poverty) and the decline in this capacity from a marginal situation that provides minimal means for survival with few reserves (transient poverty).” Normally, safety nets are provided by public entities but informal safety net programs managed by community-based
organizations, local NGOs, and religious groups are also common. Among the eight Cooperating Sponsors, the major safety net programs are those operated by CRS through MOC and smaller local NGOs. They are, by and large, targeted on individuals incapable of effectuating a livelihood strategy – orphans, widows, the chronically infirm, HIV/AIDS sufferers, etc.

There would seem to be considerable room to expand the use of safety nets as a means of temporarily offsetting at least some of the risks listed in Table 3. As a general observation, the interventions of the Cooperating Sponsors are not well-oriented toward reducing the high level of risk associated with living in the more food insecure areas of rural Ethiopia. There are safety net options that could be added to on-going programs aimed at productivity enhancement, the slow build-up of productive assets, and human and animal health and nutrition. These might include establishing community-based food reserves or other forms of community insurance schemes, expansion of savings and credit schemes, and enhancing a PA's capacity to purchase and store surplus food for later use as a selective reserve for PA members suffering particularly severe food deprivation.

6.) Much work done under FFW auspices over the past 20 or more years has not been well done nor well maintained. These dilapidated, non-functioning rock walls and other structures dot the countryside in most of the more food insecure woredas of Ethiopia. It is a serious problem and needs to be addressed, since the environmental deterioration they are supposed to be preventing or reversing continues largely unabated and remains possibly the most important contributing cause of on-going chronic food insecurity. No one can make a living on deteriorated, infertile soil or sheets of bare rock characteristic of the more food insecure areas of highland and midland Ethiopia. The government’s Employment Generation Scheme has been an attempt to use relief food efforts to tackle the problem by blending aspects of relief, safety nets and development in a program providing food-for-work opportunities for inhabitants of areas affected by severe droughts or other shocks. The EGS is intended to provide FFW for six months to enable recipient communities to make the transition from relief to normal coping and to do so in a way that creates enduring productive assets. The scheme has been heavily criticized, however, for not insuring that the assets created in EGS programs are, properly designed, well constructed, and sustainable. The majority of the EGS efforts have tended to be stone bunds, often not surveyed, and improperly sited for retarding water and soil losses. The program has, thus, been criticized as not much better than “make work.” Some of the Cooperating Sponsors have also criticized the EGS scheme for siphoning away beneficiaries from Title II project activities.

It has been widely recognized that something has needed to be done to turn this situation around. FFW-produced physical barriers to rainwater destruction, soil loss prevention, increased water percolation, reduced gully erosion – well designed, well managed and well maintained – have, in fact, been accomplished in many parts of Ethiopia. In some cases, they have now been continuously preserved for 15 and even 20 years. The need is to determine why those peasant associations, or cooperatives, or watershed associations have continued to maintain those physical resources for years after the end of the food for work programs that originally constructed them. It is suggested, in this regard, that a
review of the experience of the WFP Participatory Rural Land Rehabilitation Project be undertaken to identify lessons learned about what works and what has not worked. That project – the largest FFW activity in the world – has had both successes and failures and has been both praised and criticized. It has also transformed itself during its four five-year phases into a very participatory and increasingly successful model of what it takes to create among participant/beneficiaries the resolve to preserve check-dams, bunds and local roads, as well as the tree- and brush-covered hills which now characterize their formerly eroded landscapes.

The government has attempted to enhance the quality of the assets created under the EGS schemes by attempting to improve the training of the Bureaus of Agriculture staffs at regional and woreda levels so that they are better able to assist the communities to plan and implement these schemes. It is hoped, of course, that these efforts will result in an increase in the sustainability of the assets created in the FFW efforts.

2. What have been the direct impacts of each type of intervention package on its respective impact objective? What, if any, have been the indirect impacts on each of USAID/Ethiopia’s development objectives?

(The first half of this question is answered in depth in the previous discussion of Cooperating Sponsors’ interventions and their impacts. The answer to the second half is incorporated into the response to question 4 below.)

3. How well have the Cooperating Sponsors dealt with the need to generate sustainability? How do they define and measure it? What have been the most effective methods used to develop it?

The eight Cooperating Sponsors have had a mixed experience in laying the groundwork for eventual “sustainability” in their various activities. It may be, however, that the likelihood of achieving sustainability in many is still rather limited.

First, what is meant by sustainability? In general, the term means that the improvements generated by project interventions are robust and will continue as improvements well beyond the phase out of Title II assistance. It also means that the processes put in place under the intervention will continue to operate without the continued involvement of the Cooperating Sponsor. Each of the Cooperating Sponsors has their own variant.

In general, the Cooperating Sponsors take the concept of sustainability seriously. FHI, for example,\(^{28}\) considers its development interventions to be sustainable when they “…continue to deliver appropriate levels of benefits for an extended period of time after financial and technical inputs from external sources are terminated.” FHI uses a predetermined set of indicators to measure stakeholder capacity and readiness to pursue project activities after phase-out (see annex 5). Among all FHI activities, the Cooperating Sponsor has determined on the basis of its experience that the following types of interventions have provided the best chance for sustainability:

\(^{28}\) Tesfaye-Riley email communication 10 June 2002.
- Water and sanitation
- Soil and water conservation
- Private forestry (household wood lots and forage development)
- Health (family planning)

The likelihood of sustainability is enhanced, according to FHI, by the extent to which an activity is: i) simple; ii) adapted and sustained by the community members themselves; iii) such that the beneficiaries can readily see the benefits of the program; iv) characterized by voluntary committees being able to easily manage the assets such as springs and hand-dug wells; and v) such that families understand the need and are able to sustain wood lots and built-up conservation structures.

Among the more effective approaches, FHI has concluded, are the following:

- Focus on the prioritized felt needs of the community.
- Involve the community in the entire project cycle.
- Hand over management of the created assets well before the end of the project and follow up with the communities to ensure they are managing appropriately.
- Assign high priority to enhancing the latent capacities of stakeholders.
- While appropriate technology is important it must build on “what they already have.”

When asked what factors were common to their most successful projects, FHI replied that the “harshness” of the problem area was important because it tended to facilitate the community’s active involvement. Other elements were having staff skills “appropriate” to the problems encountered, good relationships with local government officials, and good collaboration with donors.

CRS reports\(^\text{29}\) that “sustainability means that the community has attained the necessary skills, knowledge, and means to continue the program without CRS (or the partners) assistance. We look for community ownership of the project right from the beginning by involving [them] in the identification, planning, and implementation process.”

Perhaps the best example of this in CRS’ portfolio of activities is the Lege Oda Mirga project near Dire Dawa. The involved communities were at one time recipients of relief food aid every year. However for the last two years they have not needed relief food aid, to a very great extent because of the success of their integrated watershed management approach which as led to increased production, productivity, and community ownership of the processes of their own development.

As with FHI, CRS argues that sustainability grows out of involvement of the communities in their own development. “This implies that the communities need to be involved from the point of problem identification, planning, and implementation.”

\(^{29}\) Bousquet-Riley e-mail message 10 June 2002.
Another element related to improved prospects for sustainability is when success is achieved in community collection of fees for water which has been made available by the project. In CRS’ case the water collection committees are successfully collecting such fees which will be used, in turn, to cover the costs of managing and maintaining the water points. This demonstrates recognition by members of the community of the need to pay for important assets created under the project. These funds are a significant element of that recognition by the community of the need for sustainability and part of the fiscal means by which sustainability comes about. Success in achieving sustainability is also associated with an integrated approach. In CRS’ case the integration is accomplished around the “watershed” – an area where the residents share a common need to preserve the natural relationships between hillsides, downslopes, potential sources of water, and the soil. Within selected watersheds, CRS has combined interventions in agriculture, natural resources management, health and sanitation, and water development.

EOC defines an activity as “sustainable” “…when it is able to deliver an appropriate level of benefits for an extended period of time after major, managerial, and technical assistance from EOC-DICAC is terminated. In other words, sustainability of an activity or intervention refers to the continuity of project outputs after the withdrawal of project inputs and the changes it has brought to the lives of the beneficiaries”30 In determining whether an activity is, or will likely be, sustainable, EOC looks for the following attributes:

- The activity is a priority for the beneficiaries and reflects their expressed needs.
- There is a limited and manageable set of objectives.
- There is strong beneficiary participation in decision-making.
- Beneficiaries are willing to contribute labor, materials, and land.
- Local government technical officers are involved from the beginning and demonstrate their willingness to continue to participate with the project after EOC’s phase-out.
- Beneficiaries have demonstrated technical, managerial, institutional and financial capability of continuing the process and managing the outputs in a sustainable way.
- There is continued replication of activities.
- There is continued improvement in the awareness of the beneficiaries.
- The activities/technologies are appropriate to the level of beneficiaries’ implementation capacities.

EOC lists its most successful interventions as: potable water; introduction of vegetables and cash crops; improved health services management; the construction of health posts; livestock improvement; rural access road construction; and capacity building through training, particularly in relation to soil and water conservation and crop management. Success is measured by whether the assets built are actually being used, whether production activities continue, whether the health and veterinary posts continue to be

30 Abadi-Riley e-mail message 8 June 2002.
operational without EOC support and whether the beneficiaries themselves continue to be enthusiastic about what they have learned.

WVI/WVE defines sustainability of DAP-financed activities as “continuance of activities by the community members themselves on a continual basis until long after the project is completed.” However, the DAP activity is not considered a stand-alone program by WVE, because their DAP programs are integrated into larger, more comprehensive WVE Area Development Programs (ADPs) which are the units WVE regards as the appropriate level for considerations of overall sustainability. In this broader unit, WVE defines sustainability as “keeping the process of development – in which both the current and the future potential to meet human needs and aspirations are enhanced while exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are in harmony.”

In determining whether an activity is or will be sustainable, WVE seeks to:

- Ensure that identified activities will contribute to the reduction of the problems in the community
- Ensure there exists resource potential in the area
- Ensure that community and local government interest and willingness to participate are sufficient
- Ensure that the policy and environment is enabling.
- Ensure that the technologies available are appropriate to the problems faced by the community.
- Ensure that the community is inclined to use the technologies that would be introduced.

Sustainability is most likely to be assured where the activity has been initiated by the community, where the community is willing to provide resources to accompany those of the government and donor(s), and where the responsibilities of beneficiary/stakeholders are shared widely.

Their most successful interventions, in WVE’s view, have been in soil and water conservation, potable water development, reduced soil erosion, the rehabilitation of degraded areas into productive farmland, and the re-vegetation of slopes now usable for “cut-and-carry” forage and bee-keeping. The techniques which are associated with the most success include: i) working closely with model farmers; ii) taking advantage of whatever potential exists, iii) the development of local organizations and institutions to gradually be able to take over management of assets and processes, and iv) working within local government and donor long-term strategies.

CARE defines sustainability as follows:

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31 Teklu-Riley e-mail message 11 June 2002.
32 Baldizon-Riley e-mail, 17 June 2002
“...sustainability is implicitly defined as the motivation, interest and capacity of the communities to continue benefiting from a specific intervention on a long term basis. This requires community based groups to be organized and strengthened with the skills and tools needed to support and maintain such activities at the community level. In addition, local government partners are involved in the process (from design to completion) in order to ensure that they will be willing to accept responsibility for providing needed support when this is beyond the community’s capacity and possibilities. This also means that community groups need to learn how to access external support in an effective manner.”

Based on long experience, CARE is increasingly convinced that the best early indication that an activity will be sustainable is community willingness to contribute free labor and cash for the implementation of that specific activity. The concept of sustainability is, however, changing as CARE’s perception of its own role changes from that of direct implementer to that of facilitator. In the emerging conception of sustainability, CARE believes that “sustainability should not be limited to maintaining the benefits of the project, but to expanding those benefits on an ongoing long-term basis”

Some common themes run through the Cooperating Sponsors perceptions of sustainability:

- It is not the sustainability of individual activities that counts so much as it is sustainability of the community-centered processes that have been put in motion.
- Integration at many levels is key – there is no support for the concept of “sustainability” of a single element
- The community itself must be at the center from the beginning and must be genuinely committed to the set of activities that, together, constitute the program being sustained.
- There was considerable support for the centrality of NRM/agricultural production as the elements most likely to be successful.

Two or three themes that might have been expected to emerge from the polling of the Cooperating Sponsors about sustainability did not emerge. There was no sense of the time element. How long does a DAP-financed program have to be in place before the necessary pieces are in place to generate sustainability? None of the Cooperating Sponsors spoke to that issue. In reviewing all the elements of all the constituent parts of all the Cooperating Sponsors programs, this evaluation concludes that, for a significant percentage of DAP-financed activities, it is too soon for them to be considered sustainable. This is particularly the case for the SCF-US and Africare activities. In the CRS case, because one or two of their long-time counterparts have evolved to the point where they could probably operate successful food security-focused development projects independent of CRS, it might be argued that these counterparts are independently sustainable, even if the activities they support are not quite there. In the particular case of the CARE urban projects, there is quite a different approach in place which results in a fairly high degree of sustainability likely in most (but not all, according to CARE’s final DAP evaluation) participating woredas. This particular mode of operation has been in place for many years and the modalities have been tested by a large number of iterations. The rural processes, since they inevitably involve longer-term NRM and agricultural production activities, are unlikely to be sustainable for several years – for one reason...
because they must be “nursed” through bad years as well as good to ensure that the processes are resilient enough to withstand droughts and other natural shocks.

Another important element of sustainability was only lightly touched on in the Cooperating Sponsor responses. That has to do with the capacity of other organizations to continue to provide the backstopping, safety nets, or continued support of different sorts. In most of the Cooperating Sponsors responses, the assumption was that local, regional or national government entities would be responsible for providing support in the form of continued staffing of clinics and schools built, roads rehabilitated, and continued training for farmers, pregnant and lactating mothers, health workers, Development Assistants, etc. Several Cooperating Sponsors reported that, if this were not to be the case, sustainability could not be assured. Given continued government budget austerity, and the multiple demands for such continuing assistance from other donor and other NGO projects in phase-out mode, there is no assurance that such continuing support is realistic for many of the Cooperating Sponsors’ projects reaching phase-out in the next few years. As noted earlier in Section 2, several of the individual Cooperating Sponsor DAP evaluations suggested that some Cooperating Sponsors were unduly optimistic about whether their activities were at a point where sustained continuation was a reality.

