

2020 Vision Network for East Africa

IFPRI RESEARCH AND TRAINING ACTIVITIES IN EASTERN AFRICA



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INTRODUCTION

This note summarizes the research and training activities of the International Food Policy Research Institute (IFPRI) in Eastern Africa (Ethiopia, Kenya, Malawi, Mozambique, Tanzania, and Uganda). Its primary objective is to inform partners and collaborators in the 2020 Vision Network for East Africa about IFPRI's ongoing research and training activities in the region during 1999-2000. The Network is composed of researchers, policymakers and civil society representatives in the above-mentioned countries.¹

The International Food Policy Research Institute (IFPRI) was established in 1975 to help developing countries devise appropriate food policies and the policies needed to ensure the optimum use of new agricultural technologies. Without such policies, there is no guarantee that technical improvements will translate into adequate food supplies and improved nutrition for fast-growing Third World populations.

IFPRI operates as part of the Consultative Group on International Agricultural Research (CGIAR), a worldwide network of institutions that seek to improve the productivity of agriculture, forestry, and fisheries in developing countries, reduce malnutrition, and enhance the well-being of poor people while preserving their environment. While the other CGIAR centers focus mainly on agricultural science and technology, IFPRI aims at fostering sustainable economic growth and combating poverty through better government policies.

Although IFPRI's research is ultimately focused on reducing hunger and malnutrition, its interest extends to social, economic, and institutional forces that drive the food sector and bear on the development process. IFPRI seeks to strengthen links between agriculture and other sectors of the economy, such as manufacturing and service industries. It also examines trade and other macroeconomic policies -- such as exchange, interest, and wage rates -- to determine their effects on development and the environment.

IFPRI sets its research priorities through a consultative process that involves key stakeholders from developing and developed countries. Priority is given to urgent food policy issues that will have the greatest positive impact on the poor. The Institute has 25 years of cumulative research experience and collaborates with other national and

¹ This note has been prepared by Dr. Simon Bolwig, Danida Junior Professional Officer, with the 2020 Vision Network for East Africa. Please refer to IFPRI's website www.ifpri.org for further information on IFPRI's research and outreach activities and to download IFPRI publications. To receive periodic email announcements about new publications and other items of interest, please join our **NEWatIFPRI** listserv at www.ifpri.org/new/newatifpri.htm. IFPRI can be contacted directly by email at ifpri@cgiar.org.

international agricultural research centers in order to create synergies and achieve sustainable results.

IFPRI's research is multidisciplinary and relies on primary data collected in collaboration with developing-country institutions at the household, regional, and national levels. The Institute's goal is to generate results that will have international benefits for policymaking in diverse socioeconomic, political, and geographical contexts. The Institute conducts its research through multicountry research programs, global and regional programs, and syntheses of thematic issues. IFPRI undertakes collaborative research in some 50 developing countries. About one-fifth of its senior research staff reside in the countries where they conduct research.

IFPRI has four research and outreach divisions and a communications division:

- Environment and Production Technology Division;
- Markets and Structural Studies Division;
- Food Consumption and Nutrition Division;
- Trade and Macroeconomics Division; and
- Communications Division

In addition IFPRI hosts the 2020 Vision for Food, Agriculture, and the Environment initiative.

IFPRI RESEARCH AND TRAINING ACTIVITIES IN EASTERN AFRICA

This section summarizes IFPRI's research and training activities in Eastern Africa during 1999-2000. The presentation is organized by IFPRI's research and outreach divisions. The following information is provided for each division:

- Main areas of research;
- IFPRI staff members involved in Eastern African research;
- Research projects in the region;
- Training activities in the region; and
- Eastern African collaborators.

In some cases mention is also made of IFPRI collaborators from outside the region. Annex 1 lists IFPRI publications dealing with Eastern Africa. Annex 2 provides more comprehensive summaries of IFPRI research projects and programs that include countries in Eastern Africa.

A 2020 VISION FOR FOOD, AGRICULTURE, AND THE ENVIRONMENT

In 1993, IFPRI, in collaboration with partners around the world, launched an initiative called A 2020 Vision for Food, Agriculture, and the Environment. The main impetus for this initiative was the prevalence of considerable disagreement on the magnitude and nature of the world's food and environmental problems combined with complacency that global food surpluses were a sufficient guarantee of global food security. The lack of a long-term vision and consensus about what actions are required for feeding the world, reducing poverty, and protecting the natural resource base spurred IFPRI to launch the 2020 Vision initiative.

The 2020 Vision initiative has two primary objectives: (i) to develop and promote a shared vision and consensus for action for meeting food needs while reducing poverty and protecting the environment; and (ii) to generate information and encourage debate to influence action by national governments, nongovernmental organizations, the private sector, international development institutions, and other elements of civil society.

To realize these objectives, the 2020 Vision initiative engages in four major activities:

- Generating timely, state-of-the-art information on key topics related to food, agriculture, and the environment, paying special attention to emerging issues that have long-term implications for feeding the world, alleviating poverty, and protecting natural resources;
- Communicating the 2020 Vision challenges and related action program to raise awareness of the world's food and environmental problems and what can be done to solve them, paying special attention to reaching not only the current generation of policymakers, researchers, educationists, and other leaders, but also the next generation(s);
- Providing fora for dialogue, debate, information sharing, and consensus building among policymakers, researchers, and leaders in nongovernmental organizations, private sector, and media through seminars, workshops, and conferences; and
- Strengthening the capacity of developing countries to conduct their own 2020 research and to design and implement their own 2020 strategies and action plans, mainly through regional networks, initially in East and West Africa, and later in other developing regions. The next section describes the network for East Africa in further detail.

The 2020 Vision Network for East Africa

In 1998 IFPRI and its collaborators in Africa established two regional research networks, one for East Africa and one for West Africa. Unlike most research-based entities, these networks include not only researchers, but policymakers and leaders from civil society. Through research, publications, training, and dialog between

decisionmakers and researchers, the networks aim to generate information that policymakers can use to encourage sustainable growth and poverty-alleviation goals and to build the capacity of African countries to formulate appropriate policies and strategies.

The overall goal of the 2020 Vision networks is to reduce poverty, improve food security and child nutrition, improve gender equity, increase agricultural productivity, and promote sustainable use of natural resources. The networks aim to fulfill these objectives specifically by integrating themselves in national and regional-level policymaking processes, working closely together with local researchers, policymakers, and civil society organizations.

The East African network comprises Ethiopia, Kenya, Malawi, Mozambique, Tanzania, and Uganda. The network has formed country teams headed by leading researchers and policymakers from each country. The teams are drawn from government ministries, research or academic institutions, and civil society organizations.

Through a consultative process, country and region-level priority research themes needed for effective policy formulation have been formulated and described in six Country Notes. At this writing, each country team is formulating research proposals for high-priority applied policy research aimed at the most important information gaps identified in that country. In connection with policy research a number of training and capacity-strengthening activities will be carried out under the auspices of the network. Innovative courses will be offered on key topics and a researcher exchange program will facilitate interaction between countries in the region and with other developing countries. Information dissemination through various communication instruments will be developed, workshops and meetings will be organized, and a major regional conference will be held by the network toward the end of the second stage to present the results of network activities to a larger group of stakeholders in the region.

The network is coordinated by Dr. Fred Opio, who is an IFPRI senior staff member based in Kampala, Uganda. He reports to Ms. Rajul Pandya-Lorch, Head of the 2020 Vision Initiative, at IFPRI headquarters in Washington, D.C. A Danida junior program officer, Dr. Simon Bolwig, assists the coordinator in Kampala. A regional advisory committee, under the chairmanship of Mr. Harris Mule of Kenya, sets priorities, evaluates progress, and undertakes other activities as appropriate. A proposal evaluation committee, chaired by Professor Mandivamba Rukuni of Zimbabwe, will review research proposals and make recommendations on the allocation of a competitive grants program to fund research on country- and regional-level research priorities.

MARKETS AND STRUCTURAL STUDIES DIVISION

Much of the work of the Markets and Structural Studies Division (MSSD) focuses on agricultural input and output markets and the related issues of marketing, infrastructure, and institutional development. A working assumption of the division is that undistorted and unencumbered input and output markets are vitally important for a successful transition. Yet many developing countries rely on a host of direct and indirect market interventions. The challenge for the division is to define and visualize successful strategies for market reform.

MSSD believes that the success of agriculture in many developing countries depends, to a large extent, on managing the transition from a subsistence to a commercial rural economy. This transition is typically accompanied by changes in product mix, sources of income, the structure of employment, and the productivity of labor. The prospects for reducing rural poverty, assuring food security for the poor, and improving the overall quality of life in rural areas depend on the way governments manage this change.

MSSD staff involved in research or training activities in Eastern Africa:

- Christopher Delgado, Senior Research Fellow
- Francesco Goletti, Senior Research Fellow
- Nicholas L. Minot, Research Fellow
- Mylene Kherallah, Research Fellow
- Eleni Gabre-Madhin, Postdoctoral Fellow
- Peter Gruhn, Research Analyst
- Philippe Berry, Research Analyst

MSSD Research Activities in Eastern Africa

The Eastern African projects listed in the table below falls within the following thematic multi-country programs (MPs) run by the Markets and Structural Studies Division:

MP 1 — Public policies for rural institutions, markets and infrastructure development (managed by Mylene Kherallah)

MP 7 — Promoting growth and diversification through markets for high-value crop and animal products (managed by Christopher Delgado)

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers Involved
Prospects for regional grain trade in East Africa (MP1), 2000 — WB	The project studies the operation of, and constraints affecting, the grain trade between Kenya, Uganda, Ethiopia, and Tanzania.	Kenya, Uganda, Ethiopia, Tanzania	<ul style="list-style-type: none"> • Eleni Gabre-Madhim • Mylene Kherallah
Pilot study on maize trade between Uganda and Kenya (MP1), 1998–1999 — WB	The project gives an overview of the efficiency of, and constraints to, maize marketing in Uganda and Kenya	Uganda, Kenya	<ul style="list-style-type: none"> • Eleni Gabre-Madhim
Impact of market reforms on smallholders in Benin and Malawi (MP1), 1998–2000 — BMZ	The objective of the project is to determine the effects of market reforms on the smallholder farming sector, using survey data from farmers, input and output traders, and local communities. In Malawi the focus is on the effects of the regulation of maize prices.	Malawi	<ul style="list-style-type: none"> • Mylene Kherallah • Nick Minot • Eleni Gabre-Madhim • Philippe Berry
Tanzania agricultural strategy (MP7), 1999 — DANIDA, SIDA, IFPRI	The project provides an analysis of field-level and secondary data to determine the extent to which Tanzania's agricultural sector has contributed to (since 1986), and can contribute to, economy-wide growth under structural adjustment. The study is intended to support the joint United Republic of Tanzania—World Bank Country Economic Memorandum.	Tanzania	<ul style="list-style-type: none"> • Christopher Delgado • Nick Minot • Claude Courbois
Agricultural market reforms in Sub-Saharan Africa (MP1), 1999–2000 — IFPRI	The project provides a synthesis of the literature on market reforms in Sub-Saharan Africa (SSA), including the status of market liberalization and the preferred pathways of agricultural market development.	SSA	<ul style="list-style-type: none"> • Mylene Kherallah • Nick Minot • Eleni Gabre-Madhim • Christopher Delgado
Policies for improved land management in Uganda (MP1), 1999–2001 — Jointly with EPTD-IFPRI	<ul style="list-style-type: none"> • The project will provide an area-specific overview of land management issues in Uganda, including degradation and pathways to sustainability (see project description in the EPTD section). • MSSD researches the market aspects of land management, including a survey of market input distribution, agricultural output marketing, and surveys of communities and producers. 	Uganda	<ul style="list-style-type: none"> • Francesco Goletti • Peter Gruhn • Rashid Shahidur • Ephraim Nkonya
BEAF, NORAD	The project studies dairy marketing in Uganda	Tanzania, Uganda, Kenya	<ul style="list-style-type: none"> • Christopher Delgado
Promoting growth and diversification through markets for high-value crop and animal products (MP7), 2000 — (Tanzania) WB	The project studies dairy marketing in Uganda	Tanzania, Uganda, Kenya	<ul style="list-style-type: none"> • Christopher Delgado

