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INITIATIVE TO END HUNGER IN AFRICA (IEHA) FINAL EVALUATION

LESSONS LEARNED AND RECOMMENDATIONS FOR
FEED THE FUTURE

APPENDICES

SEPTEMBER 2011

This publication was produced for review by the United States Agency for International Development. It was prepared by Social Impact, Inc. (SI), and Management Systems International (MSI).

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APPENDICES

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

This document was submitted by Social Impact, Inc., with Management Systems International, to the United States Agency for International Development under USAID Contract No. RAN-I-00-09-00019-00.

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ACRONYMS

APEP	Agricultural Productivity Enhancement Program
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
CAADP	Comprehensive African Agricultural Development Program
CGIAR	Consultative Group on International Agricultural Research
COMESA	Common Market of Eastern and Southern Africa
DAP	Development Assistance Program
DFID	UK Department for International Development
DHS	Demographic and Health Survey
DSIP	Development Strategy and Investment Plan
EAC	Regional Economic Commission
EAGC	Eastern African Grain Council
FACTS	Foreign Assistance Coordination and Tracking System
FBO	Farmer-based organization
FEWS NET	Famine Early Warning Systems Network
FFP	Food for Peace
FTF	Feed the Future
GFSR	Global Food Security Response Initiative
GTZ	German Development Service
HACCP	Hazard Analysis and Critical Control Point
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IEC	Information, Education and Communication
IEHA	President's Initiative to End Hunger in Africa
IFDC	International Center for Soil Fertilization and Agricultural Development
IFPRI	International Food Policy Research Institute
IITA	International Institute for Tropical Agriculture
ILRI	International Livestock Research Institute
IP	Implementing Partner
IR	Intermediate Result
LEAD	Livelihoods and Enterprises for Agricultural Development
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MIS	Market Information System
MSI	Management Systems International
MYAP	Multi-Year Action Plan
NAIP	National Agricultural Investment Plan
NARO	National Agricultural Resource Organization
NEPAD	New Partnership for African Development
NGO	Non-Governmental Organization
OFDA	Office of Foreign Disaster Assistance
OU	Opening Unit
PEPFAR	President's Emergency Plan for AIDS Relief
PRODEPAM	Programme de Développement de la Production Agricole au Mali
PVO	Private Voluntary Organization
RATIN	Regional Agriculture Trade Intelligence Network

RCSA	Regional Center for Southern Africa
REC	Regional Economic Committee
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
RH	reproductive health
SADC	Southern Africa Development Community
SI	Social Impact
SIDA	Swedish International Development Cooperation Agency
SSA	Sub-Saharan Africa
TIPCEE	Trade and Investment Program for a Competitive Export Economy
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USG	United States Government
VAC	Regional Vulnerability Committee
WFP	World Food Programme

APPENDIX A: STATEMENT OF WORK

Below is the original statement of work (SOW), as provided to Social Impact by the United States Agency for International Development (USAID) in the Request for Task Order Proposals in July 2010. The evaluation team used this statement of work (SOW) as guidance during field work and data collection in January-February 2011. Upon return to Washington, DC, USAID/W requested that the evaluation report be more oriented toward lessons-learned for the Feed the Future Initiative. As a result, a new outline for the final report was developed by Social Impact and approved by USAID/W. The revised outline upon which the Final Evaluation Report is based follows directly below the original SOW.

ORIGINAL STATEMENT OF WORK

PURPOSE

USAID's Bureau for Africa, Office of Sustainable Development (AFR/SD) is soliciting the services of a contractor to conduct the final evaluation of the Initiative to End Hunger in Africa (IEHA). The period covered by the evaluation is 2002-2009. While IEHA is drawing to a close, the many problems related to hunger and poverty in Africa persists, and the U.S. is continuing its commitment to African agricultural development and food security through the Global Hunger and Food Security Initiative/Feed the Future (GHFSI/FTF). As the implementation of the GHFSI evolves, it will be important to build upon the IEHA experience, using the lessons learned to inform GHFSI/FTF implementation, to continue to develop innovative programming approaches and more effective implementation mechanisms for achieving impacts and results. To this end, USAID's Bureau for Africa, Office of Sustainable Development (AFR/SD) intends that the evaluation be an effective learning tool that can be used by USAID and its many partners to further the GHFSI/FTF effort.

The overall deliverable under this SOW will be a comprehensive Evaluation Report that addresses the issues and questions provided in Section C.3 below. Offerors will be given the latitude to define the manner in which they present their evaluation findings and deliverables (lessons learned, innovations, program approaches, etc.). Thus, the evaluation findings should be framed in a manner that presents a set of lessons learned and identification of those innovations pioneered through IEHA implementation that will allow a scaling up of expanded efforts under GHFSI/FTF. The evaluation findings will also improve USAID's understanding of a common M&E system and help inform the development of the GHFSI/FTF system.

The evaluation should provide AFR/SD with findings and recommendations to facilitate a significant expansion of food security programming through GHFSI. The contractor should conduct a comprehensive review of IEHA implementation taking into account a set of strategic questions that will enable AFR/SD to support this expanded initiative:

These broad questions include:

- Did IEHA demonstrate impact to reduce hunger? In what way?
- To what extent were USAID and other partner assets leveraged?
- In cases in which IEHA had impact, what were the conditions (operational, technical, partners) that enabled this to occur? Were they sustained?
- Can any conclusions be drawn on the impacts from targeting? Small holders vs. commercial farmers? Women? Vulnerable groups?

- In what way did USAID/Washington, regional and bilateral missions work together to implement the initiative? What worked? What didn't?
- How was IEHA communicated among key stakeholders and constituents?

BACKGROUND

IEHA was developed in response to the challenges of alleviating hunger and poverty and ensuring food security for the populations of Africa. The IEHA results framework is based on the first Millennium Development Goal to “eradicate extreme hunger and poverty”. IEHA also supports the implementation of the African Union’s Comprehensive Africa Agriculture Development Program (CAADP), which is a commitment by African governments to significantly increase investments in the agricultural sector to achieve an overall six percent growth rate in the sector’s contribution to Gross Domestic Product.

IEHA’s strategic objective is to rapidly increase agricultural growth and rural incomes in Sub-Saharan Africa (SSA) to reduce both poverty and hunger by harnessing the power of new agricultural production and processing technologies; improving the efficiency of agricultural trade and market systems; building the capacity of communities and producer-based organizations; and integrating vulnerable groups and countries into development process. The strategic objective of increasing incomes is based on the knowledge that doing so will expand economic growth, reduce poverty, and eliminate hunger. IEHA’s goal to increase incomes depends on the achievement of three intermediate results:

1. Enhanced agricultural productivity,
2. Improved policy and institutional environment, and
3. Increased agricultural trade.

IEHA has four main areas of expected impact:

1. Increasing agricultural productivity and production;
2. Strengthening value-chains to increase trade in agricultural products, including regional trade in staples;
3. Promoting sound market-based principles; and
4. Assisting the vulnerable and accelerating the participation of the very poor in rural growth.

As of 2009, IEHA has been implemented in seven countries (Ghana, Mali, Kenya, Malawi, Mozambique, Uganda, and Zambia) and three sub-regions (East Africa, Southern Africa, and West Africa). These countries were chosen because of their progress in policy reform, public investments in agriculture, and government commitment to agricultural growth and poverty reduction. They are also representative of key economic and agricultural characteristics of their regions and have the greatest potential for rapidly influencing regional agricultural productivity and economic growth through trade and technology diffusion.

A mid-term evaluation was conducted in 2006 which indicated that IEHA had generated significant impacts and changes in behavior at the household, community, and country level, and was successful in making strategically important contributions to economic growth and poverty reduction. IEHA-supported programs also served as significant examples of how agriculture can and does improve the wealth and well-being of African rural households. IEHA is now considered an important part of the agricultural reform and development process in Africa, which is beginning to show signs of stimulating economic transformation.

IEHA has made several other notable contributions to African agriculture. IEHA has supported the implementation of CAADP at the continent level by assisting the pillar institutions develop strategic frameworks and implementation guidelines and has strengthened institutional capacity and improved the policy environment by supporting the regional economic communities in assisting countries develop their CAADP country-level sector investment plans or compacts. IEHA has established public-private partnerships, developed regional trade action plans, and supported farmers' organizations for participation in expanded trade. Activities have worked to establish a regional staples food market development program in East Africa; provided analytical support for investigating agricultural and food security issues; and established seed and fertilizer alliances across the continent.

In 2008, with the heightened attention to the problems of hunger and food security brought about by higher food prices throughout the world, agricultural development took on even more importance as a U.S. foreign policy objective. In response, Congress appropriated resources for the Global Food Security Response (GFSR) to comprehensively address the underlying causes of hunger and food insecurity. The GFSR effort represents a significant increase in resources devoted to African agriculture and the goals and objectives are convergent with IEHA and the CAADP process. As such, the programming and implementation of country and regional programs will need to build on the IEHA experience and lessons learned to scale-up activities to achieve the additional progress expected on reducing hunger and improving food security.

TASKS

IEHA represented a major increase in development assistance funding for agriculture in Africa. With the increased funding, it was also expected that IEHA would provide a comprehensive approach to agricultural development and additional ties to country and regional programs through providing intellectual leadership in sector analysis, developing innovations and new approaches to programming, standardizing monitoring and evaluation procedures, forging strategic partnerships for leveraging resources, and improving donor coordination. It is important for this evaluation to identify those additional ties IEHA brought to the agricultural development process and the approaches and lessons learned that can be scaled up and replication to achieve broad transformation impacts under the GHFSI/FTF.

The principal tasks for the Evaluation Team will be to:

1. IEHA: Conduct a review and analysis of the IEHA program, including both the country and regional levels, from 2002-2009 to document actual/cumulative results, identify the significant innovative approaches developed, keys to the success achieved, and the tangible lessons learned in the course of implementation related to:
 - a. Leveraging Resources: A key objective of IEHA was to leverage resources from private and non-governmental sector sources to expand the development of input systems, expansion of marketing and trade in agricultural products, development and dissemination of technologies, implement food aid programs, etc. To what extent were these partnerships effective in increasing overall sector investments? How was IEHA able to facilitate and support multiple types of partnerships? What are the lessons learned?
 - b. Private Sector Development: Was IEHA successful in expanding private sector involvement in country and regional agricultural development programs? If so, how did the program operate to produce this?
 - c. Producer Organizations: The focus on strengthening producer organizations was seen as a strategic approach to value-chain development, efficiencies in input marketing, stronger negotiating power, policy advocacy, and improving overall market and trade development.

- Did the program achieve these outcomes? How? Was this focus successful in creating commercially viable and sustainable producer organizations?
- d. Value-Chain Development: The IEHA focus on value-chain development was considered key to increasing the country and regional competitiveness for important staple and high-value agricultural products. To what extent was the value-chain approach effective to improving competitiveness? How?
 - e. Smallholder Development: Smallholder agricultural development was considered key to increasing agricultural productivity and overall production under IEHA. What was IEHA's balance in terms of support to smallholder agriculture and higher-level support for policy and institutional strengthening?
2. Policy: Conduct a review of IEHA's support to the CAADP process and discern the overall impact this assistance had on policy reform and the development of the country and regional level investment plans and CAADP Compacts. This review should include, but not be limited to:
 - a. Is there tangible evidence that, as a result of IEHA assistance, improved agriculture sector policies have increased overall agriculture sector investments?
 - b. What has been the overall impact of IEHA's efforts to affect sector policies at the regional level?
 - c. Is there evidence of greater civil society and private sector involvement in the policy reform process?
 - d. Are there examples of how IEHA technical assistance in analysis and capacity building informed policy debates and the overall reform process?
 3. Agricultural Research: IEHA's focus on agricultural productivity and overall production highlighted the important role of agricultural research in the greater IEHA effort.
 - a. What there evidence of increased support to agricultural research, at both the country and regional levels, as a result of IEHA?
 - b. What are the significant technologies developed and disseminated under IEHA and what was the impact on productivity and production among smallholder farmers and pastoralists? Has the considerable attention to biotechnology been warranted?
 - c. Is there evidence of strengthened national research capacity as a result of IEHA support?
 4. Food Aid: Conduct a review of food aid programs under IEHA and determine if there were any significant reductions in food aid in Africa as a result of IEHA interventions. Document evidence where IEHA-supported efforts were successful in moving vulnerable groups from food aid dependency to mainstream economic activities.
 5. Poverty: Under the GHFSI/FTF, objectives of poverty and malnutrition reduction have an even greater urgency. To what extent has IEHA contributed to understanding the dynamics of poverty among rural populations in Africa, and how has this knowledge informed country and regional interventions and policies?
 6. Gender: Strengthening the productive capacity of women is cross-cutting objective in the GHFSI/FTF. A recent gender assessment was undertaken of four IEHA programs outlining best practices and missed opportunities in core IEHA investments. To what extent are these results borne out in other IEHA countries? Are there additional promising approaches not previously identified?
 7. Capacity Building and Institutional Strengthening: A principal objective of IEHA was increasing human and institutional capacity for African agriculture.

- a. Are there examples of strengthened institutional capabilities as evidenced by sustainable processes for managing development programs as a result of IEHA assistance in target countries or regions?
 - b. What value-added did IEHA assistance provide country programs in terms of expanded training activities?
8. Monitoring and Evaluation: IEHA established a monitoring process with standardized indicators and reporting periods. IEHA also provided analytical support to investigate important development and sectoral topics in an attempt to inform mission programming decisions and designs.
 - a. To what extent did country and regional missions find the reporting system established by IEHA useful in program monitoring?
 - b. To what extent did country and regional missions use the analyses and special studies conducted under IEHA in designs and program decisions?
 - c. How was the analytical agenda established under IEHA for investigating issues and problems and informing the development debate?
 - d. How do the IEHA common results framework, standard indicators, and reporting periods inform mission programming decisions and designs.
9. Country-Regional Programs: IEHA activities were implemented at both the country and regional level. In terms of operational efficiency, regional programs managed activities that conceivably could bring value-added to country programs such as through trade facilitation, common problems related to agricultural research, or other concerns that no one bilateral mission could address alone.
 - a. How effective was the IEHA effort at integrating regional and country level programs? What were the major operational issues for better integrating country and regional programs?
 - b. What were the principal areas where regional missions added value to country programs?
 - c. Are there any themes (trade, research, environment, water resource management) that regional programs were able to effectively address?
10. Lesson Learned: Based on the above review of IEHA components, identify lessons learned and make recommendations that AFR/SD and mission programs can use to scale up support for African agriculture that should include, but not be limited to what worked, what didn't, why it did or didn't work and what can we take forward in the following:
 - a. Leveraging Resources
 - b. Policy (both national and regional)
 - c. Agricultural Research
 - d. Food Aid
 - e. Poverty
 - f. Gender
 - g. Capacity Building and Institutional Strengthening
 - h. Monitoring and Evaluation
 - i. Country-Regional Programs

METHODOLOGY

The conduct of the evaluation is estimated to take a total of six weeks. While it will be the responsibility of the Evaluation Team to determine the overall work plan, the Team should, nonetheless, expect to spend time

in the U.S. reviewing documents and meeting with USAID officials most closely associated with IEHA programming and implementation. The Evaluation Team will also travel to IEHA target countries and regional missions to interview mission personnel, implementing partners, government officials, and private sector and non-governmental representatives to obtain input and perspectives on IEHA and to review any further data and related information on the program. A draft Evaluation Report and presentation to AFR/SD will be expected at the end of the sixth week. The final, USAID-branded Evaluation Report including ten (10) bound, color printed copies of the report, Word and 508 compliant Portable Document Format (pdf) electronic documents, and an electronic PowerPoint presentation of findings and results will be expected two weeks after the draft Evaluation Report presentation.

A Work Plan for the overall evaluation shall be completed by the Chief of Party within 2-3 days of the award of the contract and presented to the CTO. The Work Plan, to the extent possible, should include a tentative draft outline of the Evaluation Report for consideration by the CTO. The Work Plan will delineate the roles and responsibilities of the other members of the Evaluation Team to ensure coverage of all elements of the State of Work.

The anticipated USAID deliverable schedule is as follows. Offeror's may propose or adjust as needed in the technical approach response and draft work plan.

1. Final Work Plan – Three days after award of RFTOP
2. Draft Evaluation Report – Six weeks after COTR approval of final work plan
3. Debrief USAID/AFR on draft report - Six weeks after award of RFTOP
4. Final Evaluation Report – two weeks after submission of draft evaluation report including ten (10) bound, color printed copies of the report, Word and 508 compliant Portable Document Format (pdf) electronic documents, and an electronic PowerPoint presentation of findings.
5. Present Final Report to USAID - Two weeks after submission of draft report

Key Personnel & Core Staff

A six-member Evaluation Team is envisioned for the conduct of the evaluation. While the Offeror can propose the composition of the Team, the following list is illustrative of the types of skills required for the completion of the evaluation:

1. **Senior Agricultural Development Specialist:** (KEY PERSONNEL) This individual will serve as Chief of Party (COP) and will be responsible for managing and coordinating the overall evaluation process. He/She will also be responsible for the overall compilation of the final Evaluation Report and be the principal interlocutor between the Team and USAID. The individual should have a graduate degree in an agricultural discipline with at least fifteen years of experience managing agricultural development programs in Africa, including some experience with USAID-related activities. He/She should have a broad range of subject matter knowledge and experience to complement the other members of the Team.
2. **Agricultural Development Specialist** (farmer/rural organization development): This individual should have a graduate degree in an agricultural discipline with at least fifteen years of experience managing agricultural development programs in Africa. This individual should have a broad range of experience including agricultural research and extension, education, rural organization development, and farmer training.
3. **Agricultural Marketing and Trade Specialist:** This individual should have a graduate degree in an agricultural discipline such as agricultural economics with at least fifteen years of experience working in

agricultural development programs in Africa. He/She should have a broad range of experience in agricultural marketing, trade, and agribusiness development.

4. Agricultural Research Specialist: This individual should have a graduate degree in an agricultural discipline related to agronomy, soils science, and seed technology with at least fifteen years of experience working in agricultural research programs in Africa. He/She should have a broad range of experience in research and a good understanding of research in Africa and of national and international research institutions.

5. Agricultural Policy Specialists: This individual should have a graduate degree in an agricultural related discipline with at least fifteen years of experience managing agricultural development programs in Africa. He/She should have a broad range of experience in the analysis of agricultural and related economic policies.

6. Food Aid Specialist: This individual should have a graduate degree in a relevant discipline relate to rural development and at least fifteen years of experience working in food aid-related rural development programs. He/She should have broad experience working in poverty reduction programs and current subject matter related to food vulnerability assessments, asset management, and coping strategies related to food security.

REVISED OUTLINE

FINAL EVALUATION OF THE INITIATIVE TO END HUNGER IN AFRICA

Major Findings and Conclusions from IEHA with Recommendations for Feed the Future

I. Executive Summary

- a. Brief description of IEHA and its follow-on, FTF
- b. Purpose and Objective of the Evaluation
- c. Brief overview of methods, key evaluation questions
- d. Discussion of organization of report and rationale
- e. Key Conclusions and Lessons Learned
- f. Table of Key Recommendations listed in terms of Feed the Future IRs

II. Background and Introduction

- a. Extended description of IEHA
 - i. Description of the problem/opportunity IEHA was designed to address
 - ii. Countries IEHA implemented (map) and USAID's level of investment
 - iii. Overall program and process
- b. Purpose of Evaluation and intended users
- c. Organization of Report

III. Evaluation Methods – brief overview w/ more detailed info in Annex

- a. Team members
- b. Time frame and work plan – countries visited
- c. Methods

IV. IEHA Framework Design and Strategy

- a. Overall IEHA Process and Focus
 - i. IEHA Process

- Findings
 - Conclusions
 - ii. Focus of IEHA Programs
 - Findings
 - Conclusions
 - iii. Recommendations for Overall IEHA Process and Focus and implications for FTF
- b. Results Reporting
 - i. Strengths and weaknesses of results reporting and indicators
 - Findings
 - Conclusions
 - ii. Results Framework
 - Findings
 - Conclusions
 - iii. Indicators
 - Findings
 - Conclusions
 - iv. Using Evaluations and ReSAKSS as Opportunities for Program Learning
 - Findings
 - Conclusions
 - v. Recommendations for Results Reporting and implications for FTF
- c. CAADP
 - Findings
 - Conclusions
- d. Policy
 - i. Engaging with African Leaders
 - Findings
 - Conclusions
 - ii. Regional Program Synergies
 - Findings
 - Conclusions
 - iii. Identification of Priorities
 - Findings
 - Conclusions
 - iv. Recommendations for Policy and implications for FTF
- e. Stakeholder Engagement and Leveraging Resources
 - i. How IEHA programs reinforced one another
 - Findings
 - Conclusions
 - ii. Recommendations and implications for FTF

V. IEHA Applied to FTF Intermediate Results

- a. Introduction

- i. Explanation of how evaluation lines up with the FTF and how it can inform FTF
 - ii. Explain how IEHA IRs line up and how they might differ from those in FTF
- b. Improved Agricultural Productivity (FTF IR 1)
 - i. Research and S&T
 - Findings
 - Conclusions
 - ii. Producer Groups (as a mechanism for technology transfer)
 - Findings
 - Conclusions
 - iii. Recommendations for Agricultural Productivity and implications for FTF
- c. Improved Markets (FTF IR 2)
 - i. Integration and Incentives
 - Findings
 - Conclusions
 - ii. Regional and Global Trade
 - Findings
 - Conclusions
 - iii. Shift from Competitiveness to Staples
 - Findings
 - Conclusions
 - iv. Farmer Access to Markets
 - Findings
 - Conclusions
 - v. Factors Critical to Market Performance
 - Findings
 - Conclusions
 - vi. Market and Food Security Information Systems
 - Findings
 - Conclusions
 - vii. Grades and Standards
 - Findings
 - Conclusions
 - viii. Certification for Farm-based Organizations
 - Findings
 - Conclusions
 - ix. Agro-processing as Opportunities
 - Findings
 - Conclusions
 - x. Recommendations and implications for FTF
- d. Resilience of Vulnerable households and Communities (FTF IR 5)
 - i. Defining Beneficiaries and vulnerable groups
 - ii. IEHA's Primary beneficiaries
 - iii. Targeting and Reaching the Vulnerable

- Findings – country-level targeting, geographic targeting,
 - Conclusions
 - iv. CAADP Principles in targeting the vulnerable
 - Findings
 - Conclusions
 - v. Approaches to address vulnerable and food insecure households
 - Findings
 - Conclusions
 - vi. Recommendations for FTF
 - e. Emerging Themes
 - i. Global Climate Change
 - Findings
 - Conclusions
 - ii. Recommendations and implications for FTF
- VI. Overarching Conclusions**
- a. Summary of Conclusions from previous sections
 - b. Lessons learned and key take-aways
 - c. Summary of Recommendations

ANNEXES

- A. Scope of Work (as approved in January 2011)
 - a. Modified SOW
- B. List of Interviewees
- C. Extended overview of Methods
- D. Work Plan and Travel Schedule
- E. Interview Questionnaires
- F. IEHA Results Framework
- G. FTF Results Framework
- H. Additional evidence from each section, as needed to be annexed

APPENDIX B: PERSONS CONTACTED

COUNTRY	NAME	POSITION/ORGANIZATION
USA	Emily Hogue	M&E Specialist, Bureau for Food Security USAID
USA	Jeanne Downing	EGAT/Microenterprise/Poverty Reduction, USAID
USA	Katherine Farley	DCO, TSC Millennium Challenge Corp.
USA	Kristin Penn	State Department, on Loan from MCC
USA	Richard Ody	Director, Africa, Chemonics
USA	Rockfeler Herisse	Senior Alliance Advisor, ODP/PSA USAID
USA	Sarah Gavian	Chief Economist, IFDC, Washington
USA	Michael Johnson	IFPRI
USA	Beth Dunford	USAID/Washington
USA	Susan Thompson	USAID/AFR/SD
USA	Jeff Hill	USAID/AFR/SD
SENEGAL	Abdourahamane Sangare	Biotechnology/bio-safety Mgr., CORAF/WECARD
SENEGAL	Ernest Adiedu	Staple Crops Program Manager, CORAF/WECARD
SENEGAL	Harold Roy-Macauley	Director of Programs, CORAF/WECARD
SENEGAL	Jean-Rostand Kamga	Director of Finance & Admin, CORAF/WECARD
SENEGAL	Paco Sereme	Executive Director, CORAF/WECARD
SENEGAL	Peter Trenchard	Economic Growth Office Director, USAID Senegal
MALI	Baou Diane	Project Mgmt Specialist, Agr. Production, USAID Mali
MALI	Dolo Modibo	Macroeconomist, Planning & Dev't, Ministry of Economy & Finance
MALI	Edo Lin	Sr Seed Production Specialist, WASA The Seeds Project
MALI	Fousseyni Mariko	Agro-Economic Director, Ministry of Agriculture
MALI	Gaoussour Traore	Acting Team Leader, Accelerated Economic Growth Team, USAID Mali
MALI	Halima Ouattara-Ayanou	Markets and Trade Program Mgr, ACEG, USAID Mali
MALI	Jean Francois Guay	Director/CoP, IICEM
MALI	Jeff Dorsey	Consultant, Agriculture, Business, Credit and Development LLC
MALI	Jon Anderson	Resident Country Director, MCC Mali
MALI	Kalilou Tigana	National Coordinator, M&E for IICEM
MALI	Kodjo Kondo	M&E Specialist, The Seeds Project WASA

COUNTRY	NAME	POSITION/ORGANIZATION
MALI	Korka Sagara	Seeds Systems Mgr, The Seeds Project, WASA
MALI	Mamadou Augustin Dembele	Project Mgmt Specialist, Agronomist, ACEG, USAID Mali
MALI	Mathieu Dembele	Mopti Coordinator, IICEM Project
MALI	Meg Brown	Surge Team, Feed the Future, AFR/SD/USAID
MALI	Moussa Sangare	Program Mgr, Catholic Relief Services
MALI	Niama Dembele	Resident Director Mali, Michigan State University
MALI	Oumarou Camara	Project Mgmt Specialist, M&E, ACEG, USAID Mali
MALI	Ralph Conley	Food for Peace Officer, ACEG, USAID Mali
MALI	Ryan Vroegindewey	Project Assistant, ACEG, USAID Mali
MALI	S.V.R. Shetty	CoP, Seeds Project, WASA
MALI	Timothy Bishop	Country Representative, Catholic Relief Services
MALI	Timothy Stein	Program Dev't Officer, USAID Mali
MALAWI	Vincent Langdon-Morris	Sr. Agricultural Technical Analyst
MALAWI	Rob Turner	COP, Market Linkages Initiative
MALAWI	James Bwirani	Country Representative, FEWS NET
MALAWI	Vic Mhoni	FANRPAN
MALAWI	Anne Conroy	Donors Coordinator, Irish Aid
MALAWI	Pheneas Ntawuruhunga	Potato Breeder, SAARNET/IITA
MALAWI	Hailu Tefera	Soybean Breeder, SAARNET/IITA
MALAWI	Paul Demo	Sweet Potato Breeder, SAARNET/IITA
MALAWI	Patrick Mputeni	M&E Specialist, Ministry of Finance
MALAWI	Klaus Droppelmann	Sr. Program Coordinator, IFPRI
MALAWI	Monica Fisher	IFPRI
MALAWI	Peter Chimsasa	Acting Project Coordinator, CADECOM/CRS
MALAWI	Glyceria Stambo	Field Officer, CADECOM
MALAWI	Neil Orchardson	Advisor, Ministry of Ag. & Food Security
MALAWI	Rachel Sebande	Market Information Specialist, Market Linkage Initiatives
MALAWI	Betty Chinyamunyu -	Commercial Coordinator, NASFAM
MALAWI	Henry Mtende Swira	Programs Director, CARE
MALAWI	Cecily Bryant	Country Director, CARE
MALAWI	Geoffrey Kumwenda	Coordinator/CARE
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APPENDIX D: SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

REPORT SECTION	CONCLUSIONS	RECOMMENDATIONS
IV. IEHA Framework Design and Strategy		
a. Overall IEHA Process and Focus	Conclusions on IEHA Process - The IEHA process was participatory. However, more input from the field earlier on and throughout the process, clearer and more consistent communication from headquarters and more time for implementation was required. - Field personnel queried felt that the CAADP Process was less participatory and remained largely at the headquarter level among donors, with limited engagement from the field. - To the extent that CADDP represents realistic priorities for funding, as opposed to a basket of general wish lists without resources or real commitments, it will be necessary to interact with the process and with other donors seeking to implement similar programs affecting population segments or value chains targeted by USAID-supported programs. - New initiatives under FTF will be better received and more effectively implemented if they take heed of FTF concept and framework early on, finalize the FTF results framework with stakeholder input and review, develop mission FTF strategies and then design mission results frameworks. Conclusions on Focus of IEHA Programs - IEHA had an impact on the focus of mission portfolios and cash crops, and national USAID responders felt they were aligned with local government priorities. - IEHA programs do work intensively and extensively with smallholders, the rural poor and women. - While smallholders should remain the main focus, the methods of increasing incomes, particularly in programs involving marketing, should look carefully at market demand and the prospects of cooperating with players throughout the value chain, as opposed to ignoring other options and competitive cost considerations when considering storage and processing by farm-based cooperatives. - FTF planners and program implements should share goals, objectives, vision and strategies of new initiatives or programs with all stakeholders, which will not only inform partners, but also provide an opportunity to draw on their experience and capacities and complementary cross-program efforts. This is true for higher-level initiatives such as IEHA and FTF but also specific implementing partner programs. Conclusions on Strategic Framework - Unlike emergency programs, development programs should have a view of being	Recommendations for Overall IEHA Process and Focus and implications for FTF - FTF should continue the focus on enhancement of markets and smallholder access and reinforce efforts to build sustainability through creation strong links between market actors (e.g., lead farmers and smallholders, buyers and smallholders), capacity building of viable producer groups, linkage to entities with the resources and contacts to ensure reliable marketing and measures to improve enabling environment such as policy reform, commodity exchange mechanisms and rural infrastructure. - All marketing programs should consider the full value chain, all players, competitors, cost of finance, and other problems and opportunities to make farmers and their organizations more productive and fully competitive. - New programs on nutrition may use some of the same target groups as the marketing programs, or may be completely separate programs. - FTF should acknowledge the need for more time and an orderly process and establish a more participatory approach with the missions, IPs in the field, other donors pursuing related activities, and local partners. - FTF projects should be designed within the framework and very broad priorities of FTF, and host country governments can and should play an important role in matters concerning regulation of public health (prevention of marketing or misapplication of dangerous chemicals), introduction of appropriate infrastructure, radio news on market prices, programs required certifications and identify preservation of goods (required for European marketing), etc. In many commercial aspects of programs it will be desirable to seek local allies in government and business to try to limit or change some of the more negative aspects of government regulation, or improper actions by authorities in order to facilitate commerce and to make investment more attractive and profitable.