Most of the Cooperating Sponsors are anxious that their activities develop the attributes of sustainability. Most of them emphasize the importance of a communal sense of ownership of their own development agenda and a willingness to undertake as many as possible of the tasks themselves. This spirit infuses much of REST’s work in Tigray, although it is harder to find elsewhere. In effect, the bottom line for sustainability is that it must rest in the minds of the people themselves. An integrated project’s progress toward a food security or livelihood security goal can be made an on-going, sustainable effort, if the members of the community will it to be so. If the community does not have the will to sustain it, then it will not be sustainable, no matter whether the supporting mechanisms are there or not.

4. How extensive is the compatibility between USAID SOs as laid out in the 2001-2006 ISP and the activities and outcomes of the Cooperating Sponsors’ programs? In what ways should Title II programs change to comport to the new USAID strategy?

The Title II program described above operates within the context of Ethiopian Government policies and strategies and also under the umbrella of USAID’s development strategy and program in Ethiopia. During the period being evaluated in this report, USAID has had two multi-year development plans: the 1993-2001 strategy well-summarized in a descriptive piece entitled “Back to the Future”; and the present 2001-2006 Integrated Strategy Plan. The implementation periods for the DAPs has varied from one CS to another and are presently not in sequence with the USAID 2001-2006 ISP timeframe. It will be recommended in Section 3 below that the new FY03-FY07 DAPs be shortened by one year to FY03-FY06. Starting in 2007 both DA and Title II programs would operate on the same multi-year framework.
The present development strategy contained in USAID/Ethiopia’s five-year Integrated Strategy Plan (ISP) commits USAID to the reduction of chronic household food insecurity in Ethiopia during the ISP lifetime. Five Strategic Objectives and one Special Objective are set out as strategic elements in a combined effort to reduce chronic household food insecurity:

- **Improving family health** using high impact child survival and reproductive health interventions; a strengthened focus on reducing the incidence of HIV/AIDS; and efforts to improve the effectiveness of health sector resources.
- **Enhancing quality and equity in the primary education system** by improving the quality of professional education; strengthening teacher-learner systems; improving the community-government linkages in education; and improving basic education management systems.
- **Increasing rural household production and productivity** by increasing the integration of crop and livestock factor markets; increasing market competitiveness; increasing/diversifying rural household income; strengthening food and agricultural research in target areas; improving dissemination of technology capacity in the extension service.
- **Mitigating the effects of disasters** by adopting improved mitigation factors; improving targeting and response mechanisms; enhancing the capacity of socio-economic institutions to provide services in conflicted areas near the Ethiopia - Eritrea border.
- **Developing more effective governance and civil society** by increasing popular participation; strengthening the judiciary and respect for civil rights; and increasing effectiveness in use of public resources.

The Special Objective is:

- **Improving the livelihoods of pastoralists and agro-pastoralists in Southern Ethiopia** by increasing incomes; improving access to primary care and primary education; and increasing the effectiveness of traditional means of resolving disputes.

In addition to these building blocks of the USAID strategy for reducing chronic food insecurity in Ethiopia, there are four strategic areas – or cross-cutting themes where progress is intended be made under all Strategic Objectives:

- **Improving nutritional status** – seen as an inseparable element from food security but one that must be dealt with from multiple perspectives.
- **Human and institutional capacity development** – strengthening Ethiopian capacities, particularly at the local level, is the essential element if sustained progress is to be maintained upon the conclusion of individual donor-assisted project activities.
- **HIV/AIDS** – this major human, economic, social and development crisis is already upon Ethiopia and USAID’s assistance efforts will have to cut across all sectors.
Integration of Title II activities into development programs – previous Title II programs in Ethiopia had been found by a joint government-donor assessment to have been ineffective in helping reduce chronic malnutrition in children, lacking in focus, and insufficiently well-integrated with interventions in other sectors. Working with the Food and Nutrition Technical Assistance (FANTA) project, USAID/Ethiopia has developed a listing of proposed interventions related to each SO where it is believed Title II food aid could make an effective contribution. In furtherance of this concept, USAID/Ethiopia has taken steps to focus Title II food aid more specifically on reducing malnutrition and improving household food security in ways that are well integrated within each of its new Strategic Objectives. To this end a listing of 45 potential Title II interventions has been prepared – each linked to one or another of four specific SOs: Rural Household Production and Productivity, Improved Family Health, Enhanced Primary Education, and Mitigating the Effects of Disasters.

It is hard not to conclude that the array of five Title II IRs aimed at a food security special objective during the 1993-2001 period did not play some role in helping USAID/Ethiopia define its 2001-2006 program. First, the 1993-2001 food security special objective for the Cooperating Sponsors’ Title II DAP programs has now become, in a somewhat more macro form, the overall goal of the USAID program in Ethiopia. While the focus of the DAPs was on securing improved household food security for the Cooperating Sponsors’ targeted beneficiaries, the focus of USAID’s ISP goal is making measurable progress in reducing household food insecurity at the national level.

Second, three of the five Title II IRs are similarly related to the new set of Strategic Objectives. The Title II IR1 (increasing agricultural production) was aimed at the same objective as is the present increasing rural household production and productivity SO (RHPP). IR3 (improving health and nutrition status) is closely related to the 2001-2006 improving family health SO (ESHE) and IR5 (enhanced emergency response capacity) is clearly associated with the mitigating the effects of disaster SO (MED). While there are no direct ties to USAID’s basic education (BE) SO nor to the governance (DG) SO, there are a number of ways that the programs of the Cooperating Sponsors actually relate to these categories of USAID assistance as well. This is particularly the case in the institutional strengthening that forms the core of several Cooperating Sponsor activities. Communities that have learned to elect development committees, water users associations, community health and sanitation committees are, in fact, practicing basic forms of democratic association and representational local governance functions. The community members, by placing policy demands on these newly-created local bodies are a step closer to being able to formulate and present demands on local and national levels of government as well. The relationship to the BE SO can be found in efforts, such as those of CARE, in building new primary schools in very poor, food insecure woredas. In the future, there would also be the option of using a future Cooperating Sponsor school feeding activity as a mechanism for improving the ratio of girl to boy students within the BE SO framework of strengthening the delivery of primary education in the more food
insecure areas of the country. This could be a particularly powerful tool if orchestrated with Ministry and regional Bureaus of Education efforts to improve the coordination of WFP’s school feeding program with strengthening the delivery of primary education in the poorer, for food insecure areas of Ethiopia.

USAID’s special objective related to improving the lives and livelihoods of the pastoralists in southern Ethiopia (the “southern tier initiative”) is thematically very close to the programmatic objectives of SCF-US in southern Oromiya and Somali areas. The lessons learned under the SCF-US program, identified in their most recent DAP evaluation, are clearly of use as well to those implementing the southern tier strategy. There are reasons to link these two programs so that the strengths of one effort can complement the other and, in the process, increase the potential for helping improve weak local government institutions throughout the pastoralist areas with a concerted set of approaches to widespread, common problems.

USAID’s health sector strategy in 2001-2006 is heavily focused on efforts to reduce the numbers of Ethiopians being infected in the HIV/AIDS pandemic. There are clear opportunities to collaborate with Cooperating Sponsor efforts to use food aid to ameliorate the effects of the pandemic on the households of the infected and to improve the nutrition levels of infected household breadwinners so that they can remain productive for a longer period of time. CRS and possibly other Cooperating Sponsors and NGOs not part of the Title II DAP effort could combine Title II resources and non-food resources in efforts aimed at keeping households with HIV/AIDS-infected members as economically self-sustaining as possible.

5. What are the best practices and guiding principles for the future use of food aid assistance to improve food security in furtherance of USAID/Ethiopia’s overall objectives and SOs? Which internal and external factors most positively contributed to the achievement of the Mission’s overall goal and individual SOs, and which did not? What are the factors that are common to successful Title II programs and which have negatively affected these programs?

Each of the Cooperating Sponsors’ DAP programs contains examples of approaches or modalities that provide guidance for the future. Many of these are highlighted in the previous sections dealing with the Cooperating Sponsor programs individually, particularly in the concluding “lessons” sub-section of each discussion. External factors that adversely influenced the ability of the Cooperating Sponsors to more readily reach their objectives are discussed in the “Food Aid Issues” sub-section of Section 3. There are, however, several key categories of “best practices” and of factors common to successful Title II programs worthy of reiteration.

a. A universal theme voiced by all eight of the Cooperating Sponsors is that success ultimately depends on the “centrality” of the community in the process. The households

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33 The ability of school feeding to attract many more rural Ethiopian students to school in areas where parents are traditionally reluctant to send their children to school is demonstrated in the recent evaluation of WFP’s school feeding program in Ethiopia. See: [http://www.wfp.org/eb/docs/2002/wfp008086~1.pdf](http://www.wfp.org/eb/docs/2002/wfp008086~1.pdf)
of the communities being assisted to enhance food security must be fully on board and participating from the earliest planning stage, and must be willing to contribute time, labor and other assets. The task of the Cooperating Sponsor or other donor is, in a very real sense, to ensure that community members will find it worth their while for having done so. This is nicely exemplified in CRS’ Lege Oda Mirga, the CARE urban projects, and in the REST NRM and agriculture production activities. It is a theme, however, more easily enunciated than taken to fruition. Several of the final DAP evaluations questioned the ability of many of the surveyed participating communities to maintain, over the longer term, gains made during the DAP project period. In many cases, while there is evidence of community interest in the objectives of the pertinent DAP program, these activities are for the most part only a few years old and often not fully tested by adversity. This underlines the fact that the project lifetimes for these activities should be significantly longer than the five year programs which are the norm in these DAP activities. Community commitment mat well be exemplary for a year or two only to be de-energized the first time the much hoped-for bumper harvest confronts inelastic demand, and producer returns decline. This was the case for maize producers, for example, in some FHI locations during 2001. A ten or more year life-of-project period would enable communities to learn more fully – and through experiences with real setbacks – how to confront shocks or other adversities.

b. There must be close cooperation with local government agencies. These DAP activities must be viewed by the latter as advancing their own food security or poverty-reduction agendas. Africare, for example, has involved local Bureau of Agriculture personnel in training and in crop diversification activities from the beginning. CRS had the opposite experience several years earlier when the zonal government in Gurage zone of Oromiya region in effect conducted their own evaluation of the CRS agricultural activities, determined that the project was operating counter to the zone’s policies, and terminated the activities.  

c. The central, multi-dimensional importance of helping improve access to and availability of water is clearly a theme emerging from the experience of virtually every Cooperating Sponsor. Most of the mid-term and final DAP evaluations have found that increased availability of water is the most highly regarded intervention by both beneficiaries and Cooperating Sponsors alike. As CARE reports:

“Our most successful intervention so far is Water and Sanitation. First, people say that when there is a drought frequently the reason they start migrating is lack of water not lack of food. Second, women and children spend 4-6 or more hours per day searching for water—which causes an incredible expenditure of calories. Third, the water they usually drink is contaminated and they are chronically affected by diarrhea and parasites—which worsen their nutritional status. Fourth, by reducing the amount of time required for fetching water women have more time to take care of themselves and their children. One innovation we have introduced in our water systems is to pipe the water as close as possible to the target communities. The longest

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34 As noted in the CRS Mid-Term Evaluation, CRS admitted that local government officials had not been part of the initial design and early implementation and had not been made a partner in the project’s operations in the zone.
pipeline we have built now is 11.5 km—which means women and children do not have to travel 11 kilometer to have clean water.”

SCF-US beneficiaries have also responded that the development of water points and increased availability for both livestock and humans is their top interest and most highly regarded activity. The benefits from increased clean water availability occur in every sector. Increased irrigation reduces vulnerability to the vagaries of annual rainfall and enables multiple cropping and greater crop diversification. Even the added soil moisture that occurs adjacent to properly sited and constructed bunds enables the growth of new crops – pigeon peas are a popular crop in such situations. Cash crops become a more lucrative possibility and thus there can be positive income consequences. Increased water for human consumption has positive human labor consequences, and positive sanitation, health, and nutrition consequences. As a product of NRM area closure programs, reforestation, and reduced water and soil run-off in the rainy season, there is a positive ecological consequence. Finally, increased water availability increases resilience to droughts and other shocks. Perhaps no other activity – save, perhaps, some aspects of soil and land conservation -- has as many positive returns as does a focus on increasing the amount of water available to all members of a community and increasing the amount of time each year it is available.

d. Sustainability requires that the support mechanisms (most often involving local government field staff) that will exist after the phase out of the Cooperating Sponsor be well thought out in advance and that the personnel who will continue to serve the food security objective of the effort be fully trained and be enthusiastic regarding their continued contribution in the post-DAP period. There are many levels of sustainability (and the discussion returns to the “sustainability” theme in Section 3), but the fundamental one is the ability of the beneficiary community to be assured that the efforts they have contributed during the term of the project will not have been wasted and that there are entities that will continue to provide needed support. It is a primary task in each of the activities that each of the Cooperating Sponsors determine what the post-project support structure needs to include and to ensure – during the lifetime of the DAP-financed project – that the necessary groundwork is accomplished.

Problems common to most Cooperating Sponsors, as voiced in the pertinent midterm and final DAP evaluations, include concern over the validity of the indicators used to measure progress, frustration with the shortfall in monetization proceeds during the last three years of DAP activities, and a focus on the construction of assets without ascertaining how continued maintenance will be provided (this was true for several of the Cooperating Sponsors for several types of activities: road-building, irrigation canal construction, health post and school construction, etc). A theme raised in one or two evaluations, but one which resonates to a greater or lesser degree among nearly all of the programs is the need for much more attention being devoted to activities intended to make the beneficiary households more productive agriculturally (or in terms of livestock), but with insufficient attention paid to issues of sustainable and growing incomes. There has been relatively little attention paid to increasing marketing acumen among beneficiaries or to how they

35 Baldizon-Riley e-mail message 17 June 2002
might better organize themselves to market their production more effectively. In one or two cases there is some focus on improving access to market information, but there seems to be little else in place to enable the recipients of such information to be able to take advantage of it. It is also unclear how the process of gathering and disseminating such information will continue to occur after the end of the DAP projects.