MSSD Training Activities in Eastern Africa

MSSD held training courses in 1999 at the Bunda College of Agriculture in Malawi. The course participants were staff from Eastern African universities, research institutions and ministries. The training was organized as 3-4 day courses with computer exercises. The topics were 1) survey and sampling methods, 2) price analysis, 3) supply and demand analysis, 4) policy analysis. Training courses will be offered again in November/December 2000. At this time the results of the “Impact of market reforms on smallholders” project will also be presented. Parallel training courses were held in Benin by Nick Minot. An MSSD staff member also supervises and jointly sponsors a PhD student in Kenya. In Uganda, MSSD staff undertake a number of training and capacity building activities in relation to their collaboration with local researchers in the project “Policies for improved land management in Uganda”.

MSSD Eastern African Collaborators

Kenya

- Tegemeo Institute, Egerton University
- International Livestock Research Institute
- Ministry of Agriculture, Information Branch (Famine Early Warning Systems)
- University of Nairobi (Kabete)

Malawi

- Agricultural Research Policy Unit, Bunda College of Agriculture

Tanzania

- University of Dar-es-Salaam
- Institute for Development Management, Morogoro
- The Planning Commission
- Ministry of Agriculture and Cooperatives

Uganda

- Agricultural Policy Secretariat of the Ministry of Finance, Planning and Economic Development
- National Agricultural Research Organisation (NARO)
- Makerere University
- Kawando Agricultural Research Institute

Regional

- International Livestock Research Institute (Addis Ababa and Nairobi)

ENVIRONMENT AND PRODUCTION TECHNOLOGY DIVISION

Research in the Environment and Production Technology Division (EPTD) focuses on meeting food production needs in developing countries in ways that are beneficial to the poor and do not degrade the natural resource base. This involves identifying the most appropriate technological and institutional changes and policies for sustainable and equitable agricultural production. Research attempts to identify appropriate policies for less-favored rainfed areas, including forest margins, hillsides, and semi-arid lands, and water management policies for high-potential irrigated areas. The division's research mandate also includes work on agricultural research and extension and on property rights and collective action.

EPTD staff involved in research or training in Eastern Africa:

- *John L. Pender*, Research Fellow
- *Stanley Wood*, Senior Scientist
- *Ephraim Nkonya*, Postdoctoral Fellow, outposted to Uganda
- *Pamela Jagger*, Senior Research Assistant

EPTD Research Projects in Eastern Africa

EPTD's current activities are concentrated in Uganda and Ethiopia. The Eastern African projects listed in the table below falls within the following thematic multicountry programs (MPs), global and regional programs (GRPs), and special synthesis projects (SYNs) run by the Environment and Production Technology Division:

MP 11— Property rights and collective action (managed by Peter Hazell)

GRP 1— Agricultural science and technology policy (managed by Phil Pardey)

GRP 5— Sustainable development of less-favored lands (managed by John Pender)

SYN 4— Synthesis of agricultural development issues and investigations in Sub-Saharan Africa (managed by Peter Hazell and Raisuddin Ahmed)

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers Involved
Property rights, risk, and livestock development in Sub-Saharan Africa (MP11) — Jointly with ILRI, BMZ, CAPRI	The project addresses the issues of property rights, risk, and livestock development in drought-prone agro-pastoral areas of Sub-Saharan Africa. Such areas are characterized by low productivity, high vulnerability to drought events, resource degradation, and conflicts—sometime violent—over the use of resources that are held under various types of tenure arrangements. The ultimate policy question addressed by the project is thus: How does one	Ethiopia	<ul style="list-style-type: none"> • Nancy McCarthy • Peter Hazell • Anna Knox

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers Involved
	<p>design and implement policies that will increase the productivity of households and decrease their vulnerability to drought events, while at the same time minimizing conflict and ensuring equitable access and sustainable use?</p> <p>Key objectives: (1) improve the understanding of how environmental risk effects resource use and management under alternative property rights regimes; (2) identify the conditions under which different pathways are followed; and (3) identify how policy and other external interventions can assist communities to achieve preferred pathways to intensification and mitigate the negative impacts of undesirable pathways</p> <p>Major activities: (1) literature review and synthesis; (2) development of conceptual framework and models; and (3) empirical testing of hypotheses and models at selected sites in Niger and Ethiopia, including surveys of 40 communities at each site, stratified by variation in rainfall (and hence drought risk).</p>		
<p>Agricultural research priority setting for East Africa (GRP1), 2000</p>	<p>Key objectives and themes: (1) regional research assessment; (2) investment and institutional policies for agricultural science and technology; (3) agricultural genetic resources and biotechnology policies; and (4) productivity-environment linkages of agricultural R&D, and its growth-cum-distributional consequences.</p>		<ul style="list-style-type: none"> • Albert Acquaye • Stanley Wood • Philip Pardey
<p>Sustainable development of less-favored lands: The East African Highlands (GRP5) Ethiopia: 1998 Uganda: 1999 Jointly with ILRI and MSSD-IFPRI</p> <p>SDC, NORAD, MBZ, WB</p>	<p>Key objectives and themes: (1) policies for sustainable land management; (2) extent and causes of land degradation; (3) use of results in global research on soil, nutrient, and water management; (4) identify pathways of development and their causes; (5) make strategies for more productive and sustainable pathways; (6) increase policymakers' and others' awareness of land degradation and policy strategies for sustainable land management; and (7) strengthen the capacity in East Africa to conduct policy research related to sustainable land management in the region.</p>	<p>Ethiopia, Uganda</p>	<ul style="list-style-type: none"> • John Pender • Ephraim Nkonya • Pamela Jagger
<p>Policies for improved land management in Uganda (GRP5), 1999–2001 — Jointly with MSSD-IFPRI</p> <p>BEAF, NORAD</p>	<p>The project will provide an area-specific overview of land management issues in Uganda, including degradation and pathways to sustainability.</p> <p>Objectives of the project: (1) identify main factors affecting land management in Uganda; (2) identify major current and potential development pathways, their causes, and implications; (3) identify and assess policy, institutional, and technological strategies to promote more productive, sustainable, and</p>	<p>Uganda</p>	<ul style="list-style-type: none"> • John Pender • Ephraim Nkonya • Pamela Jagger

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers Involved
	<p>poverty-reducing pathways of development and improved land management; (4) to strengthen the capacity of collaborators in Uganda to develop and implement such strategies; and (5) to increase awareness of the underlying causes of land degradation problems in Uganda and promising strategies for solving the problems.</p> <p>Major activities (1999–2000): (1) characterization of land degradation problem in selected region of Uganda; (2) market and trader survey and analysis to identify market structure, development, and responses to structural adjustment policies; (3) survey and analysis of community and households to identify main pathways of development, their causes, and implications for land management; (4) assessment of the impacts of past and present policies and other factors on land management within major pathways; and (5) exploration of the potential impact of alternative policy, institutional, and technological strategies at the farm and market level.</p>		
<p>Synthesis of agricultural development issues and investigations in SSA (SYN4), 2000–2001 — in collaboration with MSSD</p> <p>IFPRI core funding</p>	<ul style="list-style-type: none"> • The objectives of the research are to explain the lack of agricultural success in SSA, analyze success stories, outline key appropriate pro-poor and environmentally sustainable strategies for agricultural growth, and identify further research and outreach priorities. The key method is literature review and analysis. • A joint effort between two collaborating teams of IFPRI and African researchers respectively. 	<p>Sub-Saharan Africa</p>	<ul style="list-style-type: none"> • Peter Hazell • Steve Haggblade • Eleni Gabre-Madhin (coordinator)
<p>Area-based index insurance: Drought insurance schemes for small farmers</p> <p>EPTD in collaboration with researchers from the World Bank, SICHELGAITA, University of Rome, University of Kentucky, and the Ohio State University</p>	<p>Droughts, floods, and other natural disasters lead to severe income losses for rural people, especially farmers and poor people. Given limited ability to offset these losses, many rural people suffer extreme hardship, lose assets, and default on their debts in disaster years. New forms of insurance based on regionally defined indices of natural disasters may offer a viable way of helping people to better manage their own catastrophic losses. Recent development in world financial markets (such as catastrophe or “cat” bonds) offer exciting new opportunities to pool large volumes of covariate risks at the global level. If these instruments could be successfully harnessed through contracts with governments, banks, or large insurance companies, then the covariate or systematic part of catastrophic risks could be reduced to manageable levels at the country level.</p> <p>Major activities: (1) assess the feasibility in terms of potential demand and supply of developing this kind of insurance in four</p>	<p>Ethiopia</p>	<ul style="list-style-type: none"> • Peter Hazell

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers Involved
	countries (Ethiopia, Morocco, Nicaragua, and Tunisia); (2) assess the potential market for “cat” bonds for spreading natural disaster risks, and the likely costs that developing countries would face; and (3) design pilot projects for two of the four study countries that might later be funded by the World Bank.		

EPTD Training Activities in Eastern Africa

EPTD conducts substantial training of local collaborators in Uganda as part of the “Policies for improved land management in Uganda” project, and to a lesser extent in Ethiopia (Tigray, Amhara, and Oromia) as a component in the “Sustainable development of less-favored lands” research project.