	sustainable after the end of a project. Feed the Future should handle both, but should insist on a realistic plan for sustainability for the development programs. Aid programs often expend extensive resources, buying vehicles and fuel, hiring people at salaries several times what they could make elsewhere, paying people per diem to attend meetings and training programs, providing international travel for officials and business people. These resources can be very useful to get cooperation, to create or add to local efforts and to bring change, but high participation in subsidized programs may not necessarily result in sustainability. Sustainability at the end of the project should always be a key issue to consider in program design, implementation and monitoring of results. • RISK: The issue of risk will depend on the type of program chosen. Agricultural marketing is inherently risky and all risk cannot and should not be eliminated. The biggest farm product risks are from weather and competition from lower cost suppliers. Market demand should be allowed to send price signals that cause producers to expand or contract their efforts and permit supply and demand to balance. The poorest of the poor often can't take the risk to buy inputs to produce marketable crops. They need free food, medical care, and education. But if they are given the inputs free beyond a brief emergency period this can disfavor the development of a private sector input industry and can negatively affect sustainability. In ideal programs, farmers or their producer organizations might have surpluses that would help to mitigate a bad year and a bad year could mean either poor production or poor prices. But it is preferable to let market prices influence producer incentives, even if stabilization programs or temporary assistance may be useful to partially mitigate the harshest and most rapid price shifts. Commercial import competition from low cost food (e.g. Asian rice and vegetable oil) is a substantial risk, particularly since local producers have high costs compared to Asian and even American suppliers for transport, machinery, fertilizer, and other production costs other than daily wage rates. Importation of free food through aid programs helps consumers but can lower prices and hurt incentives for farmers and local marketing companies. Bellmon Amendment determinations are supposed to evaluate and reduce the possibility of negative impacts of food aid imports on local markets. Local purchases by WFP, still a fledgling program with some difficulties, have been proposed as a way to avoid damage to farmer incentives through food aid programs. • Production of cash crops that require purchased inputs (often on credit) is somewhat more risky than subsistence agriculture. The poorest of farmers often can't take the risk of producing and marketing a high value crop. All farmers need cash incomes for school fees, medical expenses, etc. For the more prosperous farmers, doing nothing to improve production and marketing is the biggest long term risk. Working with small farmers prosperous enough to produce and market a surplus will be a key element of future programs, coupled with other income generating possibilities raising animals or family members learning a variety of marketable skills. Emergency food aid assistance is available through USG programs but ideally, shouldn't be a continuing process for countries able to bring farmers and other rural people out of poverty and into the commercial	Recommendations for FTF Strategic Framework 1. Country plans should highlight the importance of risk (vulnerability) reduction and crisis prevention and mitigation. This would include: programs designed to address these specific issues; clear and transparent linkages to development oriented components within mission strategies and support to and use of food security and early warning monitoring, analysis and reporting systems. 2. The terms risk and vulnerability should be defined within the FTF framework. Appropriate interventions cannot be designed in the absence of a clear understanding of the hazards and additional underlying factors that contribute to food insecurity and hunger, especially transitory food insecurity and hunger, which is not addressed in the guide or results framework. 3. Indicators appropriate for the evaluation of resilience need to be defined and should be consistent with those being defined by the corresponding CAADP Pillars. Pillar III on "food supply and hunger" has made progress on indicator definitions and their M&E plan should be consulted. 4. The FTF guide and results framework should be vetted by all missions and, at least, a sampling of IPs to generate advice on implementation procedures for country programs, in principle coordinated with Country CADAAP investment plans and falling within the broad guidelines of the FTF guide and results framework. 5. Within the Whole of Government approach, the FTF initiative will need to establish clear linkages and complementarities with resource streams supporting agriculture research and policy reform, two areas critical to agriculture growth that not explicated stated in the FTF results framework but which are mentioned in the FTF guide. 6. Programs without substantial buy-in from beneficiaries are often unsustainable. With host governments often more than doubling their budgetary commitment to agriculture under CAADP pledges, there should be opportunities for both public and private interlocutors to make significant contributions that will continue after the end of the project. Sustainability should be a key element of project approval and of mid-term monitoring/adjustment.
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	market. They should get short term help and training during the transition. Conclusions on Alignment • IEHA successfully laid the foundation for USAID’s support for CAADP – both in principle and in structure. The IEHA was instrumental in helping USAID to promote processes and principles that emphasized and enabled greater alignment between USAID Mission agricultural programming and the programs and objectives of African governments. This was a precursor to FTF’s programming emphases, which are designed to directly support CAADP. This process is consistent with the Paris Declaration for Aid Effectiveness and represents a fundamental departure for USAID’s traditional support of agricultural development in Africa. Conclusions on Inclusive Participation Process • IEHA’s promotion of value-chain training, planning and analysis increased and enhanced the participation of stakeholders in national-level agricultural dialogue and planning, and this is a process that has been continued under CAADP. • The CAADP process has remained largely at the headquarter level among donors, with limited engagement from local government and non-state actors. A useful start has been made to increase the inclusive participation of non-state actors, and the commitment to continue doing so is strong (as evidenced by FtF and CAADP principles), but substantial additional effort is required.	Recommendations on FTF Alignment • To maintain and further the progress USAID has made in aligning its programming with African government priorities and system, USAID should review the proposed M&E plans for the different CAADP pillars most relevant to FTF (Pillars II and III) and, where possible, align FTF indicators with those included in pillar frameworks and discuss the details of planned programs with appropriate contacts in the host government and key private sector groups likely to be involved as well as with other donors with similar program focuses (focusing on the same population segment or similar types of programs). This will build consistency across programs throughout Sub-Saharan Africa and across initiatives (i.e., CAADP and FTF). Recommendations for FTF Inclusive Participation Process • FTF should acknowledge that realizing its objective of substantial and meaningful participation by local government and non-state actors in agricultural planning and implementation will require additional time, effort, and resources
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b. Policy	Conclusions on Policy • Generally to implement any major project in an African country it is necessary to give some level of information to the national and local authorities and to make them feel involved – though sometimes it is most desirable to keep that official involvement mostly at a theoretical level – having the Minister open workshops etc to show others that the process has local support. While big government agencies have a tendency to be slow and inefficient in implementing programs, on the other hand, some of the individual researchers and extension agents may be eager to participate in donor-financed project and may be quite helpful if allowed to participate. The biggest question is usually sustainability at the end of the project if subsidies are provided to farmers or to pay the costs of their technical advisers. A sustainable transition should be envisioned at the outset and reviewed at the end as a measure of the success of the program. • One important aspect of policy is the ability for producer organizations and business groups to influence government policy, particularly in commenting on changes. For instance early in the TIPCEE project in Ghana, the government issued regulations on standards that were not business –friendly. . TIPCEE helped the government consult with exporters and redraft regulations that were more business friendly and effective. Some private sector advocacy will call for protection against imports or other special protection against competition, that may not be fully in the national interest or consistent with USG preference or World Trade Organization commitments. But in general, giving the private sector a voice that the government can hear is a very positive move that can improve the business enabling environment for the marketing of farm products, priorities for infrastructure, and other essential products and services that the government can provide. This is the sort of business advocacy linked policy reform that is mentioned in the Feed the Future guide.	Recommendation for Policy under FTF FTF should continue certain types of policy reform work, particularly regulatory changes that do not need lengthy development of parliamentary legislation and can be achieved during the life of the projects. FTF should seek to promote useful measures that are championed by local business to improve the commercial environment for targeted products.
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c. Stakeholder engagement	Conclusions on Stakeholder Engagement • In general IEHA has been successful at leveraging resources and the creation of constructive and opportunistic collaboration. • Comprehensive support spanning on-the-ground productivity through market access and the policy environment at national and regional level (e.g. support to CAADP process) enhanced the participation of stakeholders in dialogue at appropriate points along the relevant value chains. • One of the weakest areas in terms of stakeholder input is in the engagement of IPs, local stakeholders and mission staff in the development of CADAAP frameworks. • Stakeholders such as financial service providers have favored working with organized groups such as Producer Organizations (POs). • There was a feeling among some stakeholders that projects were not well integrated with the activities of the Ministry of Agriculture (Uganda), leading to questions of possible duplication of activities; future sustainability of the interventions; etc. The provision of a forum for public and private sector groups is a common way that IEHA has contributed to higher-level objectives. This has led to greater involvement of private sector in roles previously dominated by the public sector e.g. seed certification. • Addressing cross-border issues that cannot be addressed by individual countries (e.g. harmonization of seed policies) has been an extremely useful, and many cases, fruitful endeavor. • There is need to strengthen the other forms of mass media such as radio and television so that the wider rural community can be reached, and a greater variety of stakeholders can participate in project planning. Adequate resources should be applied to ensure that translations into local languages are accurate.	Recommendations for Stakeholder Engagement Under FTF 1. For effective linkage with government and policy processes projects should have clear points of engagement with relevant government ministries/departments. 2. The time to seek input and vision is at the initiation of a process rather than bringing in these well-informed people who will have to implement initiatives as reviewers and fact checkers. 3. Continue to search for activities that can bridge the gap between the results of a particular project and a contribution to higher-level policy objectives. Stronger information dissemination plans and inclusive public forums with a variety of stakeholders can help contribute to a larger impact. 4. Encourage greater information sharing among USAID missions within regions and across Africa.
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V. IEHA APPLIED TO FTF FRAMEWORK

a. Improved Agricultural Productivity (FTF IR I)	Conclusions on Research and S&T - Agricultural research with support from IEHA has made significant contributions to regional harmonization of policies, regulations and protocols as well as facilitated the exchange of ideas and technologies. It is within research and the enabling environment that regional and country synergies have been substantial. - The work of IITA, NARO and other national agricultural research centers in the region on cassava mosaic appears to have been successful since farmers and facilitators all noted that the problem seemed to be resolved with the availability and planting of new resistant material. - Seed research and development is the foundation of sustainable agricultural development in West Africa. In the case of Mali where IEHA evaluation field work was conducted, if not already programmed, USAID Mali can provide support in removing the bottlenecks in improved seed multiplication, certification and diffusion. Presently, Mali has one seed certification laboratory that is overextended and is an impediment to private sector seed enterprise development and investment. - In Mali, at local level, there is good exchange between local Government agencies and the project. They work together in a very good collaboration. Consequently, they have success in the dissemination of practices Conclusions on Producer Groups (as a mechanism for technology transfer) - Organizations with larger membership (economies of scale) have better opportunities for leverage in the market place as exemplified by the following organizations: (i) in the case of maize and barley by Kapchorua Commercial Farmers Association (KACOFA), Uganda with a membership of 6,328; and (ii) in the case of milk by dairy federations in Kenya with more than 1,000 members (supported by Kenya Dairy Development Program/Dairy Sector Competitiveness Program). KACOFA has forward contracts for barley with Uganda Breweries and supplies maize to WFP under the Purchase for Progress (P4P) program. Dairy federations in Kenya have been able to negotiate prices with milk processors for bulk deliveries that are as high as KSh.4 more per liter. (Source: Interviews with KAFOCA; Land O Lakes). - In the absence of strong and well-organized farmers groups, there is a likelihood of market distortion by big buyers of farmers' produce e.g. large processors in the case of milk (Land O Lakes, Kenya Dairy Sector Competitiveness Program). - Marketing is still a challenge for producer organizations. Some of the larger organizations engage the services of qualified marketing professionals. Lack of market negatively affects the receptivity of farmers to training because they do not see the value in the effort, and their adoption of new technologies and practices (Land O Lakes, Kenya Dairy Sector Competitiveness Program).	Recommendations on Research - Research is crucial to maintenance of productivity, as mentioned in the FTF guide. Short timelines for IEHA and FTF project results may preclude financing for long term research projects and tend to focus more on approval of new varieties and new pesticides by national authorities and programs to get them to farmers and train the farmers – generally a process that could be done in under 5 years. - Encourage the dissemination of new technologies, including free traditional seeds with low input needs for refugees returning to farming, improved seeds for surplus producing farmers coupled with advice and training on the mix of inputs needed, credit programs to permit purchase of inputs, post harvest handling techniques, and marketing of the products. - A wide range of technologies can be explored. For instance flattening land for irrigated rice, use of nurseries for transplanting rice seedlings and planting in rows, nurseries for tomato plants for transplanting, the possibility of buying hand tillers to replace labor, use of backpack sprayers for pesticides, or alternatively using crops that are have built in genetic resistance to some pests, use of high yielding corn and sorghum varieties, etc. - Technology must be appropriate. Irrigation may not be a good option in many places if it reduces the water table or if soil is inadequate or if farmers are not willing contribute their labor to maintain irrigation systems. - Milk collection systems including cooling systems can increase marketing potential and incomes for small farmers. Simple milking equipment for larger herds can reduce disease such as mastitis. - Farm organizations are likely to play a key role in grouping farmers for training, quality control and better post harvest handling of products. Technology must be integrated into the social system to be workable. Both production and marketing are essential and neither should be addressed in isolation. Getting together all the relevant players in a value chain such as was done in Uganda's LEAD program is the right way to consider any production and marketing program - consideration of all key for any crop or livestock products.
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	• Experience to date suggests that there is need for strong corporate linkages between producer organizations and major agribusinesses or commodity buyers. • The quality of management of a producer organization is critical for it to operate as a successful business entity. Therefore there is a need to put emphasis on business management skills for the senior personnel of producer organizations. Without sufficient capacity building, exceptional management (such as KACOFA's) may not be easy to replicate. • An important success factor is the awareness of group members about why they should form groups to realize benefits. It is not enough to merely form groups. Members need appropriate capacity building to form sustainable groups.	• Realistic introduction of new technology requires a good understanding of local conditions. Farmers can broadcast traditional millet varieties in areas with poor rainfall and have a basic staple that won't produce high yields, but may be a reliable provider of part of the family's food needs without much investment or risk. But most of them need to produce cash crops or livestock products and USAID programs can help link them to new technology. • Sustainability is important. Loans for equipment or animals can be provided, but the question of veterinary services, equipment maintenance, and extension work by public or private sector players should be included in any production and marketing system. • Both SARRNET and ESARRN (East and Southern Africa Root Crops Research Network) should do applied research and get the smallholder farmers (and if possible extension agents) involved in all aspects of the project. • Farmers should be advised against concentrating too many resources on monoculture cash crops – such as maize. Other crops such as cassava and sweet potato with vitamin A or other protein and vegetable crops should be considered as alternative cash crops and in the interest of providing adequate nutrition for the family. Applied research programs would need three or more years to produce solid results. • Efforts can be made in the difficult process of getting farmers to change cultivation techniques to prevent soil degradation. This might include digging compost pits for crop residues and use of such residues with or without animal dung improve to soil structure and to prevent soil degradation
d. Expanding Markets and Trade (FTF IR 2)	Conclusions on Value Chain Approach • Maintaining a focus on markets and starting with demand and demand preferences has proven to be effective in gaining access to markets, obtaining higher returns and contributing to smallholder productivity and household welfare. • Timing can be the main determining factor in price setting and may enable a grower to fill a niche before or after the normal tomato harvest. In this case small-scale irrigation is the enabling technology. Such opportunities should be investigated and exploited.¹ • Entrepreneurship thrives and is self-selecting when unmet market opportunities are identified, there is full engagement by producers and buyers, and the opportunity is supported by technical and business development tools and training.²	Recommendations on Value Chain Approach 1. The value chain consideration of all players from farm to fork should generally be used in planning any marketing program, even if only a segment of the value chain is targeted for activities. 2. Seed research and development requires significant resources in the coming years. USAID support should continue in regional policy reform, seed production and in seed distribution to lead farmers or agro input suppliers at the village level. Substantial support (fertilizer, advice etc) is needed to realize the benefits of high yielding seeds,

¹ Dixon Amoxa is a tomato farmer and Lead Farmer in the Dormaa Ahenkro-Brong Ahafo region of Ghana. He credits TIPCEE for providing the technical and technology support to grow tomatoes under irrigation during the shoulder season when tomatoes are less plentiful at the local markets.

• Lead farmers and buyers can be an important linkage for producer groups seeking to access markets. • Adequate storage for non-perishable crops is crucial for generating higher prices and sales volumes. Appropriate storage prevents deterioration in the quality of produce. Storage also reinforces the link between market timing and price setting to producers. Location of storage depends on cost, drying and fumigation facilities and other factors. • Group Certification allows smallholders to compete in new markets. Producer groups can mobilize and achieve certification (usually for export markets) within a relatively short timeframe if the market rewards growers for the additional costs and time for certification. But, early buy-in by all of the major stakeholders such as the Ghana Ministry of Agriculture (which changed its marketing regulations and inspection practices to assist the export program (TIPCEE) , which was necessary to a successful public-private certification process. This reflects the need among public/private partnerships and initiatives for joint planning and design from the ground up. • In cases where large commercial farmers with good market access want to establish out grower systems with smaller farmers, this would be a very appropriate segment of the value chain for USAID to provide training on production inputs, post harvest handling and other short term assistance to enable small farmers to integrate into a reliable marketing system. • Progress on the creation of grain standards and grades has provided an opportunity for farmers and other actors along the value chain to reap higher returns with the provision of better quality produce. • Bulk sales have provided smallholders and lead farmers with new market outlets (e.g., WFP, regional exporters, and breweries) and better leverage when negotiating prices. Group operations have been able to support group savings and, in some instances, secure bank loans. • Input markets performance is poor yet these markets are critical to stimulating agriculture growth. Farmers need and want access to quality inputs, and they are willing pay for them. However, there is significant risk associated with purchasing inputs when markets are highly concentrated and unable to deliver timely quality inputs. Many farmers complained of input adulteration. Several governments continue to supply smallholders with inputs and regulate markets crowding out the development of a private input supply system. . • Rural credit continues to be woefully inadequate. • Under the IEHA funded agribusiness development projects, farmers and farm-based organizations were connected to processors, exporters and other buyers for the	which require more attention and investment than traditional low yielding seeds that are often resistant to local pests. 3. Continue the IEHA focus on markets and market access as a means to increase food production and rural household incomes. 4. Place more attention on input suppliers and options for develop viable private sector supply chains with reliable seeds and agrichemicals (fake or adulterated products are currently a problem). 5. FTF market development projects should be timed to lessen the gap between an old and new project. 6. If high value export crops are to remain as an income generating subcomponent of Feed the Future then sustainability incentives for annual certification programs need to be revisited. Indefinite subsidies are not desirable but more transitional support may be needed to sustain small holder participation as suppliers of certified export products. 7. New agribusiness development projects should consider continuing support to high-performing farmers-based organizations that will benefit from ongoing production and market support. This will allow of greater attention to be placed on quality of service and impact as opposed to producer groups and uneven impact. 8. Regional seed certification can be pursued, perhaps through a US university project. The USDA/APHIS (Animal and Plant Health Inspection Service) regulatory scientists in Senegal and South Africa (and Egypt) have close contacts with African regulatory scientists and can help with making and sustaining some of the official contacts throughout the continent, though another group should be relied on for implementation of a detailed program. 9. IPs of IEHA agribusiness development projects like TIPCEE and TradeMali must first identify commodities with market opportunities and for which there exists a competitive advantage such as soil and climatic conditions, access to critical transportation hubs, available labor, and distance from larger markets. Recommendations for Regional and Global Trade Both global and regional trade provide substantial opportunities for high profits (exports trade) and more stability of markets (regional trade).
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² In Livingston Zambia farmers, including orphans and widows, have generated \$1,000,000 in sales since 2006 from the ASNAPP vegetable production scheme that focused on self-selecting entrepreneurs and unfilled niche markets for tourist demand for fresh fruits and vegetables.

	domestic marketplace. • Building trust among value chain stakeholders is critical and problematic. Trust building is needed between buyers and producers, between borrowers and lenders, between the public and private sector on issues of a business enabling environment through sound policy including import duties and export controls. Distrust runs deeper than IPs anticipated and the time it takes to develop trust is often beyond a project timeframe. There is no one tried and true method to build trust but adding it as a component to future workshops and training is suggested and why it is so important to business relations and life. There are team-building workshops that include activities to build up trust that could be a starting point. Long term traditional relationships are the best way to build trust and amicably resolve minor problems (without courts or formal arbitration). New entrants (such as a farmers' cooperative) may find it useful to link up a large private buyer with good contacts and relationships with the final buyers. • Coordination among projects increases sustainability of efforts and achievements. • Dry and rodent resistant storage facilities for non-perishable commodities like rice and maize combined with a credit scheme like the Credit Stockage Vivrier scaled up in Mali contribute significantly through the creation of group savings and as collateral for input credit. Storage and delayed sale can result in higher prices, year-round sales and create new markets for Farm Based Organizations. Some management is required such as fumigation every two months or so – easier with bulk commodities than bagged – so farmers may lose identity preservation for their grain – another program involving trust and good management. • There are numerous examples—for example Malian mango and Ghana pineapple growers-- of producer organizations and commercial scale farmers that were trained to meet the stringent protocols and standards for GlobalGap and EurepGap certifications. Once the process was understood and technical assistance provided by IPs or buyers, certifications were achieved within one or two growing seasons. TIPCEE in particular developed an innovative tool kit including Good Life posters and a farmer's Passport of quality requirements and skill building. • Seed provision—availability of certified high quality and appropriate varieties—to rural smallholders is a constraint to food security and increased trade. Seed certification by national laboratories is a bottleneck. Policy harmonization across regions with regards to the movement of seed is an ongoing issue. Seed is the foundation of a productive agricultural sector in Africa and additional resources are needed from USAID, other donors and national and regional agricultural research and policy institutions. • Activities supporting smallholder production and access to local markets merits ongoing support based on IEHA funded accomplishments. For instance, significant improvements in smallholder purchases were demonstrated under IEHA. Value of purchases was \$150.7 million in Fiscal Year 2007 as compared to \$71.5 million in Fiscal Year 2005, more than a doubling of income to smallholders and their families. • Access to credit and quality inputs by smallholders and an understanding of product	Even if USAID contacts don't think USAID has expertise in developing export markets, it can help create the small holder supplier networks to provide products to experienced exporters who can effectively access the export markets. Recommendations for Market Information Systems 1. Include in national and regional mission strategies support to market and food security information systems and particularly working with the various stakeholders to harmonization key indicators, measurement, data collection methods and efforts to integrate systems as well as share data and information. 2. Convene fora to share innovations in the application of ICTs to agriculture, market and food security information collection and dissemination. 3. Explore how ICTs can be more effectively and widely used in crisis monitoring, prevention, mitigation and response. 4. FTF should regularly consult with agencies and individuals who work in food security and early warning networks to benefit from their extensive experience and access to broader network expertise. 5. Bilateral and regional missions can create and strengthen information sharing and explicit programmatic linkages across emergency and development components of their strategies. 6. Host government could be given assistance in developing strategies for crises affecting basic staples. Training of market analysts in ministries of agriculture and industry could help. The strategies might include contingency plans to contract with private sector purchase and storage for unusual surpluses (with government contributing to costs), or better still programs to export surpluses, even at a loss, surpluses to achieve market stability. For shortages imports, suspension of custom duties or other ways to encourage private sector imports could be a quick and effective reaction to a temporary crisis. Planning should be well underway before a crisis starts. Advice and training to governments in advance of a crisis may forestall ill conceived actions. Consultation with other countries (e.g. shipping excess corn to South Africa to use as livestock feed) or to another country that has a shortage could help to mitigate a problem. 7. There's a need to facilitate the sharing of experiences among innovators and to validate the claimed benefits of the systems (e.g., are cell phone diagnostics and extension advice accurate and effective as means for promotion of improved agricultural practices, has the availability of market prices actually helped smallholders negotiate
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	grades and standards are critical to achieving successful market performance. Notable IEHA funded projects that have addressed these critical elements of credit and, inputs and standards are presented and based on the project reports, have had a favorable impact when there is a holistic market approach. • Producer groups can usually obtain higher prices when they negotiate as a group and are able to make bulk supplies. The Dairy Federations in Kenya, which is discussed under Producer Groups, demonstrated that farmers have greater price negotiating leverage as a group with bulk supplies • Partnerships with governments, donors, private sector firms, and certification organizations can target certification training towards groups of small-holder farmers. In turn, more small holders will be able to enter into higher levels of the value chain. This was evidenced through the successful TIPCEE project in Ghana towards certifying small holders in pineapple standards. • There is potential for commercial scale agricultural development given proper investment for inputs and production technology. This speaks to the importance of cultivating relationships between market stakeholders. The Matanuska banana plantation in Mozambique illustrates the success of a plantation growing staple foods and export crops as result of this relationship. Conclusions on Regional and Global Trade • Capacity building of regional trade promotion institutions cannot easily be accomplished nor the outcomes of activities easily measured. The regional missions of USAID, that are charged with this capacity building, express frustration about the vast distances between stakeholders, and the difficulty of creating change with one or two embedded staff at a lagging institution, with monitoring and guidance made more difficult by understaffing at their own headquarters. Agreed upon support to bi-lateral Missions and their direct interventions within the marketplace and in trade promotion may be a better option. • Regional institutions were noted as the weak link in developing an agricultural marketing information system like MISTOWA. One strategy is for USAID regional missions to focus on a fewer number of the more innovative and regional institutions through a self-selection process for greater impact and change. Market information is valuable background when negotiating with a buyer and market information by radio or cell phone access maybe an important first step in integrating a new organization into the marketing system. • There are formal (trade policy) and informal barriers to trade that may be difficult for USAID program to address without major efforts such as that of EAGC in grain trade in East Africa. But easier regional could have a major impact on farm incomes and stability of markets. At present, much of the regional trade is pursued informally and it is difficult to track. Linking buyers and sellers could lead them to find ways to overcome obstacles to crossing borders	more favorable prices).
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- Regional organizations like ECOWAS and COMESA have rules that provide for liberal rules on regional trade, but sometimes national governments take restrictive action (e.g. Nigeria banning exports to Niger during a shortage) and it is difficult to implement the policies supported in theory.
- In spite of all the problems, regional trade can provide more food security to domestic producers if trade barriers are reduced. In a year of high production and low prices, commodities can be shipped to other markets – such as Ugandan corn to Kenya and Sudan, Ghanaian corn and Malian rice to Nigeria. Barriers to trade can be both official (trade bans or high customs duties) and unofficial (extortion by police and customs authorities, low price competition from Asian imports of rice and vegetable oil that don't pay import duties (because of bribery) and enter markets at lower prices than local products. This creates a particular problem for investment. Regional trade efforts for corn and a few other products seem to have had some success in East Africa and could be expanded in light of the recent expansion of the East African Union. The first step would be market information and the second linking potential buyers and sellers, and then addressing other obstacles.

Conclusions on Market and Food Security Information Systems

- Market information systems are widely felt to be important drivers to improved market coordination and performance, smallholder market access and, thus, expansion of markets and trade within and outside the region.
- FEWS NET and the national early warning systems have essentially focused on short-term emergencies and responses and they are introducing a new tool which estimates income losses to affected populations as a means of advising policy makers on urgent needs. The FEWS NET program, begun in the 1980's is designed to provide quick information of impending crises. Its information can also be used to track ecological problems such as desertification. Other programs such as an economic analysis of IFPRI could consider influencing inform decisions on sustained and longer-term investments to reduce poverty and vulnerabilities to shocks.
- When relevant market information is available, farmers and the poor are willing to regularly access and pay for it.
- Support to food security monitoring, assessment and reporting systems have increased the amount and quality of available data, improved estimates of needs and targeting and contributed to better designs and implementation of contingency and response planning.

