

SAGA
**Strategies and
Analysis for
Growth and
Access**

CORNELL
and
CLARK ATLANTA
Universities

[SAGA Website](#)
[SAGA Small Grants Website](#)
[SAGA Working Papers](#)
[SISERA Website](#)



Funded by the United States Agency for International Development

SAGA Briefing Report
HFM-A-00-01-00132-00

November 2003

Key Personnel:

Cornell University

N'Dri T. Assie-Lumumba
Christopher B. Barrett
Ravi Kanbur
David E. Sahn (Chief of Party)
Stephen D. Younger

Clark Atlanta University

Mesfin Bezuneh

Other Cornell Personnel:

Paul Cichello
Parfait M. Eloundou-Enyegue
Peter J. Glick
Marieme Lo
Leopold Sarr
David C. Stifel
Kaushik Basu
Erik Thorbecke



Table of Contents

Preface

- I. Introduction**
- II. Research Matrix**
- III. Country/Regional Collaborating Institutions**
- IV. Conferences and Workshops**
- V. Survey and Data Collection Efforts**
- VI. Research Output**
- VII. Engagement in Policy Process**
- VIII. Technical Assistance**
- IX. Competitive Grants**

PREFACE

In October 2001, USAID and Cornell and Clark Atlanta Universities signed the SAGA Cooperative Agreement. The program of work covers five years, with \$6 million contributed by USAID and \$2.2 million by Cornell and Clark Atlanta Universities. Shortly after signing, work began to identify a set of core countries in which to concentrate the research component of SAGA. Consultations with USAID missions culminated in May 2002, when countries were selected based on the scoring of the proposals and responses from the missions that had expressed an interest in SAGA. Subsequent to the selection of SAGA countries, a process of consultation with USAID missions, SISERA partner institutions, government officials, and stakeholders commenced, with the intent of defining the research priorities that would best respond to, and promote evidence-based policy formulation. This process was completed in the end of 2002, enabling the research component of SAGA to commence in early 2003. We are now nearly one year into the research process. This briefing is designed to consolidate information in the four more detailed semi-annual progress reports that have been submitted by Cornell and Clark Atlanta Universities to USAID, and thus, give an overview of our progress to date, and plans over the next year.

I. PROJECT OVERVIEW

Strategies and Analysis for Growth and Access (SAGA), a project of Cornell and Clark Atlanta Universities, funded by a cooperative agreement with USAID, brings together key personnel with extensive experience in Africa as researchers, teachers, policy makers, and consultants, to offer a different approach. We believe that macroeconomic reforms are only part of the basis for growth and poverty reduction—what is missing is a “bottom-up perspective.” We are focusing on the capabilities of individuals, households, and communities—their productivities, their vulnerabilities, their institutions, and their environment.

Our project differs from typical research projects in that both the research and the technical assistance components are demand driven, responding directly to needs and interests of our African colleagues. We seek considerable input from African policymakers, stakeholders, and researchers in developing the activities of this project. SAGA’s goals are to conduct high quality, policy relevant, research and to increase African capacity to produce such research on key issues affecting economic growth and improved living standards in Africa. Our four main objectives are to:

1. Conduct policy oriented research on economic growth equity and poverty alleviation;
2. Strengthen selected African economic research institutes;
3. Expand the pool of highly trained African economists; and,
4. Facilitate linkages between U.S. and African researchers.

SAGA is divided into 3 major components:

Research:

The research component of SAGA has 4 broad themes: (1) schooling, education and human capital; (2) health and nutrition; (3) risk, vulnerability, and poverty dynamics; and, (4) empowerment and institutions. Our aim is to understand better the economic, social, institutional, and natural constraints that keep Africa’s poor from prospering in the context of growth-oriented reforms.

Technical assistance:

We are providing technical assistance to SISERA partner institutes on a demand-driven basis on research methods, proposal preparation, and generating science based information for policy making.

Competitive grants program:

We provide opportunities for researchers, including Ph.D. students and faculty from U.S. universities to development partnerships with African researchers and research institutions by financing their collaborative research in Africa.