EPTD Eastern African Collaborators

Ethiopia

- CARE-Ethiopia
- Southern Rangelands Development Unit, Ethiopian Ministry of Agriculture
- Mekelle University, Tigray
- Ethiopian Bureau of Agriculture and Planning and Economic Development in Tigray, Amhara and Oromia regions
- Ethiopian Agricultural Research Organization (EARO)
- International Livestock Research Institute (ILRI) in Ethiopia

Uganda

- National Agricultural Research Organization (NARO)
- Makerere University
- Agricultural Policy Secretariat (APSEC) of the Ministry of Finance, Planning, and Economic Development (MFPED)

Regional

- African Highlands Initiative (AHI)
- International Livestock Research Institute (Nairobi)
- ICARDA
- Eastern and Central Africa Programme for Agricultural Policy Analysis (ECAPAPA) of the Association for Strengthening Agricultural Research in
- Central and Eastern Africa (ASARECA)

FOOD CONSUMPTION AND NUTRITION DIVISION

The achievement of sustainable food production is a critical first step toward the reduction of food insecurity and malnutrition, but by itself, it does not guarantee substantial movement along the path toward zero malnutrition. The Food Consumption and Nutrition Division (FCND) takes the lead at IFPRI on research relating to improved economic access to food and improved ability to harness food for growth and nutrition. The division's research program asks:

- How do policies and programs affect community, household, and individual food security?
- What do poor individuals do themselves to generate income, secure food, and ensure good nutrition and health and what are the institutions that facilitate and constrain them in their endeavor?

Answers to these two questions will suggest alternative policy and program designs for overcoming hunger, food insecurity, and malnutrition, and will require an understanding of the constraints and incentive structures influencing community, household, and intrahousehold behavior—often in relationship to specified policies or program interventions.

FCND staff involved in research or training in Eastern Africa:

- *Agnes Quisimbing*, Research Fellow
- *James Garrett*, Research Fellow, Mozambique experience
- *John Hoddinott*, Research Fellow
- *Kenneth Simler*, Research Fellow, Outposted to Ministerio do Plano et Financas, Maputo until July 2000
- *Manohar Sharma*, Postdoctoral Fellow
- *Aliou Diagne*, Visiting Research Fellow, Malawi experience
- *Bonnie McClafferty*, Communications Specialist

FCND Research Projects in Eastern Africa

FCND's activities are focused on Mozambique and Malawi. The Eastern African projects listed in the table below falls within the following thematic multicountry programs (MPs) run by the Food Consumption and Nutrition Division:

MP 5— Rural finance policies for food security of the poor (completed, managed by Manfred Zeller and Manohar Sharma)

MP14— Urban challenges to food and nutrition security (managed by Marie Ruel and James Garrett)

MP17— Strengthening development policy through intrahousehold analysis (managed by Agnes Quisumbing)

MP18— Targeted interventions to reduce poverty (managed by John Hoddinott)

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers Involved
Urban challenges to food and nutrition security (MP14) — CARE-Mozambique, Government of Mozambique, DANIDA, SDC, USAID	<p>Key objectives and themes: (1) document trends and understand determinants of urban poverty, food insecurity, and malnutrition; (2) document and analyze responses to pressure arising from urbanization on food security and malnutrition in urban areas; and (3) document and analyze public policies affecting food and nutrition</p> <p>Key research components: (1) rapid appraisal of urban livelihood security in Maputo, followed by technical support to CARE which executes a project on livelihood security in Maputo; and (2) national poverty assessment in Mozambique (1997).</p>	Mozambique	<ul style="list-style-type: none"> • Marie Ruel (manager) • James Garrett (manager)
Gender and intrahousehold aspects of food policy (MP17) — USAID	<ul style="list-style-type: none"> • The key policy question of the research is when and how can food and agricultural policies be improved through a better understanding of intrahousehold processes? • Note that the analysis of Ethiopian data is a small component in the overall project. 	Ethiopia	<ul style="list-style-type: none"> • Agnes Quisumbing
Targeted interventions to reduce and prevent poverty (MP18)	<ul style="list-style-type: none"> • The objective of the project is to understand the causes of poverty, food insecurity, and poor nutrition, and the impact of the interventions designed to prevent them. • The project includes a significant capacity building component. 	Malawi, Mozambique	<ul style="list-style-type: none"> • John Hoddinott
MP18 in Malawi: Poverty assessment and monitoring systems (1998)	<p>The objectives of the project are to (1) provide technical assistance to the government of Malawi in developing a countrywide poverty monitoring system; (2) build Malawian capacity to collect and analyze poverty data; and (3) construct poverty profiles (year 2000).</p>	Malawi	<ul style="list-style-type: none"> • Todd Benson
MP18 in Mozambique: Policy analysis of poverty, safety nets, food security, and nutrition (1996)	<p>Data will be released in April 2000.</p> <p>The objectives of the project are to (1) provide technical assistance to the National Household Survey on Living Conditions (1996–97); (2) strengthen mechanisms for monitoring and characterizing poverty at the district level, leading to the construction of provincial poverty profiles; (3) support the government's poverty reduction action plan; and (4) study</p>	Mozambique	<ul style="list-style-type: none"> • Kenneth Simler (based in Maputo)

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers Involved
Rural finance policies for the food security of the poor (MP5), 1993 — DANIDA, others	<p>linkages between education and poverty. The project includes significant training and capacity building at the Ministry of Planning and Finance.</p> <ul style="list-style-type: none"> • The project builds on the premise that improved access to credit and savings options by the poor increases their income levels, enables them to preserve their assets during times of hardship, and permits them to buy food during lean periods. Bottom-up approaches suggest a potential for sustainable rural financial systems. • The project studies changes in household-level income generation, agricultural production, consumption, and nutrition that result from an increased access to member-based financial institutions such as groups, village banks, and cooperatives. 	Malawi	<ul style="list-style-type: none"> • Manohar Sharma • Suresh Babu • Aliou Diagne • Francesco Goletti

FCND Training Activities in Eastern Africa

Training program in Basic SPSS for collaborating staff at the National Economic Council (NEC), the Center for Social Research, and the National Statistics Office of the Government of Malawi (July 1999) continues in year 2000.

FCND Eastern African Collaborators

Ethiopia

- Department of Economics, Addis Ababa University
- International Livestock Research Institute (Addis Ababa)

Malawi

- The Poverty and Social Policy Division of the National Economic Council, Lilongwe.
- National Economic Council (NEC)
- Center for Social Research
- National Statistics Office of the Government of Malawi
- Bunda College of Agriculture
- Ministry of Women, Children, Community Development and Social Welfare
- Malawi Rural Finance Company

Mozambique

- Ministerio de Agricultura, Maputo
- CARE-Mozambique
- Department of Macroeconomic Programming of the Ministry of Planning and Finance
- The Poverty Alleviation Unit of the Ministry of Planning and Finance.
- Eduardo Mondlane University
- Department of National Statistics
- International Livestock Research Institute (ILRI) in Addis Ababa

TRADE AND MACROECONOMICS DIVISION (TMD)

The work of the Trade and Macroeconomics Division focuses on two broad themes: (1) the impact of macroeconomic policy reforms and structural adjustment programs on agriculture and, in turn, on structural change, equity, and growth in the medium to long run; and (2) the effects of regional integration and reforms in the world trading system on developing countries, emphasizing the role of agriculture. Research in the Division focuses on highlighting linkages between the agricultural and nonagricultural sectors, between household and enterprise decisions and macro policy, and among countries through international trade.

Researchers involved in research or training in Eastern Africa:

- *Hans Lofgren*, Research Fellow
- *Marcelle Thomas*, Research Analyst
- *Peter Wobst*, Research Analyst

TMD Research Projects in Eastern Africa

TMD's Eastern African research is focused on Malawi, Mozambique, and Tanzania. The Eastern African projects listed in the table below falls within the following thematic multicountry program (MP) and global and regional program (GRP) run by the Trade and Macroeconomics Division:

- MP 12 — Macroeconomic policies, rural development, and household food security (managed by Romeo M. Bautista until 6/30/2000, and Hans Lofgren after 6/30/2000)
- GRP 2 — Global and regional trade (managed by Eugenio Diaz-Bonilla)

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers Involved
Macroeconomic reforms and regional integration in Southern Africa (MERRISA) (MP12): →1999 →2000 (Malawi) →2001 (MERRISA 2)	<ul style="list-style-type: none"> The project investigates the interactions among agriculture, natural resources, and alternative policy regimes, which will lead to an increase in the understanding by policymakers of the effects of macroeconomic policy changes on agricultural performance, natural resource use, poverty, and overall income growth. Key methods are the construction of a social accounting matrix (SAM) and general equilibrium modeling (CGE). 	Mozambique, Tanzania, Malawi	<ul style="list-style-type: none"> Hans Lofgren
MERRISA in Mozambique (MP12): →1999 Follow-up →2000 (see collaborative research project below)	The main components of the research are: (1) historical analysis of structural adjustment; (2) analysis of the structure of the Mozambican economy, including a SAM study of the sectoral linkages of agriculture; (3) CGE modeling; (4) study of agricultural technology and marketing margins; (5) study of agricultural technology, risk, and gender; (6) study of the impact of the different distribution schemes of food aid.	Mozambique	No IFPRI MP12 research on Mozambique. The case was studied by collaborating researcher Finn Tarp at the University of Copenhagen.
MERRISA in Tanzania (MP12), 1999	The research objectives are to (1) analyze the effects of a devaluation on agricultural exports and welfare implications; and (2) analyze the effects of a devaluation under alternative marketing margin scenario, e.g. if infrastructure is improved.	Tanzania	<ul style="list-style-type: none"> Peter Wobst
Collaborative research and capacity strengthening for multisector policy analysis in Malawi and Southern Africa (MERRISA follow-up (MP12), 1999 — BMZ	CGE modeling is a key approach. This project is a MERRISA follow-up project with focus on capacity strengthening and with emphasis on Malawi. The key components of the research are: (1) support policymaking and capacity to do policy research in Malawi; (2) strengthen the capacity of emerging policy analysis in other parts of Southern Africa; (3) teach courses in Quantitative Multisector Policy Analysis, including a manual on CGE modeling in GAMS and training in SAM-based data management and policy analysis; and (4) undertake joint research with Malawian counterparts on policy issues related to agricultural development and poverty alleviation.	Malawi	<ul style="list-style-type: none"> Hans Lofgren Sherman Robinson Peter Wobst Andrea Cattaneo Anne Robilliard
MERRISA 2 (MP12), 2000–2001 — DANIDA	The project is a continuation of MERRISA.	Zimbabwe, Tanzania, Mozambique	

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers Involved
Regional integration in Southern Africa (GRP2 and MERRISA), 1999–2000	The project includes: (1) modeling work on issues of regional integration in Southern Africa; (2) modeling and analysis of impact on the region of the EU-South Africa free trade agreement, using GTAP data; and (3) expansion of analysis to country-level data, including Malawi, Mozambique, and Tanzania.	Malawi, Mozambique, Tanzania	

TMD plans to extend the MERRISA project with a MERRISA 2 in 2000–2001. This project will include research in Malawi, Mozambique, and Tanzania.

TMD Training Activities in Eastern Africa

In 1999, TMD initiated the project “Collaborative research and capacity strengthening for multisector policy analysis in Malawi and Southern Africa” with focus on capacity strengthening and emphasis on Malawi. The project is a follow-up on a large research project in Southern Africa, “Macroeconomic Reforms and Regional Integration in Southern Africa (MERRISA).” It is intended to support policymaking and capacity to do policy research in Malawi and to strengthen the capacity of emerging policy analysts in other parts of Southern Africa. Courses are taught in Quantitative Multisector Policy Analysis, and a manual on CGE modeling in GAMS and training in SAM-based data management and policy analysis has been elaborated in collaboration with IFPRI’s Communications Division. These training components are followed up by joint research with Malawian counterparts on policy issues related to agricultural development and poverty alleviation.