Decision makers and political leaders that countries should take advantage of regional trade to enhance their food security (EAGC; Tegemeo; FEWSNET)

c. Resilience of Vulnerable households and Communities (FTF IR 5)	Conclusions on Targeting and Reaching the Vulnerable • IEHA addresses the needs of some of the vulnerable populations, has tended to not focus on the poorest of the poor, those unable to produce a marketable surplus to sell. In FTF much more needs to be done in terms of reaching the chronically vulnerable households, providing them with food, medicine, education and also income generating activities. • Among the youth in many IEHA focus countries, most are landless and lack formal education. In addition to being food insecure, they are extremely susceptible to being drawn into conflict or other violent situations... • The phasing out of Title II in many countries will leave a critical gap in USAID's and IEHA's ability to reach many of the vulnerable populations and safety net programs for highly vulnerable populations are not established as of yet. While these Title II programs have shown impact on decreasing vulnerability, as measured by numbers of months of self-provisioning (of food) and increasing resiliency, sustainability of results for the most vulnerable households is not assured. • IEHA projects have unnecessarily and unwisely over stressed cash crops and ignored food crops that have small or limited markets. • IEHA and Title II/ USDA programs have many commonalities that can be leveraged to a greater degree when addressing the varying issues faced by the most vulnerable populations. • For the sustainability of the extension services it is essential that increased effort is made to engage commitment of the private sector in order to develop both the demand and supply sides of value chains.	Recommendations for Targeting and Reaching the Vulnerable 1. Farmers should be encouraged not to place too much reliance in a single cash crop to reduce risk for the family 2. The terms risk, vulnerable and vulnerability need to be defined. 3. Contingency action plans could be developed in concert with national, regional and local officials for action in the event of a crisis. Projects should consider strengthening the organizational capacity of the community while implementing IEHA or MYAP activities. If the communities are not organized to respond to shocks like drought, floods, eruptions, etc. All value chain principles could be washed away in hours putting the communities at risk. 4. The long term answer to poverty is sustainable income. All climate fluctuations and crop production fluctuations cannot be prevented and people need to recognize that there can be good years and bad years (so they should find some manner of saving, even if it is keeping an animal instead of money as a source of savings). 5. For Title II, add provisions to the budgets (particularly cash resources) to enhance capacity building, and define exit strategies at onset of programs. 6. Programs need to be designed for specific vulnerable populations where they constitute a significant population group. These different groups could include viable poor smallholders, risk prone farmers, chronically food insecure households, female entrepreneurs and farmers, HIV/AIDS affected populations, youth, the urban poor, etc. 7. Maybe farmers could be convinced to save money in some fashion, e.g. buying a voucher at harvest time for the next season's inputs or some variation of that. Some savings programs exist – subsistence farmers save seed for the next planting season, farmers save and store grain to feed the family through the year and people raise animals that they could sell if necessary. There are traditional small savings societies all over Africa. It would be nice to convince farmers to save from the harvest to buy next years' fertilizer but this would be a big jump in cultural habits. The commodity exchange warehouse receipts (delaying sale of grain until market prices increase) are a form of saving. Cooperatives could hold back a share of the profits from marketing crops. Perhaps there are other innovative techniques to convince farmers to save, instead of borrowing at high interest rates, with all the difficulties of costly administration loans, defaults, etc. New approaches on alternatives to credit (such as the VSL program of CRS mentioned above) should be explored on a small scale.
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	Conclusions on Adopting New Technologies - Technologies are being introduced without assistance to deal with the new crop levels. The occurrence of such a situation is likely to make the farmer vulnerable. Some PVO's or research centers introduce new improved seeds or tubers. They try them on demonstration plots before passing on to communities to experiment the trials. Experimentations involve planting practices, germination and growth monitoring, harvesting and conservation and sometimes, tasting takes a critical importance due to dietary habits. This can lead to other time-consuming genetic modifications. Things have to start over and over again. Since agriculture in Africa is mainly rain-fed, farming is seasonal; you miss a campaign and you have to wait for the next year. Unfortunately, research centers usually have 2-year funding (renewable at times). While waiting for the hypothetical renewal, some technical staff is released for lack of funds. Very often, researchers or PVO's do not go all the way thru. Conclusions on Climate Change - Discussions with World Food Program, FEWS NET and OFDA staff reveal a more nuanced and accurate picture of poverty and populations vulnerable to food insecurity on a chronic or transitory basis. Adequately addressing the problem of risk will require the disaggregation of vulnerable populations and program designs that account for the differences among these groups. IEHA essentially treated all vulnerable populations the same and concentrated on pulling the upper tier of the poor, those that could produce a surplus for sale, into the main stream of markets and economic development. While representing a large group of the rural poor, the approach overlooks a large and growing number of households that are prone to disasters and repeatedly in need of humanitarian assistance and or education and other assistance that will permit them to generate enough income to support them. - Differentiating between short term emergency situations requiring food aid versus longer term problems that require more complex solutions will require a clear	Recommendations on Technology - National platforms have a role to play in coordination, raising awareness and dissemination of relevant information. - Public institutions have to spearhead development programs with involvement of the private sector in order to develop both the demand and supply sides of value chains. - Reduce import duties to facilitate access to processing equipment and encourage investors to set up processing plants - The biggest opportunity for technology adoption is through private investors – including input supply companies linked to foreign suppliers, companies linked to foreign markets, and abilities to undertake substantial investments, some of them involving credit programs and smallholders. Farmers' cooperatives may also be able to invest in marketing infrastructure such as storage, dryers, rice decorticators machinery, grain grinding machinery, milk cooling equipment etc. Clearly there are areas where small farmers' marketing potential can be helped by some short term assistance to groups wishing to help them market their crops. - New varieties are tested in research institutes and then introduced through demonstration plots. Farmers may be reluctant to adopt new crops unless there is a very clear market opportunity. Unfortunately, research centers usually have 2-year funding (renewable at times). While waiting for the hypothetical renewal, some technical staff is released for lack of funds. Very often, researchers or PVO's do not have the multi-year longevity necessary to introduce new crops and methods in traditional societies. Recommendations for Climate Change - Global climate change will rightly have a focus that extends beyond poverty alleviation and encompasses the whole social, economic and environmental context of a country and inter-related countries. It will be difficult if not impossible to weave both objectives together effectively in all cases so different streams of resources with different, but complementary, objectives will likely be required. - Environmental regulations can be complex and hard to understand. USAID should provide an expert able to visit projects and advise at the outset what special requirements affect a project (e.g. involving forestry, fishing, irrigation, or agricultural chemicals).
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	framework, accompanying strategies and explicit attention to these populations, many of whom can graduate to the level of the viable poor with appropriate support. Subsidized school feeding programs, possibly using local products such as milk, vegetables and high protein sauces to complement the nutritional value of grain, will be one aspect of addressing the long term issue of poverty. Conclusions on Gender, Health and Nutrition - Gender and Health are cross cutting themes that take a back seat to the agricultural components of most IEHA programs. But while there are social norms that may prevent women from taking the lead in some activities, in others such as women's groups involved in vegetable production and marketing have been commonly financed by IEHA programs. Women's cooperatives are often exceptionally good credit risks. Health programs might combine with government efforts and target pregnant and nursing mothers and young children with respect to health and nutrition. Food donations at clinics coupled with advice can be a way to effectively reach many mothers. - HIV/AIDS has a profound effect on the most vulnerable populations and IEHA's cross cutting themes of health and nutrition. IEHA did not directly address this issue and FTF does not have an HIV/AIDS component at the time of this writing, though there are major US programs to address AIDS under PEPFAR. The issue of appropriate nutrition for those with HIV or full blown AIDS could be a useful focus of future programs. CADAAP targets of the Vulnerable - FTF clearly will not profoundly address all problems of the poor. Adding nutrition programs is a diversion from production/marketing programs for agriculture but FTP could benefit from some of the village or producer structures in the production/marketing programs to also reach vulnerable women with education programs. - Women's groups are among the most reliable groups in credit programs and there are many that are joined in agricultural programs and handicraft programs. The West Africa Trade Hub has a number of programs with substantial participation by women. - Targeting pregnant women and children under five can be done in villages or it can be done through clinics, or radio programs. Giving a mother and child (past weaning age) a supplementary food could be helpful. - The FTF guide mentions micronutrients. Responders mentioned vitamin A in sweet potatoes and another program that has been used is vitamin A fortified cottonseed oil, required in West African production of cottonseed oil and subsidized by the Helen Keller Foundation and other PVO's. - USAID country missions may wish to invite PVO's who have been involved in health programs and clinics to an interactive session to brainstorm on how nutrition and sanitation programs can reach pregnant women and mother you newborns.	Recommendations for Private Sector and Linking to Vulnerable Populations - The agricultural development models of Land O'Lakes and Profit have successfully involved and they linked the private sector, rural communities, smallholders and vulnerable populations. In addition, the dairy model has built in sound complementary agricultural and nutrition elements to their program. These projects can and should be considered for replication and scale up under FTF. - The ASNAPP project in Lusaka and Livingstone area has been successful at building both production and market acumen as well as linking smallholders and vulnerable populations (including destitute handicapped and blind populations) to numerous buyers and lead farmers. Producer groups exhibited capacity to independently identify and assess market demand and specific buyers – a rare exception among many similar programs. Their design principles should be shared and emulated under FTF. - If it is not possible to focus on cash crops and food crops, then recommendations regarding appropriate crop husbandry and alternative food security crops should be given to farmers, or at least assistance in accessing this information through another organization. - It is important to complement both Multiyear Action Plans (MYAP) and commercial agricultural development programs with cross cutting support to the entire value chain in the agricultural sector. This can be achieved through strengthening the agricultural marketing systems. Markets need greater capacity to provide concrete solutions to smallholders who are often unable to access higher-priced bulk markets due to their small volumes and lack of market information. There needs to be a vehicle for the design of such a program, which would no doubt involve complementing current initiatives such as Ikuru in Mozambique with more far-reaching interventions at the policy level, institutions and investment, both public and private. This represents a major opportunity for USAID with its worldwide expertise in market strengthening and value adding to use its influence and resources (both through FTF and its agriculture program generally) to bring market strengthening in countries like Malawi which have a major food security policy bias into the mainstream of the country's policy agenda. The reinforcement of the market focus would aptly complement other CAADP-compliant initiatives in the areas of farmer organization, research, public spending on agriculture and rural infrastructure / including irrigation.
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	• There may be many innovative ideas, school children putting on plays to dramatize the issue of health and nutrition for presentation in villages, etc. Clinics and churches could play a major role in reaching the target audience. There could even be short sessions in agricultural training programs. • Mothers and fathers who realize that their children could have stunted growth or die if the pregnant mothers and their weaned children don't get a varied diet of locally available foods, may be willing to change their habits. • Information on boiling water for mixing with powdered milk or proper cooking of unpasteurized milk could also be useful. • There are many health hazards in food, including aflatoxin (which can cause liver cancer) in poorly stored peanuts and corn. WFP tests corn for aflatoxin but schools buying corn locally might not. • There are many opportunities for programs of food safety and nutrition. Exploration of the possibilities will involve brainstorming by knowledgeable people, perhaps including web based multicounty forum to discuss ideas and successes. • Once a program is developed, it can be implemented partly with the help of nurses and other health sector professionals likely to benefit in the long term from the increased awareness that they can continue to impart to those they serve.	Recommendations for Health/Nutrition 1. Review the HEALTH/NUTRITION component. Train volunteers (in association with the health staff in the area) to conduct monthly GMP, IEC, recuperation sessions for the <5. In addition, include and systematize joint visits and training with government extension agents. This is a capacity building and sustainability strategy. 2. Encourage crops diversification and a combination of agriculture with fishery and animals raising, e.g. farm fish ponds, or heifer-international type programs providing an animal to a poor family. 3. Educate mothers on using a mix of foods (such as cassava mixed with soybeans or cowpeas and green vegetables) to provide healthier nutrition for their children and provide mothers to be with information of the importance of having clean (or boiled) water for their children. 4. Revisit and strengthen the overall M&E system: within the NGOs, with the communities, the extension agent and the local authorities. 5. No food security programs, no initiative to end hunger or poverty can succeed if HIV/AIDS prevalence is overlooked. FTF should have a component. The main objective of which is to: - Educate on how to handle Mother to Child Transmission - Develop special educational programs for AIDS orphans, perhaps pay their boarding school fees and e.g. establish an apprenticeship program with an industrial company that will take (by competitive exam) the best and brightest HIV-free children as interns and help to guide school curricular to include types of training likely to increase job prospects for students when their schooling is complete. - Consider any special nutritional advice for AIDS victims. - Coordinate with AIDS programs (under PEPFAR and local health programs going beyond the nutrition focus of FTF but with implications for the productivity of the farming sector) to cooperate with targeted populations and advise them where they can get condoms and avoid risky sexual behavior or get treatment.
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VI. OVERARCHING CONCLUSIONS, KEY TAKEAWAYS & RECOMMENDATIONS

	Overarching Conclusions - Health and nutrition have been added as first level results in the FTF program – a change from IEHA, which focused mostly on improving farming productivity and linkages for sales in commercial markets, initially focusing on export markets and then shifting to more focus on staple foods for domestic and regional sale. Thus there are three types of beneficiaries: - Those with no resources who need free food, medical care, education and perhaps training in some modest income-generating activities. FTF covers nutrition, which is closely associated with some but not all medical issues. - Those in transition who need a helping hand - Farmers with well established markets that need help in making production and marketing more efficient and finding new markets at home or abroad. - Among farmers there is a big difference between the more prosperous small farmer that can produce a significant surplus for sale and extremely poor farmers, who do not currently produce a surplus for sale, or have been uprooted and are in refugee camps. The lower income tier of small farmers will need emergency help – food, medicine, schooling in the short term or while they are in refugee status. But in the longer term it is desirable to promote commercial farming, a private seed industry, and sustainable, cost competitive production and marketing. - So far, many of field personnel in Missions and in Implementing Partners do not feel they are involved in the CADAAP process. Of setting priorities and plans, though there was agreement that USAID programs under IEHA are consistent with the general objectives of CADAAP - Some responders felt that ReSAKSS topics for study/recommendations should be chosen in consultation with field personnel. - There have been some excellent successes in a wide range of programs involving famer production, giving poor people new sources of income such improving dairy collection systems, and a wide range of programs that made producers more aware of market opportunities, gave them seeds and information to help them expand their production and sales. - Some of the most successful programs in Uganda, Ghana and elsewhere, used value chain analysis – considering the market for products and all the different players – input suppliers, government researchers and extension agents, credit providers etc.	Overarching Recommendations for FTF - There are many opportunities for production and marketing activities by women's cooperatives and these should be one of several important targets in the program. - A variety of nutrition programs can be considered. The biggest challenge is how to target pregnant women and mothers of young children most effectively. This may vary by country and different targeted population groups within a country. USAID missions should arrange brainstorming sessions with other providers of health care programs through clinics or other programs to get ideas on how best to target and educate women and their families on the need for a varied diet (using locally available foods) and on sanitary practices relative to food. Other programs, such as vitamin A fortification of industrially prepared food products (e.g. vegetable oil) can be considered as well. PL 480 programs and implementing partners probably have many good ideas and methodologies. - The USG is committed to the Paris Agreement on Aid Effectiveness and the CADAAP process whereby national governments set development priorities and donors follow applying resources where there is mutual agreement of likely effectiveness. There should be interaction with relevant host country officials on USAID programs and discussion of possible synergies and actions needed by both sides. - At the proposal stage, there should be a strong effort to learn what other donor programs are doing with similar activities or targeting similar groups (also consistent with CADAAP commitments). USAID national missions should take the lead in pursuing these activities. Many missions and programs are already doing this and it should be a requirement for all programs to explore synergies. - The Regional West Africa Mission has done a good job of cooperating with businesses in the region to promote exports, though with some exceptions (cashews, shea nuts) this has not concentrated on unprocessed farm products. Regional work in East Africa has also been effective with respect to a number of products. USAID country offices would benefit from considering regional strategies and cooperating with their colleagues in the region, particularly of regional integration efforts and efforts to harmonize policies. The mechanism for this cross-country coordination needs to be explored by USAID, since it may not come naturally.
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• While the new IEHA results reporting system developed by Abt Associates is an improvement over previous systems, there was concern that the required reporting indicators were too numerous and variable among programs, so that sometimes midway through a program IP's had to get new types of data through their local partners. There is also concern that the focus on numbers trained etc might not present a full picture of challenges and successes that should be used to evaluate programs. • Some of the data on incomes and commerce are quite difficult to get and not fully reliable, particularly for domestically sold commodities. • Among the most important considerations in planning and in evaluation of programs is sustainability. That requires buy in and real contributions from participants. Prospects for sustainability should receive adequate attention at the outset of project planning, in midterm reviews and adjustments and in final evaluation of success of projects. • Another important aspect consistent with the 2005 Paris Declaration on Aid Effectiveness is complementary with other programs of the United States, the host country and other donors. IP's should be expected to cooperate with other programs where appropriate and to know what programs with similar goals or the same target audience are doing. Their effectiveness should be rated in part on the degree to which useful cooperation with other groups is promoted and implemented. Key Takeaways from IEHA 1. There is substantial opportunity to improve production and marketing of agricultural products and incomes of small holders through a wide range of products. 2. Sometimes changing rules, practices, regulations and laws is necessary and this can be accomplished, particularly with industry support and receptive government authorities – but it is difficult and time consuming; 3. Projects of 3 to 5 years must undertake activities that will have results within that time frame. Inclusion of some long term policy programs may not be possible under FTF. 4. USAID has substantial expertise pertinent to helping small farmers improve their production and marketing. 5. It does not have strong expertise in promoting African exports but can work effectively with private sector players who have or can develop the requisite contacts and export abilities. 6. Coordination is common but can be improved. Following the Paris Agreement on Aid Effectiveness the USG is committed the process of national government plans leading donor activities and there is a strong need for coordination among donors as well. This coordination should be built into project planning and evaluation.	6. Basic indicators required by all projects should be reduced in number (to about 10) and standardized to avoid changes in reporting requirements in mid project. A supplementing reporting system should permit narratives as well a numbers and permit evaluation of the challenges and successes experienced in implementing projects. 7. Sustainability of development programs should be a key element of program proposals, mid project review and final evaluation. In many cases buy in and resources from national governments and/or local private organizations will be essential to success and sustainability. USAID should be prepared to reduce funding in cases where that planned buy-in is not realized.
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APPENDIX E: BACKGROUND ON IEHA

IEHA APPROACH

The predecessor to Global Hunger and Food Security Initiative/Feed the Future (GHFSI/FTF), the US Presidential Initiative to End Hunger in Africa (IEHA) began as the vehicle through which the US would meet its commitment to the Millennium Development Goal of halving poverty and hunger in Africa by 2015. To this end, IEHA's strategic objective over the period of 2002-2009 was to:

... rapidly increase agricultural growth and rural incomes in Sub-Saharan Africa (SSA) to reduce both poverty and hunger by harnessing the power of new agricultural production and processing technologies; improving the efficiency of agricultural trade and market systems; building the capacity of communities and producer-based organizations and integrating vulnerable groups and countries into the development process. The strategic objective of increasing incomes is based on the knowledge that doing so will expand economic growth, reduce poverty, and eliminate hunger.

The IEAH results framework is as follows: IEHA intermediate results included:

1. enhanced agricultural productivity,
2. improved policy and institutional environment, and
3. Increased agricultural trade.

With expected impacts in four main areas:

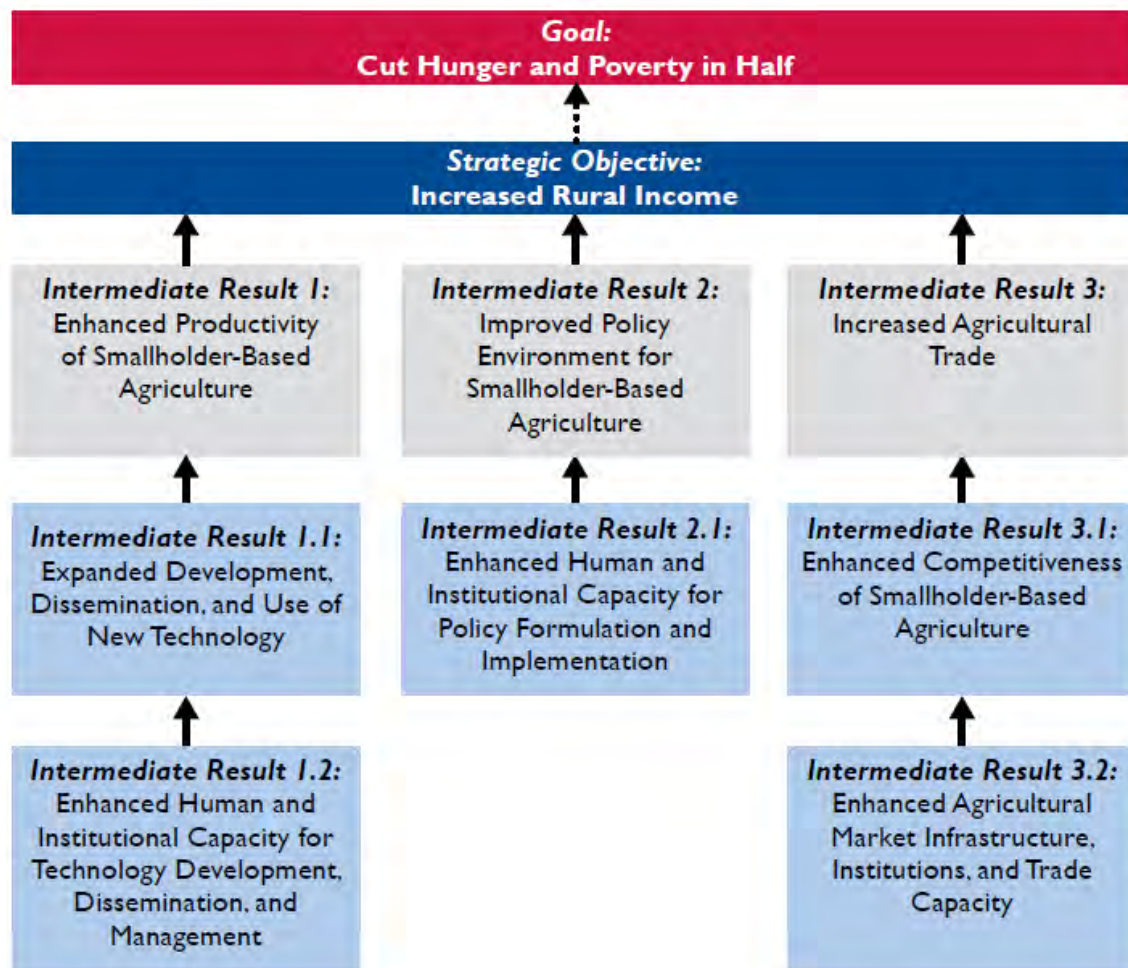
4. increasing agricultural productivity and production,
5. strengthening value-chains to increase trade in agricultural products, including regional trade in staples,
6. promoting sound market principles, and
7. Assisting the vulnerable and accelerating the participation of the very poor in rural growth.

The ultimate expected impact achieved through these results is increased rural incomes and a reduction in poverty and hunger in Africa (see Annex I for IEHA framework)

In a bi-lateral approach, each mission was given the latitude to develop its own results framework based on the circumstances in that country or region. Bi-lateral missions were selected based on hunger and food security issues specific to those countries. For instance, 'focus countries' such as Ghana, Mali, Kenya, Uganda, Mozambique and Zambia, received IEHA support for agricultural development, whereas IEHA support to newly incorporated 'food security countries', such as Malawi in 2007, centered heavily on reversing food insecurity.

IEHA also took a regional and sub-regional approach in its work to address hunger and food security. Regional USAID missions in each of the three sub-regions (East, Southern and West Africa) were the central points of sub-regional, cross-border famine-reduction and trade promotion. IEHA funding also supported continent-wide initiatives, such as the African Union/NEPAD Comprehensive African Agricultural Development Program (CAADP). CAADP was used as a platform from which IEHA could leverage partnerships with African private and government institutions

IEHA RESULTS FRAMEWORK



IEHA BUDGET ALLOCATIONS

FAF CATEGORIES	TOTAL LIFE OF ACTIVITY OBLIGATED, YEARS 2004-2010 (IN USD) – EAST AFRICA					
	EAST AFRICA		KENYA		UGANDA	
	Amount	% of total	amount	% of total	amount	% of total
Total (All Categories)	69,171,719.00	15%	36,125,000.00	8%	40,393,931.00	9%
4.5.1 Agricultural Enabling Environment	15,718,710.00	19%	6,150,000.00	8%	0.00	0%
4.5.1.1 Agricultural Resource Policy	0.00	0%	3,550,000.00	11%	0.00	0%
4.5.1.2 Food Policy	0.00	0%	950,000.00	12%	0.00	0%
4.5.1.3 Agricultural Market Standards & Regulations	10,337,779.00	42%	1,100,000.00	4%	0.00	0%
4.5.1.4 Public Investment Policy	5,380,931.00	36%	550,000.00	4%	0.00	0%
4.5.2 Agricultural Sector Productivity	53,453,009.00	14%	29,975,000.00	8%	40,393,931.00	11%
4.5.2.1 Research & Technology Dissemination	7,192,863.00	9%	8,580,000.00	10%	7,465,000.00	9%
4.5.2.2 Land & Water Management	1,616,578.00	9%	1,900,000.00	11%	3,725,000.00	21%
4.5.2.3 Rural & Agricultural Finance	0.00	0%	200,000.00	1%	2,010,324.00	14%
4.5.2.4 Agribusiness & Producer Organizations	17,591,054.00	18%	11,175,000.00	12%	6,785,324.00	7%
4.5.2.5 Markets & Trade Capacity	26,554,004.00	26%	7,620,000.00	8%	6,054,352.00	6%
4.5.2.6 Emerging Agricultural Threats	50,000.00	5%	0.00	0%	0.00	0%
4.5.2.7 Agricultural Safety Nets & Livelihood Services	448,510.00	1%	500,000.00	1%	14,353,931.00	26%

FAF Categories	TOTAL Life of Activity Obligated, years 2004-2010 (in USD) – West Africa					
	West Africa		Ghana		Mali	
	Amount	% of total	amount	% of total	amount	% of total
Total (All Categories)	64,953,657.00	14%	73,597,851.38	16%	24,165,000.00	5%
4.5.1 Agricultural Enabling Environment	13,300,000.00	16%	25,523,191.00	31%	4,325,000.00	5%
4.5.1.1 Agricultural Resource Policy	2,410,000.00	7%	17,374,314.00	52%	1,575,000.00	5%
4.5.1.2 Food Policy	1,400,000.00	17%	4,027,218.00	49%	550,000.00	7%
4.5.1.3 Agricultural Market Standards & Regulations	6,962,500.00	28%	587,600.00	2%	1,650,000.00	7%
4.5.1.4 Public Investment Policy	2,527,500.00	17%	3,534,059.00	24%	550,000.00	4%
4.5.2 Agricultural Sector Productivity	51,653,657.00	14%	48,074,660.38	13%	19,840,000.00	5%
4.5.2.1 Research & Technology Dissemination	6,472,375.00	8%	5,820,950.34	7%	9,375,000.00	11%
4.5.2.2 Land & Water Management	950,000.00	5%	3,777,742.00	21%	1,595,000.00	9%
4.5.2.3 Rural & Agricultural Finance	3,550,000.00	26%	1,217,169.00	9%	720,000.00	5%
4.5.2.4 Agribusiness & Producer Organizations	21,044,282.00	22%	9,693,246.00	10%	4,145,000.00	4%
4.5.2.5 Markets & Trade Capacity	18,062,000.00	18%	11,499,691.66	11%	2,725,000.00	3%
4.5.2.6 Emerging Agricultural Threats	700,000.00	68%	0.00	0%	180,000.00	17%
4.5.2.7 Agricultural Safety Nets & Livelihood Services	875,000.00	2%	16,065,861.38	29%	1,100,000.00	2%

FAF Categories	TOTAL Life of Activity Obligated, years 2004-2010 (in USD) – Southern Africa							
	Southern Africa		Malawi		Mozambique		Zambia	
	amount	% of total	amount	% of total	amount	% of total	amount	% of total
Total (All Categories)	33,218,589.00	7%	24,174,238.00	5%	46,776,612.00	10%	38,217,329.00	8%
4.5.1 Agricultural Enabling Environment	8,739,241.00	11%	2,000,000.00	2%	2,750,000.00	3%	2,939,412.00	4%
4.5.1.1 Agricultural Resource Policy	4,335,688.00	13%	0.00	0%	2,750,000.00	8%	1,571,610.00	5%
4.5.1.2 Food Policy	600,000.00	7%	0.00	0%	0.00	0%	623,196.00	8%
4.5.1.3 Agricultural Market Standards & Regulations	3,803,553.00	15%	0.00	0%	0.00	0%	359,803.00	1%
4.5.1.4 Public Investment Policy	0.00	0%	2,000,000.00	13%	0.00	0%	384,803.00	3%
4.5.2 Agricultural Sector Productivity	24,479,348.00	7%	22,174,238.00	6%	44,026,612.00	12%	35,277,917.00	10%
4.5.2.1 Research & Technology Dissemination	14,283,168.00	17%	0.00	0%	17,185,806.00	21%	7,325,812.00	9%
4.5.2.2 Land & Water Management	950,000.00	5%	3,240,000.00	18%	0.00	0%	150,000.00	1%
4.5.2.3 Rural & Agricultural Finance	0.00	0%	4,389,080.00	32%	0.00	0%	1,820,000.00	13%
4.5.2.4 Agribusiness & Producer Organizations	3,880,280.00	4%	5,385,158.00	6%	12,287,206.00	13%	4,556,125.00	5%
4.5.2.5 Markets & Trade Capacity	5,015,900.00	5%	4,300,000.00	4%	14,553,600.00	14%	4,592,623.00	5%
4.5.2.6 Emerging Agricultural Threats	0.00	0%	0.00	0%	0.00	0%	100,000.00	10%
4.5.2.7 Agricultural Safety Nets & Livelihood Services	350,000.00	1%	4,860,000.00	9%	0.00	0%	16,733,357.00	30%

IEHA IMPLEMENTING PARTNERS

GHANA	KENYA	MALAWI	MALI	MOZAMB.	UGANDA	ZAMBIA	E. AFRICA	S. AFRICA	W. AFRICA
ACDI/VOCA	ACDI/VOCA	CARANA Corporation	Abt Associates	Abt Associates	ACDI/VOCA	Action Against Hunger International (ACF)	Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)	International Agriculture Organization for Sustainable Agribusiness (ASNAPP/ Southern Africa)	Abt Associates
CARE International	Adventist Development Relief Agency (ADRA)	Chemonics International	Academy for Educational Development (AED)	Adventist Development and Relief Agency (ADRA)	ARD, Inc.	International Potato Center (CIP)	Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA/East Africa)	Chemonics International	Comité Inter-Etats pour la Lutte contre la Sécheresse au Sahel (CILSS)
Chemonics International	Agriculture Sector Coordination Unit (ASCU – Gov't of Kenya)	Catholic Relief Services (CRS)	Chemonics International	Africare, Inc.	Auburn University	Cooperative League of the United States of America (CLUSA)	CARE	Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN)	Club du Sahel
COWI A/S	CNFA	CUMO Microfinance Limited	Cooperative League of the United States of America (CLUSA)	ARD, Inc.	Catholic Relief Services (CRS)	Cornell University	Land 'O Lakes	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT/ Southern Africa)	Conference of African and French Leaders of Agricultural Research Institutes (CORAF)
International Food Policy Research Institute (IFPRI)	CARE International	Development Alternatives International (DAI)	Colorado State University	International Potato Center (CIP)	Chemonics International	Heifer Project International (HPI)	Michigan State University	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT/ West Africa)	Cornell University
Millennium Challenge Corporation (MCC)	CNFA	Friends of Aids Support	Cornell University	Cooperative League of the United States of America (CLUSA)	Cornell University	International Food Policy Research Institute (IFPRI)	Save the Children	International Center for Soil Fertilization and Agricultural Development Center (IDFC)	EDE-Consulting
Opportunities Industrialization Centers International (OICI)	Development Alternatives International (DAI)	Heifer International	Government of Mali	CARE	International Heifer Project	International Food Policy Research Institute (IFPRI)	Chemonics International	International Institute for Tropical Agriculture (IITA)	World Agroforestry Center (ICRAF)
TechnoServe	Emerging Markets Group (EMG)	International Food Policy Research Institute (IFPRI)	International Crops Research Institute for the Semi-arid Tropics (ICRISAT)	Food for the Hungry, Inc. (FHI)	International Food Policy Research Institute (IFPRI)	Mercy Corps	Common Market for Eastern and Southern Africa (COMESA/E. Africa)	Louisiana State University	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT/ West Africa)
University of Rhode Island	Famine Early Warning System Network (FEWS NET)	Institute for Tropical Agriculture (IITA)	Institut du Sahel (INSAH)	International Crops Research Institute for the Semi-arid Tropics (ICRISAT)	Mercy Corps	Save the Children	Catholic Relief Services (CRS/East Africa)	Rutgers University	International Center for Soil Fertilization and Agricultural Development Center (IDFC)
United States Department of Agriculture (USDA)	Food for the Hungry, Inc (FHI)	Land O'Lakes	Ministry of Ag/IER	International Center for Soil Fertilization and Agricultural Development Center (IDFC)	World Vision	World Vision	International Livestock Research Institute (ILRI/ ReSAKSS)	University of Florida	International Institute for Tropical Agriculture (IITA)
	Fintrac	National Smallholders Farmers' Association of Malawi (NASFAM)	Michigan State University	International Institute for Tropical Agriculture (IITA)			Tufts University, Food Economy Group	Penn State University	Kraft, Inc.
	International Food Policy Research Institute (IFPRI)	Positive Community Impact, Malawi (PCI)	Near East Foundation	International Rice Research Institute				University of Nebraska	Michigan State University
	Kenya Agricultural Research Institute (KARI)	Total Land Care	Oregon State University	Michigan State University (MSU)				US Geological Survey (USGS)	University of Florida
	University of Nairobi	Washington State University (WSU)	Peace Corps	Opportunity International				West Africa Rice Development Association (WARDA)	Penn State University
	World Food Programme (WFP)		Purdue University	Save the Children					University of Nebraska
			Texas A&M Univ.	Technoserve					US Geological Survey (USGS)
			Trickle Up	The Africa America Institute					West Africa Rice Development Association (WARDA)
			University of California-Davis	World Bank					
			University of Nebraska-Lincoln						
			Virginia Tech						
			Winrock International						

APPENDIX F: RESULTS REPORTING PROGRESS SINCE MID-TERM EVALUATION OF IEHA

Table F.1 presents a summary of the IEHA midterm evaluation team's observations and suggestions on results reporting along with a comment on the current status. The progress has been limited in most areas.