Returning once more to the Diskin framework, it appear that most of the work being undertaken by the Cooperating Sponsors focuses on Box A (increasing production) to produce results associated with box AA (more food), and also on Box D (health care, water and sanitation) to produce results associated with box DD (improved nutritional status of the individual). Work on Boxes B and C is certainly less visible and results – in terms of increasing entitlements or access – are also less visible and more uncertain. What work that is being done in Box C (e.g., in FACS/CBHC) related to increasing awareness about proper nutrition at the household level and sensitization about intra-household allocation is less pertinent or useful because it is to a considerable degree income dependent.

Finally, if one uses the Buchanan-Smith and Maxwell framework (Table 3) to help analyze what appear to be the results of all the Cooperating Sponsors activities, taken together, one can conclude the following: There is a strong emphasis on increased productive assets (“capital”) as measured – somewhat strangely – by increases in non-productive assets (e.g., household expenditures on chairs and tables). There is an equal emphasis on increasing human capital through training, education and health. There is a lesser emphasis on income and little apparent involvement in “claims” except for the very important experiment with women’s savings and credit undertaken by CRS. The issue is whether what is being accomplished – and reported on as success in terms of meeting indicator targets – is, in fact, robust against the various types of risks in the remainder of the cells in Table 3. This issue is further discussed in the following section.
Section 3: Guidance for the future

The purpose of Section 3 is to provide guidance for the future use of Title II food resources as an instrument to help USAID/Ethiopia make progress toward its food security program goal. First are presented encapsulated issues that have long associated themselves with food aid as a development resource. The second sub-section suggests ways to use Title II food aid to make the present ISP more effective in achieving progress toward that very long-term, difficult-to-achieve goal. The third sub-section suggests food aid modalities and a set of “rules” that are recommended to improve effectiveness. It uses the Buchanan-Smith and Maxwell framework to help clarify what food aid might be able to do in the remaining years of the 2001-2006 ISP timeframe to reduce some of the risks attendant upon increasing availability of and access to food and insuring that the health and nutrition environment allows the consumption of that food by poor Ethiopians to have the maximum positive impact.

1. Issues of Food Aid

a. Monetization

The sale of Title II food for cash is a difficult issue to treat in this report. There are: i) U.S. government policy issues, ii) USAID/Ethiopia policy and programmatic issues, iii) Ethiopian Government policies that remain unclear to the evaluation team, iv) the concerns of international food traders, local businesses and Ethiopian producers of identical foods – or near substitutes – used for monetization, and v) the continuing essential need by the Cooperating Sponsors for adequate non-food resources to accompany the use of food aid commodities.

A designated unit of CARE undertakes periodic monetization of vegetable oil or wheat and makes the local currency proceeds available to the Cooperating Sponsors on a pro rata basis. During the last three years of the current DAP cycle a number of problems have arisen to hamper the commodity sales process and the resultant shortfall in local currency has caused all cooperating sponsors to curtail important aspects of their programs – training, input purchase and distribution, and the procurement of vehicles among them. Staff of some of the Cooperating Sponsors have been furloughed or terminated as a result.

Rather than review the history of the monetization problems, as was done in the first report, this second version proposes three possible options for the future. They are not mutually exclusive. First, wherever possible USAID/Ethiopia DA funds should be made available to the Cooperating Sponsors in their forthcoming programs in lieu of a portion of monetized proceeds. The evaluation team is aware that such a decision has already

36 The Ethiopian Government policy for several years has been to oppose monetization. The government is apparently willing to make exceptions for the monetization of some quantities of vegetable oil and/or hard wheat for U.S. Title II Cooperating Sponsors. It has not been made clear to the evaluation team on what basis such decisions are made.
been reached by USAID/Ethiopia and strongly endorses it. On the assumption that the levels of DA likely to be made available will probably be limited (at least in some years) and may not be adequate to cover the cash needs of the Cooperating Sponsors, other options should be explored. The second of these is to continue the process of negotiating with the Ethiopian Government and with those organizations – among them the Chamber of Commerce and Ethiopian commodity producer, processor, wholesaler and retailer groups – who have been opposed to the monetization of imported U.S. food aid to reach agreement on a process by which annually some level of monetization can be agreed to in advance. The actual monetization could be undertaken in the fiscal year before it would be expended. This would enable the Cooperating Sponsor to know well ahead of time the amount of monetized proceeds would be available in the operational year.

The third option is to propose a Title III or Commodity Import Program for Ethiopia as a way of generating local currency proceeds (i.e., a counterpart fund account) for Title II and other USAID development activities. These program food aid vehicles have worked well in the past, particularly in Ethiopia. While such initiatives are not currently part of the approved program for Ethiopia, and are little used in USAID globally at present, such will remain the case until particularly cogent arguments are put forward for their use in the future. The evaluation team believes the situation in Ethiopia provides ample material for making the case for a revival of a small program food assistance package to generate local currency tied to reducing chronic household food insecurity.

During the course of the evaluation, the team discovered that there is unhappiness among a few of the Cooperating Sponsors with the manner in which the monetization process has been handled. It is beyond our capacity to determine the validity or lack of validity of the concerns. The purpose here is to note that the concerns exist. One Cooperating Sponsor proposed that they be allowed to undertake their own monetization, based on their long experience with successful monetization in other countries in Sub-Saharan Africa. The evaluation team suggests that the option of more than one monetizing entity be entertained.

b. Food-as-food

There is a long history of debate over the relative utility of food aid as a development resource. Some of this debate is footnoted earlier in this report. In the original draft of this report, a summarized version of the major tenets of the food vs. cash debate was included. There was a strong adverse reaction in the USAID/Ethiopia Mission to this element of the evaluation report (as not being germane to the objective of the evaluation) and it is not contained in this version. To the extent that it is, or will become, U.S. policy that a greater share of developmental Title II food aid be used as food, rather than monetized, the evaluation team believes that this can be accomplished through the continued use of a substantial portion of Title II food in the form of safety net resources These resources would be channeled through MOC and similar charitable organizations for use in ameliorating the effects on HIV/AIDS-afflicted households of the pandemic – particularly, as noted earlier, where the food enable HIV/AIDS-positive breadwinners to
remain physically active significantly longer than would have been the case without the safety net.

Food-for-work efforts can and should be expanded in the community-based, jointly programmed, and collaborative modes discussed in the prior sub-section. The cash requirements for tools, construction materials, agricultural inputs, training, management, and evaluation that cannot be met from monetized proceeds will have to be met by DA funds.

Food used as an incentive to bring pregnant and lactating mothers to regularly visit clinics or community-based health facilities to monitor the progression of a pregnancy or the growth of infants is a traditional use of food-as-food and is associated with improved nutritional status of the mothers and infants so long as they are receiving supplementary rations. The issue has always been whether there is substantial lasting nutritional benefit after the period of supplementation expires. Have the mothers learned and retained the right nutritional message and do they have the means at home to convert that knowledge into continuous nutritional benefit for themselves and their children? The CRS final DAP evaluation raises the issue again when it suggests that attendance at growth monitoring sessions dwindles when the period of the free ration is over. The mothers know they should bring their children to the health location monthly, but without the inducement of a free food ration they are not as willing (or able) to do so. The DAP evaluation also suggests that the long distances to the clinic/health post and the other demands on the mother’s time mean that, while she would like to do so, without the reward of food she will have to deal with these other demands instead. The answer lies not in discontinuing the inducement of the food ration, but rather in reducing the travel time to the health post by having more of them, and in reducing the other demands on the mother’s time by continuing to provide improved access to water as a top priority at the community level. These efforts, however, require substantial cash resources to proceed at an acceptable pace.

In sum, there is ample opportunity to use food as food. To do so effectively requires adequate accompanying cash resources. If monetization does not generate sufficient amounts, DA will have to be used. If there is insufficient DA, the whole process slows. For the food-as-food approach to operate effectively requires significant non-food resources.

c. Disincentive effects of food

A major debate among the evaluation team members has related to the disincentive effects of large-scale food aid, both generally and specifically in Ethiopia. This is, of course, a wider debate of many years standing. The issues of whether such effects are large, inevitable, and have adverse consequences over the longer term have not been resolved either on the evaluation team or in the literature. The argument was made in the first draft of this evaluation that while there can be a disincentive effect, there does not have to be a disincentive effect. This evaluation cannot resolve this disincentive issue to the satisfaction of all team members. It can recommend, however, that, to the greatest
possible extent in the design and review of food aid projects, the potential for
disincentive created by the local sale of some or all of the food commodities be
specifically addressed and the potential for such effect minimized in the design of the
activity.\footnote{For a fuller presentation of the issues see the references cited on page 1 of this report and the discussion on this topic in the first version of this evaluation report.}

d. Special problem of livestock in Ethiopia

The issue is presented in Annex 3 – a briefing note written by a member of the evaluation
team. Essentially, the concern is about whether there may be too many livestock in
Ethiopia consuming too much of the dwindling forage and water resources. Should Title
II food aid be used to support efforts to improve animal health, and in other ways to help
increase the numbers of livestock owned by households in degraded areas? There are
approximately as many livestock as people in Ethiopia and the former have been
identified by the authors cited in the briefing note as being more responsible for the
country’s environmental degradation than the latter. While the evaluation team
recognizes that the lives and livelihood of pastoralists and mixed farmers who depend on
livestock for traction, income, milk, and other products cannot be turned around in the
near term, the team is nonetheless raising questions of the propriety of continuing to
support efforts to increase the numbers of livestock without concomitant efforts to insure
that the numbers of animals are in balance with the ability of the pasturelands to support
them. At a minimum, projects involving support for animal health, increased availability
of water, and other animal management issues should also identify the environmental
effects of the presumed positive outcome of these livestock enhancing activities and,
either as part of the DAP activity or in undertakings by outside donors, insure that
balance will be achieved and not further disrupted.

2. Recommended role for Title II food aid during the remainder of the 2001-
2006 ISP period.

a. The context

Long-term macro-economic growth in Ethiopia is essential if efforts to reduce chronic
household food insecurity are to sustained and the goal achieved. Achieving USAID’s
overall program objective requires that the efforts of the IMF/World Bank, other major
multilateral and bilateral donors, the various levels of the Ethiopian government and civil
society – operating individually and in concert – achieve rates of growth enabling the
average Ethiopian to increase the returns from his/her labor. Neither poverty reduction
nor achieving food security can succeed in the absence of significant, sustained economic
growth that is widely shared.

Poverty-reduction within a growth environment – as is being developed in the PRSP
framework – is the context in which efforts to improve household food security will
occur. Within that context, Title II food aid, as a significant element in USAID/Ethiopia’s
2001-2006 ISP, has multiple roles to play. First, as is well documented (Raisin 2002), there are presently some 4 million Ethiopians requiring food aid, even in non-drought years, caused by their inability to grow or purchase even minimally adequate amounts of food.\textsuperscript{38} When droughts or other calamities strike, this number can rapidly double or triple. These people require a safety net of food assistance to enable them to survive. While it is normally preferable to either provide them with cash (in CFW programs or cash transfers to the elderly or infirm) or to purchase food domestically from surplus areas for their use, these options are not presently available to USAID/Ethiopia. There continues to be a lack of cash resources of the magnitudes required for CFW programs\textsuperscript{39}. The historical truth is that food aid has been available, and is likely to continue to be available where adequate cash resources are most likely not, at least not in sufficient quantities. Food aid in the form of “food-as-food” is likely to continue to be needed – in large amounts – to feed the Ethiopian hungry even in years without significant emergencies. The challenge for the Cooperating Sponsors engaged in this effort is to assist the beneficiary communities to engage in well-planned, well-executed efforts resulting in sustainable changes in their physical situation. These should improve the quality of their productive and human assets, increase the opportunities for earning more income, and increase their options to exercise claims on food when disasters strike while simultaneously reducing the risks of losing these assets, income streams and claims. These are all elements of disaster response, disaster mitigation, and progress along the relief-to-development continuum.

b. The elements of the future Title II program

Food aid – even that intended for direct feeding – must be used in ways that contribute substantially to a reduction in the factors causing both poverty and chronic food insecurity among tens of millions of Ethiopians. Perhaps the single most important food aid-related action necessary in Ethiopia over the next 20 years or more is speeding the revival of the natural resource patrimony of the country. Centuries of poor land and soil management have resulted in damage that needs to be reversed and repaired. In the highlands and woina dega (midlands) where over 80 percent of Ethiopia’s 64 million people live (i.e., at elevations of over 1,500 meters above sea level), the extent of the erosion is compelling. As noted in Section 1 of this report, more than 2 million hectares of arable lands are already irretrievably lost. Another 10-14 million hectares offer soils depths of 50mm (19”) or less – inadequate for optimal rooting for many staple crops and impossible for tree planting. A full 50 percent of Ethiopia’s arable lands have slopes of 16 percent or more. Nationally, present soil erosion rates result in losses of 1.5 billion MT/year. As a result of these and other factors, net agricultural productivity rates continue to decline at an estimated 2-3 percent per year and, as was the case with population growth, this too is an exponential rate… of loss.\textsuperscript{40}

There is inadequate progress being made today in reversing the trends in the factors that have caused this substantial degradation and loss. Trees and brush continue to be cut

\textsuperscript{38} As discussed earlier in this Report.
\textsuperscript{39} Of the sort currently employed in the EC’s food security program.
\textsuperscript{40} WFP/Ethiopia data.
down for firewood or building materials, or for sale to generate meager incomes for the nearly destitute. The barriers that would stop the rushing of the rainwater out of Ethiopia are not built in numbers that can significantly stem these flows. The NRM-type programs of the Cooperating Sponsors should not only continue, but they should be expanded to the extent there are food and related cash resources to do so. This effort should be the centerpiece of the relief-to-development aspect of Cooperating Sponsors programs and more closely linked to similar efforts by other donors – particularly WFP – so that the task of training community leaders and the local government support and backstopping staff can be widely shared, concerted, and jointly financed.41

Above and beyond efforts to improve the development contribution of food provided to those suffering chronic food deprivation and in efforts to improve the productivity of the land and soil, food aid should continue to be used to increase water availability for human use, crop growth and livestock well-being. It is abundantly clear from the individual experiences of the eight Cooperating Sponsors in Section 2 above that the multiple benefits from increased availability of water make its provision among the highest priority DAP activities for the next several years in terms of contributing to improvements in household food security over the longer term.