TMD Eastern African Collaborators

Malawi

- Bunda College of Agriculture
- National Economic Council (NEC)

Mozambique

- Ministry of Planning and Finance
- Eduardo Mondlane University
- Banco Internacional de Mocambique

Tanzania

- Economic and Social Research Foundation (ESRF)
- The Planning Commission at the President’s Office

COMMUNICATIONS DIVISION

The Communications Division (CD) provides information for policymaking, strengthens the capacity of developing countries to conduct food policy research, promotes information exchange between IFPRI and those involved with policymaking, and facilitates the implementation of food policies. It accomplishes these tasks by disseminating information through publications, public awareness activities, and meetings and through training and capacity-building activities. The Communications Division also conducts research that is closely connected with collaborative training and capacity-strengthening activities.

CD staff involved in research or training in Eastern Africa:

- Suresh Chandra Babu, Head of Training and Capacity Strengthening Program, Malawi experience.

CD Training Activities in Eastern Africa

The Communications Division at IFPRI promotes IFPRI’s mission—conducting research to meet the food needs of the developing world on a sustainable basis—and communicates the results in a manner that enhances the Institute’s impact on food policy. The Division’s activities include library services, a policy seminars program, a training and capacity strengthening program, and an information program (publications, 2020 Vision material, public awareness and media relations, website).

In an Eastern African context, the most important activities are those of the training and capacity-strengthening program, headed by Suresh Babu. Training and capacity-strengthening activities in Eastern Africa have been carried out in collaboration with other IFPRI Divisions as well as with Eastern African and other collaborating institutions.

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers and (other) Divisions Involved
Supporting research divisions in training activities: 1999 — BMZ	<ul style="list-style-type: none"> • Southern Africa regional training course in CGE modeling, to impart quantitative skills to policymakers and policy analysts. • The project includes the organization of 	Malawi	TMD

Project Title, Period, and Funding	Project Summary	Eastern African Countries	IFPRI Researchers and (other) Divisions Involved
	workshop on Quantitative Multisector Analysis and the production of training and reading materials.		
Supporting regional organizations in developing countries	<ul style="list-style-type: none"> The project aims at developing linkages between IFPRI and regional organizations, such as SADC in Southern Africa, ASARECA in Eastern Africa, and IGAD in the Horn of Africa. The project focuses on strengthening policy analysis capacity (through ECAPAPA) and on the Food Security Program (IGAD). Such linkages will be strengthened through the 2020 Vision Regional Networks initiated by IFPRI. 	All	2020 Vision
Supporting selected developed-country and developing-country institutions: 1999	The key objective of the project is to increase the use of IFPRI's research and training materials in development-oriented courses taught at universities.	Kenya	
A network of training institutions	Efforts are made to organize an informal network of food policy institutions involved in training at the international, regional, and national levels		
Preparation of training manuals based on IFPRI research: 1999	A <i>Manual on Food Policy Analysis</i> has been made. It is planned to prepare computer-aided interactive training manuals which can be accessed through the Internet.	All	

CD Eastern African Collaborators

Kenya

- The University of Nairobi

Malawi

- Bunda College of Agriculture

Mozambique

- The Faculty of Agronomy and Forestry (FAEF) of Eduardo Mondlane University.
- The Poverty Alleviation Unit of the Ministry of Planning and Finance

Regional

- Eastern and Central Africa Programme for Agricultural Policy Analysis (ECAPAPA) of the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)
- Inter-Governmental Agency for Development (IGAD)

CONCLUSION

This note provides an overview of current and recently completed IFPRI research and training activities in Eastern Africa, as well as a list of IFPRI's local collaborators in the region. A list of the publications on Eastern Africa by IFPRI and IFPRI staff is provided in Annex 1, while Annex 2 describes in more detail those IFPRI research projects and programs which include countries in Eastern Africa. It is hoped that researchers, policymakers, and other stakeholders in Eastern Africa will utilize the provided information as an important guide when they prepare and implement research and development activities. Due to space limitations, this note offers only brief descriptions of IFPRI's activities in Eastern Africa; readers are therefore encouraged to contact IFPRI for further information on the projects and literature of specific interest.

The overview shows that IFPRI conducts policy research in all of Eastern Africa in collaboration with a wide range of local partners. Many of the projects have a strong focus on capacity-strengthening and technical assistance. In Ethiopia, projects cover issues as diverse as regional grain trade; the role of property rights and risk in livestock development; area-based drought insurance; land management and agricultural change; and intrahousehold aspects of food and agricultural policies. In Kenya, IFPRI's research focuses on regional grain marketing – in particular maize; dairy marketing and dairy cooperatives; and how to promote growth through agricultural diversification into high-value products. The many research efforts in Malawi are concerned with questions relating to the effects on small holders of market reforms – in particular the regulation of maize prices; macroeconomic policy changes and their effects on agriculture, natural resource use, poverty and growth; regional integration in Southern Africa; poverty assessment and monitoring; targeting of interventions to reduce poverty and food insecurity; and rural finance policies for the poor.

IFPRI's activities in Mozambique cover urban poverty, food insecurity and malnutrition; targeting of interventions to reduce poverty and food insecurity; policy analysis of poverty, safety nets, and nutrition (including support to the National Household Survey on Living Conditions); macroeconomic policy changes and their effects on agriculture, natural resource use, poverty and growth; and regional integration in Southern Africa. In Tanzania, IFPRI undertakes projects dealing with regional grain trade; Tanzania's agricultural strategies under structural adjustment (since 1986) and how such strategies can be designed to promote economy-wide growth; how to promote growth through agricultural diversification into high-value products; macroeconomic policy changes (especially currency devaluations) and their effects on especially agricultural exports and welfare; and regional integration in Southern Africa. In Uganda, a pilot study has been completed on the efficiency of maize marketing, and a large study is underway on policies for improved land management – including the role of

agricultural input and output markets – and possible pathways for sustainable development.

This note has summarised IFPRI's many research and training projects in Eastern Africa on a country-to-country basis; yet it is important to note that most such research efforts are part of larger multi-country research programs extending beyond the individual country and even the region. In this regard, mention should be made of the current project "synthesis of agricultural development issues and investigations in Sub-Saharan Africa", among whose main objectives are to explain the lack of agricultural success in SSA, analyse success stories, and identify further research and outreach activities. And last but not least, the 2020 Vision Network for East Africa, initiated by IFPRI in 1998 and composed of researchers, policy makers and civil society leaders in Ethiopia, Kenya, Malawi, Mozambique, Tanzania, and Uganda, provides a unique regional framework for policy research and outreach activities.

Annex 1
IFPRI PUBLICATIONS ON EASTERN AFRICA*

IFPRI PUBLICATIONS

Research Reports

- Constraints on Kenya's Food and Beverages Exports, *Michael Schluter* (April 1984, No. 44).
- Regional Cooperation to Improve Food Security in Southern and Eastern African Countries, *Ulrich Koester* (July 1986, No. 53).
- Income and Nutritional Effects of the Commercialization of Agriculture in Southwestern Kenya, *Eileen T. Kennedy and Bruce Cogill* (November 1987, No. 63).
- Storage, Trade, and Price Policy under Production Instability: Maize in Kenya, *Thomas C. Pinckney* (December 1988, No. 71).
- The Effects of Sugarcane Production on Food Security, Health, and Nutrition in Kenya: A Longitudinal Analysis, *Eileen T. Kennedy* (1989, No. 78).
- Famine in Ethiopia: Policy Implications of Coping Failure at National and Household Levels, *Patrick Webb, Joachim von Braun, and Yisehac Yohannes* (1992, No. 92).
- Trade Pessimism and Regionalism in African Countries: The Case of Groundnut Exporters, *Ousmane Badiane and Sambouh Kinteh* (1994, No. 97).
- Agricultural Growth Linkages in Sub-Saharan Africa, *Christopher L. Delgado, Jane Hopkins, Valerie A. Kelly, with Peter Hazell, Anna A. McKenna, Peter Gruhn, Behjat Hojjati, Jayashree Sil, and Claude Courbois* (1998, No. 107).

IFPRI/John Hopkins University Press Series

- *Accelerating Food Production in Sub-Saharan Africa*, eds. John W. Mellor, Christopher L. Delgado, and Malcolm J. Blackie (1987).
- *Famines in Africa: Causes, Responses, and Prevention*, Joachim von Braun, Tesfaye Teklu, and Patrick Webb (1998).

Occasional Papers and Books

- *Re-establishing Agriculture as a Priority for Development Policy in Sub-Saharan Africa*, eds. Awudu Abdulai and Christopher L. Delgado (1995).
- *Achieving Food Security in Southern Africa: New Challenges, New Opportunities*, ed. Lawrence Haddad (1997).

* This list of publications is ordered by IFPRI research and outreach divisions. For a full list of IFPRI Publications, refer to IFPRI's website <www.ifpri.cgiar.org>.

Food Policy Statements

- Policy Agenda for Famine Prevention in Africa, *Joachim von Braun* (1991, No. 13).
- Famine in Africa: Causes, Responses, and Prevention, *Joachim von Braun, Tesfaye Teklu, and Patrick Webb* (1999, No. 28).
- Famine in Africa: Causes, Responses, and Prevention, eds. *Julian M. Alston, Philip G. Pardey, and Vincent H. Smith* (1999, No. 30).

Policy Briefs

- Structural Change in African Agriculture (1990, Policy Brief No. 5).

Food Policy Reports

- A Policy Agenda for Famine Prevention in Africa, by *Joachim von Braun* (1991).

Lecture Series

- Toward Sustainable Smallholder Agriculture in Sub-Saharan Africa, by *George Benneh* (1996, No. 4).

Working Papers

- Labor-Intensive Public Works for Food Security: Experience in Africa, by *Joachim von Braun, Tesfaye Teklu, and Patrick Webb* (1991, No. 6).

General Information

- Good News From Africa, by *Ebbe Schiøler*.

MARKETS AND STRUCTURAL STUDIES DIVISION

Division Discussion Papers

- "Of Markets and Middlemen: The Role of Brokers in Ethiopia," *Eleni Z. Gabre-Madhin* (November 1999, No. 39).
- "Economy-wide Impacts of Technological Change in the Agro-Food Production and Processing Sectors in Sub-Saharan Africa," *S. Ehui and C. Delgado* (October 1999, No. 37).
- "Agro-industrialization through Institutional Innovation: Transactions Costs, Cooperatives and Milk Market Development in the Ethiopian Highlands," *G. Holloway, C. Nicholson, C. Delgado, S. Staal, and S. Ehui* (October 1999, No. 35).