TABLE F.1 INCORPORATION OF MIDTERM EVALUATION SUGGESTIONS	
MIDTERM EVALUATION OBSERVATIONS AND SUGGESTIONS	CURRENT STATUS
IEHA has no tool for standardized collection of data to monitor changes in levels of hunger. To date, there has not been any reporting on IEHA's impact on hunger and poverty, although IFPRI has worked on modeling various scenarios and possible results on poverty and hunger rates.	No hunger indicator defined to date. There is no explicit consistent definition of hunger. CAADP Pillar III hunger focus is "... on the chronically food insecure, and on populations vulnerable to and affected by various crises and emergencies..."
While a few IEHA countries have invested in developing models to monitor household income changes, there is no standardized methodology across the IEHA countries.	No standard income indicator to date
Common Indicators are useful in enabling USAID to "add across" all IEHA programs to report on continent-wide results. However, not all of these are in fact "addable."	Informants noted considerable improvements in the system, but there are still inconsistencies and problems summing or rolling up, especially at the regional level. For some indicators, attribution is an additional challenge (e.g., trade volumes and values)
There are weak M&E capacity and poor quality systems in most missions. There is little standardization among implementing partners on data collection and methodologies for analyzing the data.	The system is more standardized. Inconsistencies remain, but considerable progress in systemization has been made over the life of IEHA
IEHA needs to improve M&E to show important impact results to sophisticated audiences. This will help build alliances and Sector Wide Approaches with donors and host country governments. IFPRI's work on modeling for poverty and income tracking needs to be finalized.	IFPRI conducted modeling exercises and reports are available. However, no standard M&E methods for measuring income have evolved. A number of projects now use gross margins, but it is variably defined and some disagreement as to whether all programs could and should use this measure.
USAID should develop a uniform system for monitoring changes in rural incomes, similar to those used in Kenya and Mozambique. Additional resources (funding and technical assistance) need to be provided to IEHA missions to put this system in place.	Was not implemented. Gross margins suggested as an alternative. Missions and implementing partners have expressed that resources for M&E are too limited.
USAID/Washington should consider making assistance available to missions to upgrade their M&E methodologies, quality and consistency of baselines, data collection and analysis, and the use of PIVA. Missions need to complete their monitoring plans, including setting annual targets for all indicators, timely information gathering, and timely and quality reporting	Missions are setting annual targets. They received technical assistance to upgrade their M&E systems and implementing partners received training.
Where Title II is considered a partner or contributor to IEHA objectives, be they income or nutrition, they should be required to use the common indicators appropriate for the activities.	Currently Title II incorporated common indicators and uses the internet reporting system
Improve M&E in order to measure and report on IEHA's larger, higher impacts. This will require additional work on models and additional resources to the field to establish a standardized system to measure rural incomes.	No standardized system of measuring rural incomes has been developed EA mission has commissioned an on-going work to review available data on trade and propose a method for measuring regional trade.

APPENDIX G: ADDITIONAL FINDINGS ON IEHA PROJECTS

The following Appendix includes additional details and information on IEHA-funded programs that the evaluation team visited in the field. Due to page constraints, these details could not be included in the main text of the report, but should serve to provide further findings and evidence for the conclusions and recommendations in the evaluation report. Findings in this Appendix are organized by IEHA topic area.

PRODUCER GROUPS

In some instances, the returns to joining organizations can be so great as to act as an **incentive for youth and other would-be migrants to stay within the village**. The Korenza Irrigated Rice Project (PIVA) in Mali turned the tide of migration. Before the project in 2005, it was common for young people to leave the country in search of other work elsewhere. But now with the rice project in place, not only do youths not leave in large numbers, but some youth who left are coming back. Farmers can send kids to school (the number of kids going to school has tripled); buy clothes; pay for health; primary school enrolment has doubled; sales from the local pharmacy have increased; people starting businesses e.g. fattening of livestock; renting out of equipment to other farmers; (spinoff businesses). Men working for PIVA find it easier to attract brides for marriage.

The Labkaiyet Farmer Group in Keiyo District of Rift Valley Province provides a good example of how producer groups provide benefits to smallholders. The Group was formed in February 2006 by 25 farmers whose vision was *to “eradicate poverty and achieve economic empowerment of both men and women through the production of horticultural crops”*. Some of the main challenges the group faced included i) lack of technical knowhow on production and marketing strategies for various horticultural crops ii) lack of organized market linkages and iii) finding time for both home and group activities.

The group applied to KHDP for technical assistance in March 2006 and has been able to **raise their farming activities to a commercial level** in less than a year. To supplement existing maize and beans production, KHDP manager Geoffrey Nyamota assisted the group to establish a demonstration plot on one of the members' farms where all the group members could share the cultivation costs and receive practical training on the growing of passion fruits. Since then the group has made impressive progress with its objectives. Average incomes have increased from \$833 (KSh. 62,475) in 2005 to a projected \$9,000 (KSh. 675,000) for 2006, mainly from the sales of passion fruits. For example, in September 2006, the group members sold a total of 24 tons of passion fruit valued at \$7,048 (KSh. 528,600). Additionally, the group has established a passion fruit nursery to supply members with planting material with the surplus sold to outside growers for extra income.

Producer Organizations have also **contributed to leveraging of additional investment** in the agricultural sector. KACOFA lobbied to have the Centenary Bank in Uganda open a new branch at Kapchorua. Previously farmers had to go to the branch at Mbale 65 km away to the southwest. The loan portfolio of the new branch is currently about Ug Sh.5 billion and out of this, 40% is by KACOFA members. The improved access to financial services may be part of the reason for the rapid increase in the membership. KACOFA and similar producer organizations are leading a transformation of farming from subsistence to semi-commercial.

Producer organizations have also been a means of **organizing farmers into legal entities** that can undertake serious business on their own behalf. One clear advantage conferred by this process is recovery of

loans. Organized marketing of produce through producer organizations makes recovery of loans to farmers easier, e.g., in the case of KACOFA, recovery of loans from Centenary Bank to barley farmers is made easier by KACOFA making deductions from proceeds paid by Uganda Breweries. Improved access to capital enhances the ability to adopt technology. In the dairy sector, for example it is easier for organized groups to access funds for purchasing milk-cooling tanks (Land O Lakes, Kenya Dairy Sector Competitiveness Program). The Choma District Dairy Cooperative Union (CDDCU) in southern Zambia was able to obtain a \$62,600 loan from the bank to expand its milking activity (site visit).

The Dairy Federations in Kenya have demonstrated that **farmers can obtain higher prices when they negotiate as a group** and are able to make bulk supplies. Likewise KACOFA in Uganda has been able to negotiate higher maize prices for good quality maize. Thus with APEP training, maize prices increased from about Ug Sh.140 per kg (low quality maize before APEP) to Ug Sh.270 per kg (high quality maize).

Some producer organizations have managed to build significantly large memberships, essential for achieving economies of scale. In Uganda, KACOFA, the outstanding example, has more than 6,000 members while in Kenya, the Dairy Federations each have more than 1,000 members; and Kesses Farmers Marketing Federation has more than 4,000 members. These large organizations benefit from professional management at the top while retaining democratic control through their smaller groups that make up the associations or federations.

Producer organizations have been able to successfully lobby government for policy change. For example, the Cereal Growers Association (CGA) in Kenya resisted government attempts to allow wheat into the country imports when this would have negatively impacted on domestic wheat growers.

Because participation in producers is lucrative and farmers are seeing many benefits, it's possible to meet groups still working well after development assistance ceased.

Challenges Related to Producer Organizations: One notable problem with producer organizations is that farmers are sometimes brought into a scheme that has not had adequate feasibility analysis. There were times when farmers were encouraged to grow crops that seemed to promise very high market prices, which turned out to be short-lived. Vanilla farmers in Uganda in the last decade went through one such phenomenon that came about when vanilla crop in the major world producing country, Madagascar, was hit by a tropical cyclone in April 2000³. Coffee farmers went through a similar cycle following major coffee problems in Brazil. Inadequate feasibility analysis occurs especially in relation to returns to labour. Thus, for example, during the introduction of some greenhouses in Kenya, gross margin analysis ignored important costs related to accessing water such as water pumping charges and/or labor costs for fetching water from the source.

Creating and maintaining an active and effective producer is hard work and takes time and good leadership. Several implementing partner key informants noted that there is too much push to create more and more groups and not enough appreciation for the need to build sustainable capacity. While there are plenty of effective producer groups in Mozambique, the numbers are quite large and many are just not active or effective.

3 The cyclone, political instability, and poor weather in 2003 drove vanilla prices to an astonishing US\$500 per kilogram in 2004, bringing new countries into the vanilla industry. Thereafter, a better crop, coupled with decreased demand caused by the production of imitation vanilla pushed the market price down to \$40 per kilogram and below from mid-2005.

Insufficient and poor quality storage is a critical limitation to bulking, quality enhancement and capturing higher prices. Storage constraints were reported in all countries and also from those key informants who are further along the value chain.

Rapid growth in membership means that the number of beneficiaries grows too fast putting increased demands on administrative time and straining capacity for service delivery. To illustrate, KACOFA membership increased from 27 in 1999 to 100, then to 3,200 in 2005 and currently (in 2011) the membership is 6,328. Related to the growth in numbers is the challenge of empowering these large groups of farmers with skills and knowledge. Meeting and maintaining product quality standards (e.g. in maize) demands strong capacity building of individual producers and their groups supported by inspections enforced by the producer organization and the buyer. It is a big challenge organizing such capacity building without adequate resources. Thus, growth in numbers as an indicator may not tell the whole story.

Producer organizations with limited technical, managerial or financial resources may find it difficult or impossible to manage or coordinate with other stakeholders. Many USAID programs build on linkages and leverage resources. Under these circumstances, the number of partners and stakeholders can be quite large.

In terms of sustaining creditworthiness of a producer group, a challenge is posed by defaulters especially where the group guarantee approach is applied. In this case, group solidarity can be negatively affected.

Sometimes when a group is successful, politicians get interested and intervene. Likewise, many women's groups complain that men tend to take over successful groups to the detriment of women.

In Mozambique people think of production first and markets second (wrong priority). Examples from Ghana, Uganda and elsewhere indicate that market access is often tied to the project, with farmer organizations too dependent on project facilitators. Once the project closes, the market disappears.

Handouts by some projects operating in a given area can negatively affect other projects working towards sustainability in the same area. The implementation of Land O'Lakes and the Kenya Dairy Sector Competitiveness Program suffer from giving way projects in their area.

2. Conclusions and Lessons Learned

- Organizations with larger membership (economies of scale) have better opportunities for leverage in the market place as exemplified by the following organizations: (i) in the case of maize and barley by Kapchorua Commercial Farmers Association (KACOFA), Uganda with a membership of 6,328; and (ii) in the case of milk by dairy federations in Kenya with more than 1,000 members (supported by Kenya Dairy Development Program/Dairy Sector Competitiveness Program). KACOFA has forward contracts for barley with Uganda Breweries and supplies maize to WFP under the Purchase for Progress (P4P) program. Dairy federations in Kenya have been able to negotiate prices with milk processors for bulk deliveries that are as high as KSh.4 more per liter. (Source: Interviews with KACOFA; Land O Lakes).
- In the absence of strong and well-organized farmers groups, there is a likelihood of market distortion by big buyers of farmers' produce e.g. large processors in the case of milk (Land O Lakes, Kenya Dairy Sector Competitiveness Program).
- Marketing is still a challenge for producer organizations. Some of the larger organizations engage the services of qualified professionals in marketing. Lack of market negatively affects the receptivity of farmers to training because they do not see the value in the effort, and their adoption of new technologies and practices (Land O Lakes, Kenya Dairy Sector Competitiveness Program).

- Experience to date suggests that there is need for strong corporate linkages between producer organizations and major agribusinesses or commodity buyers.
- The quality of management of a producer organization is critical for it to operate as a successful business entity. Therefore there is a need to put emphasis on business management skills for the senior personnel of producer organizations. Without sufficient capacity building, exceptional management (such as KACOFA's) may not be easy to replicate.
- An important success factor is the awareness of group members about why they should form groups to realize benefits. In Mali, groups (cooperatives) are now aware of why they came together and thus support their groups. It is not enough to merely form groups. Members should need appropriate capacity building.

CREDIT AND RISK CASE STUDIES

Because of extended family traditions and obligations, most farmers seeking to plant high yielding crops cannot save cash and must get credit for fertilizer and/or pesticide, essential to some of the high yielding seeds. There are plenty of farming methods that are well known and can greatly increase farm yields, such as fertilizer for corn, or pesticide for cowpeas. The seeds alone usually won't be sufficient. Generally farmers have trouble getting credit because there are problems of repayment. When credit is available, it is common to have solidarity groups, where all are responsible for a default by one. Micro-credit is sometimes used for seeds and fertilizer, but the interest rates are usually two to three times normal commercial rates because of high administrative cost and risk.

RISK OF CASH CROPPING: In traditional systems, farmers often planted a mix of low yielding crops that didn't require the farmer to purchase fertilizer or pesticide and were somewhat resistant to local pests, and intercropping reduced the spread of pests. They saved seed for the next season. Their traditional sorghum (unlike high yielding varieties) might have high stalks that they could use to make baskets, roofs or to feed their animals in the dry season. While some crops might fail in a bad year, others would produce and the family could survive at some level. It would be risky to switch completely to a cash crop. For instance, in Mali, farmers are advised to devote no more than a third of their planted area to cotton, using the rest for a food crop that might be eaten or sold. Families in some areas produce grain, dry it, and store it in mud silos for up to a year, when the new harvest comes in. In other areas they may have a mix of alternative crops year round or root crops such as cassava that can be harvested as needed over a period of months. Owning animals (cows, sheep, and goats) can also provide some extra income or be sold to generate income and provide food security in a bad year. The poorest farmers usually can't take the risk to grow cash crops, but crop farmers with substantial food production can take the risk of buying fertilizer and investing in a cash crop that they hope to sell in the market. If it is a cash crop that they can eat and/or store, such as corn, the risk is somewhat less.

It is sometimes a challenge to get high yielding seeds to farmers. The ideal situation is the case of the brewer in Uganda who wants farmers to grow a special variety of barley for beer production. The crop has a value to the brewer higher than the farmers would get for the product on the open market, so they will sell to him and he can recoup his loans to them. He can make an agreement with farmers, give them seed and fertilizer on credit, have the product picked up from their villages and pay them, deducting the cost of the inputs (they may divert some of the fertilizer to their corn or vegetables).

A guaranteed market by a supportive buyer is the ideal situation. In the free market, there is sometimes a problem of fraud, common in countries such as Uganda and Mali – where ordinary seeds will be dyed to look like treated high value seeds and where agrichemicals can sometimes be falsified. A number of countries have active private seed and agrichemical distribution networks. For instance in Ghana a large and reputable private company, Yara, has outlets throughout the country and good links to private suppliers of seeds and fertilizers in Europe. They also sell locally produced seeds. Private control of branded products may eventually reduce the incidence of fraud and give farmers the confidence to buy high yielding seeds and the agrichemicals needed to make them effective.

The ideal long term, sustainable system should be development of a private network of seed and agribusiness dealers, selling chemicals and sprayers. A reliable private supply system can also facilitate other programs, possibly even credit. When Ghana decided to issue subsidized fertilizer vouchers through extension agents to small farmers, they were redeemable at private input supply company outlets, which then returned them to central authorities for payment a clumsy system, but illustrative of the value of a network of private supply companies. Private companies also can provide storage and often get credit for building infrastructure and buying vehicles at interest rates much lower than villages can obtain. Rice farmers in Mali use small rice decortication machinery in the villages and many business people or cooperative may need credit for storage or for processing equipment. With respect to fertilizer and seed, getting farmers to save to buy the next season's inputs might be the best solution, but it would require a difficult cultural change.

Usually in marketing system, there is an issue of quality control and also of credit. A large buyer, whether it be a dairy cooperative or a private business, can create a sustainable market. If there is only one buyer for northern Ugandan corn sellers (where corn is not a popular food), storing their dried products for sale to the World Food Program, it is not certain they will make a sale. WFP purchases through a tendering system and they compete against larger private sellers. It would be desirable for them to be able to easily shift their well dried and high quality corn across the border to sell to industrial users in neighboring Kenya if they fail to sell to WFP. While the farmer's corn, mixed with the corn of other farmers for ease of fumigation, is waiting for sale, he can perhaps take out a loan with the corn as collateral. If his corn doesn't sell, he is in trouble.

In sum, cash crops and the credit needed to finance them can be complex and risky. Farming has risks all over the world. But credit is often essential and USAID has many examples of successfully raising farmers' incomes by providing credit for agricultural and non-agricultural products.

CREDIT CASE STUDIES: In the dairy sector in southern Zambia, the Choma District Dairy Cooperative Union (CDDCU) was able to obtain a \$62,600 loan from a cooperating bank for modernization of the Milking Collection Center. The loan represented 75% of the renovation costs. Some individual farmers were also able to get a loan from the financial institution on the same basis. The individual daily production by the farmers is recorded when s/he brings the milk at the collection center. The private milk processor makes the payment on a monthly basis through the bank. The money is transferred into the account of the milk producers association with a list of the names of the members. The frequency and reliability of the transactions establish a relationship with the bank, the individual farmers and the associations and is an example of a good practice.

In Malawi, the Deepening the Microfinance Sector (DMS) project funded by USAID combined a traditional financial sector lens approach to industry development with a value chain approach that identified and supported financing opportunities in several key agricultural market segments. When the project began in 2004, the sector supported about \$15 million in microloans. DMS facilitated a revision of the government

policy, under which it has agreed to facilitate the sector's growth and refrain from providing direct microfinance services and DMS led a collaborative effort among donors and the microfinance sector to assist the government in drafting a Microfinance Bill and Financial Cooperative Bill, expected to be passed in late 2009. These laws will allow certain categories of licensed MFIs to mobilize deposits. In terms of Lesson Learned, the project point to the usefulness of a holistic, capacity building approach that covers all key players — investors, regulators, financiers, and technical service providers.

The IEHA West Africa evaluation team met with the Femmes de Loutana, a cooperative of women rice farmers. Two rice storage facilities (one supported by USAID/Mali) have enough storage capacity for 90 tons and allow the group to wait for better prices as well as borrow for inputs from Banque Nationale de Développement Agricole (BNDA) the national bank of agricultural credit. Membership has increased from 145 members in 2006 to currently 456 members. Initiatives Integrees pour la Croissance Economique au Mali (IICEM) the follow on project to TradeMali continues support of storage and funded six warehouses in the Sikasso region exclusively for the rice producing cooperative mentored by the IICEM project as they had reached their storage limit after increasing yields. These warehouses assist them in increasing the selling price of rice and in turn lead to increased incomes.

Another IICEM supported Malian intensive rice cultivation project in Korientze involves three cooperating farmer based organizations and has been highly successful in re-stimulating the local community through rice production. However, due to poor storage (not protected against weather or rodents) the rice must be sold immediately after harvesting regardless of price to repay loans and provide households with basic income. The farmers understand the advantage of storage and its link to higher prices and would like to build new storage units when cash becomes available.

CERTIFICATION FOR FARM BASED ORGANIZATIONS

The Trade and Investment Program for a Competitive Export Economy (TIPCEE) Project set up partnerships with the Ghana Ministry of Food and Agriculture, GTZ, the trade association Sea Freight Pineapple Exporters of Ghana (SPEG) and with Global Gap, the certification organization, to develop an option for certifying groups of small holder farmers. This became Option 2 and a total of 34 FBOs were Global Gap certified by the end of the TIPCEE project. The legacy of TIPCEE support is that today pineapple is the most sophisticated and state of the art value chain in Ghana and is used by the Ministry of Food and Agriculture's as its Export Markets Quality Awareness Program platform for establishing quality and inspection standards for mango, papaya and vegetables international exports and intra-regional trade.

In Kenya, exporters under their association Fresh Produce Exporters Association of Kenya (FPEAK), the Horticultural Crops Development Authority (HCDA), the Government of Kenya, producers and other players and industry stakeholders together established certification and addressed all aspects of the process. Projects such as Kenya Horticultural Development Project (USAID funded) were also critical. Training of extension workers and farmers in Good Agricultural Practices was essential. Development of local standards (KenyaGAP, officially launched in May 2010) and its adoption by growers was a favorable result. (Source: Joseph Kariuki, IEHA field observations, February 2011).

TradeMali in collaboration with the Center for Promotion of Imports from Developing Countries (CBI) assisted six exporter groups with EuropeGAP certification during the last year of the project. Total mangos exported with TradeMali assistance reached a record 5,492 tons during the fourth year, a 42 percent increase over the results achieved the previous year, resulting in an overall total of 14,955 tons of mangos sold in sub-regional and international market during the life of the project.

RESEARCH PROGRAMS

New plant varieties, new agrichemicals as old pests develop resistance or new ones appear, and new methods to sustain soil fertility, have two or three crops in a year instead of one can be crucial to agricultural development. Under CGIAR international crops centers, there are a number of specialized regional research centers in Africa, specializing in crops (such as IITA – tropical agricultural, ICRISAT, semi Arid Agriculture, livestock, etc. Many crop varieties are available free through international institutes. New methods of genetic engineering and other fairly recent methods can greatly reduce the time it takes to develop and multiply a new plant variety. Program reports mentioned important efforts to develop new cassava varieties resistant to mosaic, or bananas resistant to black sigatoka – both devastating diseases that could destroy a farmer's food crop. There are also commercial companies that sell high performing hybrid corn (that has to be renewed each year). Most of the new varieties need heavy doses of fertilizer and sometimes pesticides or fungicides to be effective. Some seeds such as tomatoes and seed potatoes are imported from Europe. Others, such as NERICA rainfed (non-irrigated) rice varieties are available in Africa.

Biotechnology – transferring genes into plants by splicing rather than traditional cross breeding can be very effective in producing crops that are resistant to pests and highly productive. The best know examples are American corn, soybeans and cotton, often having a BT gene that protects the plant against certain insects without expensive and dangerous pesticides. Biotech cotton has been introduced commercially in Burkina Faso after a long development of biosafety protocols and testing. Mali is developing the same sort of approvals. A private company, Monsanto took African cotton varieties and inserted the genes. While biotech methods can be used for rapid development of many new plant traits, there has been a virulent campaign against any biotech crop and propaganda and misinformation is likely to intensify when attempts are made to introduce food crops. If USAID were to help in introduction of biotech crops, it should be through American universities and should focus on a multiyear development of biosafety systems.

In most cases it will not be feasible nor desirable to have the multitude of little national research centers in Africa do basic science to splice genes or develop new varieties. But they can play an important role in testing varieties developed elsewhere and in arranging multiplication of seeds for commercial sale once a multiyear process of testing is complete to show the seeds are productive and have no discernable ill effects. A useful endeavor – already underway in some USAID-financed projects, has been to seek to harmonize rules across countries so that a variety tested for years in one country could have those tests recognized in a neighboring country, and the same could be applied to agrichemicals, which must be changed as bugs develop resistance. Other methods such as alternative fertilizers for different climatic regions of a country or preservation/restoration of soil by trying to convince farmers to use crop residues for compost, can also be pursued, as can procedures for organic farming in cases where there is a good market for organic crops (usually not as productive in yield as conventional crops).

BIOTECH

Americans eat biotech corn and soybeans. But probably it is a hard sell for USAID to push this, though if scientists are eager, they can be supported. There is a huge problem of fraud in selling high value seed or agrichemicals in countries such as Mali and Uganda. Corn seed may be dyed to look like hybrid treated seed. There are big companies such as Yara in Ghana that have seed and agricultural chemical offices throughout the country and could develop good varieties. In some areas, after refugees returned home – e.g. Uganda, there has been free distribution of seed. The highest performing seed usually needs fertilizer and possibly fungicide or insecticide to realize its potential and justify its cost. A good seed program would require help from extension service (public or private) and appropriate inputs given free or on credit for a demonstration

farm that others could see. Ideally in the longer term, it is highly desirable for a network of private dealers to develop. They can possibly assist with credit to be provided to farmers. In Ghana, they accept from farmers vouchers for subsidized fertilizer distribution (available since the price hike in 2008). Sometimes national seed authorities control seed distribution and multiplication, leading to a bottleneck and delay in introducing new varieties. Ideally, the research institutes would handle foundation seed and have private out growers to multiply the seed.

With respect to a US expert to encourage work on harmonization, it would not be a full time job. Probably the USDA regional Animal and Plant Health Inspection Service representative in Senegal could help, or one of the APHIS pest risk assessment advisers – the one who used to be at the Accra Regional Mission is now posted in Senegal and there may be still advisers in Kenya and South Africa, or alternatively the APHIS representative in Senegal, South Africa or Egypt could probably help with official contacts, with a US university linked in to help run specific programs, working with the CGIAR regional research centers and helping coordination with national authorities.

IITA

With USAID support, the International Institute of Tropical Agriculture (IITA), in collaboration with Mozambique's national agricultural research institute (IIAM) has led ground-breaking research to identify soybean types that grow well in Mozambique, which has diverse soil types, country-wide. The project screened over 300 different soybean varieties to determine how well they performed in different locations, including their yield potential, drought tolerance, and pest and disease resistance. Agriculture experts from IITA then worked with farmers and communities to share information on the best soybean types for their area, and taught new technologies to produce crops with higher nutritional value. Farmers planted the new soybean varieties on demonstration plots, compared the new crops with the old, and provided feedback to IITA and IIAM.

In Murrupula, Nampula Province, the evaluators visited IITA's field cassava trials where brown streak and mosaic resistant varieties of cassava are screened, selected and multiplied. The varieties are capable of yielding up to 45t/ha under optimum conditions, and even in farmers' fields can double existing yields while also possessing good eating qualities and low toxicity.

MSU

MSU has worked with the Ministry of Agriculture (MINAG) in Mozambique since 1991 to increase MINAG's capacity to formulate and implement facilitative agricultural sector policies, strategies, and institutional reforms. Since 2004, assistance has also been provided to the National Agricultural Research Institute (IIAM) to support expansion of appropriate crop, livestock and natural-resource management technologies availability for smallholder farmers and to accelerate the uptake of those technologies by strengthening policy institutions and market information services. The project seeks to achieve this goal through formal and on-the-job training in the identification of priority policy issues, collection and timely analysis of relevant information, and prompt dissemination of actionable results to managers and policy makers. MSU has also assisted MINAG since 1991 in implementing an Agricultural Market Information System (SIMA). SIMA produces weekly (Quente-Quente) and monthly bulletins (Boletim Mensal) which provides domestic prices of 25 products in 27 producer, wholesale, and retail markets throughout the country, plus regional and international prices of selected commodities, and market commentary.

IIAM

The Institute plays a central role in the USAID strategy for support to technology development, dissemination, extension and adoption through its coordinating role of the Platform for Research which brings together all the different CGIAR agencies working in Mozambique into a common campus: ICRISAT, IPC, ILRI, IRRI, IFDC, CIMMYT, IWA and Embrapa. The Platform, which has received considerable support from the USAID mission, will facilitate a coordinated approach between the international research institutions and IIAM which reflects national priorities through its strategic plan and enhance knowledge sharing and synergies between the numerous programs.

The Strategic Plan distinguishes between staple crops and cash crops. The first group comprises Maize, poultry, beans, tomato, cassava, rice, banana, lettuces, cabbage, eggs and sorghum. The second group comprises cotton, groundnut, cashew nuts and timber, sesame, potatoes, soybeans, copra, beef cattle and small ruminants.

Production constraints for both sets of crops are associated with low quality planting material (varieties, seeds and vegetative materials) low soil fertility and insufficient use of fertilizers and irrigation; phytosanitary problems and access to farming services (credit, extension services, new technologies etc.). These areas offer promising opportunities for the research sector to contribute to the development of the agrarian sector. In so doing USAID should ensure that the valuable lessons learned from Compete, Mozambique Agricultural Research Competitive Grants Program, should be incorporated into the management of future US support to IIAM and the Research Platform. These successes are identified in the final evaluation of Compete:

- Engaging IIAM to develop its grants management capacities and integrate a competitive grants program into its operations;
- Effective use of participatory research models to broaden research impacts. Participants in research efforts gained valuable skills and knowledge through collaboration with grantees;
- Linking research to the broader agricultural community. Compete grantees successfully engaged extension agents, NGOs, the private sector, and university. These organizations were integrated from the initial research design and implementation for greatest impact;
- The use of interdisciplinary research teams. Researchers were able to investigate the complexities of topics by having a range of collaborators drawing from areas such as nutrition and socio-economics. Historically in Mozambique such interdisciplinary collaboration has not been typical; and
- Support of two successful Borlaug Fellowships for African Women in Sciences awards in 2008
- Capacity building of researchers in preparing competitive proposals.

International Potato Center field visit to experimental station at Umbeluzi

Orange flesh sweet potato varietal research is developing high carotene (vitamin A), drought tolerant commercial varieties of the sweet potato and has commenced multiplication of improved varieties among communities of south and central Mozambique. Uptake has been successful as the crop has major nutritional qualities and is easily assimilated into local culinary practices. It is also an attractive cash crop for smallholders as its market price tends to be aligned with the price of imports of the inferior white variety imports from RSA, where prices are high compared to costs of production in Mozambique. Multiplication of improved varieties is carried out commercially in farmer fields, accelerating adoption. The considerable research effort is complemented by extensive promotion of the orange fleshed root through branded vehicles, T-shirts, flyers, posters and promotional events, with practical demonstrations of cooking techniques and diverse products

such as sweets, preserves, as well as its incorporation into nutritious dishes. The Programmed seemed to this evaluator an example of highly focused USAID supported research addressing specific issues of malnutrition in a practical and effective manner. Note that this is similar to work years ago to incorporate vitamin A into rice. In that case there were problems of consumer acceptance. People in developing countries are sometimes even fussier about their food than rich people in developed countries.