Associated with the provision of water, are the health and sanitation improvements that can capitalize on increased availability of clean water. The various elements of the Cooperating Sponsors’ programs that have focused on improving health through the provision of improved community health services provide useful experience in terms of what has worked in particular sites (reduced prevalence of diarrhea associated with provision of clean water, increased weight for age in under-twos associated with FACS/CBHC, improvement in contraceptive prevalence among pastoralists associated with the SCF-US programs, etc.) and what has not worked (authenticated behavioral changes among mothers surveyed at home, lack of evidence in numerous communities of willingness to pay the costs of community health workers, lack of strengthened local bureaus of health willing and financially able to take over health and sanitation efforts after the Cooperating Sponsor has phased out, etc). Efforts associated with improving the nutrition status of at risk populations will also continue to be of highest priority.

The HIV/AIDS element of Title II food aid should be substantial. It should not however overshadow, nor draw resources from, the land or pasture rehabilitation/water regeneration, and the other elements discussed above. This element should assist in both prevention and amelioration efforts. In assisting in prevention, food can be used as payment for services for community-based health workers who would be responsible for delivering the appropriate messages and supplying condoms throughout their communities. Food can also be used as recompense for PA, tabbia and kebele officials

41 This was the core element of the “Tier 1” approach proposed in the initial version of this evaluation report. The 2-tier approach as described in that paper is still an option that USAID may find useful as it considers its Title II options for the remainder of the 2001-2006 period and beyond, but the clear sense of skepticism evident in the many USAID comments on the idea have led to its being scrapped as part of the proposed course of action.
brought to central locations for training in HIV/AIDS prevention and care-giving at the community level, where local currency is not available for that purpose.

There are several possible options for using food aid to deal with the consequences of the epidemic. HIV/AIDS-specific safety nets are likely to be required all the way down to the community/PA/kebele level, and food will probably have to be a major component of those nets. Food aid should be made available to care-giving NGOs such as MOC for distribution to households of HIV/AIDS-infected persons too debilitated to work. If undertaken early enough, such feeding programs can help maintain the productivity of those with full-blown AIDS for months, or even a year or two longer than would be the case without Title II distribution. From the perspective of the household, this is valuable, productive time. NGOs will also need to provide food to extended family members or local NGOs caring for HIV/AIDS orphans (already estimated to number a million or more in Ethiopia). Food may be required to support small, simple community-based training programs for care-giving households or community volunteers to cope with the added burden on the community (PA/tabbia/kebele) of significant losses to the disease.

c. Modalities of Title II food aid

1.) Standardize information collection across Cooperating Sponsors. There is a great need to standardize information gathering on Title II program effectiveness and impact and to reduce the amount and type of data, or information, being collected. All Cooperating Sponsors should use the same indicators for the individual types of activities they implement. There should be less emphasis on what CRS has appropriately called the “nice to know” information, particularly those data for most of the proxy indicators for changes in income status. It is strongly recommended that USAID instruct the Cooperating Sponsors to use the same types of questions on household expenditures for food and other items – and changes therein over time – that are commonly used in Sub-Saharan Africa as proxies for changes in income status.42

2.) Reduce the weight in collection of indicator data given to year-to-year changes which are hard to distinguish from normal variance around long term trend lines. At the same time, add the requirement that coefficients of variation data be gathered for time series data because wide amplitude variability in some factors (e.g., rainfall, prices, transaction costs) is one of the major risk factors for the food insecure rural poor in Ethiopia.

3.) Increase information gathering related to changes in target group patterns of behavior and define or redefine the hypotheses that establish testable links between Title II interventions and these behavioral changes – or the lack of them – over time. This is where sustainability is born and where success or failure in Cooperating Sponsor approaches and modalities will occur.

42 See any of the World Bank Living Standards Surveys or Integrated Household Surveys for several African countries for the model.
Be wary of reliance on econometric analysis until the data collected are more reflective of
the reality they attempt to mirror. Peter Kennedy in the introduction to his *A Guide to
Econometrics* (Kennedy, 1993) reminds the reader that:

“The patching up statistical methods to deal with situations frequently encountered in empirical
work in economics has created a large battery of extremely sophisticated statistical
techniques…econometricians are often accused of using sledgehammers to crack open peanuts
while turning a blind eye to data deficiencies and many questionable assumptions required for
the successful application of these techniques.”

Andrew M. Kamarck, formerly Lead Economist in the World Bank’s Africa Bureau has
written an entire book (Kamarck, 1983) cautioning econometricians working with Third
World data and those who use their work to be ever mindful of the ease with which
apparent precision can be mistaken for accuracy in econometric analysis. The point here
is that most data collected in Ethiopia is very likely to be filled with errors and that, when
used for econometric analysis, can lead to highly erroneous conclusions about the state of
the reality of relationships that the analysis is, in fact, trying to clarify. One must be very
careful to hold such conclusions lightly.

4.) Combine Cooperating Sponsor programs into fewer DAPs. Eight separate DAPs is too
many. USAID/Ethiopia staff made clear to the evaluation team their preference for fewer
Cooperating Sponsors and/or fewer DAPs. While it may be too late for the present round
of new DAPs, recently submitted. It is suggested that, starting with the 2007 program
cycle, there be no more than four or five DAPs, either functionally or geographic area
specific. There are reported to be examples of Cooperating Sponsors collaborating
successfully within joint DAPs in West Africa.43

Four such possible combined DAPs are suggested as an example for consideration. Other
alternatives are, of course, possible:

a.) Pastoralist program DAP
b.) Amhara-Tigray cropping/mixed farming program DAP
c.) Oromiya integrated development program DAP
d.) Urban program DAP

Separate, but often jointly prepared, DAPs would be prepared for each of the above. The
individual DAP could have one, two, or more Cooperating Sponsors operating elements
of the proposed program. Any individual Cooperating Sponsor having a particular
domain of expertise would be free to take up that element (say, road rehabilitation or
livestock development) in all DAPs featuring that category of assistance. There should be
a much reduced call on USAID management and staff time and a reduction in redundant
staff among Cooperating Sponsors.

5.) Recognize that the processes that are most important in reducing chronic household
food security in the more food insecure woredas are long-term in duration and are not
likely to be nearly completed in the normal 5-year year life span of a DAP. The

43 Bryson-Riley personal comment, 5 June 2002.
requirement for continuing Title II assistance is more likely to be 10 years or more. The processes in question are those that enable individual households to be taught better ways of production and different opportunities for income earning while at the same being engaged in building up the organizational structure of the association (community or PA) to be better able to act as a local decision-making entity regarding the interests of the member households. This requires capacity-building and enough time to test what, to them, are new and experimental approaches to agricultural production, coping with risks and strengthening the community’s ability to better meet the demands and needs of its members.

6.) New and expanded types of partnering are necessary. The Cooperating Sponsors should seek out such potential partners as WFP, Save-the-Children/UK, Oxfam and similar NGOs, the World Bank’s food security project, and the food security projects of the European Commission. Partnering may lead to new sources of resources for the Cooperating Sponsor or for the communities being assisted. It may provide an added, continuing growth path for the assisted community as it “graduates” from the DAP project. At a minimum, it provides a forum for the sharing of experiences in differing approaches to similar food security-oriented goals.

d. Suggested Title II links to the USAID 2001-2006 ISP SOs

Looking at how the Title II DAP activities can link effectively with the ISP, the following suggestions are offered. These are general suggestions, offered as guidance. Specific suggestions could only be made on the basis of knowledge of: i) where geographically the Cooperating Sponsors will be operating in the remainder of the 2001-2006 period, ii) which Cooperating Sponsors will be active, and iii) whether some are willing to collaborate on shared project efforts.

Improving Family Health: ESHE SO

Of the four sectors being emphasized in the ESHE SO (child survival, reproductive health, HIV/AIDS/AIDS and infectious diseases, and health sector capacity-building) there are opportunities for Title II DAP involvement and support in each of them, just as there would be opportunities in each of the three geographic regions (SNNPR, Oromiya and Amhara) The scope could be extended to include Tigray and Somali regions as well. CRS’ FACS/CBHC activity is focused on strengthening the capabilities of communities to provide for their own basic health needs through a structure of community-based health personnel trained and backstopped by the local bureaus of health. Food aid is used to induce heightened attendance by pregnant and lactating mothers at training sessions. It can, in theory, be used as a means of payment for the services of health workers (and TBAs) and, in the form of FFW, for increasing water availability and construction of latrines and even health facilities. It might even be possible to include health sector-related FFW among the relevant regions’ EGS-supported activities.

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44 As a successful supplicant for grants under the World Bank’s project, for example.
SCF-US has provided support for family planning in its pastoralist-focused activities in the south, which has succeeded in increasing condom use significantly. This will undoubtedly continue so long as SCF-US remains operational in Southern Oromiya and Somali regions. Is it suggested elsewhere that the present Southern Tier Initiative and the SCF Title II program be combined into a greater southern Ethiopia pastoralist activity. The reproductive health element should be made a component of any such larger program.

The potential role of Title II in HIV/AIDS prevention and amelioration of adverse effects using local NGOs as the vehicle for reaching affected households in the food insecure target woredas, has been discussed previously. The specific modalities are still being developed by the interested Cooperating Sponsors but should include food transfers to suffering households intended to keep the infected breadwinner actively engaged in economic activity as long as possible, assistance to households who have lost breadwinners to adapt to changed circumstances, and assistance to community-based organizations to care for HIV/AIDS orphans.

Basic Education: BE SO

The primary connection to USAID’s BE SO lies in the possibility of introducing school feeding in the areas where Cooperating Sponsors are already operating as a way of inducing parents to allow their children to attend primary school. There was considerable opposition to the concept of school feeding when it was suggested in the first version of this paper. That is fine, there are strongly held opinions on both sides regarding the development impact of school feeding. It is undeniable, however, that in food insecure areas of Ethiopia the provision of a nutritious lunch to children between 5 and 14 years old is sufficient to increase school enrollment in a matter of weeks after initiating the program and that the provision of approximately 1200 kcal/day/student makes a great deal of difference in the health and performance in school of these children.45 If the USAID BE SO strategy encompasses increasing primary school attendance, Title II46 food can be a powerful tool in energizing this outcome.

Rural Household Production and Productivity: RHPP SO

The core of USAID’s Rural Household Production and Productivity Increased Strategic Objective is an integrated agricultural development project in the Amhara Region focused on applied agricultural research, strengthening of the technical competence of the regional agricultural extension service, and the growth of small scale rural enterprises in the region. Implementation of the program is scheduled to begin in mid-2002. The USAID project has been developed in close collaboration with the regional government and its implementing bureaus. It responds to the region’s top priorities in agricultural-led growth which are:

45 The WFP office in Addis Ababa can supply evidence as needed to substantiate these assertions. The author of this report was also the lead evaluator of the WFP development program in Ethiopia in mid-2001.
46 Or more likely food from the U.S. Global Food for Education Initiative.
• increasing the amount of land under cultivation,
• improving the supply and distribution of agricultural inputs,
• expanding extension systems,
• strengthening the regional agricultural research sub-system,
• reducing post-harvest losses,
• rehabilitating and conserving the natural resource base, and
• diversifying household income and employment opportunities.

The project will be implemented by a U.S. Title XII university partnered with a consulting firm experienced in rural-based micro-enterprise development.

There are a number of ways that Title II Cooperating Sponsors could participate as partners in this effort using their experience in Amhara region or elsewhere in Ethiopia. There are many examples of community-based production and productivity enhancing projects that could be used as test sites in the semi-arid food insecure woredas in the eastern half of the region for the application of agricultural research-derived packages applicable to these agronomic and economic conditions. The development of an LLPPA-type community-based planning process and organizing these communities to participate in other aspects of the larger project would be natural tasks for a Cooperating Sponsor. FFW programs aimed at reforestation, area closures, charging aquifers and other aspects of water development (including small-scale irrigation), soil improvement and improving farmer practices should probably be the mainstay of Cooperating Sponsor activities in support of the RHPP SO in the region.

It will be important for any Cooperating Sponsors operating in Amhara region over the remainder of the 2001-2006 period (EOC and FHI operated in the region during the prior DAP period, but FHI has decided not to participate further in DAP-financed activities) to work closely with those other NGO and donor partners focused on food security objectives in overlapping areas of the region. For example, WFP has a large FFW effort in several woredas in eastern Amhara and SOS-Sahel has been operating a production, NRM, and income enhancing activity aimed at food security objectives in Meket in North Wollo. DAP programs in Amhara region may also be able to develop one or more sites for proposed micro-enterprise activities. Their experience with such efforts over the past several years may prove useful input into the early implementation phase of that aspect of the RHPP project. The fact, as noted earlier in this report, that the income-enhancing elements of most of the Cooperating Sponsor programs met with only limited success should not deter them from sharing their experience with the micro-enterprise development contractor. Lessons learned from difficulties are as valuable as those from successes.

Some cautions are in order. As noted in the issues section, the FFW element should be undertaken in ways that minimize any disincentive effects. Cognizance of the FFW rations used in other donor programs in the region ought to guide establishing the ration for Cooperating Sponsor programs as well. FFW work norms and standards should be similar to those already employed.
Mitigating the Effects of Disasters: MED SO

The entire Title II development assistance program in Ethiopia is intended, in one way or another, to mitigate the effects of disasters by increasing the ability of vulnerable households and communities to better withstand these shocks, or to be able to confront them with their own mitigation strategies for ever increasing periods of time. Using the Buchanan-Smith and Maxwell framework discussed earlier, the task of Title II is very much to improve the quantity and quality of productive and human assets, and increase household income and claims, while simultaneously reducing the risks threatening each of those entitlements (particularly the natural risks in column 2 of Table 3). The programs are intended to operate increasingly well in each of the four (A to D) boxes of the Diskin framework, so as to move families eventually to full realization of the Box DD state of long-term, optimal nutritional intake and utilization.