- “Agroindustrialization through Institutional Innovation: Transaction Costs, Cooperatives and Milk-Market Development in the Ethiopian Highlands,” *Garth Holloway, Charles Nicholson, Chris Delgado* (November 1999, No. 35).
- “Accelerating Africa’s Structural Transformation: Lessons from East Asia,” *Eleni Z. Gabre-Madhin and Bruce F. Johnson* (November 1999, No. 34).
- “Transaction Costs and Market Institutions: Grain Brokers in Ethiopia,” *Eleni Gabri-Madhin* (October 1999, No. 31).
- “Rural Economy and Farm Income Diversification in Developing Countries,” *Christopher Delgado and Ammar Siamwalla* (October 1997, No. 20).
- “The Sequencing of Agricultural Market Reforms in Malawi,” *Mylene Kherallah and Kumaresan Govindan* (February 1997, No. 13).
- “Smallholder Dairying under Transactions Costs in East Africa,” *Steven Staal, Christopher Delgado, and Charles Nicholson* (December 1996, No. 9).
- “The Impact of the CFA Devaluation on Cereal Markets in Selected CMA/WCA Member Countries,” *Ousmane Badiane* (February 1996, No. 8).
- “Agricultural Input Market Reforms: A Review of Selected Literature,” *Francesco Goletti and Anna Alfano* (June 1995, No. 2).

ENVIRONMENT AND PRODUCTION TECHNOLOGY DIVISION

Division Discussion Papers

- Community Natural Resource Management: The Case of Woodlots in Northern Ethiopia, *Berhanu Gebremedhin, John Pender, and Girmay Tesfaye* (April 2000, No. 60).
- Impact of Agricultural Research on Poverty Alleviation: Conceptual Framework with Illustrations from the Literature, *John Kerr and Shasi Kolavalli* (December 1999, No. 56).
- Rural Population Growth, Agricultural Change, and Natural Resource Management in Developing Countries: A Review of Hypotheses and Some Evidence from Honduras, *John Pender* (September 1999, No. 48).
- Spatial Aspects of the Design and Targetting of Agricultural Development Strategies, *Stanley Wood, Kate Sebastian, Freddy Nachtergaele, Daniel Nielsen, and Aiguo Dai* (May 1999, No. 44).
- Are Returns to Public Investment Lower in Less-Favored Rural Areas? An Empirical Analysis of India, *Shenggen Fan and Peter Hazell* (May 1999, No. 43).
- Costs Aspects of African Agricultural Research, *Philip G. Pardey, Johannes Roseboom, Nienke M. Beintema, and Connie Chan-Kang* (May 1999, No. 42).
- Strategies for Sustainable Agricultural Development in the East African Highlands, *John Pender, Frank Place, and Simeon Ehui* (April 1999, No. 41).

- The Challenging Organizational Basis of African Agricultural Research R&D, *Johannes Roseboom, Philip G. Pardey, and Nienke M. Beintema* (November 1998, No. 37).
- Educating Agricultural Researchers: A Review of the Role of African Universities, *Nienke M. Beinema, Philip G. Pardey, and Joannes Roseboom* (August 1998, No. 36).
- Financing Agricultural Research and Development in Rich Countries: What's Happening and Why?, *Julian M. Alston, Philip G. Pardey and Vincent H. Smith* (September 1997, No. 29).
- Water Resources Development in Africa: A Review and Synthesis of Issues, Potentials, and Strategies for the Future, *Mark W. Rosegrant and Nicostrato D. Perez* (September 1997, No. 28).
- Population and Land Tenure, and Natural Resource Management: The Case of Customary Land Area in Malawi, *Frank Place and Keijiro Otsuka* (April 1997, No. 27).
- Impact of Market and Population Pressure on Production, Incomes, and Natural Resources in the Dryland Savannas of West Africa: Bioeconomic Modeling at the Village Level, *Bruno Barbier* (November 1996, No. 21).
- Determinants of Farmers' Indigenous Soil and Water Conservation Investments in India's Semi-Arid Tropics, *John Pender and John Kerr* (August 1996, No. 17).
- Farm-Nonfarm Growth Linkages in Zambia, *Peter B. R. Hazell and Behjat Hojjati* (April 1995, No. 8).
- Sustainable Agricultural Development Strategies in Fragile Lands, *Sara J. Scherr and Peter B. R. Hazell* (June 1994, No. 1).

FOOD CONSUMPTION AND NUTRITION DIVISION

Division Discussion Papers

- Quality or Quantity? The Supply-Side Determinants of Primary Schooling in Rural Mozambique, *Sudhanshu Handa and Kenneth R. Simler* (March 2000, No. 83).
- Adult Health in the Time of Drought, *John Hoddinott and Bill Kinsey* (January 2000, No. 79).
- Determinants of Poverty in Mozambique: 1996–97, *Gaurav Datt, Kenneth Simler, Sanjukta Mukherjee, and Gabriel Dava* (January 2000, No. 78).
- Can Cash Transfer Programs Work in Resource-Poor Countries? The Experience of Mozambique, *Jan W. Low, James L. Garrett, and Vitoria Ginja* (November 1999, No. 74).
- Determinants of Household Access to and Participation in Formal and Informal Credit Markets in Malawi, *Aliou Diagne* (June 1999, No. 67).
- Are Determinants of Rural and Urban Food Security and Nutritional Status Different? Some Insights from Mozambique, *James L. Garrett and Marie T. Ruel* (May 1999, No. 65).

- Efficiency in Intra-household Resource Allocation, *Marcel Fafchamps* (December 1998, No. 55).
- Impact of Access to Credit on Income and Food Security in Malawi, *Aliou Diagne* (July 1998, No. 46).
- Does Urban Agriculture Help Prevent Malnutrition? Evidence from Kampala, *Daniel Maxwell, Carol Levin, and Joanne Csete* (June 1998, No. 45).
- The GAPVU Cash Transfer Program in Mozambique: An Assessment, *Gaurav Datt, Ellen Payongayong, James L. Garrett, and Marie Ruel* (October 1997, No. 36).
- Market Access by Smallholder Farmers in Malawi: Implications for Technology Adoption, Agricultural Productivity, and Crop Income, *Manfred Zeller, Aliou Diagne, and Charles Matayav* (September 1997, No. 35).

TRADE AND MACROECONOMICS DIVISION

Division Discussion Papers

- After Negotiations: Assessing the Impact of Free Trade Agreements in Southern Africa, *Jeffrey D. Lewis, Sherman Robinson, and Karen Thiefelder* (September 1999, No. 46).
- Marketing Margins and Agricultural Technology in Mozambique, *Channing Arndt, Henning Tarp Jensen, Sherman Robinson, and Finn Tarp* (July 1999, No. 43).
- A 1992 Social Accounting Matrix (SAM) for Tanzania, *Peter Wobst* (September 1998, No. 30).
- Agriculture and Macro-Economic Reforms in Zimbabwe: A Political Economy Perspective, *Kay Muir-Leresche* (August 1998, No. 30).
- Social Accounting Matrices for Mozambique, 1994 and 1995, *Channing Arndt, Antonio Cruz, Henning Tarp Jensen, Sherman Robinson, and Finn Tarp* (August 1998, No. 28).
- Policy Bias and Agriculture: Partial and General Equilibrium Measures, *Romeo M. Bautista, Sherman Robinson, Finn Tarp, and Peter Wobst* (May 1998, No. 25).

COMMUNICATIONS DIVISION

Division Discussion Papers

- Evaluating Food Security Monitoring Systems in Africa: A Case Study and Lessons from Uganda, *S. Babu* (September 1997, No. 20).
- Natural Resource and Sustainability Monitoring: A Conceptual Framework, Issues, and Challenges, *S. Babu* (July 1997, No. 17).

- Strengthening Capacity in Food, Agriculture, and Nutrition Policy Analysis in Sub-Saharan Africa: Review, Own Experiences in Malawi, and Lessons Learned, *M. Zeller, C. Mataya, and Y. Islam* (April 1997, No. 15).
- Designing Decentralized Food Security and Nutrition Policies: A Knowledge-Based System Approach in Malawi, *S. Babu* (March 1997, No. 13).
- Linking Policy Research to Policy Reform: Social Science and Food Security Research in Uganda and Ghana, *D. Maxwell* (November 1996, No. 12).
- Multi-Disciplinary Capacity Strengthening for Food and Nutrition Policy Analysis-Lessons from Malawi, *S. Babu* (August 1996, No. 11).
- Mitigating the Effects of Drought Through Food Security Monitoring-Lessons From Malawi, *S. Babu and E. Chapasuka* (June 1996, No. 9).
- Assessing Capacity Strengthening Needs for Policy Analysis in Malawi, *S. Babu and E. Chapasuka* (June 1996, No. 6).
- Rethinking Training in Food Policy Analysis: How Relevant is it to Policy Reforms?, *S. Babu* (March 1996, No. 5).
- Supply Response Under Market Liberalization: A Case Study of Malawian Agriculture, *G. Kumaresan and S. Babu* (March 1996, No. 4).
- Priority Setting in Food and Agricultural Policy Research: A Case Study and Lessons from Malawi, *S. Babu and S. Khalia* (March 1996, No. 3).

A 2020 VISION FOR FOOD, AGRICULTURE, AND THE ENVIRONMENT

2020 Discussion Papers

- Africa's Changing Agricultural Development Strategies: Past and Present Paradigms as a Guide to the Future, *Christopher L. Delgado, IFPRI* (1995, No. 3).
- A 2020 Vision for Food, Agriculture, and the Environment in Sub-Saharan Africa, *edited by Ousmane Badiane and Christopher L. Delgado, IFPRI* (1995, No. 4).
- Potential Impact of AIDS on Population and Economic Growth Rates, *Lynn R. Brown, IFPRI* (1996, No. 15).
- Livestock to 2020: The Next Food Revolution, *Christopher Delgado, Mark Rosegrant, and Claude Courbois, IFPRI; Henning Steinfeld, FAO; and Simeon Ehui, ILRI* (1999, No. 28).
- Roots and Tubers for the 21st Century: Trends, Projections, and Policy Options, *Gregory J. Scott, Mark W. Rosegrant, and Claudia Ringler* (2000, No. 31).
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- Overcoming Child Malnutrition in Developing Countries: Past Achievements and Future Choices, *Lisa C. Smith and Lawrence Haddad* (2000, No. 30).

- Soil Degradation: A Threat to Developing-Country Food Security by 2020? *Sara J. Scherr* (1999, No. 27).
- Food from Peace: Breaking the Links between Conflict and Hunger, *Ellen Messer, Marc Cohen, and Jashinta D'Costa* (1998, No. 24).
- Overcoming Malnutrition: Is There an Ecoregional Dimension? *Manohar Sharma, Marito Garcia, Aamir Qureshi, and Lynn Brown* (1996, No. 10).