FIGURE I. SUMMARY OF RESEARCH PROJECTS

PROJECT	BRINGING THE BENEFITS OF GENOMICS AND SYSTEMS BIOLOGY TO MAIZE FIELDS THROUGH GENE DISCOVERY AND ACCESS FOR GENETIC TRANSFORMATION ADDRESSING DROUGHT STRESS TOLERANCE IN THE ECA 150,000 USD (2005-2007)
Objective	The overall project goal was to transfer new developments in plant (especially cereal) genomics and systems biology to address one major constraint of maize production in the ECA sub-region, namely drought. The specific objectives were to: • Develop protocols for in vitro regeneration and Agrobacterium-mediated transformation of locally adapted maize germplasm. • Identify and/or access candidate genes and controlling elements (e.g. promoters) that can be used to confer drought stress tolerance in maize through genetic transformation. • Introduce/transfer identified drought stress tolerance genes into locally adapted maize germplasm. • Build human and infrastructural capacity and networking among research institutions in plant molecular biology and genetic transformation in the ECA.
Successes	• Accessing genes and promoters from various laboratories for use in maize transformation. • Developing protocols for in vitro regeneration and Agrobacterium-mediated transformation of locally adapted maize germplasm. • Optimizing in vitro regeneration methods for local maize germplasm. • Optimizing the Agrobacterium-mediated transformation methods for local germplasm using screenable/reporter genes. • Undertaking molecular characterization of transformed regenerates containing reporter genes, and transgene inheritance analysis. • Training of students in plant genomics, bioinformatics and genetic transformation. Technological breakthroughs • To develop drought tolerant maize variety using genetic engineering there are a number of stages and processes that must be followed. The lines to be improved must be identified. The genes to be introgressed must be identified, isolated, acquired and cloned. Protocols for regeneration must be developed and optimised. This is then followed by transforming the maize with the constructed vectors or cloned genes then evaluations first under confined conditions followed by field trials before release to the farmers. To date the following has been achieved: • Maize germplasm has been acquired and bulked at Plant Transformation Laboratory (PTL) of Kenyatta University. Out of the germplasm that has been tested, so far 36 varieties have been regenerated and the protocols for their regeneration have been optimized. These are ready for use by researchers in regenerating transformed maize using tissue culture. • Eight (8) drought tolerance genes have been accessed. Three gene constructs bearing regulatory elements were also accessed. One putative drought tolerance gene, Annexin P35 from maize egg cells has been identified, isolated and sequenced. This gene has been named ASARECA gene since it is the first time invention. • Nine (9) plant expression vectors have been constructed and are now available for transforming maize for drought tolerance, out of which eight intermediate gene constructs have been developed in the process of sub-cloning drought tolerance genes into the suitable plant expression vectors. Candidate genes have been sequenced and annotated. This is important in fingerprinting to confirm the genes. The genes that have been sequenced, annotated are: • amiRNA1 gene cloned and sequenced • Nos terminator gene cloned and sequenced • Annexin P35 gene cloned and sequenced Four transformation protocols have been developed and/or optimized for maize using seven different genes. Twenty four maize lines are being transformed with seven (7) different drought conferring genes. They include: three CIMMYT lines putatively transformed with amiRNA1 gene; three CIMMYT lines putatively transformed with amiRNA3 gene; 13 Sudanese maize genotypes putatively transformed with NHX1 and PMI genes; one Tanzanian line, Situka-M1 putatively transformed with XvPrx2 gene isolated from Xerophyta viscose; one Ethiopian line putatively transformed with IPT gene; and one temperate (A188) line that has been putatively transformed with CBF1 gene.
Challenges	n/a
Key Outcomes	Routine <i>Agrobacterium</i>-mediated transformation systems were developed for elite locally adapted maize germplasm. Genes and controlling elements for expression in maize were identified/accessed and made available to the research team for engineering drought resistance/tolerance. Contained (screenhouse) trials were initiated to test performance of adapted maize transformed with gene(s) that confer tolerance to drought. Intellectual and technical property frameworks were established to access to genes, transformation methodologies and services from relevant institutions, for technology transfer to ECA subregion. Three (3) graduate students were trained in plant genomics, bioinformatics and genetic transformation. Results were published in the reputed African Journal of Biotechnology.

Project	MARKET-ASSISTED BREEDING OF THE STAY-GREEN TRAIT OF SORGHUM TO ENHANCE TERMINAL DROUGHT TOLERANCE IN EASTERN AFRICA 150,000 USD (2005-2007)
Objective	The overall objective of this project was to increase sorghum productivity and food security in drought prone areas of Kenya, Eritrea, Uganda, Sudan and Ethiopia. The specific objectives were to: Enhance terminal drought tolerance in five locally-adapted sorghum open-pollinated varieties (OPVs), by marker-assisted introgression of quantitative trait loci (QTLs) controlling the stay-green component of terminal drought tolerance. Determine the efficiency and effectiveness of marker assisted breeding (MAB) for the stay-green trait in sorghum backgrounds selected from Kenya, Eritrea, Uganda, Sudan and Ethiopia. Enhance capacity of the NARS in Eritrea, Kenya and Sudan in marker-assisted breeding technologies.
Successes	Crossing donor line B35 with farmer preferred susceptible varieties (FPSV) from participating countries. Backcrossing work of the F1 generation with the FPSV line to generate BC1F1. Foreground selection of the stay green QTL on BC1F1 Crossing BC1F1 with FPSV to generate BC2F1. Foreground selection for the stay green QTL on BC2F1. Training of researchers and scientists from participating countries in MAS.
Challenges	Inadequate information flow among research team. Timely accountability was a problem, hence need for adequate institutional support.
Key Outcomes	QTLs for the stay green trait are confirmed and Marker Assisted Selection efficiency verified for improving drought tolerance in sorghum 5 MSc students were trained in marker assisted breeding Resource poor farmers in the region will have improved seed with drought tolerance as an important risk aversion factor. Drought tolerance will add commercial value to the local sorghum cultivars thus expanding productivity in drought prone areas Region's institutional capacity to employ similar improvement technologies of other traits in local crops.
Project	APPLICATION OF MARKER ASSISTED SELECTION (MAS) FOR THE IMPROVEMENT OF BEAN COMMON MOSAIC NECROTIC VIRUS RESISTANCE IN COMMON BEAN (<i>PHASEOLUS VULGARIS</i>) 150,000 USD (2005-2007)
Objective	To characterize advanced/elite/promising and released lines for the presence or absence of I-gene, which results in black root against BCMNV. To protect I-gene in elite and commercial varieties from the lethal hypersensitive reaction induced by BCMNV. To improve resistance against BCMNV in medium and high altitude climbing beans, and bush beans grown in drought prone areas. To enhance capacity in the use of biotechnology tools in varietal improvement.
Successes	Screening of bean varieties for the presence of I gene. Introgression of the bc-3 gene into commercial bean cultivars with I-gene. Application of MAS to select for I and bc-3 genes in elite segregating bean populations. Further selection and on-farm evaluations of promising bean agronomic traits. Yield and on-farm trials in Rwanda, Kenya and Uganda.
Challenges	Inadequate information flow among research team. Timely accountability was a problem hence need for adequate institutional support.
Project	EXPLOITING GENETIC DIFFERENCES OF INDIGENOUS EAST AFRICAN CATTLE BREEDS TO ENHANCE VACCINATION RESPONSES 150,000 USD (2005-2007)
Objective	The overall objective of this study was to investigate whether a disease resistance/ susceptibility genotype(s) would influence the performance of a vaccine in terms of induction of defined immunological responses that lead to protection. The study aimed at identifying immunological biomarkers that would show qualitative or quantitative differences between indigenous cattle genotypes of East Africa, for use in programs to enhance vaccine responses of susceptible animals. The specific objectives were to: Investigate breed-related immunological differences among three indigenous cattle populations of East Africa, in the face of vaccination against ECF. Identify potential biomarkers (cytokines) for enhancing vaccine-induced immune responses and protective immunity. Develop capacity of young nationals and NARS within the ECA region in the areas of genomics and bioinformatics.
Successes	Information on the onset, kinetics, magnitude and quality of the immune responses in local cattle breeds has been established. Postgraduate training of a student at MSc level.
Challenges	That the communication was between Regional Coordinator to research teams needed to more frequent. That compliance with reporting (technical and financial) –CGS projects rate of compliance was necessary to facilitate overall project progress. That financial reporting was the basis for further disbursements and had the biggest impact on project implementation. There was need to continuously re-examine project budgets in relation to planned activities for adequacy to ensure that they are realistic, and if not to scale down activities and expected outputs; The need for an in built incentive mechanisms was stressed and dialogue with institutions concerned recommended. Development of mechanisms for peer review of reports was stressed to ensure quality but also to meet and contribute to ASARECA goal. The project teams were requested to indicate strategies for enabling research results trickling down to end users.
Key outcomes	Biomarkers in resistant breeds that define superior immune responses were identified. A platform for designing of improved vaccination protocols for use in cattle populations was formulated.

PROJECT	ESTABLISHMENT OF A GENETIC TRANSFORMATION PLATFORM FOR CASSAVA IN THE ECA 310,000 USD (2008-2010)
Objective	To develop and strengthen capacity for cassava genetic transformation in the NARS. To avail information on cassava biotechnology platform activities made available.
Successes	At KARI in Kenya, a laboratory was refurbished and upgraded to match the regulatory requirements for Biosafety level 2. A state of the art greenhouse was also constructed. At MARI in Tanzania and NARO in Uganda, new laboratories were constructed and equipped. The laboratories are now conducting experiments in genetic modification and now serve as a training venue for students and technicians. With regard to information dissemination, there was wide media publicity made of the platform in the three countries following the launch. At NaCRRI, visitors to the platform included members of the NaCRRI management Committee, diverse stakeholders through meetings organized under the Open Forum for Biotechnology – Uganda Chapter (OFAB) and the Uganda National Council for Science and Technology (UNCST), print and electronic media personnel under the auspices of the Consumer Education Trust (CONSENT) an NGO based in Uganda. External visitors included scientists from Mikocheni Agricultural Research Institute in Tanzania (MARI), International Institute of Tropical Agriculture (IITA), the United States Agency for International Development (USAID), Donald Danforth Plant Centre (DDPSC), Great lakes Cassava Initiative (GLCI), CIAT and World Bank. In addition, graduate students for Sudan, Tanzania, Kenya, Zambia, Rwanda, Burundi and Uganda under the RUFORUM program visited the facility. Clear messages on the available capacity, potential and significance of building capacity for biotechnology and using transgenic technologies for improving cassava in Uganda were communicated. In Kenya, KARI Biotechnology Centre together with the Ministry of Agriculture and the National Council for Science and Technology spearheaded the preparation and launching of the Biotechnology Awareness Strategy for Kenya (BioAWARE). One paper was presented by the cassava transformation platform during the 1st All Africa Biotechnology Congress in Nairobi.
Project	APPLYING TISSUE CULTURE TO IMPROVE ACCESS TO CASSAVA AND SWEET POTATO CLEAN PLANTING MATERIALS FOR FARMERS IN THE ECA 309,000 USD (2008-2011)
Objective	To document the status of Cassava and Sweet Potato tissue culture in the ECA. To develop and avail cassava and sweet potato tissue culture technologies. To strengthen capacity for cassava and sweet potato tissue culture in the NARS. To avail information on cassava and sweet potato tissue culture.
Successes	Baseline survey of cassava and sweet potato tissue culture in the EAC region conducted and documented. Development, optimization and standardization of virus indexing tools for cassava and sweet potato culture materials. Over 200 sequences were collected for Cassava brown streak virus (CBSV), Sweet potato feathery mottle virus (SPFMV), Sweet potato chlorate stunt virus (SPCSV), Sweet potato chlorate fleck virus (SPCFV), and Sweet potato mild mottle virus (SPMMV). Other key achievements recorded included further analysis of the sequences for coat protein. This was achieved through multiple alignment and Blast for diagnostic primer designs and epitope candidate screening. Specific diagnostic primers and PCR-based diagnostic testing were also identified, in addition to potential epitopes from coat proteins of cassava/sweet potato viruses for antibody development. Low cost tissue-culture protocols for farmer preferred cassava and sweet potato varieties have been produced. Mechanisms for engaging dialogue and collaboration between public private sector laboratories in tissue culture have been developed. One such mechanism is the tissue culture business network (TCBN). At least 8 laboratories in the ECA have been refurbished and equipped for cassava and sweet potato tissue culture. Training of technicians and scientists in specialized skills in tissue culture has been done. A centralized database system for cassava and sweet potato tissue culture has been developed.
Key outcomes	National institutes will benefit greatly from this regional capacity building through equipments purchased, training of students and staff especially the women scientists, and linkages with the private sector and international institutes. Technical 'on-the-job' training will directly support local capacity building and technical empowerment. Capacity building through formal training and infrastructure support is important in this project. Ultimately, the availability of clean, high yielding and disease cassava and sweet potato planting material to farmers will increase their food security and their overall health condition as well as increase their household income.

PROJECT	CONSERVATION FOR SUSTAINABLE AVAILABILITY OF SWEET POTATO AND CASSAVA GERMPLASM THROUGH THE APPLICATION OF BIOTECHNOLOGY IN THE ECA 697,000 USD (2009-2011)
Objective	The overall objective of this proposal is to develop a strategy that will promote the long-term ex situ conservation and sustainable utilization of cassava and sweet potato plant genetic resources of actual and potential value for the benefit of present and future generations. Specific Objectives: - To establish collections of cultivated and landrace cassava and sweet potato germplasm. - To characterize and document cassava and sweet potato germplasm. - To establish /refurbish and equip laboratories for cassava and sweet potato conservation. - To establish a centralized database system for cassava and sweet potato germplasm conservation. - To train technicians and scientists in cassava and sweet potato conservation specialized skills. - To create awareness on benefits of cassava and sweet potato germplasm conservation.
Successes	Key collections of cultivated and landrace cassava and sweet potato germplasm have been characterized, documented and conserved. At least 8 laboratories have been equipped to conserve cassava and sweet potato germplasm. A number of technicians and scientists have been trained in cassava and sweet potato conservation specialized skills. Genetic linkage maps for field tolerance to CBSD and identification of molecular markers associated with two sources of field tolerance to CBSD was developed. A total of 56 SSR markers were screened for polymorphism across three parental lines with some levels of resistance to the disease.
Key Outcomes	Capacity building through formal training and infrastructure support has been the cornerstone of this project. Thus national institutes have benefited greatly from this regional capacity building through equipments purchased, training of research staff and technicians especially the women scientists. Technical 'on-the-job' training undertaken has gone a long way in directly supporting local capacity building and technical empowerment.

PROJECT	GENETIC ENGINEERING OF MAIZE FOR DROUGHT TOLERANCE IN THE ECA 358,000 USD (2008-2011)
Objective	To develop and avail drought tolerant engineered maize genotypes adapted to ECA. Specific objectives: - Identify, isolate and characterize drought tolerance conferring genes to transform adapted maize germplasm in ECA. - Access available drought tolerance conferring genes to transform adapted maize germplasm in ECA - Transform and evaluate transgenic maize under contained and confined conditions. - Build capacity for development and commercialization of adapted transgenic maize germplasm in ECA.
Successes	This project was one of the successful projects carried forward from the previous USAID funded project titled “Bringing the benefits of genomics and systems biology to maize fields through gene discovery and access for genetic transformation addressing drought stress tolerance in the ECA”. Although ongoing, the project has made remarkable progress towards the development of drought tolerant transgenic maize. Breeding and testing for drought tolerance in maize using a number of techniques. Out of the 15 Open Pollinated Varieties (OPVs) and 42 inbred lines adapted to ECA regions from Kenyatta University’s Plant Transformation Laboratory (PTL), 7 OPVs and 15 inbred lines were regeneratable. Similarly, out of the 8 genes known for conferring drought tolerance that had been acquired and sub-cloned into pNOV2819 plant expression vector, 2 have been successfully cloned. Maize accessions from participating countries and other centers were collected. 5 inbred maize accessions were availed from Sudan, 2 inbred maize accessions from Tanzania and Ethiopia and Kenya. In addition, 30 tropical maize accessions were availed from CIMMYT. Three genes and the stress-inducible promoter were isolated from dehydration cDNA libraries of the resurrection plant, <i>Xerophyta viscosa</i>, namely XvPrx2: XvSap1; XvErd15. A patent was granted for these genes and their promoters, that includes Prof Jennifer Thompson at UCT and Prof. Jesse Machuka the PI at KU as inventors. Progress was also made in: (a) identifying putative genes for drought tolerance. Arabidopsis eIF, PKR and GCN2 genes that may have roles in drought and salinity stress responses were characterized. (b) Isolating candidate genes where a stress-inducible promoter was isolated from either cold or dehydration cDNA libraries of the resurrection plant, <i>Xerophyta viscosa</i>. A patent for this innovation has also been granted. Attempts at cloning drought tolerant genes were made courtesy of a confidentiality agreement signed between KU and Syngenta Biotechnology Inc. (Research Triangle Park, North Carolina). The agreement provided permission to replace a selectable marker gene (bialaphos) with phosphomannose, isomerase. Several Material Transfer Agreements (MTAs) and FTOs (Freedom to operate instruments (FTOs) were obtained: An MTA between Kenyatta University and University of California Davis has been signed by IP offices at UCD and KU for access to a gene that expresses isopentenyltransferase (IPT) - an enzyme that catalyzes the rate-limiting step in cytokinin (CK) synthesis. Another MTA between Kenyatta University and University of Gent in Belgium has been signed to allow KU access -polyADP-ribose polymerase -PARP1- amiRNA. A freedom to operate (FTO) agreement was signed between KU and UC Davis and Iowa State University (ISU) to access nicotiana protein kinase enzyme 1 (NPK 1) to enhance drought stress tolerance in maize. Genes from KU laboratory were sent to BECA for sequencing in order to design primers and verify restriction sites and authenticity of sequences. Annexin P35) sequence was obtained from Arabidopsis and the homologue cloned at KU. Other key progress areas include the identification of 2 inbred maize accession for transformation and 15 maize accessions planted for regeneration. Construction of a containment glasshouse was completed. 4 PhD students from Tanzania, Sudan, Ethiopia and Kenya were trained in maize regeneration and transformation experiments and multiplication of inbred lines to generate seeds and embryos for transformation. 3 Publications in refereed journals were produced. Increasing Agricultural Productivity USAID/East Africa supports the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), which brings together national research organizations and their partners from ten member countries (Kenya, Uganda, Tanzania, Rwanda, Burundi, Ethiopia, DR Congo, Madagascar, Sudan and Eritrea) to focus on issues of regional importance that constrain agricultural productivity. ASARECA is a pillar (leading) institution for CAADP Pillar IV, and coordinates regional collective action in research, technology transfer, advisory services, and agricultural education. ASARECA focuses on issues that can best be addressed from a regional perspective, such as rapidly spreading pests and diseases of crops and livestock. Improved methods, technologies, knowledge, and best practices are made available quickly and efficiently through ASARECA’s regional platform, which includes national research organizations, faculties of Agriculture from major Universities, regional and national farmer organizations, extension services, non-governmental organizations, development partners and International Agriculture Research Centers. Over the past ten years, USAID/East Africa has been assisting ASARECA to focus on research in the following commodities and products: bananas, cassava, maize, potatoes, sweet potatoes and beans. In FY 2010, ASARECA tested several agricultural production technologies and practices, including cassava varieties tolerant to brown streak disease, nutritious quality protein maize varieties, high yielding orange-fleshed sweet potato varieties as a source of Vitamin A, and varieties and practices for managing bacterial wilt in bananas. Key results include: Using molecular markers technology, ASARECA identified two sources of field tolerance to cassava brown streak disease and made them available for use in breeding programs in the region. Through conventional cassava breeding processes, ASARECA released cassava brown streak disease tolerant varieties in Uganda and Tanzania and completed preliminary yield trials in Kenya. ASARECA continued the testing and promotion of disease control options for banana bacterial wilt disease, while also promoting the signing of germplasm transfer agreements by member countries for the transfer of banana wilt escaping cultivars. Ten cultivars were transferred to Tanzania for further research work and 21 cultivars are undergoing field-level

	testing in DR Congo. ASARECA developed the capacity to undertake virus indexing and partner institutions have concluded the indexing of sweet potato and cassava viruses existing in the region. A regional network for tissue culture operators was formed and provides guidance towards successful operations and management of tissue culture facilities as a business. Tissue culture is a source of clean planting materials for vegetatively propagated crops. Shared packages of tolerant varieties, agronomic practices, and systems for tissue culture and seed contributed to the food security of hundreds of thousands of households in the region. ASARECA supported scientists in Kenya, Ethiopia, and Sudan to pool their experience in advanced biotechnology on a project to transform maize varieties for enhanced levels of tolerance to drought, a trait that will meet a priority need in large areas of the region. Laboratory work for the benefit of many countries was carried out at Kenyatta University and the Center for Biosciences in Eastern and Central Africa, located on the campus of the International Livestock Research Institute in Nairobi. 24 maize lines were transformed with seven different genes with promise to confer drought tolerance. These have been introduced into a series of testing protocols, first in the laboratory and then in confined field trials, with the expectation of reaching farmers' fields by 2018. The transgenic maize shall be made available to the national research institutions where its handling procedures will be dictated by the biosafety laws and regulations that exist in each country. The new maize variety shall contribute to closing the cereal deficit in the region. Through policy interventions, analysis and advocacy work, ASARECA promoted an enabling environment for agricultural development and the application of biotechnological advances in agricultural research. Specific activities include harmonization of policies to facilitate implementation of regional research programs, dissemination of the results, and promotion of private sector participation in input distribution. In 2010, ASARECA continued work on a regional quarantine pest list, harmonized variety release regulations and procedures, harmonized seed certification regulations and procedures, harmonized regional standards for roots and tubers, and biosafety policy. ASARECA worked with COMESA to finalize regionally harmonized biosafety standards for commercial production, trade, and food aid of bioengineered crops, which were presented to the COMESA Council of Ministers. They were sent back to the countries for final comment, and should be finally approved within one or two years. Clear laws and regulations will facilitate commercial use and regional trade in genetically modified crop varieties and diagnostic techniques, while protecting public health and biodiversity.
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On both the national and regional levels, IITA, through Southern Africa Root Crops Research Network SAARNET, did **impressive research on cassava and Irish potatoes**. In Malawi, farmers' potato production has increased, yet the other challenge is changing the mindset of the target groups who have hitherto considered cassava as a lesser crop compared to maize. In addition to increasing the yield and developing a variety more resistant to the mosaic, the researchers worked on the taste in order to respond to the cultural need of the population. This is a great contribution to the dietary diversification and an income generation activity for the farmers in the IEHA countries. The culture of maize alone has reduced households in the sole consumption of this staple crop. In Malawi and Mozambique, a couple of farmers have started a small enterprise with starch production, cassava grits and chips. **The initiative needs more support in marketing, training, bookkeeping, quality control etc.**

Smallholder farmers are the main beneficiaries of the certain research programs, i.e., cassava, orange-flesh potato. In addition, some small-scale farmers are becoming entrepreneurs in cassava by products processing in Malawi and Mozambique. The main objective is to increase cassava and sweet potato production and utilization by smallholder households in poor areas of Southern Africa through adoption of improved varieties and crop husbandry practices, and strengthening the capacity of national root crops research for development programs in the SADC region.

USAID/East Africa supported the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), which brings together national research organizations and their partners from ten member countries (Kenya, Uganda, Tanzania, Rwanda, Burundi, Ethiopia, DR Congo, Madagascar, Sudan and Eritrea) to focus on issues of regional importance that constrain agricultural productivity. ASARECA coordinates regional collective action in research, technology transfer, advisory services, and agricultural education. ASARECA focuses on issues that can best be addressed from a regional perspective, such as rapidly spreading pests and diseases of crops and livestock. ASARECA's regional platform includes

national research organizations, faculties of agriculture from major universities, regional and national farmer organizations, extension services, non-governmental organizations, development partners and International Agriculture Research Centers.

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Key results include:

- Using molecular markers technology, ASARECA identified two sources of field tolerance to cassava brown streak disease and made them available for use in breeding programs in the region.
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- ASARECA developed the capacity to undertake virus indexing and partner institutions have concluded the indexing of sweet potato and cassava viruses existing in the region.
- A regional network for tissue culture operators was formed and Kenya, Tanzania, Uganda and Rwanda have drafted harmonized policies, regulations and protocols on varietal development and release of seed for 10 commodities with food security and economic development value for the region.
- Shared packages of tolerant varieties, agronomic practices, and systems for tissue culture and seed contributed to the food security of hundreds of thousands of households in the region.
- Provides guidance towards successful operations and management of tissue culture facilities as a business. Tissue culture is a source of clean planting materials for vegetative propagation of crops.

Another good example of regional collaboration is the work that OFDA funded on cassava mosaic. IITA, NARO, KARI and other centers efforts appear to have been successful not only at the station but in farmer fields, as well, since farmers and facilitators all noted the problem seemed to be resolved with the availability and planting of new resistant material. The cassava mosaic work has moved into Southern Africa and is based at the regional CGIAR center in Lilongwe.

The ABSPII Banana Project provides a **key success story**. USAID has funded the National Agricultural Research Organization (NARO) since 2004 for US\$ 2,700,000. The general objective of project was to promote the judicious use of modern agricultural biotechnology in Uganda in order to increase agricultural productivity and, ultimately, the incomes of the rural poor. The expected outputs of banana research under this project are transgenic

- There continues to be much needed work in developing a West African seed industry especially in the areas of varieties suitable to a changing climatic environment, seed demand forecasting and mapping of available seed, distribution and policy reform/harmonization.
- The WASA Seed Project also worked with the Agribusiness Trade Promotion (ATP) Project, IEHA funded under USAID West Africa Mission, in introducing a rainy season onion variety “PREMA”.

Its diffusion was very easy due to overwhelming demand for PREMA production. The Mali Biocarburants Project, for example, planted one hectare of PREMA onions and is busy introducing the production of PREMA (rainy season onions) to its Jatropha farmers as crop diversification option. Many households have adopted it and it is easily marketed.

The Seed Project funded out of the USAID West Africa Mission focuses on development of the private sector. Its focus has been on seed policy harmonization and value chain strengthening in eight West African

KEY SUCCESS STORY: ASARECA BIO SAFETY RESEARCH

Clear laws and regulations will facilitate commercial use and regional trade in genetically modified crop varieties and diagnostic techniques, while protecting public health and biodiversity. From 2000-2003, a bio safety working group held several meetings to discuss the feasibility of the Program. The Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) supported scientists in Kenya, Ethiopia, and Sudan to pool their experience in advanced biotechnology on a project to transform maize varieties for enhanced levels of tolerance to drought. Laboratory work was carried out at Kenyatta University and the Center for Biosciences in Eastern and Central Africa, in Nairobi. Through policy interventions, analysis participation of private sector input distributors and advocacy work, ASARECA promoted an enabling environment for agricultural development and the application of biotechnological advances in agricultural research. In 2010, ASARECA continued work on a regional quarantine pest list, harmonized variety release regulations and procedures, harmonized seed certification regulations and procedures, harmonized regional standards for roots and tubers, and bio safety policy.

ASARECA worked with COMESA to finalize regionally harmonized bio safety standards for commercial production, trade, and food aid of bioengineered partnership with International Institutions (Cornell University, Venganza, University of Leeds, IITA) crops, which were presented to the COMESA Council of Ministers. They were sent back to the countries for final comment, and should be finally approved within one or two years. in order to acquire technical know-how through technology transfer and training mechanisms. The transgenic bananas in the Confined Field Trials (CFTs) at Kawanda were **generated in Uganda by Ugandan scientists**. These trials are the first in Sub-Saharan Africa with plants generated in the region. No sub-Saharan African country has developed a transgenic and progressed it to field evaluation. USAID support was critical in this achievement. There were some challenges in execution of the program:

1. Slow process in release of funds leading to delays in some activities: The money originates from a USAID mission in Kampala, sits for sometime in an intermediary US Institution (Cornell) and finally gets back to Uganda.
2. Constant demand for quick research results from a team working on a slow growing crop.

countries. The ECOWAS regulation on seed law harmonization was adopted by all 15 Member States in May 2009 and should facilitate regional trade in seeds and planting materials by establishing a regional catalogue of varieties. This harmonization has the potential to open up the market and increase the need for quality seed production.⁴ Constraints to seed production and dissemination include:

- Lack of seed demand forecasting
- Seed certification bottlenecks in some countries
- Restrictive seed import policies in some countries
- Limited production of seed in key staple crops like sorghum, millet and cowpeas

The lack of demand forecasting along the seed value chain is identified as a major constraint to guarantee production from breeder seed to certified seed and to produce those varieties for which there is a sustainable demand. The Seed Project cites the lack of seed production for sorghum, millet, cowpeas and groundnut as

⁴ Seed Project 2010 Annual Report, page 9

worrisome and the need to look at incentives. Seed certification bottlenecks in Mali where there is one under-resourced national laboratory is another constraint mentioned by two independent seed farmers interviewed by the West African IEHA evaluation team. The Seed Project collaborated with the IEHA West Africa Agribusiness Trade Promotion Project in introducing a rainy season onion variety. The interest in PREMA production has been “overwhelming”. A tomato hybrid called Maxipeel was also introduced in Mali by the Seed Project in 2008 and has superior storage characteristics and a high solid content. Smallholders are paying 25 to 35% premium for the seed because of its demonstrated benefits and higher price at the market. In conclusion, seed research and development is the foundation of sustainable agricultural development in Mali and West Africa and requires significant resources in the coming years. Although the project will end in December 2011 USAID support needs to continue in regional policy reform, seed production and in seed distribution to lead farmers or (typo?) agro input suppliers at the village level.

EXPANDING MARKETS AND TRADE

Mozambique: USAID supports cashew processing at a modern commercial-scale processing facility by facilitating the introduction of international quality systems into their factory, which would require little refurbishment to qualify for HACCP (Hazard Analysis and Critical Control Points) status. The facility purchases 4m kgs of raw cashew per year, thus providing a market for many thousands of small-scale cashew producers who rely on the seasonal crop to complement their family income. The factory employs over 700 workers in the manual shelling of nuts and steaming prior to sorting and packaging and provides an outlet for the raw kernels. Forward-looking plant design will likely allow the company to meet international quality and safety standards without considerable investment, which would greatly increase market opportunities and help ensure a reliable outlet for cashew producers and an incentive to increase their on-farm productivity.

- Broiler out-growers have derived major benefits from the employment and income opportunity of supplying Novos Horizontes with finished birds on contracts. This also strengthens the maize and soya sectors through the provision of a reliable outlet for improved strains of these crops and an incentive to adopt better practices and appropriate levels of agricultural inputs, thereby strengthening the entire value chain for these major food security crops in which Mozambique is becoming more self sufficient.
- Banana production for export markets has led to the development of an integrated supply chain involving primary production, farm-to-pack house transportation, treatment selection and packaging of fruit, loading, pack house-to-port transportation, maritime transport scheduling, international sales and marketing. The banana industry has laid the foundations for a fruit export industry in the province to which crops such as pineapple and mango can be added with considerably lower costs, thus facilitating the emergence of a fruit packaging / processing / export cluster in the vicinity of the Nacala deep-water port. Apart from the direct employment opportunities that such a development creates, on large plantations and out grower farms, the introduction of higher technology, competitive international distribution and marketing systems and quality management to global standards tends to help all farmers in the area “raise their game” and increase their capability to link more sustainably and profitably to national, regional and international markets.

The Mozambique IEHA evaluation team visited Novos Horizontes a poultry operation that has received support from Technoserve through both Empreenda and Agrifuturo, in particular in soy production and milling. Novo Horizontes has benefitted from \$600,000 of financial support from a Dutch matching fund, \$350,000 of grant funding through Technoserve as well as technical support and Church funds and loan capital. Contributors to their success included:

- Extensive use of out growers was successful due to training, technical support and weekly monitoring. Out growers are given clear indicators of performance and pay (weight gain) of chicks.
- Living standards were better than average among the out growers as compared to other local farmers. (need reference)
- Diverse market outlets (storefront and local open markets) and products (chicks, feed supplies, and even veterinary supplies) create a broader foundation for future growth and a cushion against risk.