II. RESEARCH MATRIX

		SAGA THEMATIC AREAS			
		Schooling, Education and Human Capital	Health and Nutrition	Risk, Vulnerability and Poverty Dynamics	Empowerment and Institutions
COUNTRIES	Ghana	X		X	X
	Kenya			X	X
	Madagascar	X	X	X	X
	South Africa	X		X	X
	Uganda	X	X	X	
	West Africa Region				
	Cameroon	X			
	Cote d'Ivoire	X			X
	Senegal	X	X		X

III--COLLABORATING INSTITUTIONS

Pan-African Institutions:

African Economic Research Consortium
Secretariat for Institutional Support for Economic Research in Africa¹

Ghana:

Institute of Statistical, Social and Economic Research, University of Ghana
(ISSER)

Kenya:

Institute of Policy Analysis and Research, Nairobi, Kenya (IPAR)
Kenya Institute for Public Policy Research And Analysis (KIPPRA)
Tegemeo Institute of Agricultural Policy And Development
University of Nairobi

Madagascar:

Centre d'Etudes Economiques, Antananarivo, Madagascar (CEE)
Centre National de Recherche Appliquée au Développement Rural (FOFIFA)
Institut National de la Statistique (INSTAT)
Ministry of Health
Ministry of Primary and Secondary Education
University of Antananarivo
The World Bank

South Africa:

Development Policy Research Unit, University of Cape Town
National Institute of Economic Policy, Johannesburg, South Africa (NIEP)

Uganda:

Economic Policy Research Center, Makerere University (EPRC)
Ministry of Education

West Africa:

Cameroon:

Centre d'Etudes et de Recherches en Economie et Gestion, Yaoundé, (CEREG)
Dschang University
Ecole Normale Supérieure
Ministry of Education
Ministere de l'Enseignement Supérieur

¹ The names of SISERA affiliated institutions have been *italicized*.

Cote d'Ivoire:

Centre Ivoirien de Recherche Economique et Sociale, Abidjan (CIRES)
Centre d'Education à Distance-Côte d'Ivoire (CED-CI)

Senegal:

Centre de Recherche en Economie Appliquée (CREA)
Conférence des Ministres de l'Education Nationale (CONFEMEN)
Institut National d'Etudes et d'Action pour le Developpement de l'Education
(INEADE)
Institut National de la Recherche Agronomique, Paris (INRA)
Ministry of Education
UNICEF
The World Bank

IV—CONFERENCES AND WORKSHOPS

Multi-Country:

- Qualitative Methods and SAGA: Community Studies Meeting, April 2002.

While SAGA's methodological and disciplinary center of gravity is very clearly quantitative and economic, the original proposal recognized the value of a limited broadening out from this base to take in qualitative methods and other social sciences. We therefore held a brief workshop to discuss the way forward on integrating qualitative techniques and other social science disciplines into our research and technical assistance.

Ghana:

- Design of the SAGA-Ghana Research Program, October 2002.

A Workshop was held in Accra in October 2002, with a range of stakeholders and, in consultation with the USAID mission, it was agreed to pursue four lines of enquiry: (1) a volume of papers, primarily written by locally based Ghanaians, on "Understanding Poverty in Ghana"; (ii) launching a project on collecting and analyzing panel data sets for Ghana at the community level; (iii) building bridges between quantitative and qualitative analyses of poverty; and (iv) analyses of land tenure issues in Ghana.

- Qual-Quant Workshop, May 2003.

The disconnect between qualitative and quantitative approaches to poverty analysis in Ghana is quite marked. We began to address this problem, at the workshop attended by approximately 30 participants, including economists, sociologists, anthropologists, geographers, and statisticians. Participants came from academia, think tanks, government, NGO's, and donor groups. Under the SAGA project ISSER will take the lead in forming interdisciplinary teams to address many issues that were highlighted as being best addressed by qual-quant analysis—and in seeking funding for these studies in the Qual-Quant tradition.

- Workshop on Panel Data Sets for Ghana, February 2003.

There is a glaring gap in data on poverty in Ghana—the lack of panel data sets that allow us to do serious analysis of poverty dynamics. Ghana simply does not have the household panel data sets that are essential before a whole host of dynamic questions — on risk, on poverty, on health and nutrition, on informal insurance, etc — can be answered. We therefore set for ourselves the task of developing a comprehensive

research proposal that will develop, for the first time, such a data set and such analyses, for Ghana at Yale, which included ISSER and several global leaders in the area of poverty dynamics.

- Understanding Poverty, January 2004.

The first drafts of the commissioned papers (see VI. Research Output, below) will be presented for discussion at a workshop held at ISSER, where they will receive comments from peer reviewers.

- Support for the new Network on the Economy of Ghana (NEG), July 2004.

This meeting will be the first conference of a new “Network on the Economy of Ghana.” The Network will be based at ISSER and will use new technology and web-based links to the fullest. It will produce a journal, published and managed electronically. Thus, the ISSER-Cornell and SAGA-Ghana processes have now led to a Ghana-wide process, based at ISSER, which has the possibility of transforming economic analysis networks on Ghana.