2020 Policy Briefs

- Roots and Tubers for the 21st Century: Trends, Projections, and Policy Options, *Gregory J. Scott, Mark W. Rosegrant, and Claudia Ringler* (2000, No. 66).
- Nutrient Depletion in the Agricultural Soils of Africa, *Julio Henao and Carlos Baanante, International Fertilizer Development Center* (1999, No. 62).
- Livestock to 2020: The Next Food Revolution, *Christopher Delgado, Mark Rosegrant, and Claude Courbois, IFPRI; Henning Steinfeld, FAO; and Simeon Ehui, ILRI* (1999, No. 61).
- Population Growth and Policy Options in the Developing World, *John Bongaarts and Judith Bruce* (1998, No. 53).
- Food from Peace: Breaking the Links Between Conflict and Hunger, *Ellen Messer, Marc J. Cohen, and Jashinta D'Costa* (1998, No. 50).
- Land Degradation in the Developing World: Issues and Policy Options for 2020, *Sara J. Scherr and Satya Yadav* (1997, No. 44).
- The Potential Impact of AIDS on Population and Economic Growth Rates, *Lynn R. Brown* (1997, No. 43).
- Africa's Changing Agricultural Development Strategies, *Christopher L. Delgado* (1997, No. 42).
- Reducing Poverty and Protecting the Environment: The Overlooked Potential of Less-Favored Lands, *Peter Hazell and James L. Garrett* (1996, No. 39).
- Employment Programs for Food Security in Sub-Saharan Africa, *Tesfaye Teklu* (1995, No. 28).
- An Ecoregional Perspective on Malnutrition, *Manohar Sharma, Lynn Brown and Aamir Qureshi and Marito Garcia* (1995, No. 14).

2020 Syntheses

- A 2020 Vision for Food, Agriculture, and the Environment in Sub-Saharan Africa: A Synthesis (1995, No. 1).

2020 Focus

- Getting Ready for the Millennium Round Trade Negotiations, *edited by Eugenio Diaz-Bonilla and Sherman Robinson* (1999, Focus No. 1). (4) African Perspective, *Natasha Mukherjee and Rebecca Lee Harris, IFPRI.*

2020 Network for East Africa Country Notes

- Country Note for Ethiopia, *Ato Neway Gebre-ab, Gezehygne Ayele, Tenkir Bongor, Mulat Demeke, Ato Beyene Haile, Ato Berhanu Haileselesie, Alemu Mekonnen, and Alemayehu Taffesse*, 2000.
- Country Note for Kenya, *Kangethe W. Gitu, Hezron Nyangito, and Willis Oluoch-Kosura*, 1998.
- Country Note for Malawi, *Charles Mataya, Osten Chulu, Stanley Khaila, Ian Kumwenda, Charles Machinjiri, and Gadson Mthindi*, 1998.
- Country Note for Mozambique, *Firmino Gabriel Mucavele and Gilead Isaac Mlay*, 1998.
- Country Note for Tanzania, *Haji Semboja, Janet Bitegeko, Nuhu Hatibu, A.K. Kuchuliza, Festus Limbu, Deogratias Philip Macha, and George Sempho*, 1998.
- Country Note for Uganda, *Fred Opio, Grace Akello, Godfrey Bahigwa, C. Maikut, David S. Muduuli, Peter Ngategize, W. Odwongo, E.N. Sabiiti, and Rhoda P. Tumusiime*, 1998.

Annex 2
**IFPRI RESEARCH PROJECTS AND PROGRAMS
WHICH INCLUDE COUNTRIES IN EASTERN AFRICA**

This summary of IFPRI research projects and programs is ordered by research and outreach division. Please refer to IFPRI's website <www.ifpri.org> for more information on IFPRI's research projects and programs.

MARKETS AND STRUCTURAL STUDIES DIVISION (MSSD)

Public Policies for Rural Institutions, Markets and Infrastructure Development

IFPRI's research on agricultural market reforms has shown that the liberalization programs adopted by many developing countries in the past two decades have not always been successful at developing private, efficient, and competitive agricultural markets. Evidence suggests that this failure is due to institutional and structural deficiencies that have not been properly addressed by governments. More research is needed to identify the appropriate role of the government in providing or facilitating the development of those institutions that are necessary to promote agricultural markets and rural income growth. The types of institutions needed can be classified into four main categories: (i) market related institutions such as cooperatives, farmers' and traders' associations, credit clubs, contract farming, etc.; (ii) infrastructural institutions such as roads, communication networks, commodity exchanges, storage facilities, market information services, etc.; (iii) regulatory institutions such as laws regarding market conduct and enforcement of contracts, ownership rules and property rights, grades and standards, etc.; and (iv) government and political institutions that have the capacity to monitor the emergence of markets and support their development. The impact of institutional, market and infrastructure development on smallholder farmers and agricultural income also needs to be assessed.

In order to achieve the objectives, studies will be conducted in several African and Asian countries at various levels of market development. The results, combined with findings from earlier IFPRI research in this area, will help identify the types of public policies needed for the development of competitive and efficient agricultural markets that can contribute in reducing rural poverty and promoting agricultural economic growth in developing countries.

Major projects relevant for Eastern Africa:

- Impact of Market Reforms on Smallholder Farmers in Benin and Malawi, 1998–2000
- Soil Fertility in Uganda, 1999–2001
- Tanzania—Input and Output Markets Development, 2000–2002
- Potential for Regional Grain Trade in East Africa, 2000–2002

Promoting Growth and Diversification Through Markets for High-Value Crop and Animal Products

Many developing countries are dependent on agriculture, livestock, and fisheries for foreign exchange and—directly or indirectly—for employment of the majority of the population. Policy in these countries often proactively encourages changes in the composition of agricultural output away from overconcentration in a few starchy staples in favor of commodities with relatively higher value-added ratios and better demand prospects, in order to spur rural economic growth and increase export receipts. Many such policies are directed to increasing production of specific commodities, such as research, extension, and input supply policies. In practice, the issues involved in increasing production of high-value agricultural commodities under the conditions of many developing countries cannot be separated from

those involved in marketing those commodities. The commodities in question are almost exclusively based on livestock, fishery, or horticultural production. They are often perishable, highly quality-specific in value, and specialized in terms of final market outlet. Reliable marketing arrangements are often the difference between the success and failure of even highly efficient producers using sustainable approaches.

The objective of this program is to identify more effective regulatory, infrastructure, and institutional policies to minimize marketing costs (farm gate to import ports, CIF) from the sale of high-value horticultural, livestock, and fisheries products meeting certain requirements. The policies in question will primarily be those of the developing countries themselves, but developed-country policies such as import regulations targeted at the horticultural, livestock, and fishery products of developing countries will also be considered, as they are an important cost center in the marketing chain facing developing-country exporters. Identification of the high-value products at issue will be part of the research. First, they should originate in developing countries and be producible by large numbers of poor people. Second, they should be high value-to-weight commodities that have the potential to achieve higher producer value-added in terms of foreign exchange than the bulk of producers' present agricultural production. Third, the commodities in question should have good demand prospects in terms of high-income elasticities and a wide market, such as a regional or world market outlet. Fourth, the commodities in question should be at least potentially obtainable from environmentally sustainable production practices. While not neglecting the importance of production policies, the focus of the research will be on the marketing policies and investments along marketing channels necessary to encourage widespread private initiative in sustainable production and sale of these commodities in developing countries.

Major projects:

- Livestock to 2020: The next food revolution, 1999
- Fisheries policy research in developing countries: Issues, priorities, needs, 1999
- Increasing value-added in Tanzanian agriculture, 1999–2000
- Agricultural Business through contract farming (planned)

Policies to Increase Income and Reduce Poverty Through Postharvest Activities and Agro-Food Based Rural Industrialization

The narrow focus of traditional postharvest research on technology should be broadened to include the institutional and policy dimensions. Three global trends suggest that postharvest activities will play an increasing important role in poverty reduction, food security, and sustainable growth in developing countries. First, the declining share of agricultural GDP often implies migration from rural to urban areas because of diminished incentives for the rural population to stay in rural areas where productive employment is scarce. Enterprises related to the transformation of food and agricultural commodities have the potential to provide such productive employment. Agro-food processing is labor intensive, generates higher value added than agriculture, and is usually located in rural areas where most of the poor live. Second, increasing urbanization raises the importance of storage, quality, convenience, and safety characteristics of food products that are consumed in the cities. Third, a more liberalized and globalized trade system provides new opportunities, but also new challenges in order to be able to participate in export markets, producers need well-organized postharvest chains, access to market information, and technology that allow them to be price and quality competitive. For smallholder sectors facing missing or incomplete markets for inputs and outputs, vertical integration, contract farming, and farmers' associations are often a means to overcome market imperfections and gain access to information and assets.

The overall objective of this program is to study the constraints and policy options to raise the income of the rural poor through the development of postharvest activities, institutions, and agro-food based rural industrialization. Subsidiary objectives are: (i) to characterize the postharvest system for various subsectors of the rural economy; (ii) to identify the contribution of postharvest activities to income,

food security, and employment of the rural poor; (iii) to identify the constraints to the development of postharvest activities such as credit, infrastructure, access to markets and information, and access to land for nonfarm activities; (iv) to characterize the forms of vertical coordination between smallholder farmers and processors of high valued items; and (v) to analyze alternative policy options for improving food security and accelerating income growth of the rural poor through the promotion of postharvest activities.

Major projects:

- Development of postharvest activities as a strategy for rural poverty reduction (Madagascar, Viet Nam, Ecuador, Uganda), 2001–2003

Priorities for Public Investment in Agriculture and Rural Areas, and Appropriate Institutional Arrangements

During the last decade, developing countries have witnessed some fundamental structural changes, driven by market-led development, that have affected the allocation of public resources to agriculture and rural development. As a result, governments' hitherto pervasive interventions have been reduced and the scope of the private sector in economic activities has expanded. However, the reduction in public expenditures has resulted in a shrinking allocation to agricultural research, irrigation and water control, rural infrastructure, and agricultural credit. This GRP will look at how national and local governments can maintain their commitment to market-led development, while increasing their allocation to strategic subsectors of agriculture and rural development where the private sector is not likely to invest.

Synthesis of Agricultural Development Issues and Investigations in Sub-Saharan Africa

Africa faces serious agricultural challenges: (1) Food production is increasing at a slower rate than population growth leading to declining food availability per person. Africa is the only continent where poverty and food security is projected to worsen in the years ahead. (2) Africa already has a larger food gap than it can afford to import, and its dependence on food aid could reach crisis proportions within a decade. (3) Low-yield growth has led to expansion of the cropped area into fragile lands, and to mining of soil fertility. Resource degradation is now reaching the point where it is a serious threat to future productivity growth. To overcome these problems will require that Africa at least double its rate of agricultural growth (to 4 percent or better). Moreover, this growth will need to be achieved in ways that (i) increase the incomes and food access of the poor, and (ii) are consistent with the sustainable management of natural resources.

Despite the lackluster performance of African agriculture in recent decades, there are grounds for optimism: (1) Africa still has huge areas of potential cropland; at present only about 20 percent of the potentially cultivable land is cropped in any one year. (2) Africa still has considerable untapped irrigation potential; the current irrigated area (only 7 percent of the cropped area) can probably be doubled. (3) Fertilizer use in Africa is very low today (only about 10 kilograms of nutrients/hectare, excluding South Africa), leaving considerable scope for increasing crop yields. (4) There have already been a number of success stories in Africa (e.g., hybrid maize in East Africa) that demonstrate what can be done. India has only 13 percent of the land area of Africa, and much of the country has agroclimatic similarities with Africa, yet India successfully feeds twice as many people as the whole of Africa, and at higher per capita calorie levels. With this sort of comparison, it remains a puzzle as to why Africa lags so badly.