Again in Mozambique, the Matanuska banana plantation illustrates the potential for commercial scale agricultural development given proper investment for inputs and production technology. The plantation grows staple foods and export crops. Key features of the banana operation with yields comparable to commercial producers in Latin America are:

- High tech banana production and processing using under-tree micro sprinklers, crop programming, pruning, cableways and modern pack houses.
- GlobalGap certification achieved with containerization to the port and options for a weekly shipping route to the Gulf market.
- 1800 employees (mostly male, even in the pack houses) between farms and pack houses, managed by professional expatriate agronomists (US and Latin American). This is a ratio of 1.5 workers per hectare, which is ~50% above internationally competitive levels but is acceptable due to the lack of trained and experienced personnel and generated revenue.
- Irrigation water is provided by a 1000ha 555 million M³dam built on the estate at a cost of US\$6M.

AGRICULTURAL POLICY

Malawi

- Its agricultural sector wide approach ASWAp is the platform for CAADP, for which it is compliant since April 2010. Malawi spends over 10% of GDP on its public funding to agriculture and agricultural value of production is rising by over 6% per year. Through its Technical Secretariat the Ministry is currently trying to condense a very broad policy document into a more manageable, internally coherent form. The ASWAp is a central government product and due to centralized political system there appears to have been little input from the districts.
- IEHA-funded IFPRI and the USAID mission are not directly involved in the process and are critical of the fertilizer subsidy program. They are not taking a strong stand on this issue as the program has been successful in eliminating food shortages and are a Presidential priority. IFPRI is more in favor of a less fertilizer-dependent approach with a focus on conservation agriculture and proposes that the per head allocation of fertilizer (currently upward of 50Kg) be reduced to say 15kg plus maize seed

for all farmers, as some of the most needy are unable to utilize their full allocation and simply sell the balance on.

- Government controls the maize sector through inputs, minimum prices, managing 250,000t of grain reserves, imposing export controls with a cap on private crop storage at 40000 t. Governments used to run big commodity organizations all over Africa, taking over the colonial export systems. But many of the government programs were mismanaged and most of them ended by the early 1990's, with a few exceptions such as the Cocoa Board in Ghana. A private sector grain storage system is much more likely to be well run than a publicly owned system. This could be a good subject for a study and recommendations by IFPRI or by ReSAKSS.
- The government target for irrigation expansion is 1m hectares, though it is not clear how this can be achieved. The private sector is encouraged to invest in large scale irrigated agriculture, but USAID has expressed reservations on small-scale mechanized irrigation schemes. Issues of machinery, maintenance, water tables, soil analysis and salinity should be addressed in any irrigation programs. Programs using surface water are much less likely to cause ecological problems than programs relying on wells. Irrigation was essential to the green revolution of the 1970s in Asia (miracle wheat and rice) and has been used for rice in Mali with some success, but often has not worked as well in Africa for various reasons. Prospects for irrigation should be pursued with caution and careful study.
- Crop Price information is disseminated through radio but the USAID supported Market linkage program is promoting a GSM based system called Esoko (from Ghana, ex-TradeNet) linked to the MW commodity exchange which also has a B2B function.
- USAID would like to see more commercial farming and Value Chain development but MW is smallholder dominated with a weak internal market so opportunities for commercial agribusiness appear to be limited, though more information is required on its potential. USAID's ambiguous position on value chain vs. smallholder development needs to confront the issue of how competitive commercial farming can take off when government policy is so focused government control of commerce and prices with an aim of promoting food security, an effort likely doomed to failure.

Mozambique

- The country's official agricultural policy document has been 3 years in the drafting and is still incomplete. A final version of a CAADP compliant ASWAp is expected by April 2011. However, it appears unlikely it will be able to meet the deadline without last minute support from IFPRI. The country is working towards achieving a budget allocation of 10% of GDP to agriculture by 2015. Despite the weakness of its agricultural policy efforts, Mozambique's agricultural growth is probably over the 6% p.a. CAADP target.
- Apart from IFPRI activities (see IFPRI section of this report) USAID has little direct involvement in agricultural policy issues in Mozambique. USAID withdrew from the agricultural sector support program ProAgri in 2006 due to lack of accountability and is now outside the loop on institutional reform of the sector, which was ProAgri's main purpose. USAID's Evaluation of ProAgri 1 (PA1) required action on the following points if further USAID funding were to be forthcoming:

“The Government's political commitment ...must be substantially increased through the participation and intervention of other ministries in the implementation of PA-2. The Government of Mozambique needs to assume ownership of the PA-2, that could be "guaranteed" by maintaining the functions of the PA-2 Steering Committee that continues to promote good inter-ministerial

coordination. An "Environmental Strategy" is absolutely crucial from a long-term development point of view, and one of the preconditions required by the World Bank in its analyses."

- Since USAID withdrew from PA-2 one can only assume that the Government of Mozambique's response to these recommendations was insufficiently positive. It also seems to still hamper the program as other donors are also likely to withdraw at the end of current 2nd round.

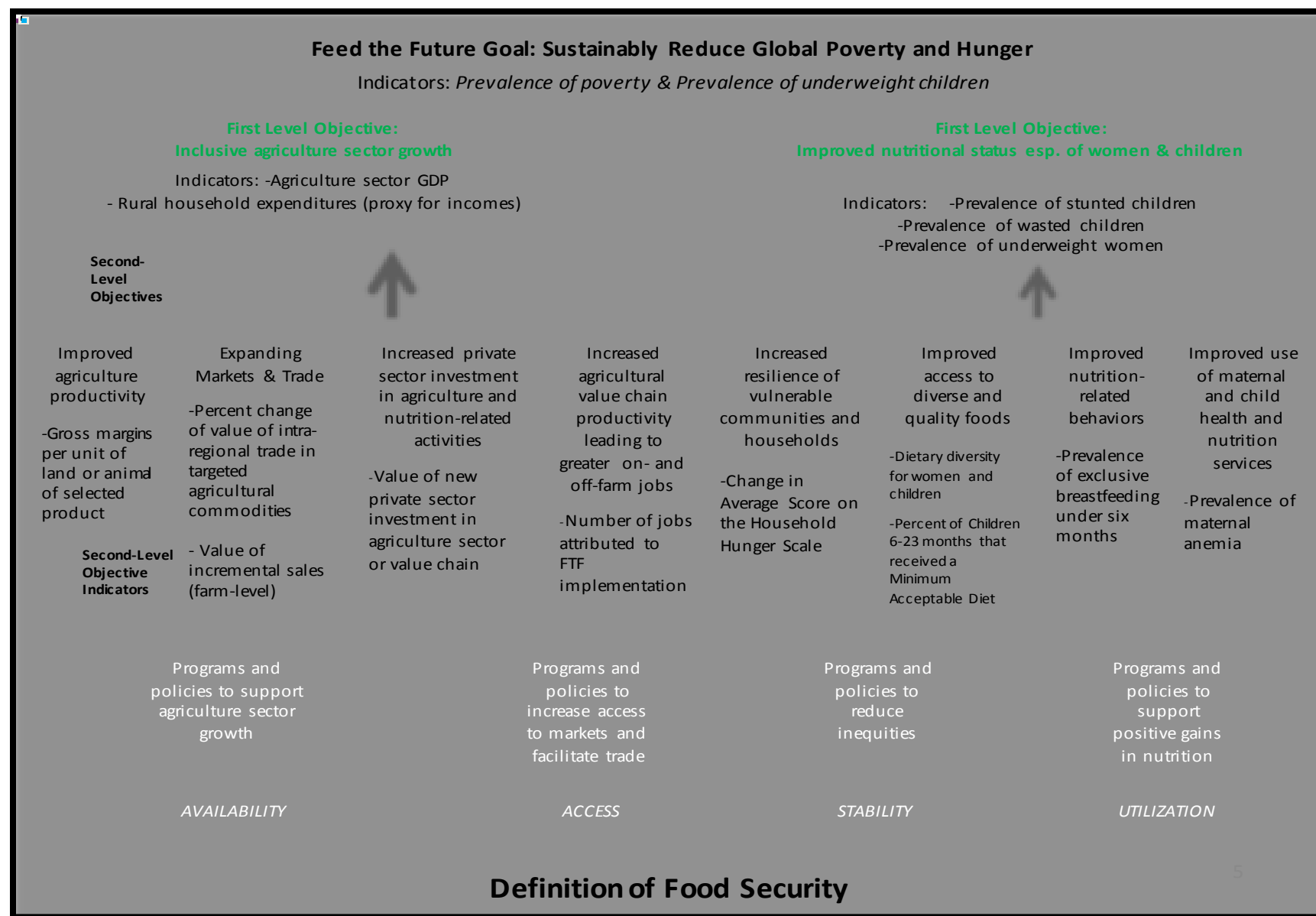
Kenya

- Kenya's Agricultural Sector Development Strategy and Medium-Term Investment Plan 2010–2015 fulfill the requirements for developing the Kenya CAADP Compact by observing broad stakeholder consultation and participation, accountability, and coordination.
- Agriculture performance has grown faster than the rural population. The sector recovered from negative 3 per cent growth in 2002 to positive 5.4 per cent by 2006. From 2007 to 2009, prolonged drought and other problems held back growth but is undergoing a recovery, given strong internal demand for major staples, livestock products, and horticultural goods, and a return to growth in key export sub-sectors such as coffee, tea, pyrethrum, horticulture, and cut flowers.
- Food security remains a challenge. Poor or failed cropping seasons beginning in 2007 resulted in the number of Kenyans requiring food assistance rising from 650,000 in late 2007 to almost 3.8 million in late 2009 and early 2010 but improved significantly in the following months.
- The six MTIP investment pillars are as follows:
 1. Increasing productivity, commercialization and competitiveness;
 2. Promoting private sector participation;
 3. Promoting sustainable land and natural resources management;
 4. Reforming delivery of agricultural services;
 5. Increasing market access and trade; and
 6. Ensuring effective coordination and implementation.
- Implementation of the Investment Plan requires 5.9 per cent of the national budget across ten Ministries. In keeping with the Maputo Declaration, the GoK has committed itself to increasing this level of support to the sector by 30 per cent by 2015.
- Kenya's development partners are expected to commit to providing about 31 per cent of the budget.
- Given the large role played by physical infrastructure improvement and development in the investment pillars aimed at increasing productivity, commercialization and competitiveness; and promoting sustainable land and natural resources management, these two pillars will together account for more than three-quarters of the budget.

Zambia

- In Zambia, the Agriculture Consultative Forum was established to provide an opportunity for all stakeholders to meet and dialogue at the same level. The Forum has benefited from IEHA supported policy analysis conducted by MSU, particularly those concerning maize policy and markets. The participation of MSU and mission staff in the dialogue and MSU presentations were much appreciated by key informants interviewed. However, NGOs would have liked to see outputs with clearer application to the issues faced by producers.

APPENDIX H: FEED THE FUTURE RESULTS FRAMEWORK



APPENDIX I: COMPLEMENTARY USG PROGRAMS TO IEHA

MILLENUM CHALLENGE CORPERATION

Millennium Challenge Corporation (MCC) Compact summary information:

Mozambique: \$506,924,053, including \$38,400,000 for farmer income support for 1,163,000 farmers

Ghana: \$547,009,000, including transportation, rural development and an agriculture project of \$294,000,000 to benefit 878,121 beneficiaries.

Kenya: \$12.7 million threshold project on reducing corruption, overhauling public procurement with a specific concentration on health care procurements throughout the supply chain.

Malawi: \$350 .7 to revitalize Malawi's power sector including households and improvements in the agriculture, manufacturing and services sector.

Mali: \$460,811,164 including \$273,000,000 to benefit 649,592 beneficiaries in the Alatona Irrigation Project. The airport improvement project \$121,000,000 may have implications for air shipments of mangoes and other agricultural commodities.

Uganda: \$10.4 million threshold project to decrease public sector corruption, particularly in procurement and helping civil society to monitor corruption.

Zambia: \$22,735,000 threshold program including one stop shop that automated procedures for business registration and tax payments and reduced processing times for customs operations; now moving to a full compact.

PL480 TITLE II DEVELOPMENT PROGRAMS

Food for peace has two types of programs – emergency feeding – often geared to refugees, and a development program covering agricultural development, health, nutrition and other programs that may be similar to some FTF programs. Following is a summary of recent programs with program descriptions pertinent to the most recent program. Sometimes the food is used directly or sometimes part of it is resold to finance the programs. Following is a summary of some recent Title II development programs in the countries of focus.

TITLE II DEVELOPMENT PROGRAMS – BID BY COOPERATING PVO'S FOR VARIOUS TYPES OF DEVELOPMENT PROGRAMS:

IEHA Focus Country	Dollar amount (USD)	Implementers	Target Beneficiaries	Current Projects
Mali	2007: 4.1 million 2008: 3.6 million 2009: 4.5 million 2010: 10.2 million 2011: 10.0 million	Africare and Catholic Relief Services (CRS)	Africare: 55,000 food-insecure Malians CRS: 83,573 food-insecure Malians	Community capacity building; agriculture; health; nutrition; and livelihood activities
Ghana	2007: 18.1 million 2008: 6.9 million; 2009: 4.5 million 2010: 0 2011: 0	Opportunities Industrialization Centers (OIC) International	130,000 food-insecure Ghanaians in 250 communities	Improve sustainable food production; improve maternal and child health and nutrition; improve care and support for people living with HIV/AIDS and orphans and vulnerable children
Kenya	2008 \$88.2 million 2009 \$133.7million 2010 \$112 million 2011 \$55 million	n/a	emergency for refugees feeding	no development programs
Uganda	2010: emergency programs only for refugees 15.3 million through WFP 2011 : Development only WFP, ACDI-Voca, Mercy Corps: 25 million	ADCI/VOCA; Mercy Corps International (MCI); World Food Program	ADCI/VOCA: 116,058 food-insecure people; MCI: 55,939 food-insecure people; WFP: 307,000 drought-affected individuals and 96,000 refugees	Agriculture production; HIV/AIDS awareness; infrastructure development; maternal and child health; water, sanitation, and hygiene
Zambia	2010: 7.2 million 2011: 6.5 million	Catholic Relief Services (CRS) in partnership with CARE, Land O'Lakes and World Vision	25,340 food-insecure households	Agriculture extension, nutrition and health training, community planning and disaster prevention, social welfare and food-for-assets infrastructure projects
Mozambique	2010: 25.5 million 2011: 20 million	Adventist Development and Relief Agency; Food for the Hungry; Save the Children Federation; World Vision-US	ADRA: 77,500 food-insecure people FHI: 99,183 food-insecure people SCF: 163,726 food-insecure people WVUS: 122,000 food-insecure people	Agriculture development; maternal and child health and nutrition; water and sanitation

Malawi	2007: 15 million 2008: 17.9 million 2009: 19.0 million 2010: 18.0 million 2011: n/a	Catholic Relief Services-led consortium	198,696 food-insecure Malawians with emphasis on children under age 5; orphans and vulnerable children; people living with HIV; chronically ill people	Integrated livelihood activities including agricultural and microenterprise development and Village Savings & Loan; community health outreach and safety net food rations for vulnerable households; district and community capacity building and improved accountability
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FEWS NET

The Famine Early Warning Systems Network (FEWS NET) is an activity of the U.S. Agency for International Development (USAID) that provides timely food security information for 29 countries in Sub-Saharan Africa, Central America and the Caribbean, and Central Asia. The activity dates back to the mid-1980s as it was designed to prevent the repeat of the food security catastrophe that affected Africa in the early-1980s, especially in Sudan and Ethiopia where more than a million people died for lack of food.

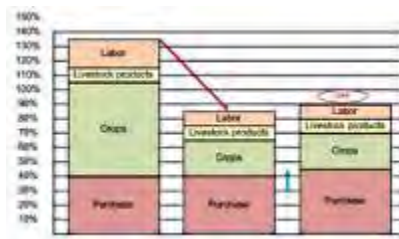
FEWS NET is a partnership between USAID, the U.S. Geological Survey (USGS), the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), the U.S. Department of Agriculture (USDA), and Chemonics International who has been implementing field activities for FEWS NET since 2000. FEWS NET professionals in the Africa, Central America, Haiti, Afghanistan and the United States monitor and analyze relevant data and information in terms of its impacts on livelihoods and markets to identify potential threats to food security. Once these issues are identified, FEWS NET uses a suite of communications and decision support products to help decision makers act to mitigate food insecurity. These products include monthly food security updates, regular food security outlooks, and alerts, as well as briefings and support to contingency and response planning efforts. More in-depth studies in areas such as livelihoods and markets provide additional information to support analysis as well as program and policy development.

FEWS NET also focuses its efforts on strengthening early warning and food security networks. Activities in this area include developing capacity, building and strengthening networks, developing policy-useful information, and building consensus around food security problems and solutions.

Livelihoods and FEWSNET: Market and trade information, crop assessments and satellite data provide important information on potential hazards. When filtered through the livelihoods lens it tells us how these hazards will impact households.

How is livelihood analysis useful to Early Warning Systems? The main advantage of a livelihoods-based early-warning system is that it provides a contextualized perspective of food and livelihood security within a region or country. Having a nuanced understanding of the context, or how households operate normally, analysts can better gauge the impact a shock will have on household food and income access. FEWS NET's livelihoods framework is essential for answering key food security questions such as, how, and to what extent, have households' normal patterns of food and income access been impacted by an event? And are households likely to face food or livelihood deficits as a result?

How are Livelihoods data used? Below is a simplified example:



This graphic shows that, due to the drought, poor households face a food deficit of 15%, causing **RISK** of food insecurity. Households may sell livestock in order to purchase 5% more food (*COPING CAPACITY*). Even still, poor households experience a 10% food deficit (*FOOD SECURITY OUTCOME*). This is the amount that could be filled by relief.

Decision Support Interface (DSI)

The Decision Support Interface (DSI) software is a web-enabled decision support tool based on weather and crop conditions. The DSI incorporates a series of drought monitoring rules to distinguish various levels of drought condition and provide a general indicator of potential impacts to agriculture and local or regional food insecurity. This feature is coming soon.

APPENDIX J: DATA COLLECTION TOOLS

FIELD INTERVIEW GUIDE

BRIEF INTRODUCTION

The US Government through the Initiative to End Hunger in Africa (IEHA) funded a number of programs between 2002 and 2010 in 7 African countries. We are involved in the final evaluation of IEHA interventions.

Specifically we are asking questions around the following issues:

1. Lessons learned - what worked well, what were the challenges
 - a. Lessons learned regarding technology innovation
 - b. Lessons learned about stimulating markets and trade
 - c. Lessons learned regarding policy dialogue and change
 - d. Lessons that can be beneficial to the Feed the Future Initiative
2. Smallholders and producer groups – adoption of improved technologies and practices, increased incomes and investment, reduced risk, greater access to markets and greater role in policy dialogue
3. What is the right balance between work directly with smallholders and work with other elements of the agriculture and broader economy (e.g., agribusiness) in order to achieve the goal of increasing rural incomes and halving poverty by 2015.
4. Views on how the results were reported.
5. ICTs as they relate to information production, access and sharing, coordination, etc
6. CAADP and the collaboration with and among stakeholders
7. Regional and national (bilateral) mission/program complementarity and cumulative impact on regional markets, technology transfer (seed, etc) and policy/regulation
8. How and to what extent vulnerable households are affected.
9. Examples of complementarity between programs e.g. markets, agriculture research and extension, agriculture and nutrition, policy and finance.
10. The impact on poverty (rural or urban) and increasing rural incomes (the goal of IEHA). This can be through directly working with smallholders or working with commercial enterprises that have a CLEAR link/impact on poverty.

NOTE: The introduction will need to be tailored for whom you are interviewing. For example, if the key informant is a donor representative, coordination and complementarity (and CAADP) will be highlighted.

NOTE: Additional themes of the evaluation: Coordination among stakeholders (see stakeholder and CAADP sections), across donors, within USAID and within USG. This relates to coordination in design and implementation.

Go from what the key informant is doing to IEHA/USAID Ag resources. One way is to:

- Ask the key informant what s/he sees as a success. Ask how USAID resources contributed to this and what was the relative importance.
- Ask the key informant what s/he sees as a challenge. Ask how USAID resources helped overcome that or whether USAID contributed to that. Ask also how could the challenges have been overcome with different support/a different design or implementation

WRITE UP CONSOLIDATION

Writing up notes for discussions and report drafting

Please put your observations, lessons learned, recommendations and case studies in the following format so that we can better review and discuss them as well as drop them into the report.

Lessons learned - successes, failures and challenges - state what the lesson learned is and then provide the evidence to support it. Include references to specific projects and key informants.

Innovators - keep a list of organizations/agencies and people who are successful innovators. The IEHA team would like to identify innovators so that they can include them in communities of practice going forward.

Recommendations - state clear, concise, actionable recommendations. If you want to provide the justification or evidence for the recommendation, that's fine, but make sure to make the actual recommendation clear, concise and actionable. Group the recommendations the following way:

1. recommendations for Agriculture, Sustainable Agriculture (SD/Ag), Economic Growth and Agricultural Trade (EGAT)
2. recommendations for Feed the Future
3. recommendations for other

Case studies - case studies are really helpful to illustrate a point. Please present them in the following way:

1. Give a title to the case study that explains its purpose
2. Provide the full story

End with a take away message

Markets and Trade

Background: The focus on strengthening producer organizations was seen as a strategic approach within the IEHA framework to increase agricultural productivity, and value-chain development and developing smallholder capacity and access. Impacts could include efficiencies in input sourcing, marketing, stronger negotiating power, policy advocacy, and other improvements in the business operating environment.

1. How were IEHA/USAID agricultural program funds used to promote changes in value chain organization and development? (Key programs/activities/interventions? Lessons learned:
 - a. What worked (good practices)
 - b. What types of farmers participated—commercial, very poor, wealthier poor, women?
 - c. Are these the right people targeted?
 - d. Who was left out that should have been included?
 - e. What were challenges or constraints?
 - f. What was innovative and should be scaled up or replicated?
 - g. Could this be applied to the more vulnerable groups or households?
2. How was information about new business practices, opportunities or farming methods communicated to smallholders/producer groups?
 - a. What worked, what needs to be improved in the future?
 - b. What partnerships were key to your successes?
 - c. How can coordination with other partners and stakeholders be improved?
3. Feed the Future is focused on nutrition and staple crops, vs. high value export crops. What are the lessons learned under IEHA activities that would help FtF succeed, and help the more vulnerable groups/households who are farmers?
4. How effective was IEHA /USAID at integrating regional and country level programs to reduce barriers to trade? This question could be asked of implementing partners with a regional focus
 - a. Does regional integration make sense? Why?
 - b. Were there major operational issues in integrating country and regional programs?

5. How effective was IEHA /USAID at increasing farmers' and agro processors' access to markets and increasing their share of value adding?
6. Was IEHA/USAID's balance in terms of support to smallholder producers, traders, business service providers and market development (buyers) about right to develop agricultural value chains and increase agricultural growth and increase incomes of the vulnerable populations?
 - a. What needs to happen now to sustain the gains made under IEHA/USAID programs and to expand the staple food supply and nutrition?
7. Is your organization or activity connected to CAADP, the Comprehensive Africa Agriculture Development Program in _____? Did IEHA/USAID help with this connection? How?

Agricultural Research and Diffusion/Adoption of Technology

1. How was your research agenda formed?
 - a. Was there input from the Ministry of Ag, commercial sector, smallholders, etc?
 - b. Does the program reflect local priorities – i.e. is it aligned with national policy (give examples)?
 - c. Is it focused more on resolving existing constraints or developing new avenues for agriculture
 - d. Was it based on certain studies or other information?
2. What are the expected outcomes of your work on the agriculture sector? Are these being achieved: how or why not?
3. How does your research relate to smallholders, the rural poor and the most vulnerable populations (give examples); their production systems, livelihoods and current challenges?
4. How critical is your research to rural households' income earning and risk diversification/reduction (give examples)?
5. To what extent do smallholders participate in the research and validation of research?
6. What type of producer feedback loop do you have and utilize (describe and give an example of when and how feedback has altered the research process)?
7. How are the improved or innovative technologies and practices developed through your work disseminated to farmers, and in particular, smallholders and vulnerable populations?
8. What have been the successes, challenges and failures related to adoption of innovations (give examples)?
 - a. What can be done to enhance the success/mitigate the challenges/failures?
 - b. Are there innovations that could be scaled up and/or transferred to other countries or regions?
9. Are there other programs or projects that you consider critically important to the success of your research program – (e.g., complementary NGO farmer training activities) and, if yes, how well are these activities coordinated and complementing one another?

NGOs working with Agricultural Research Program

1. How do the innovations you are promoting relate to the needs of smallholders, the rural poor and the most vulnerable populations (give examples); their production systems, livelihoods and current challenges?
2. How critical are these innovations to rural households' income earning and risk diversification/reduction (give examples)?
3. Did you participate in the development of the research program, and in what way (give examples)? What mechanisms are in place for you to provide on-going input and feedback and are they adequate?

4. Did the producers (men and women) that you work with participate in the development of the research program and in what way? What mechanisms are in place for you to provide on-going input and feedback and are they adequate (for both males and females)?
5. Are their farmer trials and how does this feed back into research?
6. Are their field demonstration plots and does this feed back into research?
7. What have been the successes, challenges and failures related to adoption of innovations (give examples)?
 - a. What can be done to enhance the success/mitigate the challenges/failures?
 - b. Are there innovations that could be scaled up and/or transferred to other countries or regions?
 - c. Do these observations need to be modified for female farmers and HIV/AIDS affected households?
8. Are there innovations that are particularly appropriate for very poor, vulnerable producers (explain)?
9. Are there innovations that are particularly appropriate for women (explain)?
10. Are there innovations that are particularly appropriate for HIV/AIDS affected households (explain)?

Smallholders/producer groups

Beneficiaries (very poor smallholders, female farmers, producer groups – talk to women of producer/markets groups separately in addition to the whole group, commercial enterprises – group interviews are recommended for the 1st group)

8. What assistance (such as improved seed, fertilizer, tools, credit, access to information or new markets, etc) did you receive and when?
9. How did this assistance change/influence the way you produce, market, etc?
10. How did it benefit you (production – increase, diversification, risk reduction; assets; consumption)?
11. Was the assistance sufficient (what problem did it resolve for you)?
12. Were there problems or obstacles? What kind? Were they solved?
13. Does the assistance/activity continue to benefit you? How?
14. What do you most require to continue to grow/prosper in the future?
15. Has your access to inputs/credit changed and how (Note if dependent on activity or sustainable)
16. Has your access to markets changed and how (Note if dependent on activity or sustainable, multiple outlets or one buyer, etc)?
17. What are the principle benefits you receive from participation in a producer/market association?

For those in areas with agriculture research and extension, find out to what extent the farmers define the research agenda, provide input, validate technologies, etc.

Food Aid, Vulnerability and food Crisis

NB. Informants can be FFP/Mission, Government authorities, IP's or beneficiaries (use our own judgment according to category of informants)

1. How do IEHA funds support the overall objectives of FFP and Title II activities and what is the contribution to reducing risks and vulnerability to food insecurity (temporal and chronic)?

2. How sustainable are the community groups that were formed to deliver services, extend knowledge and practices and implement programs.
3. Were food commodities used for distribution i.e. for emergency or development activities? I.e. safety net, school feeding, food for training, food for work, etc. If foods were monetized, was it a disincentive to the local production or to the commercial market? Is monetization a viable option to fund FTF activities? (In countries where it's feasible)
4. Can you confirm that monetization in the country responds to at least one or two of the following objectives of PL480:
 - a. combat hunger and malnutrition and their causes;
 - b. promote broad-based, equitable, and sustainable development, including agricultural development;
 - c. expand international trade;
 - d. develop and expand export markets for United States agricultural commodities; and
 - e. foster and encourage the development of private enterprise and democratic participation in developing countries.
5. Did the food assistance demonstrate any impact to reduce hunger? In what way?
6. How are program sectors and activities integrated in order to more effectively address food security (i.e. agriculture and nutrition, production/productivity and market availability, storage/conservation, etc).
7. In the two cases (Distribution and Monetization), what are the outcomes of the various interventions
8. Who were the main beneficiaries of the food aid program i.e. subsistence farmers, small holders, traders, vulnerable groups, etc.
9. Were there food program activities with women as the primary target and if so, what were they?
10. Is FFP/Mission staffed according to the different sectors in a food security project: Ag. Health/Nutrition, Micro credit, Infrastructures, etc
11. How are indicators of Title II-funded programs harmonized with the Mission's Strategic Objectives
12. How M&E visits are carried out? Project implementers alone for the entire Life of project activity. Joint field visits with FFP's staff or local authorities, etc.

Stakeholders

Examples: Organizations such as Ministries; Transporters; Input stockists; etc

1. What was your involvement/participation in _____(specific IEHA program)?
2. Who were the other stakeholders in the program?

Objectives/Beneficiaries

1. To which key objectives of the program did you contribute?
2. Were the objectives of the program clear to you? If not did you seek explanation and was this provided?
3. Who were the target beneficiaries?
4. Did the program in your view target the right people? Why do you say so?

Lessons and Challenges

1. What in your view worked very well in the program?
2. What do you think contributed to such success?
3. What challenges did the program face?
4. What were the possible causes of these challenges?

IEHA/USAID support

1. Would you know what IEHA/USAID contributed to the program?
2. Was this support adequate to achieve the objectives in which you participated?
3. Was IEHA/USAID's balance in terms of support to smallholder producers, traders, business service providers and market development (buyers) about right to develop agricultural value chains and increase agricultural growth *and* increase incomes of the vulnerable populations?
4. What needs to happen now to sustain the gains made under IEHA/USAID programs and to expand the staple food supply and nutrition?

Outcomes/Indicators

1. How were outcomes reported?
2. Did you as a stakeholder receive monitoring reports?
3. How many indicators were reported on in the monitoring reports?
4. Which were most effective? Why?
5. Which were not effective? Why?
6. Were the reported outcomes independently validated?
7. Did you have a chance to discuss the monitoring reports?

Coordination of stakeholders

1. How did the program coordinate the different stakeholders?
2. Was this successful? Why or why not?
3. What partnerships worked and which did not?
4. How can coordination with other partners and stakeholders be improved?

CAADP Process

1. Is your organization or activity connected to the Comprehensive Africa Agriculture Development Program in _____? Did IEHA/USAID help with this connection? How?

Feed the Future

1. Feed the Future is focused on nutrition and staple crops, vs. high value export crops. What are the lessons learned under IEHA activities that would help FtF succeed, and help the more vulnerable groups/households who are farmers?

Policy issues:

Agricultural policy analysis and reform

1. What support if any from IEHA?
2. Type of support
3. Direct financial aid
4. Technical assistance
5. Other (specify)
6. Uses of aid /form it took: staff hire, trainings, seminars / expert secondment / local experts
7. Has the assistance led to policy changes
8. Examples of Policy change
9. Examples of Regulatory reform
10. How are the policies and regulations in question being implemented
11. Who drafted the reforms?
12. Were legislators involved?