Much of the increased ability of households and communities to fend off the worst manifestations of droughts and other emergencies will take many years, even decades, to fully develop (i.e., rehabilitation of hillsides, reforestation, the re-establishment of nominal sub-surface aquifer levels). Other aspects can be accomplished much more quickly (community-based, or woreda-level strategic food reserves, local social insurance schemes, the ability to grow and store more food for longer periods of time, the capacity to produce more for cash sales, etc.). The Cooperating Sponsors have been undertaking activities in all of these areas. The effectiveness of these efforts and the impacts were addressed in Section 2.

The use of Title II food resources in short-term mitigation efforts associated primarily with rapid recovery from devastating effects of droughts will continue to focus on FFW for creating/rehabilitating productive assets, and on safety net activities. The mitigation-related FFW programs should follow general EGS guideline regarding length of effort, work norms and daily rations. They should also, to the greatest possible extent, be paired with non-food assistance to regional Bureau of Agriculture staff for training on how the structures built or rehabilitated can be constructed to a more demanding standard, can continue to be maintained and can be sited on the basis of survey work and engineering that makes them able to endure and be useful over the long term. WFP has devoted considerable time and effort to developing strategies, training programs, manuals and other guidance intended to improve the quality and durability of EGS-type assets. These are well done. USAID, to the extent there are funds and other resources to do so, should be willing to participate in this type of effort in areas where the revitalization of EGS has not occurred.

The immediate objectives would be as presented in USAID’s R2D pilot project in two woredas of Amhara – to prevent household asset depletion and to build up community productive assets. The latter would include rehabilitation of lands and soils and protection of watersheds. A mechanism, not included in the R2D project strategy that might prove to be of use is that undertaken under the 1994 Ethiopian Safety Net Program whereby peasant associations in the most adversely affected districts of the region were provided a
one-time cash grant intended to assist their worst-off member households to become more productive. The results of that experiment are presented in Reutlinger, et al., (1996) but, in sum, the PAs did an outstanding job of establishing criteria for selecting participating households, setting up a PA credit program, and lending funds for the purchase of an ox and/or seeds and fertilizer. The evaluation found the selection process to be fair, the effort much appreciated by the recipient members, and well regarded by all PA members. Up to the point of the evaluation (about two years after the program), the recipients were repaying the loans on time, and their production and productivity had, apparently and at least in the near term, risen. The point of this digression is to suggest that a similar mechanism might be investigated as part of the USAID mitigation strategy. Instead of cash, food commodities might be provided to selected PAs for them to use to create temporary employment for the worst-off of their members in works projects selected entirely by the PA members themselves – with no outside supervision or intervention other than a final evaluation of effectiveness.

MOC and other safety net institutions need to be strengthened as part of an overall mitigation strategy. There will be a certain percentage of households with members unable to participate in FFW, but who need food and other assistance to be able to become productive again.

As part of the overall mitigation strategy, a move should be made to combine USAID’s FEWSNet system with the VAM system of WFP, DPPC’s own early warning resources, and those of the EC and other NGOs such as SCF-UK. The entire EW mechanism should be centralized, presumably within DPPC – or in close proximity to it. The opportunity for redundancy or conflicting reporting should be reduced to the minimum. Of all FEWSNet offices in sub-Saharan Africa, only the Ethiopia office remains co-located with the USAID mission. This is a hindrance to easy communications and sharing of ideas, information and ideas of an hourly basis, as is necessary in the Ethiopia context.

Democracy and Governance: DG SO

Enhancement of community-level governance is one of the common types of activities undertaken by most Cooperating Sponsors in efforts to improve community ownership of the DAP projects and, as such, would seem to fit nicely with the democracy and governance objectives of the DG SO. These efforts to institutionalize within poor communities new ways of making and effectuating decisions about their own development needs and learning to allocate their community resources to confront impediments to their own development is grass-roots governance in action. These processes involve the election of members of development and other committees and the education of these elected members regarding their responsibilities to the members who have elected them.

It is recommended elsewhere in this report that the monitoring and information gathering effort focus on indicators of how well this essential governance process works as a measure of the long-term sustainability of the actual project efforts in the Title II program. Such information should prove of considerable use to those in USAID/Ethiopia.
responsible for tracking the diffusion throughout rural Ethiopia of the precepts of
democratic forms of government and the practice of principles of good governance.

**Southern Tier Initiative: STI SPO**

The work that has been done by SCF-US in Somali and Oromiya regions should be
linked with the Southern Tier Initiative and RHPP activities along the Kenyan border. An
expanded Southern Tier strategy ought to link all of the southern border pastoralist areas
into a common development framework using both DA and Title II resources within a
common program. Much of the SCF-US effort to date has been focused on human health,
 Improved water availability for both humans and animals, and some elements of
 improved early warning information diffusion in the two woredas where that Cooperating
Sponsor is active. This should continue as a high priority call on Title II and, if necessary,
DA resources. To the extent that SCF-US is able, and to the extent that additional
resources are available, a next step would be for SCF to add one or more woredas in
pastoralist areas of SNNPR to the two where they will (presumably ) continue to operate
in Oromiya and Somali. This would enable an early link with the activities already
underway in the STI project.

It is proposed that, in the next round of DAP submissions (scheduled for 2005 or 2006), a
reduced set of DAPs be entertained by USAID Ethiopia along specific thematic or
geographic area lines. A proposed DAP specifically for pastoralist areas is suggested in
which one or more Cooperating Sponsors would combine efforts to participate in a
continuing southern tier strategy.

**3. A proposed set of “rules” to help guide the future use of Title II food aid**

a. No project should be initiated without first undertaking a survey similar to those which
have been conducted by CARE in its Addis Ababa urban activities. The intent would be
to determine the feasibility of a project in a particular area, and the willingness of the
potentially involved communities or associations to provide labor and cash over the long
term as their contribution to the long-term success of the Title II project. On the basis of
such a survey, a decision would be made to proceed to a Local Level Participatory
Project Agreement based on a fully-participatory analysis of the problems and causes,
and the development of an agreed plan of action. The agreement will commit the
Cooperating Sponsor, USAID, the local government(s), and the participating community
to undertake certain actions and deliver certain inputs. This process would be
standardized across all the DAPs.

Presently the Cooperating Sponsors use a number of variants on this process, but there is
a sense gleaned from reading all the Cooperating Sponsor evaluations that in a number of
cases the early involvement of the participating community was not as thorough as it
should have been and the popular commitment over the lifetime of the activity not as
strong. The planning document proposed would be similar to that already in use in
Tigray, Amhara, Oromiya and SNNP for WFP’s Project 2488 activities. It is time-tested,
comprehensive, and accepted as effective by the regional and woreda bureau staffs of these regions.

b. The signing of an agreement involving the community and Cooperating Sponsor as central signatories and the government and USAID as secondary signatories (as providers of designated inputs) would be a key element insuring the full commitment of all parties to certain terms, conditions and individual responsibilities for successful implementation, monitoring and evaluation.

c. The projects would, in most cases, be multi-faceted and integrated in a manner similar to that employed in the present Lege Oda Mirga project.\(^{47}\) In many cases more than one Cooperating Sponsor might be involved.

d. On-going and comprehensive training would be an essential and common element of each of these activities. The financing of such training cannot depend on the vagaries of the level of annual monetization because experience has demonstrated that when monetization proceeds are less than budgeted, training programs are among the first efforts to be curtailed. USAID would have to commit itself to making DA assistance available for covering any financing shortfalls occurring as a result of inadequate availability of local currency generations from commodity monetization. The comprehensive training programs undertaken by WVE are a potential model in this respect.

e. Natural resources management intended to halt soil losses, re-vegetate denuded hillsides, increase the percolation and sub-soil water retention rates, and develop ongoing, watershed-wide land and soil conservation must be a significant element in the initial phase of any integrated food security project in any location where degradation of the lands and soils is a major feature of the ecosystem. This is likely to be the case in most of the areas where Cooperating Sponsors operations will be undertaken. The decision related to whether to proceed to the second phase of these purposefully tranched activities will depend in large part on how well this effort has been undertaken in the initial period. What will be critical are the quality\(^{48}\) of the works undertaken. In a very real sense this will be the test of the willingness of the community to organize itself to manage and govern a critical element of its eventual revival and economic growth. Success in setting up and retaining the appropriate NRM management structure bodes well for a community’s ability to take on other management-critical tasks, such as establishing savings and credit and marketing arms later in their self-directed development process.

\(^{47}\) While there are other good integrated projects that have been undertaken by various Cooperating Sponsors, this particular activity is well known to the evaluation team and is a suitable model for this purpose. Obviously, the individual components of each such integrated project would be specific to the local circumstances – generated from the LLPPA process.

\(^{48}\) Properly surveyed, properly constructed, properly managed by the community, with a strong likelihood of continued supervision and a system for maintenance in place. Examples are the CRS and CARE water users associations where fees are collected and banked for covering the costs of maintenance and security of these systems.
f. As noted in Section 2 and earlier in this Section 3, a general finding regarding nearly all Cooperating Sponsor programs is relatively less attention being devoted to issues of access to food or increased entitlements stemming from sustainable income earning prospects for a large percentage of the households in a project (i.e., the relative lack of attention to the Box “B” → Box “BB” relationship in the Diskin framework). Most of the Cooperating Sponsors have elements of their programs intended, theoretically, to help participating households increase incomes, or the prospects for incomes. Unfortunately, many of these are of the “lemonade stand” variety\(^{49}\) and are unlikely to be long term solutions to profound problems stemming from, among other things, marketing impediments and rigidities existing throughout the national economic system. More professionally-sound training, backstopping, and consulting services are required. Not only does there need to be greater attention paid to increasing household incomes sustainedly, but such attention needs to be based on market surveys and greater attention to reducing the inherently high transaction costs associated with translating smallholder subsistence agriculture into income earning agriculture. Approaches of the types pioneered by ACDI/VOCA, TechnoServe and similar not-for-profit consulting firms elsewhere in sub-Saharan Africa need to be applied in these Cooperating Sponsor programs. Some of the Cooperating Sponsors are better at promoting market-driven smallholder-based profitable enterprises than are others. A central, demand-driven consulting and backstopping service should be set up by the Cooperating Sponsors to service those among all Cooperating Sponsor beneficiary-client groups ready to move into business-oriented production-based enterprises. The micro-enterprise component of the RHPP activity in Amhara might be the right place to start, but it is unclear to the evaluation team whether smallholder agriculturists in drought-prone areas of the region would be among the priority targets of this effort.

g. A focus on sanitation, health and clean water has been the central theme of much of the Cooperating Sponsor effort aimed at reducing individual malnutrition (IR3) among target households. This is the Box “D”→ Box “DD” relationship in the Diskin framework. Relatively less attention has been devoted to the “C”→”CC” relationship which is, in effect, the training of household caregivers about the basics of maternal, newborn, infant, and child nutrition and the appropriate allocation of food within the household. This is not to say that such training has not been offered. CRS’ FACS/CBHC effort has been providing community-based instruction to pregnant and lactating mothers for several years and other Cooperating Sponsors offer assistance on breastfeeding and other elements of maternal/child nutrition within their DAP programs. Nonetheless the Cooperating Sponsors’ own DAP evaluations seem to indicate that the message is not been acted on in the homes by many of the caregivers. As noted earlier, there is some evidence that the mothers seem to be more interested in the take-home food rations given to those attending these instruction sessions than in implementing the advice they receive there. While there are, undoubtedly some successes, overall this element of the health and nutrition component of the programs needs to be enhanced. The use of Knowledge, Practices and Coverage (KPC) ex post evaluative home visits needs to be expanded – looking in on care-givers in the household to determine what of their training they have put into practice.

\(^{49}\) We grow lemons; let’s set up a lemonade stand and see how much we can sell.
Conclusions

The Cooperating Sponsors have undertaken difficult tasks, have been faced with substantial impediments – the severe shortfall in monetization undoubtedly the most difficult – and have, nonetheless, delivered important progress toward the goal of reduced household food insecurity in Ethiopia. Such progress, however, is not yet sustainable and the on-going efforts must focus on strengthening local capacities, knowledge, and continuing capacity-building support in order to increase the ability to continue to make progress after Cooperating Sponsor participation is phased out. This is not a short-term process, and there is no negative connotation intended by the observation that, for the most part, the task of building sustainability still lies largely to be done.

The production, productivity, income, health, nutrition, natural resource rehabilitation and disaster mitigation components remain rock solid choices as the categories to receive attention in the future. Of these, major attention should be placed on rehabilitation of the soils, lands and water potential because without significant improvement in water availability and quantitative and qualitative dimensions of the soils, all else will ultimately fail in these food insecure areas.

Where there is a relatively adequate natural resource base established, the next aspect of the total effort needing expanded attention is increasing sustainable incomes of food insecure poor households. What has been undertaken thus far has generally been undertaken in the absence of knowledge about the market potential of the income-generation scheme being proposed. All too often these have been attempts to enable individual farmers to be able to sell more honey, onions, potatoes or wood as individuals. The real pay-off is likely to be in strengthening PAs and other associations to operate as businesses for the benefit of their members. No Cooperating Sponsor has yet taken that tack. It should be a theme in the next set of DAPs.

Ultimately, these efforts will depend on sustainable improvements in the food and cash crop productivity of the households in the communities being assisted. These improvements will depend, in turn, on events and policies outside the spans of control of the Cooperating Sponsors and the PAs and individual households. They will depend, for example, on stronger government and donor investments in agriculture in Ethiopia. They will depend on advances in agricultural research that enable greater yields in low rainfall, low fertilizer environments. They will depend on an appropriate policy environment and continued market improvements that reduce the high transaction cost structures that continue to throttle the development of efficient markets in Ethiopia.

Droughts will continue to be a dominating influence in Ethiopia, holding back the development of the drought-prone regions of the country and enhancing the relative growth and development of the less drought-prone, more well-watered areas.