This synthesis activity will (1) seek to explain the lackluster performance of African agriculture in recent decades, and why so many past attempts to accelerate production growth have failed; (2) identify the current constraints on agricultural growth; (3) outline key elements of an appropriate strategy for accelerating agricultural growth in Africa to required levels in ways that are pro-poor and environmentally sustainable; and (4) identify future research and outreach priorities needed to help translate the strategy into

reality. The approach will be holistic and multidisciplinary, and will encompass a broad range of technology, institutional, policy, and governance issues.

ENVIRONMENT AND PRODUCTION TECHNOLOGY DIVISION (EPTD)

Sustainable Development of Less-Favored Lands

Past agricultural development strategies have predominantly emphasized irrigated agriculture and “high potential” rainfed lands in the attempt to increase food production and stimulate economic growth. This strategy has been spectacularly successful in many countries, and was responsible for the Green Revolution. But at the same time, large areas of less-favored lands have been neglected, and with rapid population growth, these lands have or are becoming major areas of rural poverty, food insecurity, and resource degradation. About 500 million people now live in less-favored lands and, if current conditions persist, this could increase to more than 800 million people by year 2020.

It is becoming increasingly clear that, on poverty and environmental grounds alone, more attention will have to be given to less-favored lands in setting priorities for policy and public investments. This leads to two key policy issues. First, what level of investment in these areas can be justified, including expenditures on agricultural research? Second, how should the resources allocated to less-favored lands be spent to promote sustainable economic development? The objectives of the proposed research are to provide empirical evidence on (a) the productivity, poverty, environmental and food security consequences of targeting agricultural investments, including agricultural research, to less-favored agricultural areas compared to more favored areas, and (b) the appropriate development strategies for different types of less-favored lands.

To meet these objectives, the research is organized around several themes:

Theme 1: Econometric analysis of secondary data at the county or district level within selected countries to quantify the productivity and poverty reducing impacts of public investments in different types of agricultural lands. This work enables us to explore the tradeoffs in returns between incremental investments in irrigated and rainfed lands. It should also help provide guidelines for prioritizing investments for less-favored lands. Research is ongoing for India, and plans are being made to extend the work to China.

Theme 2: Multidisciplinary research undertaken in partnership with other CGIAR and national research centers of strategies for sustainably intensifying agriculture in several important types of less-favored lands. These include semi-arid lands in West Asia-North Africa (with ICARDA and NARS in eight countries), low-potential rainfed areas in India (with ICRISAT and ICAR), tropical hillsides in Central America (with IICA, CIAT and several national partners), and the East African Highlands (with ILRI, ICRAF, TSBF, the East African Highlands Initiative, the Soil, Water and Nutrient Management (SWNM) initiative, and ASARECA). Research on soil fertility issues in East Africa is being conducted also in collaboration with the Markets and Structural Studies Division of IFPRI. Additional work is planned in West Africa with ICRISAT and IITA.

This research has three major components. First, cross-sectional and historical studies of community experiences in developing and managing their agriculture and natural resources are conducted, particularly contrasting community experiences in finding successful or unsuccessful development pathways and identifying the technological, socioeconomic and policy factors that determine the pathways that particular communities select. Second, bioeconomic models of watersheds and communities are constructed in order to simulate the consequences of alternative policy or technology changes. Third,

typologies of less-favored lands are constructed and GIS databases generated to enable aggregation from the community-level studies to regional or national levels.

Theme 3: Because of the growing need to monitor resource degradation in less-favored lands, IFPRI has begun new research on developing and testing indicators and resource monitoring systems that not only flag emerging problems (or track improvements in resource condition when these occur), but also shed light on the causes of observed changes in resource condition and the kinds of policy interventions needed to correct any serious problems. An important approach that will be tested is use of participatory approaches to resource monitoring that are of direct value to local people as well as feeding into more aggregated data systems. An initial test of a prototype system will be undertaken in Costa Rica.

Theme 4: Macro, trade and agriculture sector policy reforms can have profound effects on farmers' behavior, farm incomes, and sustainable resource management in less-favored areas. Research, in collaboration with TMD, to model these linkages, with particular emphasis on analyzing ways in which market liberalization policies might need to be modified to cushion any negative impacts on the poor in less-favored regions. Related work will also be undertaken on identifying more effective policies for managing droughts and other climatic risks in less-favored areas. Collaborative research on both these issues is currently ongoing with ICARDA and national teams in several countries in the West Asia-North Africa region.

Agricultural Science and Technology Policy

Agricultural research and development (R&D), which has generated astounding increases in food production in the twentieth century, is vital to assuring food security for the burgeoning global population in the coming decades. But changes in the financing, management, and organization of agricultural R&D, the proprietary nature of the agricultural sciences, and the nature of the biological sciences themselves are occurring rapidly. After decades of sustained growth, the rate of growth of spending on agricultural research has slowed in most countries since the early 1980s, and in some countries spending has even shrunk. The private sector is paying for and conducting an ever larger share of agricultural research, while governments are reducing their agricultural R&D spending. These and other changes have tended to push the agricultural research agenda in new directions, raising questions about whether agricultural R&D will be able to help meet the food needs of the poor and hungry beyond 2000.

Despite these rapid and in many respects unprecedented developments, there is a dearth of information and policy analysis to inform and guide the institutional and policy changes that are underway or being contemplated. It is the overriding objective of this research theme to help remedy that situation by developing methods of analysis and providing new information through researching public policies that improve the funding, performance, and impact of public and private agricultural science and technology institutions worldwide, including their productivity, environmental, and ultimate poverty consequences.

To achieve this objective researchers organize its activities around three highly interrelated research themes and one methodological theme, specifically:

- Investment and institutional policies for agricultural science and technology;
- Agricultural genetic resource policies; and
- Productivity-environment linkages of agricultural R&D, and their growth-cum-distributional (e.g., poverty) consequences.

FOOD CONSUMPTION AND NUTRITION DIVISION (FCND)

Rural Finance Policies for Food Security of the Poor

This multicountry research program was initiated in 1993, building on earlier work at IFPRI on rural credit. Its point of departure is the premise that improved access to credit and savings options by the poor increases their income levels, enables them to preserve their assets during times of hardship, and permits them to buy food during lean periods. Most formal rural credit programs have failed to reach the poor. New experiences featuring bottom-up rather than top-down approaches have emerged and suggest a potential for sustainable rural financial systems. This research team conducts research on these innovative systems, and is particularly interested in changes in household-level income generation, agricultural production, consumption, and nutrition that result from an increased access to and participation in member-based financial institutions, such as groups, village banks, and cooperatives.

Research has been conducted in several countries: Bangladesh, Cameroon, China, Ghana, India, Kenya, Madagascar, Malawi, Mali, Nepal, Nicaragua, and Pakistan. In addition, a short-term study on the structure and performance of the rural financial sector in Egypt was completed in 1994, and a follow-up study was in 1998.

Urban Challenges to Food and Nutrition Security

No developing country can afford to ignore the phenomenon of urbanization. Within the next 20 years, more poor and undernourished people in developing countries will live in cities than in the countryside. High rates of urbanization mean that urban food insecurity and malnutrition are concerns even for regions like Africa and Asia, which currently have relatively low levels of urbanization. Malnutrition in the poorest areas of cities often rivals that found in rural areas.

Despite the severity and extent of the problem, studies on urban food and nutrition security are fragmented, and as yet no comprehensive understanding of the factors affecting food insecurity and malnutrition in cities exist. More and better information is necessary to formulate appropriate policy and program responses. This research program, launched in 1995, will provide policymakers, program administrators, and development practitioners with the information they need to make sound policy decisions to reduce food insecurity and malnutrition in urban areas.

Gender and Intrahousehold Aspects of Food Policy

While policymakers may recognize the importance of intrahousehold issues, they often lack guidance on exactly when and how a better understanding of resource allocation within households can strengthen food and agricultural policies. This research program is designed to generate information that will assist in the development of policies, programs, and projects that are high-performing precisely because they take into account intrahousehold resource allocation processes.

Targeted Interventions to Reduce and Prevent Poverty

Research undertaken under the umbrella of this MP seeks to understand the causes of poverty, food insecurity, and poor nutrition, and the impact of interventions designed to remedy these. Results generated are applied to the design of improved policies and interventions, better instruments and criteria for efficient and cost-effective support programs in countries with differing socioeconomic circumstances, technical capacities and budgetary and administrative constraints. Both research and outreach activities are critical to the success of MP18. Specific activities currently being undertaken to reach this objective include:

- identifying and characterizing the poor by using existing methods and by developing new approaches that can be used by operational agencies with limited analytical capabilities;
- determining the impact of interventions on the poor;
- examining the existence and magnitude of second-round effects;
- undertaking a comparative analysis of different antipoverty interventions with a view to determining if these objectives can be met by altering or replacing existing programs;
- analyzing political and institutional factors that affect the performance of interventions and the feasibility of alternatives; and
- significant capacity building in selected countries.

TRADE AND MACROECONOMICS DIVISION (TMD)

Macroeconomic Reforms and Regional Integration in Southern Africa (MERRISA)

Study countries: Malawi, Mozambique, South Africa, Tanzania, Zambia, and Zimbabwe.

Since early 1996, Trade and Macroeconomics staff has been working, together with country-based and international collaborators, on the three-year project study of macroeconomic reforms and regional integration in Southern Africa. The country-study component of the MERRISA project aims to contribute to a better understanding of recent macroeconomic policy adjustments in selected Southern African countries, and of their implications for economic growth and equity. The methodology of the project uses both historical analysis and formal economy-wide (in particular, Computable General Equilibrium) modeling, with special attention to the links between agriculture and the rest of the economy. The project study essentially focuses on agriculture-based development, which is hypothesized to be strongly supportive of the twin objectives of economic growth and poverty reduction. However, where relevant in the study countries, comparison of the growth and equity effects of alternative development patterns will be made.

Preliminary papers describing the observed changes in macroeconomic policies in the study countries and their apparent effects on agricultural performance, overall economic growth, and income distribution were presented and discussed at the September workshop in Harare. Concurrent sectoral policy reforms, external developments, and weather disturbances (in particular, the severe drought of 1992) were also recognized to have been important influences on recent economic performance. Formal economic modeling would be necessary to be able to evaluate the effects of macroeconomic policy reform in isolation or in combination with other exogenous factors. The primary advantage of CGE modeling is that it specifies important multisectoral linkages that operate simultaneously and interactively within the national economy. The country CGE models incorporate special structural features that better reflect Southern African characteristics, such as own household consumption, nonseparability of farm-household consumption and production decisions, informal nonagricultural production and employment, factor-market segmentation, high transportation and transactions costs, government-imposed price bands on staples such as maize, and quantitative trade restrictions. They require an economy-wide database, organized into a Social Accounting Matrix (SAM), with a special emphasis on the agricultural sector and different household groups. The SAM integrates national income, input-output, flow-of-funds, household surveys, and foreign trade statistics into a comprehensive and consistent data set.