13. Have there been assessments of impact of policy changes

Institutional development

1. What support if any from IEHA?
2. Type of support
3. Direct financial aid?
4. Technical assistance
5. Other (specify)
6. Uses of aid / Form it took: staff hire, trainings, seminars / expert secondment / local experts
7. Has the assistance led to improvements in the focus and performance of the institutions involved in food and agriculture
8. Examples of **Institutional development and reform**
9. If no improvements, explain why not (funding issues, not practical, political problems, lack of consensus, technical issues)
10. Have there been assessments of **Institutional development and reform** experiences linked to USAID / IEHA

Agricultural financial services

1. What support if any from IEHA?
2. Type of support
3. Direct financial aid for technical issues (e.g. budget support for financial service strengthening)
4. Technical assistance staff
5. Other (specify)
6. Funding of Financial instruments such as guarantee funds, revolving funds, insurance schemes
7. Details of Uses of financial and technical aid: e.g. staff hire, trainings, seminars / expert secondment / hire of local experts, study tours
8. Has the assistance led to improvements to the institutions involved in food and agriculture
9. Examples of financial services strengthening
10. What has changed due to IEHA support
11. If no change, explain why not (funding issues, proposals not practical / appropriate due to political aspects, lack of consensus, technical issues)
12. Have there been assessments of **financial services** experiences linked to USAID / IEHA

Private sector development related to agriculture

1. What support if any from IEHA?
2. Type of support
3. Direct financial aid for technical issues (e.g. budget support for PSD strengthening)
4. Technical assistance staff
5. Other (specify)
6. Details of Uses of financial and technical aid: e.g. staff hire, trainings, seminars / expert secondment / hire of local experts, study tours
7. Has the assistance led to increased PS involvement in the food and agriculture sectors
8. Where has it been focused: investment projects incl. contract farming agro processing and exports, policy dialogue, trading/ marketing, support for NGOs, others
9. Examples of PSD strengthening activities
10. What has changed due to IEHA support
11. If no change, explain why not (funding issues, proposals not practical / appropriate due to political aspects, lack of consensus, technical issues)
12. Have there been assessments of **PSD** experiences linked to USAID / IEHA

Public Spending Policies for Agriculture

1. Has IEHA been involved in the public spending for agriculture debate?

2. What role did it play?
3. Did it provide any support in the form of direct financial aid or technical assistance?
4. Details of Uses of financial and technical aid: e.g. staff hire, trainings, seminars / expert secondment / hire of local experts, study tours
5. What in your view has been the impact of any assistance provided?
6. Has there been any change in the balance between investment and recurrent expenditure?
7. Where has change focused e.g. research, extension, marketing and market information, irrigation and drainage, post-harvest, etc.?
8. If no change as a result of support, explain why not (funding issues, proposals not practical / appropriate due to political aspects, lack of consensus, technical issues)?
9. Have there been assessments of **Public Spending interventions** linked to USAID / IEHA?

General

1. What operational issues have you experienced in working with IEHA supported programs?
2. What changes would you like to see in the way the programs operate
3. What new areas should successor Programmers explore / focus on?
4. What practices / lessons from other donors should IEHA consider for the future?
5. What features of IEHA systems should other donors learn from?

Outcomes/Indicators

8. How were outcomes reported?
9. Did you as a stakeholder receive monitoring reports?
10. How many indicators were reported on in the monitoring reports?
11. Which were most effective? Why?
12. Which were not effective? Why?
13. Were the reported outcomes independently validated?
14. Did you have a chance to discuss the monitoring reports?

Coordination of stakeholders

5. How did the program coordinate the different stakeholders?
6. Was this successful? Why or why not?
7. What partnerships worked and which did not?
8. How can coordination with other partners and stakeholders be improved?

CAADP Process

2. Is your organization or activity connected to the Comprehensive Africa Agriculture Development Program in _____? Did IEHA/USAID help with this connection? How?

Results Reporting (includes indicators) What has been your experience regarding performance indicators required by USAID (IEHA)

- a. Have there been changes in the indicators, the definitions of the indicators, how to measure the indicators? How have the changes affected your ability to measure on report on your performance?
- b. Can you comment on the number of indicators – too many, too few, etc
- c. Which were most effective? Why?
- d. Which were not effective? Why?
- e. Were the reported outcomes independently validated?
2. How helpful are these indicators for managing your program (provide examples)?

3. How helpful are these indicators for measuring the input of your program?
4. How helpful are these indicators for measuring the impact on IEHA goals/increasing smallholder incomes and reducing poverty and hunger (provide example)?
5. Do you share the results with your beneficiaries (smallholders, market actors, etc), and if yes, what do you share and how?
6. Do you require beneficiaries to track and provide input to your results reporting process, and if yes, what do you require of them?
7. What five higher-level indicators do you think would help you measure your activities impact on increasing smallholder incomes and reducing poverty and hunger?

Beneficiaries and Results Reporting

8. Are you required to track certain indicators and, if yes, were you given forms to fill out?
9. What type of performance tracking information would you find useful (give examples)?
10. Do you receive information on the performance from the implementing partner

Missions

In addition to the internet survey questions

1. How has the mission supported CAADP, what has their experience been with this support – has it been successful or challenging (give examples)
2. What are the mission's priorities going forward?
3. What are the mission's priorities related to poverty reduction and, in particular agriculture as it relates to poverty and hunger reduction?
4. How does the mission's program deal with risk (vulnerability), disaster prevention/mitigation and transient food insecurity and hunger?

IMPLEMENTING PARTNER SURVEY MONKEY QUESTIONNAIRE

Who to include in the sample: IP contacts, Title II PVOs, etc. Use the database and contacts, and for key programs that have closed, we should make sure we have new addresses for key contacts. Send the survey to the contact person and COP.

Preamble:

Initiative to End Hunger in Africa (IEHA) Evaluation Implementing Partner Survey

Social Impact and Management Systems International have been commissioned by USAID to conduct a final evaluation of the Initiative to End Hunger in Africa (IEHA) during January and February, 2011 (this includes Global Food Security Response - GFSR). The evaluation methods include: 1) review of documents; 2) an assessment of results; 3) field interviews with key informants from USAID, implementing partners, local partners, beneficiaries and other stakeholders in IEHA focus countries; and 4) two internet surveys: one for USAID staff and another for implementing partners. The evaluation report will be finalized in early March 2011 and will be made available for distribution. It is expected to provide useful input to the Feed the Future Initiative and strategy development.

The survey should take no more than 15 minutes. Most questions offer the respondent an opportunity to provide clarification and more in depth answers. Please answer these open ended questions as they will provide more meaningful input to this process. This is the only opportunity we have to gather the observations and opinions from implementing partners in countries that we cannot visit. Your input here is critical. For those in countries we will visit, your views are needed so that they will be well represented in this portion of the analysis.

Thank you!

Questions for the survey monkey

Name (optional) _____
Prime contractor/implementing partner _____
Name of project/activity _____
Position on project _____

Program Design

Please indicate the types of program areas included in your IEHA (GFSR) funded project/activity (check all that apply)

- ☐ () Smallholder food crop (grains, roots, tubers) productivity enhancement
- ☐ () Smallholder cash crop productivity enhancement
- ☐ () Creation of and support to producer associations
- ☐ () Smallholder market access
- ☐ () Market infrastructure improvement
- ☐ () Support to market information systems
- ☐ () Provision of business services
- ☐ () Agriculture financial services
- ☐ () Promotion of regional agriculture trade
- ☐ () Promotion of agriculture exports outside the region
- ☐ () Crisis mitigation related to agriculture performance
- ☐ () Agriculture research on staple food crops

- ☐ Agriculture research on cash crops
- ☐ Agriculture extension
- ☐ Agriculture policy (analysis and regulatory reform)
- ☐ Institutional capacity building

Please indicate the program areas that are covered by close complementary activities whether IEHA or other donor funded (check all that apply)

- ☐ Smallholder food crop (grains, roots, tubers) productivity enhancement
- ☐ Smallholder cash crop productivity enhancement
- ☐ Creation of and support to producer associations
- ☐ Smallholder market access
- ☐ Market infrastructure improvement
- ☐ Support to market information systems
- ☐ Provision of business services
- ☐ Agriculture financial services
- ☐ Promotion of regional agriculture trade
- ☐ Promotion of agriculture exports outside the region
- ☐ Crisis mitigation related to agriculture performance
- ☐ Agriculture research on staple food crops
- ☐ Agriculture research on cash crops
- ☐ Agriculture extension
- ☐ Agriculture policy (analysis and regulatory reform)
- ☐ Institutional capacity building

Please provide your responses to the following statements by marking the appropriate box

With whom does your project/activity work most directly (select no more than 3 choices)

- ☐ The poor and/or food insecure
- ☐ Women as farmers or entrepreneurs
- ☐ Commercial farmers
- ☐ Local traders
- ☐ Exporters
- ☐ Policy makers
- ☐ Humanitarian responders
- ☐ Other

If other, who _____

In your opinion, IEHA priorities are consistent with the local government's agricultural development priorities

- 1 – Strongly Disagree
- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

If they are not, explain how they differ and why _____

In your opinion, has IEHA significantly improved the USAID's contribution to the MDG goals for the country

- 1 – Strongly Disagree

- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

If you agree, please state which goals _____

If you disagree, please state why not _____

In your opinion, are IEHA activities more aligned with economic growth or poverty alleviation MDG goals

- 1 - Economic growth
- 2 - Poverty alleviation

The **timeline** (life of activity) of IEHA funded activities is sufficiently long to observe significant improvements in rural incomes and hunger reduction

- 1 – Strongly Disagree
- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

The **scope** of IEHA funded activities is sufficiently large to observe significant improvements in rural incomes and hunger reduction

- 1 – Strongly Disagree
- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

If you disagree, how would you modify your program to better assure results _____

The **scale** of IEHA funded activities is sufficiently large enough to observe significant improvements in rural incomes and hunger reduction

- 1 – Strongly Disagree
- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

If you disagree, how would you modify your program to better assure results _____

Reporting System

How useful were IEHA **indicators** for monitoring and evaluating your programs' performance?

- 1 – Not helpful at all
- 2 - Not very helpful
- 3 – Neutral
- 4 – Helpful
- 5 – Very helpful

Please identify the indicators that you feel are most helpful to you in assessing and managing your programs and why _____

How helpful was the overall **reporting system** established by IEHA in tracking results and assessing program progress and performance

- 1 – Not helpful at all
- 2 - Not very helpful
- 3 – Neutral
- 4 – Helpful
- 5 – Very helpful

Please provide any comments the IEHA reporting system you would like to share _____

Standardization of IEHA indicators has led to more consistent data collection and greater opportunities to rollup and compares results

- 1 – Strongly Disagree
- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

If they are not, explain how they differ and why _____

The indicators used by IEHA were able to be gathered from the field in a reasonably efficient and timely manner

- 1 – Strongly Disagree
- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

If they are not, explain how they differ and why _____

Does your reporting framework provide adequate data and information to assess your project/activity's impact on increasing rural incomes and reducing hunger?

- 1 – Not helpful at all
- 2 - Not very helpful
- 3 – Neutral
- 4 – Helpful
- 5 – Very helpful

If not helpful, why and what changes could you institute in order to do so _____

IEHA Studies and Information System

To what extent have you used the various analyses and studies conducted by **RESAKSS or IFPRI** in the **design** of your programs?

1 – Not at all

2 - Very little

3 – Neutral

4 – Somewhat

5 – A lot

If not, why not _____

If yes, for what specific purposes _____

To what extent have you used the various analyses and studies conducted by **RESAKSS or IFPRI** in the **on-going management** of your programs?

1 – Not at all

2 - Very little

3 – Neutral

4 – Somewhat

5 – A lot

If not, why not _____

If yes, which information and for what specific purposes _____

To what extent have you used the various **Global Food Crisis** analyses and studies conducted by IEHA?

1 – Not at all

2 - Very little

3 – Neutral

4 – Somewhat

5 – A lot

If not, why not _____

If yes, for what specific purposes _____

Have you used the data and information available through Risks?

1 – Not at all

2 - Very little

3 – Neutral

4 – Somewhat

5 – A lot

If not, why not _____

If yes, which information and for what specific purposes _____

Lessons Learned

In your opinion, what were the **four** most successful elements of the IEHA program in your country that you would like to see carried forward into the Feed the Future initiative:

- 1) _____
- 2) _____
- 3) _____
- 4) _____

In your opinion, what are **four** most significant challenges in implementing IEHA?

- 1) _____
- 2) _____
- 3) _____
- 4) _____

Please list any new development themes that you feel should receive greater attention under Feed the Future

What do you suggest that Feed the Future does in order to address these challenges? _____

In your opinion, and knowing USAID's comparative advantage among agencies and donors, what are **five** most important program areas to address in the Feed the Future initiative over the next five years?

- () Smallholder food crop (grains, roots, tubers) productivity enhancement
- () Smallholder cash crop productivity enhancement
- () Creation of and support to producer associations
- () Smallholder market access
- () Market infrastructure improvement
- () Support to market information systems
- () Provision of business services
- () Agriculture financial services
- () Promotion of regional agriculture trade
- () Promotion of agriculture exports outside the region
- () Crisis mitigation related to agriculture performance
- () Agriculture research on staple food crops
- () Agriculture research on cash crops
- () Agriculture extension
- () Agriculture policy (analysis and regulatory reform)
- () Institutional capacity building
- () Other

If other, please list the area(s) _____

Of the five program areas you selected, which need to be addressed or accomplished first? _____

Please comment on the necessary steps that need to be taken, linkages that need to be established, etc to make progress in these areas _____

USAID SURVEY MONKEY QUESTIONNAIRE

Who to include in the sample: Agriculture, Economic Growth, Food for Peace, IEHA, and Mission Program Officer. Can you make up a list of people so we can check to see that it's complete?

Preamble:

Initiative to End Hunger in Africa (IEHA) Evaluation USAID Mission Staff Survey

Social Impact and Management Systems International have been commissioned by USAID to conduct a final evaluation of the Initiative to End Hunger in Africa (IEHA) and Global Food Security Response (GFSR) during January and February, 2011. The evaluation methods include: 1) review of documents; 2) an assessment of results; 3) field interviews with key informants from USAID, implementing partners, local partners, beneficiaries and other stakeholders in IEHA focus countries; and 4) two internet surveys: one for USAID staff and another for implementing partners. The evaluation report is will be finalized in early March and will be made available for distribution. It is expected to provide useful input to the Feed the Future Initiative and strategy development.

The survey should take no more than 15 minutes. Most questions offer the respondent an opportunity to provide clarification and more in depth answers. Please answer these open ended questions as they will provide more meaningful input to this process. This is only opportunity we have to gather the observations and opinions from USAID staff in countries that we cannot visit. Your input here is critical. For those in countries we will visit, your views are needed so that they will be well represented in this portion of the analysis.

Thank you!

Questions for the survey monkey

Name (optional) _____
Mission _____
Position _____

Framework and Program Design

Please indicate the types of programs you have within your framework that IEHA supports (check all that apply)

- ☐ Smallholder food crop (grains, roots, tubers) productivity enhancement
- ☐ Smallholder cash crop productivity enhancement
- ☐ Creation of and support to producer associations
- ☐ Smallholder market assess
- ☐ Market infrastructure improvement
- ☐ Support to market information systems
- ☐ Provision of business services
- ☐ Promotion of regional agriculture trade
- ☐ Promotion of agriculture exports outside the region
- ☐ Crisis mitigation related to agriculture performance
- ☐ Agriculture research on staple food crops
- ☐ Agriculture research on cash crops
- ☐ Agriculture extension
- ☐ Agriculture policy (analysis and regulatory reform)
- ☐ Institutional capacity building

Please indicate the program areas where there are complementary regional and national programs (check all that apply)

- ☐ Smallholder food crop (grains, roots, tubers) productivity enhancement
- ☐ Smallholder cash crop productivity enhancement
- ☐ Creation of and support to producer associations
- ☐ Smallholder market assess
- ☐ Market infrastructure improvement
- ☐ Support to market information systems
- ☐ Provision of business services
- ☐ Promotion of regional agriculture trade
- ☐ Promotion of agriculture exports outside the region
- ☐ Crisis mitigation related to agriculture performance
- ☐ Agriculture research on staple food crops
- ☐ Agriculture research on cash crops
- ☐ Agriculture extension
- ☐ Agriculture policy (analysis and regulatory reform)
- ☐ Institutional capacity building

Please provide your responses to the following statements by marking the appropriate box

IEHA priorities as expressed in your mission's framework are consistent with the local government's agricultural development priorities

- 1 – Strongly Disagree
- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

If they are not, explain how they differ and why _____

The IEHA process has assisted Washington and the mission to effectively set their priorities and make contributions consistent with the CAADP country/regional framework, investment plan and implementation plan

- 1 – Strongly Disagree
- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

If you disagree, please explain why _____

IEHA has significantly improved the USAID's contribution to the MDG goals for the country

- 1 – Strongly Disagree
- 2 - Disagree
- 3 – Neutral
- 4 – Agree
- 5 – Strongly Agree

If you agree, please state which goals _____

If you disagree, please state why not _____

The process of integrating IEHA into the mission's framework was participatory with adequate discussion and interaction between the mission and Washington

1 – Strongly Disagree

2 - Disagree

3 – Neutral

4 – Agree

5 – Strongly Agree

If you disagree, please clarify why not _____

Reporting System

How useful were IEHA indicators for monitoring and evaluating your programs' performance?

1 – Not helpful at all

2 - Not very helpful

3 – Neutral

4 – Helpful

5 – Very helpful

Please identify the indicators that you feel are most helpful to you in assessing and managing your programs and why _____

How helpful was the overall reporting system established by IEHA in tracking results and assessing program progress and performance?

1 – Not helpful at all

2 - Not very helpful

3 – Neutral

4 – Helpful

5 – Very helpful

Please provide any comments the IEHA reporting system you would like to share _____

Standardization of IEHA indicators has led to more consistent data collection and greater opportunities to rollup and compare results

1 – Strongly Disagree

2 - Disagree

3 – Neutral

4 – Agree

5 – Strongly Agree

If they are not, explain how they differ and why _____

IEHA Studies and Information System

To what extent have you used the various analyses and studies conducted by **RESAKSS or IFPRI** in the design of your programs?

1 – Not at all

2 - Very little

3 – Neutral

4 – Somewhat

5 – A lot

If not, why not _____

If yes, for what specific purposes _____

To what extent have you used the various analyses and studies conducted by **RESAKSS or IFPRI** in the on-going management of your programs?

1 – Not at all

2 - Very little

3 – Neutral

4 – Somewhat

5 – A lot

If not, why not _____

If yes, which information and for what specific purposes _____

To what extent have you used the various Global Food Crisis analyses and studies conducted by IEHA?

1 – Not at all

2 - Very little

3 – Neutral

4 – Somewhat

5 – A lot

If not, why not _____

If yes, for what specific purposes _____

Have you used the data and information available through Risks?

1 – Not at all

2 - Very little

3 – Neutral

4 – Somewhat

5 – A lot

If not, why not _____

If yes, which information and for what specific purposes _____

Lessons Learned

In your opinion, what were the four most successful elements of the IEHA program in your country that you would like to see carried forward into the Feed the Future initiative:

1) _____

2) _____

- 3) _____
 4) _____

In your opinion, what are four most significant challenges in implementing IEHA?

- 1) _____
 2) _____
 3) _____
 4) _____

What do you suggest that Feed the Future does in order to address these challenges _____

In your opinion, and knowing USAID's comparative advantage among agencies and donors, what are four most important program areas to address in the Feed the Future initiative over the next five years?

- ☐ Smallholder food crop (grains, roots, tubers) productivity enhancement
☐ Smallholder cash crop productivity enhancement
☐ Creation of and support to producer associations
☐ Smallholder market assess
☐ Market infrastructure improvement
☐ Support to market information systems
☐ Provision of business services
☐ Promotion of regional agriculture trade
☐ Promotion of agriculture exports outside the region
☐ Crisis mitigation related to agriculture performance
☐ Agriculture research on staple food crops
☐ Agriculture research on cash crops
☐ Agriculture extension
☐ Agriculture policy (analysis and regulatory reform)
☐ Institutional capacity building
☐ Other

If other, please list the area(s) _____

Please comment on the necessary steps that need to be taken, linkages that need to be established, etc to make progress in these areas _____

APPENDIX K: CAADP

CAADP BACKGROUND

IEHA & CAADP: The African Union's Comprehensive African Agricultural Development Programme (CAADP) is a voluntary continent-wide program that requires participating countries to commit to allocate ten percent of their national budgets to agriculture and food security in pursuit of achieving six percent annual growth in agricultural productivity. CAADP's programming process emphasizes broad collaboration between the government and other key non-state stakeholders, including farmers, the private sector, non-profit organizations, including cooperatives and private sector organizations, and research institutes. CAADP is designed to help countries achieve the United Nation's Millennium Development Goal number one: to cut hunger in half by 2015.

The CAADP development process begins with a stock taking exercise to review sector programs, strategies and gaps across the range of institutions involved in a country's agricultural and food security sectors. This analysis leads to the development of a national compact, a document signed by the government and participating stakeholders, which outlines key agreements on the policy, strategies, and investment priorities that will be required to achieve increased agricultural productivity. The CAADP Compact is intended to be produced through a process of extensive consultation with a wide variety of stakeholders, including non-state actors. National compacts tend to be broad conceptual documents that identify a country's long-term food security vision and goals, and outline a commitment to pursue CAADP principles, including a commitment to follow an inclusive consultative process.

Once a national compact is signed, work begins to develop a CAADP National Agricultural Investment Plan (NAIP). The NAIP is a document that defines core investment programs and objectives, aligns the programs and objectives to national programs and budgets, identifies the role of stakeholders in program implementation, and begins to define financing needs and priorities. NAIPs tend to be three to five year strategy documents that provide a specific framework for achieving a country's food security vision and objectives. Once drafted, the NAIPs are reviewed through a peer review process that involves expert reviewers, most of whom are from outside the country.

The CAADP Pillars: In support of CAADP, the program has established a pillar structure. The CAADP framework identified four core issues in the continent's agricultural agenda. These four priority aspects, referred to as the CAADP pillars, are mutually supportive and are expected to integrate to form a comprehensive and holistic understanding of problems and opportunities, leading to systemic solutions.

CAADP's four pillars are:

- Pillar 1: Land and Water Management
- Pillar 2: Market Access
- Pillar 3: Food Supply and Hunger
- Pillar 4: Agricultural Research

The pillar, and associated pillar institutions, constitute a community of expertise that is available to support country investment plan development and other required analysis. This support is coordinated by the Regional Economic Communities (RECs).

Within their AU mandate to support member states in the implementation of the CAADP agenda, the RECs take initial leadership by garnering support for CAADP country implementation, typically starting with the ministry of agriculture. The RECs will closely liaise with and coordinate the efforts of other core players, including the AUC, the NEPAD Secretariat and the pillar institutions to ensure a coherent support structure to the country process.⁵

CAADP Pillar III is a deliberate attempt to ensure that the agricultural growth agenda targets the chronically poor and vulnerable directly, rather than through indirect and hoped for trickle down effects typical of past development policies and programs. CAADP Pillar III focuses on the chronically food-insecure, and on populations who are vulnerable to and affected by various crises and emergencies. This is to ensure that the CAADP agenda simultaneously achieves the agricultural growth agenda and Millennium Development Goal targets for addressing poverty and hunger (MDG 1 aims to cut extreme poverty and hunger in half by 2015). CAADP Pillar III focus draws together the central elements of the CAADP vision to ensure that growing agricultural productivity, well-integrated markets and expanded purchasing power of vulnerable groups combine to eradicate hunger, malnutrition and poverty. The pillar focus necessarily intersects with the other three CAADP pillars.

Consistent with the Principles of the Paris Declaration for Aid Effectiveness and the Accra Agenda for Action, CAADP works towards harmonizing and aligning systems of donor and government programming, in this case for agricultural programs. CAADP pursues this by developing country-led investment plans that can be directly supported by donors. This provides donors an option to channel funds through host government agencies to achieve their objectives (as opposed to creating parallel aid delivery mechanisms). The IEHA emphasized these same concepts and have been adapted by CAADP and, to a large degree, laid the foundation for this approach. Currently, USAID is programming agricultural support through the Feed the Future Initiative, which in Africa is designed to directly support CAADP.

CAADP implementation takes place on several fronts—Africa-wide (continental), regional, and country levels—and involves various actors: Stakeholders, donors, national governments, RECs, and the private sector including farmers and civil society organizations (From the NEPAD Website – Country status on signed compacts. The main text of the Ghana investment plan is also shown as an illustrative example.

“During the CAADP country round tables - key players come together to assess the realities of their own particular situation and develop a road map for going forward. This process leads to the identification of priority areas for investment through a ‘CAADP Compact’ agreement that is signed by all key partners. Find below key documents that are related to the CAADP round tables process. These include the stocktaking reports, signed compacts and the investment plans for the following countries:

Ethiopia - Signed Compact, Stocktaking Document, Post Compact Roadmap

Rwanda - Signed Compact, Investment Plans, Stocktaking Documents, Background Documents

Liberia - Signed Compact, Investment Plans, Stocktaking Documents, Technical Review Reports

Sierra Leone - Signed Compact, Stocktaking Documents, Technical Review Reports

⁵ Accelerating Country Implementation: A Guide for Implementors, AU/CAADP,

Ghana - Signed Compact, Investment Plans, Stocktaking Documents, Technical Review Reports

Mali - Signed Compact, Investment Plans, Stocktaking Documents

Niger - Signed Compact, Investment Plans, Stocktaking Documents

Togo - Signed Compact, Investment Plans, Stocktaking Documents

Burundi - Signed Compact, Stocktaking Document

Nigeria - Signed Compact, Technical Review Reports

Cape Verde - Signed Compact

Burkina Faso - Signed Compact, Investment Plans, Stocktaking Documents

Benin - Investment Plans, Stocktaking Documents, Post Compact Preliminary Comments

Senegal - Signed Compact, Investment Plans, Stocktaking Documents

Gambia - Signed Compact, Investment Plans, Stocktaking Documents, Technical Review Reports, Post Compact Preliminary Comments

Cote d'Ivoire - Signed Compact

Uganda - Signed Compact, Investment Plans, Stocktaking Documents

Swaziland - Draft Compact

Malawi - Signed Compact, Investment Plans

Tanzania - Investment Plans, Stocktaking Documents, Post Compact Road Map

Kenya - Signed Compact, Investment Plans

DRC - Stocktaking Documents

Guinea Bissau - Signed Compact

The countries with compacts have pledged to apply at least 10 percent of their budgets to agriculture, a doubling of the percentage for agriculture for many of them. They are to provide a detailed investment plan. After discussion of ReSAKSS, this annex also includes an excerpt from the CAADP investment plan of Ghana:

ReSAKSS' SUPPORTING ROLE TO CADAAP

The Regional Strategic Analysis and Knowledge Support System (ReSAKSS) is an Africa-wide network established to provide readily available analysis, data, and tools of the highest quality to promote evidence-based decision-making, improve awareness of the role of agriculture for development in Africa, fill knowledge

gaps, promote dialogue, and facilitate the benchmarking and review processes associated with the Comprehensive Africa Agriculture Development Programme (CAADP) agenda of the New Partnership for Africa's Development (NEPAD) and African Union (AU) and other regional agricultural development initiatives in Africa.

Three regional nodes have been established on the African continent, in collaboration with the Common Market of Eastern and Southern Africa (COMESA), the Economic Community of West African States (ECOWAS), and the Southern African Development Community (SADC) as part of the AU/NEPAD CAADP agenda. Four centers of the Consultative Group on International Agricultural Research (CGIAR), led by the International Food Policy Research Institute (IFPRI), are hosting and implementing the nodes through a network of partners in each region. In addition to IFPRI, the host CGIAR centers are the International Livestock Research Institute (ILRI), the International Institute of Tropical Agriculture (IITA) and the International Water Management Institute (IWMI).

The nodes are facilitating access by the regional economic communities (RECs) and their member states to policy-relevant analyses of the highest quality in order to improve policymaking, track progress, document success, and derive lessons that can feed into the review and learning processes associated with the implementation of the CAADP agenda.

Supporting CAADP: The establishment of ReSAKSS among the three regional economic communities (RECs) in Sub-Saharan Africa is a direct response to the growing demand for credible information and analysis during the design and implementation of agricultural-led development strategies, especially in support of the CAADP agenda.

The CAADP agenda is organized around a number of core principles and goals:

- Designating agriculture-led growth as a main strategy to achieve the Millennium Development Goal of halving the proportion of people living on less than a dollar a day (MDG1);
- Pursuing a 6 percent average annual agricultural sector growth rate at the national level;
- Allocating 10 percent of national budgets to the agricultural sector;
- Exploiting regional complementarities and cooperation to boost growth.
- Promoting partnerships at all levels of society as well as policy dialogue, review, and accountability to improve the program's efficiency.

Achieving these goals requires efficient and consistent planning and execution of sector policies and programs, effective translation of government expenditures into public goods and services at adequate levels, and appropriate mechanisms to regularly and transparently measure performance and ensure policies and programs are on track. ReSAKSS nodes have therefore been established to provide timely access to relevant information on investment options and priorities; benchmarks and best practices; statistical information to monitor progress; and other relevant technical information to help guide and inform the CAADP implementation process.

Organization: ReSAKSS is organized as a network of three nodes among the major regional economic communities in Africa. Each node, at the country level and Africa-wide, has set up a network of national, regional, and international partners that provide policy-relevant and timely analysis, data, and tools of the highest quality. The goal is to promote evidence-based decision-making, improve awareness of the role of

agriculture for development in Africa, fill knowledge gaps, promote dialogue, and facilitate the benchmarking and review processes associated with the CAADP agenda. The ReSAKSS nodes conduct activities organized around three components:

1. Strategic analysis to fill knowledge gaps and assess policy and investment options for accelerating agricultural growth and reducing poverty and hunger.
2. Knowledge management and communications to develop and build upon existing data, analytical tools, and knowledge; and facilitating timely access of the knowledge by the regional economic communities and member countries to allow for more evidence-based decision making.
3. Capacity strengthening to generate and disseminate knowledge products to support CAADP implementation particularly shared standards and protocols for collecting data and conducting analysis in ways that effectively contribute to informing policy and decision-making processes in Africa.

Host Institutions

- ReSAKSS Africa Wide is hosted at the International Food Policy Research Institution (IFPRI), in Washington, D.C. United States of America.
- ReSAKSS East and Central Africa is hosted at the International Livestock Research Institute (ILRI) in Nairobi, Kenya.
- ReSAKSS Southern Africa is hosted at the International Water Management Institute (IWMI) in Pretoria, South Africa.

ReSAKSS West Africa is hosted at the International Institute of Tropical Agriculture (IITA) in Ibadan, Nigeria.

Funding: ReSAKSS has been established with funding from the United States Agency for International Development (USAID), the UK Department for International Development (DFID), the Swedish International Development Cooperation Agency (SIDA) and the Bill and Melinda Gates Foundation.