“In less favored environments, improvements may come relatively less from Green Revolution types of technology (higher yielding seeds, fertilizer use and water control) than through adequate investment on drought resistance in cultivar research, in improved low-input extension,
and in supporting community soil- and water-management activities. The latter include management innovations such as weed control, tillage practices, mulching and water harvesting techniques, all adapted to local circumstances so as to avoid further degradation of fragile environments.” (Webb and von Braun, 1994)

Although stronger agricultural growth and improved market performance will be beneficial over the longer term, vulnerable households in the drought-prone, food insecure woredas will continue to need to be protected in the near and medium term. Webb and von Braun (1994) suggest the focus should be on food supply stabilization and heightened access to food by the poor. This is, to a very large degree, a responsibility of the government because there is no market-based solution that is going to work in the near term. These poor households have few assets, low and variable incomes, limited productive assets and human capital, and limited access to credit or improved inputs. They are, thus, unable to respond with large marketable surpluses when market signals are positive, because they lack the productive potential to do so. In addition, as Webb and von Braun suggest, the costs of producing food are rising almost as fast as are the benefits from doing so and since most poor smallholders are net purchasers, they are affected by higher prices more as consumers than producers. The government and the donors must continue to be active.

In the particular case of USAID/Ethiopia, there will be a basic requirement to “stay the course.” Among the many Mission comments on the first version of this report was one which reminded the evaluation team that USAID’s goal in Ethiopia is not, as the report described it, to improve food security in Ethiopia, but to reduce household food insecurity. The team stands corrected. But this provides USAID with an easy out, 20 years from now. They could claim to have done all they set out to do – reducing food insecurity – and not have reduced it enough to have made a difference in the end for the majority of Ethiopians.
Annexes

1. List of Organizations and Persons Contacted
2. Bibliography
3. Livestock Briefing Note
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5. FHI Measures of Sustainability
6. Methodology
7. Original Statement of Work
## Annex 1. List of Organizations and Persons Contacted

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<th>Organization</th>
<th>Contact Person</th>
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<td><strong>1 Cooperating Sponsors (CS's) &amp; Non-Governmental Organizations (NGO's)</strong></td>
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Kassahun Abate  Health Officer  Addis Ababa
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Bruce Brown  Systems Manager  Addis Ababa
Tamirat Mulu  Emergency Response Assistant  Addis Ababa

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Richard Newberg  FFP/DP  Washington
Jeanne Markunas  FFP Deputy Director  Washington

5.  U.S. Embassy
Steve Hubler  Regional Refugee Coordinator  Addis Ababa

6.  Government of Ethiopia:
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      Yibrah Hagos  Head, Pol, Plan & Prog Dept.  Addis Ababa
      Tamiru Iayana  General Manager, NDPPF  Addis Ababa
      Alemayenu Asfaw  Deputy General Mgr, EFSR  Addis Ababa
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Livestock Marketing Authority  Tessema Legebo  Planning and Projects Head  Addis Ababa
Prime Minister's Office  Beyene Haile  Food Security Officer  Addis Ababa

7.  Other:
Chamber of Commerce  Hussein Shibeshi  Secretary General  Addis Ababa
Ethiopia Grain Trading Enterprise  Girma Bekele  General Manager  Addis Ababa
International Livestock Research Institute  Mohamed Ahmed  Agricultural Economist  Addis Ababa
Annex 2: Bibliography


Ababa. Also reviewed August, 1995, Statistical Bulletin #132, Sample Survey ‘94/95, for comparison, as well as ’98/99 volume for statistics on cattle use.


Cooperating Sponsor Documents for Ethiopia: 1996 DAP Proposals, 1999-2001 Mid-Term and Final Evaluations of DAPs, 2001 CSR4s, CS 2001 monetization and 202(e) budgets, selected audits of CS programs.


*For Ethiopian authors, the first name is the equivalent of the surname in the European tradition. In the Ethiopian naming tradition a person’s second name is always the first name of the person’s father. In this bibliography, Ethiopian authors are referred to by their first name.
The True Cost of Livestock

In encouraging alternative source of income, some CSs, through independently established microfinance institutions, have proposed microfinance loans for livestock fattening in regions like ANRS. USAID may want to reconsider Title II-supported projects that encourage livestock in traditionally agricultural lands. As vegetarians are fond of pointing out, livestock use of land and water is notoriously inefficient: the amount of grain fed to livestock could feed 7 times as many people if they were fed the grain directly and it takes 5,214 gallons of water to produce one pound of beef versus 25 gallons of water to produce one pound of wheat (Stewart, 2001). These figures are from North America, but illustrate the point of resource use required by livestock.

Ethiopian livestock in the mid- and high-land regions of Ethiopia tend to graze on private and communal lands or wherever fodder is available rather than feed on expensive grain. However, a private good to an individual farmer can come at the overall loss to society where land that might have been more productively employed, from a food security standpoint, in growing grain, goes instead to supporting livestock. This private good at public expense is also seen in the policy paper for the ANRS in its discussion of using FFW to develop household rather than communal assets (Raisin, May 2001). If extended use of imported food aid has dampened producer prices for locally grown substitute grains, farmers may come to see livestock as the more remunerative use of their land. This trend may have been occurring for some time: Ethiopia, among the most food-insecure countries, now has nearly as many livestock as people (57 million)—which is the largest herd of livestock in Africa and the tenth largest in the world (CSA, September 2000).

The tradition among many Ethiopian Orthodox Christians to fast and not eat any animal products for nearly half the year is a good start to reducing the country’s production and consumption of relatively resource-costly livestock. Nevertheless, the GOE and donors should address this issue with more overt policies. By the mid-1990s, some 30 percent of Ethiopia’s agricultural GDP was coming from livestock, and lowland pastoral communities were managing about 20 percent of the national cattle herd, one quarter of the sheep, and almost three-quarters of the goats (Donovan, 1996). The vast majority of Ethiopia’s cattle are grazing in mid- and highland lands—areas more suitable for grain production (Coppock, 1994). Moreover, Donovan wrote that pastoralists provide 90 percent of the live animals for export, so dairy and meat products from livestock in non-pastoral areas are largely consumed internally and generating little foreign exchange.

An evaluation of Title II program and natural resources in 1994 warned against overstocking of unproductive livestock in the highlands (Catterson, 1994), but the
problem continues. In the name of food security, some NGOs have helped farmers acquire dairy cows. Unlike male bulls, farmers do not use female cows for traction to plough their fields or to produce the hides and skins that constitute the bulk of Ethiopia’s export earnings from livestock (CSA, September 1999; LMA, 2001). These cows are also among the least productive in the world: they produce half the volume of milk of similar animals in Sudan or Somalia, and just 3 percent of what a milk cow in North America can yield (Jabbar, 2000). The highland cows yield the least of all—requiring 70 percent more land to graze to produce as much milk as their counterparts in lowland Sidamo (Ojala, 1998). Cross-breeds are more productive and can be used for draught but constitute less than 1 percent of the over 10 million dairy cows in Ethiopia (Holloway, 1999; CSA, 1999). Since very little milk reaches the rural markets, highland farmers must be producing it largely for their own use or to churn into butter, which stores longer and thus sells more easily.

Unproductive cattle of questionable benefit—when half the herd cannot pull ploughs—are competing with humans for ever scarcer land resources. Unlike other countries in the world, Ethiopia’s statistics for 1985 through 1994 show a decline in agricultural and permanent pasture lands of a staggering 7 percent per year. If we believe the numbers, this means that the country has lost half of its usable farm land in a decade (Jabbar, 2000). Adjustments for the separation of Eritrea from Ethiopia in 1993 should skew the numbers down somewhat but not by enough to mask the unmistakable trend. During the ten-year period, Ethiopia’s cattle herds grew at six to ten times the rate of sheep and goats, respectively (ibid). With overgrazing as the “single most important cause of land degradation in Ethiopia today” (Catterson, 1994), Ethiopian highlanders still require oxen traction, whereas farmers in neighboring Kenya or Uganda, having average plot sizes 60 to 70 percent larger than the average in Ethiopia, mainly use hand-hoe cultivation (Multi-Donor Study, 1999).

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Annex 4: Lege Oda Mirga: An Integrated Project that Works

NOTE: The following is excerpted from the CRS Mid-Term Evaluation (June, 1999). Since that time CRS has completed an in-house assessment of the activity and it was again evaluated as part of the final DAP evaluation in 2001. The findings in the MTE remain valid.

The Lege Oda Mirga watershed area: an integrated approach that is working well

On May 24, 1999, the Evaluation Team accompanied by Catholic Relief Services (CRS) and Hararghe Catholic Secretariat (HCS) staff members and officers of several Dire Dawa government bureaus visited the Lege Oda Mirga watershed area about 30 km northeast of the town of Dire Dawa. This comprises a single large undulating, semi-arid valley, approximately 15-20 km² in size and inhabited by about 1,000 households (approximately 6,000 persons), all members of a single Peasant Association. These are mixed farmers for the most part with small plots of sorghum, and some maize, modest herds of cattle, sheep, goats and a few camels which browse on the steeper hillsides which surround the valley catchment. Many farmers also grow small plots of chat, a mild narcotic which is chewed (much like coca in Bolivia) to provide a low-level euphoria and sold in small amounts to generate income.

The Hararge Catholic Secretariat operates a DAP-supported, integrated development program in Lege Oda Mirga involving food for work to rehabilitate eroded, over-browsed hillsides, construction and maintenance of dirt road access to the areas of the catchment needing improvement, terracing, tree-planting, check-dam construction, dirt and rock bunding of fields, bore hole and hand-dug well construction, spring development, tree nursery development and management, small-scale irrigation, agricultural credit, FACS health and nutrition programs (including child-spacing services), women’s credit programs and a demonstration roof water catchment site to show the PA members the benefits of this technique to provide potable water for the family.

As best the team could determine, all the activities involving the construction and management of these assets had been well-planned, were well-done and were being well-maintained and managed. In driving along the dry river bed where the wells and boreholes were spaced, the Team found all were being supervised by guards hired by village Water Development Committees who were collecting user fees (which, were being deposited in bank accounts to be used for water point maintenance and repair). At an impressive spring development site higher in the hills, the Team observed a site where pipes had been connected to deliver water from a permanent seep 800 meters up the nearby escarpment to an accessible storage tank where it was used to flow water to an animal trough, and for collection by local PA member households for domestic use. The overflow was being used by nearby farmers for the irrigation of a hillside of vegetables and by the PA for the tree and shrub nursery lower on the hillside. In speaking with a group of women using the spring to collect water, the Team discovered these women could readily identify the benefit to their children’s health from this source of clean water (“no more diarrhea”), were proud to note their children were “in the green” on the FACS growth monitoring charts, and even volunteered they had learned the precepts of family planning under the project’s health component.

After being driven up the steep, rocky FFW road to observe the erosion control efforts, the Team was able to observe the distinctly greener, more densely vegetated slopes that had been terraced, replanted with local varieties of drought-tolerant trees and forage plants when compared to those across the valley which had not yet been protected. The latter were the color of sand and rock and were speckled with the black and white dots of foraging animals. The protection consisted of marked barriers to the protected areas across which no domestic animals were allowed by the local PA and Village Development Committees to browse. Anyone whose animals were caught inside the protected area was fined a minimum of 30 Birr. We saw not a single animal within the protected areas which had been under protection for two years. Eventually, when the shrubbery has been sufficiently built-up, the area would be opened to managed browsing while other areas would be closed for a similar process of terracing, tree/shrub planting and regeneration. One of the Team members discovered evidence that the vegetative growth on these protected hillsides was already producing another unintended beneficial result – an apparent acceleration in the recharging of adjacent aquifers. A shallow well in the dry stream bed in the valley floor below the hillsides
where the terracing had been completed had been dry for several years. Suddenly, without any other apparent reason, it had started to produce water again – seemingly a product of the slowed percolation of rainwater occurring as a result of the terracing and the vegetative re-growth on the hillsides above.

As admirable as all the above physical accomplishments were, the more important elements are found in the process by which the DAP project was designed and was being implemented and managed. From the start, HCS officials involved all the relevant Dire Dawa government bureaus and the members of the Peasant Association and the various village committees (development, credit, water and health). Each proposed component was thoroughly discussed and agreed to before the program started. The PA took on the responsibility of identifying those of its members who were the poorest, had the fewest assets, the smallest plots, the least incomes. These were the households that contributed the labor and were paid with FFW commodities. All other members of the PA were aware of the methodology for targeting and agreed with it. The management of the water points (wells, boreholes, springs) was thoroughly developed and responsibilities assigned and understood. The health component which involved selection and training of community-based health assistants and TBAs was also understood and agreed to by both government and PA members. This organizational groundwork and consensus-building is what has allowed this well-designed integrated project to have done so well in its first 2½ years.

A baseline study was undertaken prior to the start of the program and the Year Three survey will be conducted in a few months to provide analytical insight into the effectiveness of this program in delivering benefits to the PA members.

There is much of great importance in the Lege Oda Mirga experience to date. The assets created seem to be doing what they were intended to do. The NRM, Water, health and nutrition elements are clearly working well thus far. The effects on agricultural production of the soil improvement and credit activities must await the survey, but there is no reason at this point to doubt that they will show improvement – assuming that the rains are adequate (it is a semi-arid area after all). The initial approach of involving all parties in the entire planning process, of putting the Peasant Association and the village committees at the center of the management of the program, the growing sense among these community-based organizations of ‘taking responsibility’ for the management, and for the achieving of results is a key to the sustainability of this development process. Institutional development – in its simplest definition of “improved ways of doing things,” i.e. of positively changed traditional mindsets – has clearly occurred. The organization of these improved ways of doing things, i.e. organizational strengthening is also occurring both among the beneficiaries and their own organizations and among the government bureau personnel who have been involved and who are currently, in theory, able to apply this amazingly successful model elsewhere. There has also been a similar strengthening of the HCS staff resulting from this experience. It is worth noting that the HCS staff have been working together as a unit for five years, and include many graduates of Alemaya Agricultural College. Thus, an experienced, well-educated, and well-motivated staff may, in fact, be a significant aspect of the apparently excellent performance of the counterpart in facilitating, and motivating.

There are a host of potential lessons to be learned from Lege Oda Mirga. Why has it apparently worked so well? What were the essential ingredients? How important is the fact that HCS is a strong and experienced Ethiopian NGO? What were the secrets in achieving consensus? How important have been the particular personalities and viewpoints of the individuals involved? Is the program sustainable over the years when all the people involved in the early years are gradually replaced by a new generation?