Each of the four country studies originally included in the MERRISA Project has been working on the estimation of a benchmark SAM (for the early 1990s) which, given these countries' limited data availability and reliability, is a difficult and challenging problem. To facilitate the construction of a consistent SAM from scattered and inconsistent data sources, Trade and Macroeconomics staff has recently developed a new "entropy difference" estimation approach, which has generated interest in government

statistical agencies in the region. The method allows the incorporation of errors in variables, inequality constraints, and prior knowledge about any part of the SAM. The preliminary SAMs for Mozambique, Tanzania, Zambia, and Zimbabwe were presented at the September workshop, which also discussed plans for developing the CGE models and policy simulations to analyze the economy-wide effects of alternative economic reform scenarios. For Malawi and South Africa, which were newly added to the MERRISA Project for in-depth study, Trade and Macroeconomics staff and country-based researchers began collaborative work on the SAMs soon after the workshop.

A 2020 VISION FOR FOOD, AGRICULTURE AND THE ENVIRONMENT

In 1993, the International Food Policy Research Institute (IFPRI), in collaboration with partners around the world, launched an initiative called *A 2020 Vision for Food, Agriculture, and the Environment*. The main impetus for this initiative was the prevalence of considerable disagreement on the magnitude and nature of the world's food and environmental problems combined with complacency that global food surpluses were a sufficient guarantee of global food security. The lack of a long-term vision and consensus about what actions are required for feeding the world, reducing poverty, and protecting the natural resource base spurred IFPRI to launch the 2020 Vision initiative.

The 2020 Vision initiative has two primary objectives: (i) to develop and promote a shared vision and consensus for action for meeting food needs while reducing poverty and protecting the environment; and (ii) to generate information and encourage debate to influence action by national governments, nongovernmental organizations, the private sector, international development institutions, and other elements of civil society.

- To realize these objectives, the 2020 Vision initiative engages in four major activities:
- Generating timely, state-of-the-art information on key topics related to food, agriculture, and the environment, paying special attention to emerging issues that have long-term implications for feeding the world, alleviating poverty, and protecting natural resources;
 - Communicating the 2020 Vision challenges and related action program to raise awareness of the world's food and environmental problems and what can be done to solve them, paying special attention to reaching not only the current generation of policymakers, researchers, educationists, and other leaders, but also the next generation(s);
 - Providing fora for dialogue, debate, information sharing, and consensus building among policymakers, researchers, and leaders in nongovernmental organizations, private sector, and media through seminars, workshops, and conferences; and
 - Strengthening the capacity of developing countries to conduct their own 2020 research and to design and implement their own 2020 strategies and action plans, mainly through regional networks, initially in East and West Africa, and later in other developing regions.

Achievements and Impact

While it is difficult to measure precisely the full impact of the 2020 Vision initiative, a plethora of process indicators and anecdotes suggest that it contributes significantly to (i) raising public awareness of the challenges and opportunities for feeding the world, alleviating poverty, and encouraging sound management of natural resources; (ii) enhancing dialogue and debate on food, agriculture, and the environment; (iii) bringing together divergent views and developing consensus on what the world's food and environmental problems really are and what can be done to solve them; and (iv) influencing the policies and programs of international development agencies and national governments toward a long-term strategy for sustainable food security.

One measure of the 2020 Vision initiative's success is that many people around the world look to it for solid research-based information on emerging issues and prospects for global food security. The initiative has contributed significantly to the knowledge base on key topics related to food, agriculture, and the environment. To date, 5 books and booklets, 3 food policy reports, 29 discussion papers, over 60 policy briefs, several syntheses, and many issues of the newsletter *News & Views* have been published under the auspices of the 2020 Vision initiative.

Demand for publications is very high, with a number of people requesting multiple copies. Over 5,000 people—policymakers, policy analysts, researchers, educationists, and leaders in the private sector, civil society, and media—in developed and developing countries regularly receive 2020 publications. In addition, a steady stream of requests for individual publications are received. 2020 publications reach readers across the globe. Selected 2020 publications are translated into French and Spanish while individual publications or selected results have also been translated into German, Dutch, Danish, and Japanese, among other languages. The popularity of the 2020 web-site is growing; about 40,000 people visited the site during 1999, with about 30 percent of these visitors came back 8 or more times.

A 1997 survey of 2020 readers indicated that nearly three-quarters of those surveyed find the publications to be very useful, particularly for formulating policy, preparing policy advice, conducting research, and writing articles or books. Policymakers and people living in developing countries were prominent among the groups who found the publications very useful. Almost two-thirds of the respondents from universities and educational institutions use 2020 materials for graduate- and undergraduate-level courses. Although 2020 materials generally are not used in primary or secondary education settings, 14 percent of the nongovernmental organizations that responded to the survey use them at the secondary level. An overwhelming 96 percent of the respondents reported that they wish to continue to receive the 2020 newsletter *News & Views*. The survey indicated that readers find the writing style of all publications just right.

Aside from the successful international conference of June 1995 which was attended by over 500 participants, more than 100 meetings, seminars, workshops, and symposia have been held around the world. The 2020 Vision initiative brings together policymakers, policy analysts, researchers, and leaders in nongovernmental organizations, private-sector companies, and the media in stimulating meetings that encourage dialogue across sectors and facilitate value-added information sharing.

On a related front, the publications and meetings of the 2020 Vision initiative generate worldwide media attention with more than 300 newspaper and magazine articles, including features in the *New York Times*, *Financial Times*, *Asian Wall Street Journal*, *Toronto Globe & Mail*, *Berlingske Tidende* (Denmark), *Yomiuri Shinbun* (Japan), and *India Monitor*. As an illustration of broad developing-country coverage, 11 South African newspapers devoted coverage to a 2020 Vision workshop held in South Africa during June 1996. In addition, interviews with 2020 researchers have been broadcast on radio and television stations around the globe, including the British Broadcasting Corporation (BBC), Cable News Network (CNN), Channel Earth Television, National Public Radio, and Voice of America. These media activities contribute to raising public awareness about issues influencing food security, poverty alleviation, and management of natural resources.

By putting solid research-based information in an easily accessible style and format and by bringing together divergent views and providing fora for information sharing and consensus building, the 2020 Vision initiative enhances dialogue and debate on key topics, including some contentious ones. Illustrations include:

- 2020 research suggests that a “livestock revolution” is underway with profound implications for human health, livelihoods, and the environment. This revolution is driven by income, population, and urban growth that leaves little room for policy to alter the widespread increase in demand for

- animal food products. This research suggests how policy can make the revolution as beneficial as possible to the overall well being of the poor.
- 2020 research on China's food needs in the twenty-first century suggested that China is unlikely to become a major importer or exporter of grain, which helped to defuse alarmist projections that China could decimate the world's food supplies.
 - 2020 research on the long-term prospects for cereal demand and supply in India has drawn attention to the implications of likely structural changes in people's diets for agricultural production and trade. This research contends that consumption of livestock products could increase rapidly as the economy grows. As demand for livestock products grows, demand for cereal feed could increase substantially.
 - IFPRI's 2020 global projections model (International Model for Policy Analysis on Commodities and Trade) is recognized as one of the world's premier models for long-term projections of global food demand, supply, and trade as well as child malnutrition. The model can run many different scenarios that have illuminated the likely effect of a variety of policy options. On-going work to integrate water into the model will make this an even more powerful and innovative model.
 - 2020 research has conclusively demonstrated that foreign assistance to agriculture is a win-win proposition, causing export opportunities for donor countries as well as assisting economic development in recipient countries. This research has contributed to increased attention to agriculture in the development assistance portfolios of donor agencies.
 - The 2020 Vision initiative has conducted and is conducting path-breaking research on topics such as getting ready for the millennium round trade negotiations, the prospects for India's cereal economy to 2020, strategies for sustainable development of less-favored areas, and emerging health and nutrition issues for the twenty-first century.
 - 2020 Vision writings on the problems and opportunities of biotechnology are helping to refocus the debate away from ideology towards scientific evidence. The potential role of genetic engineering to assure food security in developing countries while maintaining acceptable biosafety is an important aspect of this work.

Governance

The 2020 Vision initiative is coordinated by a senior-level coordinator in the Director General's Office, directed by a Steering Committee of IFPRI's senior management team chaired by the Director General, and guided by an International Advisory Committee of distinguished individuals chaired by H.E. President Yoweri Museveni of Uganda. Activities are primarily undertaken by IFPRI's research and outreach divisions or by external collaborators and partners.

Donors

Since its inception, the 2020 Vision initiative has received funding from over two-dozen different donors, who have contributed about \$5 million to date. The considerable diversity in funding sources is a testament to the initiative's strength and wide appeal. It is also an important element in the strategy to realize the 2020 Vision objectives: donors are an important client group of the 2020 output. Donors include bilateral agencies such as the Canadian International Development Agency (CIDA) and the Danish International Development Agency (DANIDA); multilateral institutions such as the Inter-American Development Bank; foundations such as the Ford and Rockefeller foundations; private-sector companies such as AgrEvo and Ciba-Geigy; and a nongovernmental organization, World Vision Relief and Development, Inc.

Collaborators

From the very beginning, the 2020 Vision initiative has emphasized collaboration with individuals and institutions at all levels, including the preparation of 2020 discussion papers and briefs; joint sponsorship of 2020 seminars, workshops, and conferences; participation in public awareness and educational/training activities; development of the 2020 regional visions; and the design and engagement in capacity strengthening activities such as regional networks. For example, the regional 2020 visions for Latin America, South Asia, and Sub-Saharan Africa were developed by partners from within the regions. Experts outside IFPRI have written about half of the 2020 discussion papers and policy briefs. Most of the workshops, conferences, and follow-up meetings have been jointly sponsored or organized with other institutions, including CGIAR centers. The 2020 regional networks in East and West Africa year are being undertaken in full collaboration with the Association for Strengthening Agricultural Research in East and Central Africa (ASARECA) and the Securite Alimentaire Durable en Afrique de l'Ouest Centrale (SADAOC). The collaborators in all network countries have taken full ownership of the 2020 Vision initiative.

The Way Forward

While the 2020 Vision may be difficult to fully realize by 2020, action must be initiated now if progress is to be made over the next quarter century in feeding the world, preventing poverty, and protecting the environment. In Phase I, which concluded in December 1996, the 2020 Vision initiative took a global view and focused on identifying the global challenges and elements of a global action program to realize the 2020 Vision. In Phase II, the emphasis is on helping developing countries design and implement their own 2020 strategies and action plans. The 2020 Vision will only be realized if individual countries in the developing world conduct their own 2020 Vision research and engage in their own 2020 Vision dialogue about food, agricultural, and environmental issues within their own policymaking circles.

IFPRI will continue to contribute to realizing the 2020 Vision of a world where every person has access to sufficient food to sustain a healthy and productive life, where malnutrition is absent, and where food originates from efficient, effective, and low-cost food systems that are compatible with sustainable use of natural resources.

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