About ReSAKSS: The Regional Strategic Analysis and Knowledge Support System (ReSAKSS) is an Africa-wide network of regional nodes supporting the Common Market of Eastern and Southern Africa (COMESA), the Economic Community of West African States (ECOWAS), and the Southern African Development Community (SADC), in collaboration with the International Food Policy Research Institute (IFPRI) and the Africa-based centers of the Consultative Group on International Agricultural Research (CGIAR), to facilitate the implementation of the AU/NEPAD's Comprehensive Africa Agriculture Development Programme (CAADP) and other regional agricultural development initiatives in Africa. The ReSAKSS nodes offer high-quality analyses to improve policymaking, track progress, document success, and derive lessons for the implementation of the CAADP agenda. ReSAKSS is jointly funded by the United States Agency for International Development (USAID), the UK Department for International Development (DFID), and the Swedish International Development Cooperation Agency (SIDA). The nodes are implemented by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Institute of Tropical Agriculture (IITA), the International Livestock Research Institute (ILRI) and the International Water Management Institute (IWMI), in collaboration with regional and national partners.

About the Working Paper series: The goal of the ReSAKSS Working Paper series is to provide timely access to preliminary research and data analysis results that relate directly to strengthening ongoing discussions and critical commentaries on the future direction of African agriculture and rural development. The series undergoes a standard peer review process involving at least one reviewer from within the

ReSAKSS network of partners and at least one external reviewer. It is expected that most of the working papers eventually will be published in some other form and that their content may be revised further.

ReSAKSS Working Paper No. 31

July 2010

Monitoring and Assessing Targets of the Comprehensive Africa Agriculture Development Programme (CAADP) and the First Millennium Development Goal (MDG) in Africa

Babatunde Omilola

Mbaye Yade

Joseph Karugia

Pius Chilonda

Background of CAADP

In 2003 at an African Union Summit held in Maputo, Mozambique, CAADP was formally endorsed by African heads of state, thereby signifying Africa's commitment to taking charge of its development agenda. The CAADP framework promotes inclusiveness by engaging a broad spectrum of participants from both public and private sectors, including farmers' organizations and fosters public-private partnerships. Moreover, the framework embodies core NEPAD principles of improved governance through accountability, transparency, peer review, dialogue, and benchmarking, all of which are central to improving planning and implementation as well as monitoring and evaluation (M&E) of sector performance. CAADP is not a 'one size fits all' plan but rather a strategic agenda that lays out a wide range of overarching actions, principals, and targets along which countries and sub-regions can align their individual agricultural development and poverty reduction strategies to fit local realities.

In addition to countries' commitment to allocate 10 percent of their national budgets to agriculture, other important CAADP guiding principles and targets include: i) adopting agriculture-led growth as the main strategy for achieving the first Millennium Development Goal of halving the proportion of people living on less than a dollar a day and the proportion of hungry people by 2015; ii) accelerating agricultural productivity growth to achieve a 6 percent annual agricultural growth rate at the national level; and iii) exploiting regional complementarities and spillovers and enhancing cooperation to boost exports and growth. To help realize these targets and principles, a set of specific actions and investment areas were identified under four mutually reinforcing Pillar frameworks. These Pillars represent interventions needed to invigorate agricultural growth and address challenges faced by the sector. They are:

- Pillar 1: Extending the area under sustainable land management and reliable water control systems;
- Pillar 2: Improving rural infrastructure and trade-related capacities for market access;

- Pillar 3: Increasing food supply, reducing hunger, and improving responses to food emergency crises; and
- Pillar 4: Improving agriculture research, technology dissemination and adoption.

Furthermore, three requirements that cut across the four Pillars and need to be addressed when implementing CAADP were identified. They include the need for: increasing human and institutional capacity in the agricultural sector; providing information and knowledge systems to guide the implementation process; and aligning the Poverty Reduction Strategy Paper (PRSP) process with the CAADP process and its goals and targets.

Under the leadership of NEPAD, AUC, and two leading Regional Economic Communities (RECs): the Common Market for Eastern and Southern Africa (COMESA) and the Economic Community of West African States (ECOWAS), more than two dozen countries have been actively refining sector policies, developing programs, and establishing the necessary partnerships to successfully implement CAADP. The NEPAD Secretariat based in Midrand, South Africa, provides overall facilitation of the implementation process, while COMESA and ECOWAS provide coordination support in their respective regions. Actual field level implementation is directed by individual countries and led by their government representatives and key stakeholders. As facilitator, the NEPAD Secretariat solicits political buy-in at the highest level and mobilizes the financial resources and technical expertise—at the international, regional, and national levels—needed to advance the implementation process. Following the endorsement of CAADP by African leaders, the Secretariat working with RECs, country governments, G8 partners and other stakeholders (farmers' organizations and the agribusiness sector) held various planning meetings to review lessons and successes in agriculture inside and outside of Africa. The Secretariat developed medium and long term action plans and principles to guide the implementation of CAADP. These early meetings and activities helped to raise the credibility and profile of CAADP among key stakeholders. In addition, they helped to quell skepticism over whether CAADP was a continental top-down strategy and solidified its reputation as a framework for improved planning and implementation at the regional and country levels. The engagement of a multitude of stakeholders allowed RECs and their member countries to take ownership of the process very early on.

EXAMPLE OF CADAAP DEVELOPMENT PLAN– GHANA

PROGRAMME 1 - FOOD SECURITY AND EMERGENCY PREPAREDNESS

Outcomes and objectives

The programme for enhancing food security and emergency preparedness will increase productivity and total production and improve food distribution to vulnerable groups and enhance nutrition. The nutrition aspect of food security will also be promoted through research, education and advocacy on choice of foods, and handling of food quality and safety. Groups most vulnerable to food insecurity will also be supported with income diversification opportunities to enable them cope better with adverse food supply situations and production risk and enhance their incomes for better access to food.

Activities are organized into seven components:

- (i) Productivity improvement

- (ii) Support for improved nutrition
- (iii) Support for diversification of livelihood options

FASDEP II: Agriculture sector goals

The Food and Agriculture Sector Development Policy (FASDEP II) embodies the Government of Ghana's vision for the agriculture sector. This itself is derived from the national vision in the GPRS II, and the follow-up National Long Term Development Plan, NEPAD's CAADP and the MDG1 on halving poverty by 2015. FASDEP II objectives are to improve food security, increase income, improve market access and ensure that investments in the sector will be scientifically based and environmentally sustainable regarding the allocation of at least 10% of annual government expenditure to the agricultural sector, targeting the poor appropriately and working towards gender equity.

The vision for the agriculture sector as defined by the above strategic documents and specified in the FASDEP II is “a modernized agriculture culminating in a structurally transformed economy and evident in food security, employment opportunities and reduced poverty”. Agricultural GDP growth is targeted at, at least 6% per annum to support the national growth output. The sector policy orientation is guided by the following: value chain concept; focus on selected commodities for food security; emergency preparedness; diversification of income generation and stability; enhanced productivity; mechanization to remove drudgery; irrigation to remove over reliance on rainfall; meeting the challenge of quality standards; transforming smallholders; promoting public-private partnerships; inclusivity whereby all operators (youth, vulnerable, women and men) are reached with services; enhanced coordination and harmonization.

Agriculture sector plan 2009–2015

FASDEP II outlines six objective areas to address the goals for the sector and the Agriculture Sector Plan has been developed to implement the policy. The objectives of the policy therefore form the basis of programs and activities in the sector plan which serves as the operational framework of investment programs for the period 2009 to 2015. The first two programs are on food security and growth in incomes and directly support commodity growth and development interventions.

Three other program areas on market access, environmental sustainability and science and technology support the commodity interventions. A final program on institutional coordination supports the framework for all interventions. The specific policy objectives/plan programs are the following:

1. Food security and emergency preparedness
2. Improved growth in incomes and reduced income variability directly promoting commodity development
3. Increased competitiveness and enhanced integration into domestic and international markets
4. Sustainable management of land and environment
5. Science and technology applied in food and agriculture development
6. Enhanced institutional coordination of the poor with off-farm activities linked to agriculture

- (iv) Food storage and distribution
- (v) Early Warning Systems and emergency preparedness
- (vi) Irrigation and water management
- (vii) Mechanisation services.

COMPONENTS

1.1 PRODUCTIVITY IMPROVEMENT

Opportunities exist to increase the production of selected commodities through intensive methods. Currently yield gaps for various commodities average around 50% of achievable yields, e.g. cassava at 12.4mt/ha against potential of 28.0mt/ha.

Targets

- (i) Improved technologies adopted by smallholder farmers and yields of maize, rice, sorghum, cassava and yam increased by 50% and cowpea by 25% by 2015.
- (ii) Improved livestock technologies adopted by farmers and production of local poultry and guinea fowl increased by 20% and small ruminants and pigs by 25% by 2015.
- (iii) Improved culture fisheries technologies adopted and production of cultured fish increased by 30% by 2015.

1.2. SUPPORT TO IMPROVED NUTRITION

There are several nutrient-rich foodstuffs whose production and consumption can be promoted alongside fortification technologies to get the best out of nutrients. *Target:* Stunting and underweight (in children) as well as Vitamin A, iron and iodine deficiencies (in children and women of reproductive age) reduced by 50% by 2015

1.3. SUPPORT FOR DIVERSIFICATION OF LIVELIHOOD OPTIONS OF THE POOR WITH OFF-FARM ACTIVITIES LINKED TO AGRICULTURE

Target: 5% of people falling below extreme poverty line supported to engage in off-farm livelihood alternatives by 2015

1.4. FOOD STORAGE AND DISTRIBUTION TO REDUCE FOOD INSECURITY.

Targets

- (i) Post-harvest losses along the maize, rice, sorghum, cassava and yam value chains by 30%, 35%, 20%, 40% and 50% respectively by 2015
- (ii) Private sector capacity (including FBOs) developed to warehouse 50,000 tones of grain annually and to process (mill and/or package) 25,000 tonnes of maize, cassava, yam, sorghum and cowpea products annually.

1.5. EARLY WARNING SYSTEMS AND EMERGENCY PREPAREDNESS

This component focuses on improving the ability to respond to outbreaks, natural hazards and other calamities and timely forecasts and preparedness with linkages to international centers.

Target: The number of vulnerable households is reduced by 20% by 2015.

1.6. IRRIGATION AND WATER MANAGEMENT

Irrigated agriculture would be made viable by backward linkages to infrastructure, inputs and research and forward linkages to agro-processing and marketing.

Targets:

- (i) Irrigation schemes productivity increased by 25% and intensification by 50% by 2012
- (ii) 150 micro and 25 small scale irrigation schemes as well as agricultural water management schemes developed to benefit 50,000 households in all regions of the country by 2015.
- (iii) Private sector facilitated to establish mechanization service centers (for production and processing) in specific areas where rain water harvest is major source of water for farming (e.g. Fumbisi, Katanga, Nasia, Nabogu and Soo valleys)
- (iv) Production and value of output of existing large scale irrigation schemes increased by 30% to 50% respectively by 2015
- (v) Feasibility studies for large scale irrigation projects in Accra Plains, Afram Plains and northern savannah irrigation areas completed by 2010 and funds for implementation sourced by 2012

1.7. MECHANISATION SERVICES

There is scope to diversify mechanization services to other farm activities such as planting, cultivation, harvesting and primary processing.

Targets

- (i) At least one (private sector led) mechanization centre established in each region by 2015 to provide diversified services to all types of farmers and agro-processors (small, medium, large, crops, livestock, fisheries men, and women).
- (ii) A system of incentives established for private sector commercial production of agro-processing equipment.
- (iii) Processes for tax exemption for importation of appropriate materials for fabrication of food processing equipment put in place by 2009

PROGRAMME 2 - IMPROVED GROWTH IN INCOMES AND REDUCED INCOME VARIABILITY

Outcomes and objectives

Incomes will be enhanced through diversification and activities involving a range of commodities including cash crops, livestock, indigenous commodities and value addition would be promoted. This will be done through the value chain approach and application of science and technology to improve productivity. Enhanced incomes will reinforce food security through financial access to food and ensure that there is less variability from year to year and more equity within farming communities and between rural and urban areas. The activities are organized into six components:

- (i) Promotion of cash crop, livestock and fisheries production for income in all ecological zones
- (ii) Development of new products
- (iii) Development of pilot value chains for one selected commodity in each ecological zone
- (iv) Intensification of FBOs and out-grower grower schemes concept
- (v) Rural infrastructure
- (vi) Support to urban and peri-urban agriculture

COMPONENTS 2.1. PROMOTION OF CASH CROP, LIVESTOCK AND FISHERIES PRODUCTION FOR INCOME IN ALL ECOLOGICAL ZONES

Opportunities exist for farmers to diversify out of staple crop production.

Targets:

- (i) Income from cash crop production by men and women increased by 20% and 30% respectively by 2015
- (ii) Income from livestock rearing by men and women increased by 10% and 25% respectively by 2015
- (iii) Income from culture fisheries (production and processing) by men and women increased by 50% and 50% respectively by 2015
- (iv) Post harvest losses of perishable commodities reduced by between 25 and 50% by 2015
- (v) Products from bee keeping, mushroom and snail farming and production of small stocks increased by 20 to 50% by 2015

2.2. DEVELOPMENT OF NEW PRODUCTS THROUGH VALUE ADDITION.

Target: At least two new commercially viable products developed from each of staple crops, horticultural crops, livestock (including poultry) and fisheries by 2015

2.3. DEVELOPMENT OF PILOT VALUE CHAINS FOR TWO SELECTED COMMODITIES IN EACH ECOLOGICAL ZONE:

Target: Efficient pilot value chains developed for two selected commodities in each ecological zone (pineapple and chilies in Coastal Savanna, commercial poultry and pig in Forest, maize and tomato in Derived Savanna and guinea fowl and tomato in Guinea/Sudan Savanna)

2.4. INTENSIFICATION OF FBOS AND OUT-GROWER GROWER SCHEMES CONCEPT

Target: Development of out-grower schemes and FBOs intensified and three-tier FBO structure achieved in all districts by 2015.

2.5. RURAL INFRASTRUCTURE

Targets:

- (i) Cost of transportation of agricultural produce in rural areas reduced by at least 5% in areas where infrastructure has been improved
- (ii) Rural industrial processing of cassava, oil palm, sheanuts, cashew nuts, soybeans and groundnut increased by 20%, 20%, 40%, 30%, 30% and 30% respectively by 2015.
- (iii) Rural industrial processing of livestock and fish increased by 20% and 30% respectively

2.6. SUPPORT TO URBAN AND PERI-URBAN AGRICULTURE

Target: Output from peri-urban agriculture increased by 20%

APPENDIX L: BACKGROUND ON E.AFRICA TRANSPORT CORRIDOR POLICY EFFORT

USAID assistance to East African Transport Corridor- Press releases from USAID 2006, 2008 and 2011

One-Stop Border Post Helps Streamline Transit Times

SafeTStop leads to brighter future for border communities

28 August 2007 | Malaba, Kenya

The Northern Corridor is a rail and road network that links Kenya to the Great Lakes countries of Uganda, Rwanda, Burundi, Southern Sudan and the Democratic Republic of Congo. Of the many bottlenecks along this route, the Malaba Border Post between Kenya and Uganda is the busiest. Increased trade and efficiency along this corridor hold the potential for a myriad of economic and social benefits.

On May 23rd, 2006, the refurbished railway building at Malaba was inaugurated by Deputy Chief of Mission, Leslie V. Rowe. This building will house the Kenya and Uganda Revenue Authorities, Customs and other Transit Transport Facilitation Authorities which clear railway cargo passing between the two countries – thus creating a **One-Stop Border Post** for rail cargo.

The Border Post Railway Station is the first of several similar projects to be undertaken by the two governments, USAID, COMESA and the Transit Transport Coordination Authority (**TTCA**) to streamline transit times and costs, as well as increase transparency along the Northern Transport Corridor. The Malaba One-Stop-Border Post is an important step in transforming the Northern Corridor into an Economic Development Corridor.

In acknowledgement of the challenges that increased cross border activity creates, USAID also launched the Malaba HIV/AIDS **Safe-T-Stop**, an innovative program to extend HIV/AIDS services along regional transport corridors. **Safe-T-Stop** is designed to reduce HIV transmission, improve care for people living with HIV/AIDS, and mitigate the impact of the disease in communities frequented by truckers and other mobile populations.

Transport is an *enabling* industry; it has a major role to play in economic growth, improved standards of living, increased trade, improved access to employment opportunities and increased social integration.

At the moment, trucks move up from Mombasa at a decent pace. But, they slow to a crawl at weigh stations or border crossing such as Malaba. These locations, where trucks stop, stack up and idle create communities all their own. Transport corridors such as this one are both economic lifelines *and* arteries of HIV infection. The One-Stop Border Post at Malaba will cut waiting time at the border from days to hours, lessening the burden for truck drivers and other high-risk mobile populations and the communities that host them.

This is important because when HIV/AIDS attacks a community or a region it becomes so much more than a health issue. HIV/AIDS affects all areas of life, not only health but economic livelihoods, human rights, gender relations, business, trade and politics. HIV/AIDS thrives in locations of high population movement, populations of economic vulnerability, hunger, joblessness and unequal relations between men and women. **Safe-T-Stops** address the underlying factors that drive risky behavior -- by working with women, children and vulnerable young people who are so easily moved into high risk behavior for survival.

By reaching out to long-haul truckers, by reducing economic vulnerability, by strengthening peer education, counseling and advocacy for women, by combating and reducing the stigma that accompanies HIV/AIDS; **Safe-T-Stops** mitigate and prevent the spread of a disease that might otherwise sap these border communities of what could be a vibrant future.

Transforming the Northern Corridor into an Economic Development Corridor

Participants at the Northern Corridor Spatial Development Programme in Kampala, Uganda. Stakeholders gathered to discuss the transformation of what is known today as the northern transport corridor into an economic development corridor.

3 March 2008 | Kampala, Uganda

USAID/EA, together with the New Partnership for Africa's Development (NEPAD) and the Common Market for Eastern and Southern Africa (COMESA), supported a "High Level Workshop on the Northern Corridor Spatial Development Program" in Kampala on February 28, 2008. The workshop was spearheaded by the Transit Transport Co-ordination Authority (TTCA) of the Northern Corridor. Participants included the Minister of Finance and Economic Planning, Uganda, the Permanent Secretary of Transport, Kenya, the Director of Works and Transport, Kenya as well as high level representatives of COMESA, the United Nations Economic Commission for Africa, the Inter-Government Standing Committee on Shipping, NEPAD, EAC, African Development Bank, East African Development Bank, PTA Bank, and the Port Management Association of Eastern and Southern Africa.

The Northern Corridor TTCA has been mandated by its council of ministers to lead a process to transform the Northern Corridor into an "economic development corridor". This meeting was held to obtain consensus among high level stakeholders that there is a significant regional economic development opportunity that could be realized if the existing Northern Transport Corridor were transformed into a development corridor. Members of the Regional Spatial Development from South Africa shared results of a desk study on the proposed development corridor and shared lessons learned from the Economic corridor that links Gauteng, South Africa with Maputo, Mozambique. Other experts gave overviews of key sectors and locations for economic development that could link into the corridor.

The envisaged Northern Corridor Economic Zone covers parts of Kenya, Burundi, the Democratic Republic of Congo, Rwanda, Uganda and Sudan. The corridor would follow the current Northern Corridor route starting in the Kenyan port city of Mombasa, going through Nairobi and into Uganda. There it would split into two legs, the first running through Kampala and into Rwanda, Burundi and DRC, the second running to Gulu and then splitting again going into north-eastern DRC and to the southern Sudanese city of Juba.

USAID/EA support to TTCA started in 1994 with funding of a Transport Corridor Analysis Study in East Africa, a study which still contributes to the East African transport agenda. USAID programs have contributed to the development of the corridor through:

- East and Central Africa Competitiveness Hub activities;
- COMESA;
- One-Stop border post in Malaba;
- development of SafeTStops along the route;
- RATES work in 'Maize without Borders';
- Customs and Harmonization activities;
- Customs Bond Guarantee Scheme and;

- Transit Facilitation Investments

The recent post-election crisis in Kenya has underscored the importance of the Northern Corridor to the region. The rising cost of fuel, the decrease in trade, and the increase in prices demonstrate the dependence countries in the region have on each other. The latest reports show that the cost of transporting goods along the Northern Corridor has increased by 25% in the last two months. In a region where the cost of moving goods is already among the highest in the world, these increases will damage any prospect for further development. In order to increase competitiveness and build the East African economy, a strong transport artery in this region is essential.

Senior East African Community Country Officials Agree on Need for \$4.1 Billion Investment to Improve East Africa's Transport Infrastructure to 2015

25 February 2011 | Dar es Salaam, Tanzania

From 2008 USAID Press Release:

USAID/EA support to TTCA started in 1994 with funding of a Transport Corridor Analysis Study in East Africa, a study which still contributes to the East African transport agenda. USAID programs have contributed to the development of the corridor through:

- the East and Central Africa Competitiveness Hub activities;
- COMESA;
- One-Stop border post in Malaba;
- development of SafeTStops along the route;
- RATES work in 'Maize without Borders';
- Customs and Harmonization activities;
- Customs Bond Guarantee Scheme and;
- Transit Facilitation Investments

From Feb 25 2011 USAID PRESS RELEASE:

Senior officials, transport experts and private sector representatives from EAC countries have concluded a successful East Africa Corridor Diagnostic Study Second Stakeholders' Workshop held at the Mlimani City Conference Centre in Dar es Salaam, Tanzania. The workshop was opened by development partner representative, Ms. Stephanie Wilcock of the United States Agency for International Development (USAID), the East African Community (EAC) Deputy Secretary General, Planning and Infrastructure, Mr. Alloys Mutabingwa and The Minister of Transport in Tanzania Honourable Omari R. Nundu. The purpose of the workshop was to enable stakeholders to provide input and approve proposals made by the East Africa Corridor Diagnostic Study on an integrated action plan to improve the performance of the Northern and Central transport Corridors.

The meeting's highlight was the declaration by stakeholders through Honourable Nundu that:

"The proposed Action Plan that has resulted from the East Africa Corridor Diagnostic Study will have a tremendous impact on the regional integration and development of East Africa."

The implementation of the proposed Action Plan projects is expected to improve substantially the performance of the Northern Corridor and Central Corridors through:

- US\$1.9 billion in annual transport cost savings by 2015 representing an average reduction in transport costs of 28% on both corridors;
- 53% reduction in shipping time for destinations served by rail on both corridors and 21-33% reduction in shipping time to destinations served by road; and
- 25% decrease in road transport costs on Northern Corridor and 11-14% decrease in rail transport costs;
- An approximately 9-11% reduction in road transport costs on the Central Corridor and a 30-36% decrease in rail/lake transport cost.

Recommended Projects

Improving the efficiency and reliability of the Northern and Central Corridors will require the adoption and implementation of an integrated Action Plan to simultaneously address infrastructure constraints, bottlenecks, operational inefficiencies, and policies and procedures. Recommended projects include:

1. An optimized port / Inland Clearance Depot (ICD) integration program is proposed as a short-term solution to alleviate capacity constraints by transferring cargo handling at the marine terminals container yards to near port ICDs;
2. Ports projects originating from the master plans of both the Dar es Salaam and Mombasa ports defining long-term development projects, including new container terminals to ease capacity constraints and increase berth productivity;
3. Projects to increase capacity for liquid and dry bulk products at the two ports;
4. Increase freight volumes on the regional railways by targeting the container sector in order to achieve the threshold volumes;
5. Road improvement projects are a central component of the strategy and must be conducted for three categories of roads to:
 - o upgrade road capacity by adding lanes to roads with heavily traffic
 - o rehabilitate paved roads whose poor condition affect corridor performance
 - o upgrade from gravel to paved standards, key feeder roads that serve the corridors.

As the gateways for the two corridors, the ports of Mombasa and Dar es Salaam must have adequate capacity and be able to perform efficiently in order for the overall corridor performance to improve.

The East Africa Corridor Diagnostic Action Plan will be submitted by EAC to the Tripartite - COMESA, EAC and SADC - for approval. The Action Plan is expected to be implemented through a coordinated effort by EAC, national governments, international partners and private investors. **As a next step and to begin to mobilize the suggested \$4.1 billion to finance implementation of the Action Plan an investor's conference is planned for late 2011.**

The East Africa Corridor Diagnostic Study was made possible with the financial and technical assistance of the US Agency for International Development and the UK Department for International Development and support of JICA , AfDB, World Bank and the EU.

Background

The Northern Corridor, anchored by the port of Mombasa in Kenya, and the Central Corridor, anchored by the port of Dar es Salaam in Tanzania, are the principal transport routes for national, regional, and international trade of the five East African Community (EAC) countries—Burundi, Kenya, Rwanda, Tanzania, and Uganda. **Because of inadequate physical infrastructure and inefficiency, these corridors**

are characterized by long transit times and high cost. Freight costs per kilometer are more than 50% higher than costs in the United States and Europe, and for the landlocked countries, transport costs can be as high as 75% of the value of exports. The East Africa Corridor Diagnostic Study for Northern and Central corridors has been undertaken as a response to the Tripartite (COMESA, EAC and SADC) and EAC regional leadership and peoples demand for an in depth assessment of the performance of the corridors and preparation of an action plan to remove identified transport logistics impediments. The objective is to develop an efficient regional transport system that will reduce the prohibitively high transport costs and, thus, catalyze and facilitate trade expansion and investment, which form the cornerstone for regional economic growth, integration and prosperity.

Summary from March 2008 and February 2011 USAID Press releases on the East Africa transport corridor:

2008 release- excerpt

“The proposed Action Plan that has resulted from the East Africa Corridor Diagnostic Study will have a tremendous impact on the regional integration and development of East Africa.”

The implementation of the proposed Action Plan projects is expected to improve substantially the performance of the Northern Corridor and Central Corridors through:

- US\$1.9 billion in annual transport cost savings by 2015 representing an average reduction in transport costs of 28% on both corridors;
- 53% reduction in shipping time for destinations served by rail on both corridors and 21-33% reduction in shipping time to destinations served by road; and
- 25% decrease in road transport costs on Northern Corridor and 11-14% decrease in rail transport costs;
- An approximately 9-11% reduction in road transport costs on the Central Corridor and a 30-36% decrease in rail/lake transport cost.

Recommended Projects

Improving the efficiency and reliability of the Northern and Central Corridors will require the adoption and implementation of an integrated Action Plan to simultaneously address infrastructure constraints, bottlenecks, operational inefficiencies, and policies and procedures. Recommended projects include:

6. An optimized port / Inland Clearance Depot (ICD) integration program is proposed as a short-term solution to alleviate capacity constraints by transferring cargo handling at the marine terminals container yards to near port ICDs;
7. Ports projects originating from the master plans of both the Dar es Salaam and Mombasa ports defining long-term development projects, including new container terminals to ease capacity constraints and increase berth productivity;
8. Projects to increase capacity for liquid and dry bulk products at the two ports;
9. Increase freight volumes on the regional railways by targeting the container sector in order to achieve the threshold volumes;
10. Road improvement projects are a central component of the strategy and must be conducted for three categories of roads to:
 1. upgrade road capacity by adding lanes to roads with heavily traffic
 2. rehabilitate paved roads whose poor condition affect corridor performance
 3. upgrade from gravel to paved standards, key feeder roads that serve the corridors.

As the gateways for the two corridors, the ports of Mombasa and Dar es Salaam must have adequate capacity and be able to perform efficiently in order for the overall corridor performance to improve.

2011 Press Release - Excerpt

The East Africa Corridor Diagnostic Action Plan will be submitted by EAC to the Tripartite - COMESA, EAC and SADC - for approval. The Action Plan is expected to be implemented through a coordinated effort by EAC, national governments, international partners and private investors. As a next step and to begin to mobilize the suggested \$4.1 billion to finance implementation of the Action Plan an investor's conference is planned for late 2011.

The East Africa Corridor Diagnostic Study was made possible with the financial and technical assistance of the US Agency for International Development and the UK Department for International Development and support of JICA, AfDB, World Bank and the EU.

Background

The Northern Corridor, anchored by the port of Mombasa in Kenya, and the Central Corridor, anchored by the port of Dar es Salaam in Tanzania, are the principal transport routes for national, regional, and international trade of the five East African Community (EAC) countries—Burundi, Kenya, Rwanda, Tanzania, and Uganda. Because of inadequate physical infrastructure and inefficiency, these corridors are characterized by long transit times and high cost. Freight costs per kilometer are more than 50% higher than costs in the United States and Europe, and for the landlocked countries, transport costs can be as high as 75% of the value of exports. The East Africa Corridor Diagnostic Study for Northern and Central corridors has been undertaken as a response to the Tripartite (COMESA, EAC and SADC) and EAC regional leadership and peoples demand for an in depth assessment of the performance of the corridors and preparation of an action plan to remove identified transport logistics impediments. The objective is to develop an efficient regional transport system that will reduce the prohibitively high transport costs and, thus, catalyze and facilitate trade expansion and investment, which form the cornerstone for regional economic growth, integration and prosperity.

East African Community note indicates the one stop was not implemented yet (excerpt from Feb. 2011 article on workshop).

Workshop on Transport Corridor Development Opens in Dar PRESS RELEASE

EAC Secretariat, Arusha, Tanzania, 24 February 2011: A two-day workshop to review the East Africa Corridor Diagnostic Study (CDS) opened today at the Mlimani City Conference Center in Dar es Salaam Tanzania. The acting Permanent Secretary in the Ministry of Transport, Mrs. Sihanga Nkinga opened the workshop on behalf of Tanzania's Minister of Transport Hon. Omari Nundu.

Stakeholders from the EAC and beyond are expected to provide their inputs on the proposed integrated Action Plan for the development/improvement of the region's Northern and Central corridors, while the workshop also aims to promote broad ownership of the CDS proposals.

In his opening statement Hon. Nundu remarked that inadequate infrastructure is "an issue that constitutes the biggest concern for our region" and thus commended efforts by the EAC and development partners to address these challenges. He urged the workshop participants to design concrete recommendations to guide regional responses that would facilitate transportation of goods and in turn spur trade.

The Minister informed participants that the United Republic of Tanzania was committed to playing its part in improving regional infrastructure, observing that over the last ten years the country has built up to 570km of roads that have improved linkages with the landlocked Partner States of Rwanda and Burundi. In addition, Hon. Nundu said there were a number of initiatives at various levels of inception or implementation in the road, rail and water transport sectors.

Meanwhile the EAC Deputy Secretary General in charge of Planning and Infrastructure, Mr. Alloys Mutabingwa, said the high cost of transport is one of the serious challenges slowing development and that it was for this reason that development partners have partnered with the collaborating sub regions (of EAC, COMESA and SADC) to address the question of high costs of transport along various corridors.

He cited the ongoing implementation of the North South Corridor that begins from the port of Dar es Salaam and ends at the port of Durban linking seven countries in the EAC, COMESA and SADC blocs as an example of a promising regional response to the existing transportation challenges.

The EAC Deputy Secretary General added that the EAC is moving to reduce high transaction costs at border posts, which studies have shown contribute about 40% of the trade logistics costs, by transforming the existing inefficient two stop border posts into one stop border posts. Mr. Mutabingwa reported that the EAC is close to concluding a One Stop Border Post law to fully operationalize this project. The border posts at Malaba between Kenya and Uganda and at Namba between Rwanda and Burundi are set to benefit from the OSBP concept.