The Evaluation Team regards this as a – perhaps even the – model for successful use of food aid in achieving food security-enhancing development objectives in Ethiopia. If the secrets to its apparent success can be identified, understood and modified to work in other settings, the DAP project will have justified itself many times over. For sure, there are other examples within the project where various components are working well, or even where integrated activities are working almost as well as in Lege Oda Mirga. There may even be sites the Team did not visit where they might be working better. What will be of greatest benefit in terms of applying the lessons learned at Lege Oda Mirga is analysis – and publication – of these lessons for the wider Ethiopian and development community audience.
Annex 5: Evaluation Methodology

Title II Team Evaluation Methodology

The evaluation team sought to assess the development impact of PL 480 Title II Food Assistance in Ethiopia by employing a range of information gathering and analysis approaches during the short five-week period allotted by the USAID mission for in-country work. These included a desk review of relevant documentation, interviews with key informants and implementing organization representatives, and visits to selected Title II field sites for direct observation and data gathering from selected beneficiaries and program implementors. The evaluation team used these documentation, interview and site visit approaches to validate and “triangulate” data collection so as to present the most accurate, reliable and complete picture possible, in the time available, of Title II program implementation effectiveness and impact in Ethiopia between 1993 and 2001.

At the outset, the five-member team conducted a desk review of an extensive list of USAID and cooperating partner documentation prepared over a 10-year period of assistance activities in the country. Some of the evaluation team members were able to review some of this documentation in Washington, DC prior to departure for the field. Selected documentation from other donors and from researchers and research institutions was also included to verify and validate what was reported in USAID and cooperating sponsor reports. The documentation reviewed by evaluation team members was inventoried and listed in the bibliography included with this evaluation report.

To supplement its document review the evaluation team conducted separate interview meetings with representatives from each of the eight cooperating sponsor organizations implementing Title II programs in Ethiopia during part or all of the 8-year period between 1993 and 2001. The format for these interviews included an opportunity for each sponsor organization to highlight its Title II funded activities, accomplishment and implementation issues followed by questions from evaluation team members responsible for responding to specific Evaluation SOW issues (e.g., monetization, sustainability, logistics, socio-economic impact, etc.). As cooperating sponsors worked in different regions of the country, evaluation team members made efforts to assess the extent to which programs were tailored to specific target group requirements.

During the third evaluation week, team members traveled to the field to conduct site visits. With one exception, cooperating sponsors through their field staff assisted evaluation team members with transportation and some lodging logistics. Team members were free to select specific project sites visited and to meet with field staff and beneficiaries for unrestricted discussions and periods of time. In some instances, where time and logistics permitted, team members visited other donor (e.g., GTZ) project sites to gather comparative information.

Evaluation team members traveled individually to different parts of Ethiopia for field visits in order to maximize coverage and to include field operations of each of the eight cooperating sponsors. Prior to departure, each team member prepared a short – average
two-page survey/interview schedule to distribute to other team members so that in the field, information could be gathered to support the needs of all team members. These interview schedules were worked out prior to departure and a set provided to the evaluation team leader at the time for review by the USAID. However, USAID input on the survey instruments was not available to team members prior to their field work. The USAID Mission did assistance team members in coordinating with cooperating sponsors on field visit schedules and logistics so as to assure the most effective use of time during this phase of data collection. Where necessary some of the site survey forms were left with cooperating sponsor field staffs to complete and return to the team in Addis Ababa.

Upon return to Addis, evaluation team members compiled notes from site visits and added these to the interview notes compiled at the outset of the evaluation. These interview notes were left with the USAID Mission in electronic format on the Evaluation Team’s subdirectory. Evaluation team members also conducted some subsequent meetings in Addis with cooperating sponsor and other donor agency representatives to clarify observations made in the field and to obtain information that field staff could not readily provide.

Time constraints of the evaluation SOW and the loss of one team member, the team leader, left insufficient time for comprehensive and integrated team analysis of information collected from document reviews, key informant interviews and field site visits and verifications. In the interests of expediency, evaluation team members assembled findings into pre-agreed components that were to make up the final report and left these with the new evaluation team leader to assemble and integrate into a final draft for USAID and evaluation team review.

The new team leader devoted the entire period of his stay in Ethiopia (March 7, 2002 to April 5, 2002) to the drafting of the final report. This was done in periodic consultation with members of the USAID/Ethiopia and Cooperating Sponsor staff, and using the written materials left behind by the departed team members and the full set of Title II documentation provided by USAID/Ethiopia. The report was delivered on time on April 5, 2002.
The Impact of Title II Food Aid on Food Security in Ethiopia
Terms of Reference

1. **Impact Study**

The purpose of this Terms of Reference (TOR) is to contract for evaluation services to carry out a study of the impact of Public Law (PL) 480 Title II food aid on food security in Ethiopia and make recommendations to USAID for future action. It is expected that the contractor will field a team on or about January 3, 2002 with final report, including recommendations, due on March 14, 2002.

2. **Study Context**

Ethiopia is one of the most food insecure countries in the world. Despite decades of relief and development assistance, Ethiopia has failed to track the growth of other developing countries at best, and at worst, the number of chronically food insecure people has continued to rise.

As the largest bilateral food aid donor to Ethiopia, USAID/Ethiopia intends to rationalize its funding allocations and programs to attack the root causes of food insecurity to reduce the extent of vulnerability to famine. To this end, the Mission has initiated a high-level food security policy dialogue with the Ethiopian Government and major food donors, and USAID/Ethiopia resources will be targeted more comprehensively toward the overriding goal of reducing food insecurity in Ethiopia. The findings of this Title II Impact Study will take USAID/Ethiopia’s attack on chronic food insecurity one step further.

This study is to be a thorough, independent review of the impact, if any, that USAID Title II funded food security programming has had on progress towards sustainable development and household food security. The study is to be undertaken with a view to substantially improving the efficiency and effectiveness of USAID funded food security programs in Ethiopia. Two phases of analysis are required, drawing from a combination of quantitative and qualitative data. These are:

1. **An examination of past and current USAID food security programming, focusing on performance and the impact of these programs on addressing the key causes of food insecurity in Title II program areas.**

2. **Recommendations for future options available to USAID in the sphere of food security programming that specifically draw on the lessons learned in Part 1. This should guide the future direction of the food security program design in order for**
USAID and the Government to better address the fundamental obstacles people face in the pursuit of food security.

3. Background

General Causes of Food Insecurity

A number of general causes has been identified for the rising tide of food insecurity in Ethiopia, including: drought, conflict, inappropriate policy environments that do not cater to the needs of small-holder agriculture, a lack of urbanization, dependency on rainfed agriculture, marketing and transport limitations, and regional instability that prevents effective trade relations between Ethiopia and other countries of the Horn.

At the household level, poverty is the most important cause of food insecurity. A lack of productive assets (e.g., traction), savings, and labor, combined with the general poverty of the productive base are the significant causal factors, without drought. However, the chronically food insecure areas have become increasingly exposed to climatic risk over the centuries because population pressure has pushed farming out of ideal zones into more marginal lands where the climate is unstable in ‘normal’ years and the environment less suited to farming. At the same time, population density in the ideal middle zones has diminished household land-holdings through periodic redistribution. This, combined with the depletion of natural resources and ‘free community goods’ (for conversion to farmland) has dramatically increased pressure on on-farm resources. For example, households must often feed livestock from their own farm, even as production is insufficient to cover household food needs.

These demographic and environmental pressures compound the problems of a weak agriculture sector, from which approximately 85% of Ethiopia’s population derive their income. Despite the predominance of agriculture in the Ethiopian economy, there has been no sustained trend towards increased productivity. Ethiopia continues to experience severe food production shortfalls relative to need (e.g., acute food insecurity). Generally, drought has been a significant contributing factor to national food deficits during crisis years. However, production deficits relative to need also occur in normal years, as agricultural production, growing at 2.4% annually, lags behind the demands created by the annual population growth of 2.7%. Economic growth in industry and manufacturing has been insufficient to generate the income required for large commercial imports of food to cover deficits, resulting in recourse to food aid assistance.

Even in bumper harvest years (e.g., 2001), increased production did not translate into increased household income and food security due to poor marketing infrastructure and binding transport limitations. Thus, while some targeted areas of the country received a three-fold increase in maize, household income actually decreased because maize prices dropped by 400%, showing us that income is a better measurement of food security than production. Moreover, there is also little effective integration between surplus and deficit regions, which (purchase power permitting) might otherwise smooth out localized food
production shortfalls and consequent regional price differences, demonstrating that food availability does not equal access for food insecure households.

**U.S. Government**

Between 1985-2001, annual grain production averaged 7.4 million metric tons (MTs), while food aid averaged 700,000 MT, or about 9% of grain production, with the U.S. Government (USG) the largest single contributor. In this period, the USG provided food assistance to Ethiopia valued at approximately $1 billion, comprised mostly of Title II food aid. Title II development activities are generally valued at $36-$40 million per annum, while Title II emergency programs are generally $80 million annually, notwithstanding crisis years.

Title II programs and activities presently serve approximately 700,000 beneficiaries in Ethiopia, working through eight Cooperating Sponsors (CSs): Africare, CARE, Catholic Relief Services (CRS), Ethiopian Orthodox Church (EOC), Food for the Hungry International (FHI), Relief Society of Tigray (REST), Save the Children/US (SCF/US), and World Vision/Ethiopia (WVE). Programs concentrate on activities that will increase food security in the most food insecure areas of Ethiopia to reflect the Mission’s overall objective to reduce chronic food insecurity over the next twenty years.

In addition, USAID has provided further resources through the Office of U.S. Foreign Disaster Assistance (OFDA) and the Office of Food for Peace (FFP) over the years.

**4. A Relief to Development Agenda: The USAID Food Security Goal**

As stated in the objectives of Title II programs, the goal of USAID in Ethiopia is to increase the impact of food aid to reduce hunger and malnutrition and related diseases. Moreover, the concept of food security has broadened in recent years to encompass the wellbeing of target populations. As a result, measurements of food security include productive assets, which provide the basis for an escape from poverty; health and education indicators; as well as measures that specifically relate to hunger. The issue is, therefore, to identify ways in which food aid can be programmed and utilized more effectively as a tool to promote the broader concept of food security. This will be a challenge, as food aid has yet to have a discernible impact on reducing chronic malnutrition in Ethiopia. For example, recent donor and government assessments of food insecurity in Ethiopia conclude that nutritional standards have in fact declined since 1985 despite increased levels of food aid.

Food aid assistance has also failed to reduce or even stem the growth of a chronically food insecure class, which in 2001 is estimated at 6.2 million people. This group is defined as those people who are incapable of meeting their annual food needs without food aid assistance under normal conditions. These people usually require assistance on an annual basis, irrespective of shocks to production and income. Considering present population and agriculture growth rates, the number of people that fall into the chronically food insecure class will grow considerably. The United Nations Emergency
Unit of Ethiopia has calculated that every year population growth creates an additional demand of 250,000 MT of food. Without a significant reorientation of policy and/or significant growth in sectors, the gap between availability and demand will widen, increasing Ethiopia’s food aid requirements.

Preliminary studies suggest that food aid is most effective when used in conjunction with complementary programs. In sum, food aid has its greatest potential for sustained impact on food security when it is programmed as an integral part of a broader effort. Thus a central objective for the Mission, as articulated in its Integrated Strategic Plan (ISP), is how to best integrate Title II resources with development assistance and other local resources to reduce chronic food insecurity.

5. **Scope of Work**

This study is to be a thorough, independent review of Title II emergency and development food aid activities from 1993 to present. Programs will be evaluated for their effectiveness in addressing food insecurity, and whether these programs created an enabling development environment. Current Title II programs are to be evaluated on the basis of Title II activities that directly or indirectly impacted on the Special Strategic Objective (SO) Enhanced Household Food Security in Target Areas. This will require a review of distinct intervention packages, including: social safety nets, infrastructure development, early warning and emergency capacity, mother-child health programs, agriculture and food security programs, income generation, water and sanitation activities.

The contractor will provide a road-map to undertake a major restructuring of the food aid programs to integrate Title II programs within the overall Mission Strategy, to build the bridge between relief and development and directly address malnutrition. Title II partners are encouraged to distribute food as food and reduce their dependency on monetization. The study will address where and how the Mission should concentrate Title II and partner resources for maximum impact.

The study should draw its conclusions from qualitative and quantitative data through a combination of primary and secondary data sources. In addition to analyzing previous food aid impact and Title II CSs evaluation reports and Mission documents, the contractor will work in a participatory and cooperative manner with USAID/Ethiopia Title II CSs to identify common approaches to improving the overall impact of Title II programs. The contractor will also undertake fieldwork in project areas to ensure a thorough review of the impact of Title II programs. Conclusions should be specific with regard to types of interventions and outcomes. Examples of success and failure and their associated attributes will furnish USAID/Ethiopia with a clear guide as to what activities and partnerships should be expanded/reduced to achieve the overall objective of reducing chronic food insecurity in Ethiopia.
Section 1: A Review of Past and Current USAID Funded Food Security Programs -- Impact

The study will evaluate program impact in targeted Title II program areas, according to the following broad indicators:

- Increased household assets/income*
- Improved health status of target households (includes nutritional status)
- Community assets developed and maintained
- Improved drought/crisis preparedness and strengthened coping mechanisms.

In addition, USAID/Ethiopia provides the following questions to be used as a guide for evaluation. These questions should be addressed in the document.

- How do Title II CSs and others measure the nature and level of food insecurity in their program areas? What practical instruments or variables are used for these classifications?

- What is the ranking of factors leading to food insecurity and the obstacles that prevent people moving out of poverty? This should include an analysis of the interaction of people and the environment, household income, landholding, livestock holdings, labor availability, markets, and transport systems, as well as a review of government policies that promote/hinder food security.

- What are the patterns of impact (according to the indicators above) by gender, region or other important characteristics?

- What are the top ten interventions that impact positively on nutrition, household income and assets? In particular, have Title II resources helped beneficiaries build up sustainable productive assets that increase the opportunity to move out of poverty into increased productivity? Are existing programs providing sufficient attention to the relief-development continuum?

- What other benefits and/or adverse impacts were observed from each intervention type?

- What negative impacts, if any, are associated with the food aid programs over the last eight years (e.g., dependency, disincentives to diversification of household income, market price for cereals), either through the effects of Title II monetization locally, or through beneficiary sales of food aid, etc?

* Measurement of increase household assets/income will vary according to the asset/income base of each individual household, and may include agricultural production, off-farm income, livestock trade, and other diverse livelihoods.
Food For Work (FFW) / Employment Generation Schemes (EGS)

- Have Title II resources, when distributed as food through FFW or EGS, developed sustainable on-farm infrastructure (e.g., soil and water conservation measures) that households maintain without further food aid inputs and how? Have such works (e.g., stone terracing) increased on-farm agricultural production? Has FFW/EGS had a sustainable impact on protecting and rehabilitating natural resources, thereby linking relief and development?

- How have FFW/EGS activities provided beneficiaries with transferable skills that assist them in the pursuit of off-farm income generation activities?

- Has food aid distribution through seasonal FFW/EGS distributions had a positive impact on the nutritional status of participating households?

Section 1: A Review of Past and Current USAID Funded Food Security Programs – Performance

The study will evaluate performance of Title II programs, based on criteria of effectiveness, efficiency, sustainability, and replication.

In addition, USAID/Ethiopia provides the following questions to be used as a guide for evaluation. These questions should be addressed in the document.

Resource Management and Integration

- What are the inherent difficulties with undertaking Title II development programs in Ethiopia in relation to the current PL 480 Title II Legislation requirements and funding constraints (Internal Transport Storage and Handling, 202(e), and adjacent and third-country monetization). What changes should be proposed to effectively undertake food aid programs? How have Title II partners integrated other USAID or federal and non-federal funds (including private funding) to maximize the impact of food assistance?

- To what extent is food aid integrated with other resources (especially those of USAID), e.g., monetization with feeding and development programs (increasing productivity and household income, and focussed on reduced malnutrition)?

- How have Title II sponsors managed their monetized commodities since the re-launch of Title II? Do they have adequate technical and logistical capacity? How have monetization proceeds been used (transport of commodities, overheads, staff costs, etc)? How have 202(e) funds been used to support programs and how have Institutional Support Grants (ISG) supported NGO operations in Ethiopia? What are the constraints to improved efficiency in the use of Title II resources?
• How have the guidelines, opportunities, and market situation changed for monetization since 1993?

• What inefficiencies, if any, need to be addressed in the Title II monetization program? What are the recommendations to address these issues? How has the Ethiopian Monetization Consortia (EMC), led by CARE, attempted to address these issues to date? What are the lessons learned?

• How do CSs view monetization as an effective resource use? What are the alternatives?

• How should the Bellmon analysis be undertaken to improve overall programs? How do the difficulties of monetization in Ethiopia compare to other programs in Africa?

**Sustainability**

• How do CSs measure/determine sustainability of programs?

• To what extent do programs achieve goals of investing in people (capacity building), expand access and opportunity, and promote favorable policies and institutional environments that attack the root causes of poverty?

• Which intervention packages are most sustainable – organizationally and financially, and why?

• To what extent do programs attack the root causes of poverty, increase productivity and income in a sustainable way, or support broad-based economic growth thereby paving the way for development?

**Compatibility with the Mission’s ISP and Strategic Objectives**

• How much compatibility is there between USAID SOs as laid out in the Mission’s New ISP and activities and outcomes of Title II CSs? How should the ISP or Title II programs change to support the overall goal?

• What have been the direct impacts of each intervention package on its respective impact objective? What have been the indirect impacts of each on USAID/Ethiopia objectives?

• What are the best practices and guiding principles for the future use of food aid assistance to improve food security in furtherance of USAID/Ethiopia’s overall objective and individual SOs?

• Which internal and external factors most positively contributed to the achievement of the Mission’s overall goal as well as individual SOs, and which did not?
Program Management – Evaluations and Assessments

- What were the main conclusions/recommendations arising from program management, evaluations and assessments (including audits) of Title II Sponsor programs since 1993? What new directions (if any) were adopted as a consequence?

- Are an appropriate level of resources allocated to strengthen the management capacity of USAID’s food aid partners (private voluntary organizations, local NGOs, and WFP) in attaining mutually agreed objectives?

Section 2: Long range Plan for Integrating Title II Food Aid, Emergency Relief and Development Assistance

The study will describe how food aid in Ethiopia can be made more effective and efficient as a resource to promote food security. In addition, USAID/Ethiopia provides the following tasks to be used as a guide for the contractor. The response to these tasks should be incorporated into the document.

Enhancing Local Capacity

- Identify ways in which USAID can move forward to enhance the development of local partners in Ethiopia to ensure the sustainability of ongoing Title II programs/activities.

Geographical and Logistical Considerations

- Examine and map out the geographical spread of Title II programs and suggest possibilities for better focus, including linkages and synergies with other USAID programs.

- Undertake a cost-benefit analysis of the inland delivery hubs in relation to current and proposed program locations. Propose new points for the inland delivery of commodities, if appropriate, and the efficient delivery of food resources.

- Determine the most cost effective “radius areas” of food programs, minimizing secondary transport costs (thereby maximizing non food input/programming funds), taking into account the most appropriate areas for Title II development programs based on historical vulnerability, availability of baseline data, and comparative advantage of Title II NGO partners. How can USAID reduce food costs in real terms and increase incomes?

Future Program Packages

- Identify ways in which the Mission could improve its approach, as outlined in the ISP, to reduce the level of chronic food insecurity during the implementation phase.
Suggest changes, if any, in approach that should be made at the Strategic Objective (SO) level to achieve the ISP’s overall goal to reduce the level of food insecurity.

- Identify factors that are common to successful programs (e.g., the type of intervention, management capability, and others).

- Identify Title II interventions and organizational arrangements that are most cost effective (impact weighed against cost) in terms of each strategic objective and given potential future Mission-planned synergy between strategic objective teams?

- Describe alternative, appropriate and cost effective technical approaches based on the lessons of this study.

- Determine the best practices and guiding principles to improve impacts to further USAID’s SOs, in particular in the area of nutrition, with food assistance and improvement of food security. What changes should be made in all USAID SO(s) to better integrate future food assistance programs?

Policy Directions

- Indicate food security or other policy goals for USAID to advocate that will have a direct positive impact on food security in Ethiopia and best support the future direction of USAID food security programming.

6. Interviews

Key interviews will be undertaken with USAID/Washington (AFR/EA, BHR/FFP and the Food And Nutrition Technical Assistance contractor), USAID/Ethiopia, CSs at headquarters and field level, Regional Food Security Units, WFP Vulnerability Assessment Mapping (VAM), food security focused NGOs, Donors (DFID, European Union, CIDA, GTZ), and the Disaster Prevention and Preparedness Commission (DPPC). USAID/Ethiopia will assist in arranging initial interviews.

7. Deliverables

The contractor shall furnish USAID with a draft work plan to be reviewed and approved by the Contracting Technical Officer (CTO). Such a work plan should be submitted no later than three days after arrival in country. It should describe planned field visits, identify interviewees, and a methodology for data collection. It will serve as a confirmation to the Mission that the contractor understands the TOR and commits to a firm and fixed timetable for intermediate and final deliverables.

Prior to departure, the contractor will debrief the Mission on the major findings of the study and furnish USAID/Ethiopia with a draft of the evaluation report. The final draft should have the following format: Executive Summary (containing a summary of the study purpose, methodology, principal findings and recommendations), alongside the
main report (approximately 50 pages), and annexes that include additional background
and technical information.

USAID plans to provide comments within 10 working days of receipt of the draft.
Within 20 working days of receipt of comments, the contractor will provide USAID with
the final version of the report, after incorporating feedback on the draft.

The contractor will also send one copy of the final report to PPC/CDIE/DI, so that the
document can be made available in the USAID library and data base.

8. Roles and Relationships

The contractor will work under the direction and technical guidance of the Chief of Food
and Humanitarian Affairs Office (FHA), USAID/Ethiopia. The contractor team leader
will be responsible for regular updates to the FHA Chief on the progress of the study
during the fieldwork period, the design and management of the evaluation and evaluation
team, and the final report.

9. USAID/Ethiopia Support

The contractor will be assisted by a small in-house support team for the duration of their
stay in Ethiopia. In addition, the contractor will be provided with limited office space and
official transportation (subject to availability) for the duration of their contract in
Ethiopia.

10. Level of Effort/Timing

The services of the team leader will be required for approximately 60 working days,
which includes allocated time for report writing. The team Leader will be expected to
datail to Washington and Ethiopia in advance of the team, on or about January 3, 2002
for briefing and evaluation preparation. The Study team will be expected to depart for
Ethiopia on or about January 10, 2002. Their services are required for approximately 30
days. The final report should be submitted to USAID/Ethiopia by March 14, 2002.
11. Team Requirements & Composition

The assessment team will consist of the following members and should include at least one knowledgeable local consultant:

**Team leader:** The team leader will be responsible for managing the team, the overall assessment, the work plan and the final report. The team leader must have a minimum of a MSc/MA level degree in a development-related subject, although economics or agricultural economics is preferred. S/he should have a minimum of 10 years development experience in program design, implementation, and evaluation. Experience and knowledge of Ethiopia Title II programs and food aid impact assessments is essential. Previous work experience with USAID is desirable. Level of effort: 60 days.

**Nutritionist:** The nutrition specialist will have responsibility for assessing the impact of Title II on nutrition. S/he should be qualified to a minimum of MSc level and have extensive experience in impact evaluation. Previous Africa experience is essential, and a knowledge and previous experience of working in Ethiopia is preferred. Familiarity with Title II is essential. Previous work experience with USAID is desirable. Level of effort: 30 days.

**Agricultural Economist:** The agricultural economist will be principally responsible for the evaluation of food production, asset building, and market dynamics. S/he must have a minimum of a MSc level degree in agricultural economics and extensive experience in development. Title II experience, as well as program design, implementation, and evaluation is essential, as is knowledge of Title II programs. Ethiopia experience and previous work experience with USAID are desirable. Level of effort: 30 days.

**Financial Management Specialist:** The financial management specialist will be principally responsible for the evaluation of Title II financial management (including monetization). S/he must have a minimum of a MSc level degree in business studies or related studies. Experience of similar evaluations and Title II is essential. Previous work experience with USAID is desirable. Level of effort: 30 days.

**Food transportation/logistics Specialist:** The logistics specialist will review food aid transportation management and monetization. S/he must have a minimum of a MSc level degree in business studies or related studies. Experience of similar evaluations and Title II is essential. Previous work experience in Ethiopia with USAID is desirable. Level of effort: 30 days.
May 8, 2002

Checchi and Company Consulting, Inc.
1899 L Street NW
Suite 800
Washington, D.C. 20036-3804
Attn: Patricia McPhelim

Subject: Task Order No. 807, AEP-I-00-00-00022-00

Dear Ms. Patricia McPhelim:

As stated in the Mission’s comments sent to Checchi on Friday, May 3, 2002, and the Mission recommendations below, the draft report did not adequately respond to the statement of work (SOW) in the referenced Task Order. A critical review of the Title II programs over the last eight years was not fully undertaken by the team.

The SOW requested a thorough, independent review of Title II emergency and development food aid activities from 1993 to present. Programs were to be evaluated for their effectiveness in addressing food insecurity, and whether those programs created an enabling development environment. In essence, we wanted a review of distinct intervention packages, including: social safety nets, infrastructure development, early warning and emergency capacity, mother-child health programs, agriculture and food security programs, income generation and water and sanitation activities. This evaluation was to provide a road-map to undertake a restructuring if required and a road-map that integrated Title II programs within the overall Mission Strategy and built the bridge between relief and development and directly addressed malnutrition. We asked that the study draw its conclusions from qualitative and quantitative data based upon review of primary and secondary data sources.

In order to address the identified shortcoming in the report, Checchi needs to focus more attention to the following areas as a means to make the study less of an essay, and more of an evaluation. Your road map needs to be articulated on the basis of an evaluation of
Title II partners and programs. At present there is very little evidence for your conclusions.

We are open to working with Checchi to finalize the eight year review/evaluation of the impact of the Title II programs by focussing more attention in the following areas:

- Replace the literature review of poverty with the requested literature review of food security. Food security is a targeted strategy and program with definite goals (i.e., the goal being food security), whereas poverty reduction has no set target, only relative ones.

- What is the ranking of factors leading to food insecurity and the obstacles that prevent people moving out of poverty? This should include an analysis of the interaction of people and the environment, household income, landholding, livestock holdings, labor availability, markets, and transport systems.

- What are the top ten interventions that impact positively on nutrition, household income and assets? In particular, have Title II resources helped beneficiaries build up sustainable productive assets that increase the opportunity to move out of poverty into increased productivity? Are existing programs providing sufficient attention to the relief-development continuum? We would like this to be based on an evaluation of USAID funded Title II Cooperating Sponsors (e.g., not just WFP 2488).

- How do CSs measure/determine sustainability of programs? Which intervention packages are most sustainable - organizationally and financially, and why?

- How much compatibility is there between USAID SOs as laid out in the Mission’s New ISP and activities and outcomes of Title II CSs? How should Title II programs change to support the overall goal? This needs to be a more focused discussion with data supporting your conclusions.

- What have been the direct impacts of each intervention package on its respective impact objective? What have been the indirect impacts of each on USAID/Ethiopia objectives?

- What are the best practices and guiding principles for the future use of food aid assistance to improve food security in furtherance of USAID/Ethiopia’s overall objective and SOs? Which internal and external factors most positively contributed to the achievement of the Mission’s overall goal as well as individual SOs, and which did not?

- Identify factors that are common to successful Title II programs (e.g., the type of intervention, management capability, and others). What common Title II factors negatively affect programs?
• Correct/edit other components of the zero-draft per the Mission's paragraph by paragraph comments

• Add the SOW and the Methodology of the team's study as an Annex

These very robust Mission comments should be interpreted as the importance and/or investment that we place on this review/evaluation. Please email your responses addressing the Mission recommendations/comments to the Cognizant Technical Officer, Tim Sortley, by May 15, 2002. This request does not authorize any additional costs above the ceiling amount of $185,309 in Modification #2 of the Task Order.

We greatly appreciate the efforts of the Checchi team and look forward to the final evaluation report

Sincerely,

ORIGINAL SIGNED BY KENNETH BARBERI

Kenneth Barberi
Contracts Officer
USAID/Ethiopia