Kenya:

- Mixing Qualitative and Quantitative Method of Poverty Analysis in Kenya, 2004.

This workshop will be co-organized by IPAR and Cornell and co-sponsored by the World Bank, aims to develop and promote the use of mixed methods of poverty analysis within the Kenyan research community. At present there is, however, little understanding of or experience with the method. The objective of the workshop is to familiarize the policy research community (both producers and end-users in donor and operational agencies and government) with these techniques.

- Reducing Risk and Vulnerability in Rural Kenya, 2005.

The following sub-themes will be covered at this workshop: (i) The role of producer organizations in reducing smallholder vulnerability; (ii) Agricultural marketing systems, price volatility and vulnerability of smallholder producers and poor consumers; (iii) Improving factor market access to reduce rural vulnerability; (iv) Safety nets in marginal areas.

- Empowering the Rural Poor, July-August 2004.

The three sub-themes of this workshop will be: (i) The role of producer organizations in enhancing smallholder market participation; (ii) Decentralization and participation; (iii) Community groups and networks.

Madagascar:

- SAGA Participatory Planning Workshop, March 2003.

This meeting was organized by Cornell University and our SAGA partner, the Centre d'Etudes Economique (CEE). Attending from Cornell were Christopher Barrett, David Stifel and Bart Minten. The purpose of the workshop was to define the SAGA research agenda and the participation of various government agencies and stakeholders in the SAGA program.

- Workshop on our Health Services, Facilities and Users Surveys, 2004.

This workshop will focus on disseminating and discussing the findings of the health services and users surveys discussed elsewhere in this report

South Africa:

- DPRU Conference on Poverty and Policy in South Africa, October 2004.

We have begun planning for a major conference on poverty and policy in South Africa. Some of the papers prepared for the project noted in the research output section of this report will be presented at the conference, but the conference will have a wider catchment of scholars from inside and outside South Africa. It will raise DPRU's profile as South Africa's premier institution for poverty analysis.

Uganda:

- Poverty in Uganda: What We Know, and What We Don't, March 2004.

With the expectation that most, if not all, of our underway research projects will be completed by the conference, Cornell and EPRC are planning a conference for early in 2004, to be held in Kampala, at which authors will present their papers. This will be accompanied by a briefing of shorter duration for policy-makers to discuss the recommendations and relevance of the research.

WEST AFRICA:

Senegal:

- Identifying Policy Needs in Education, May 2002.

Cornell University, CREA and the Ministry of Education organized this conference with the support of UNESCO and UNICEF to identify information needs for policy-makers in Senegal charged with re-designing the countries education strategy.

- Dissemination Workshops on Informing Education Policy, 2004.

CREA, Cornell University-USAID, INRA, the World Bank, UNICEF and the Ministry of Education are collaboratively planning two large conferences with a broad range of stakeholders, researchers, and policy-makers in the next year to disseminate the research results from our recently fielded surveys.

V—SURVEY AND DATA COLLECTION EFFORTS

Ghana:

- Household Panel data survey--Pending confirmation of funding from SISERA.

Establishing a major panel data set for Ghana. Ghana, despite its rich household survey data sets, lacks a quantitative longitudinal panel. Proposal has been developed by ISSER and CEPA, with help from Cornell-SAGA, and has been submitted to SISERA.

Kenya:

- The Role of Rural Factor Markets in Reducing Poverty, Risks and Vulnerability in Rural Kenya.

Led by the University of Nairobi Department of Agricultural Economics in cooperation with the Institute of Policy Analysis and Research (IPAR), the Kenya Institute for Public Policy Research and Analysis (KIPPRA) and the Tegemeo Institute of Agricultural Policy and Development. This study will collect primary data from a sample of farmers in Vihiga and Kakamega districts in western Kenya in order to investigate the role of access to rural factor markets in influencing poverty, risk and vulnerability among the rural poor.

- A Study of Producer Organisations in Liberalised Kenyan Economy.

Led by Tegemeo in collaboration with KIPPRA, the University of Nairobi and IPAR, will collect primary data in 24 Districts in Kenya, building on existing panel data from throughout the country Tegemeo has collected previously. The objective of this study is to understand the factors that drive meso-level institutional change in producer and credit cooperatives, self-help groups and private companies within the agricultural sector and the impact of those changes on market participation, incomes, risk exposure and general welfare of farmers in Kenya.

- Effects of Market Price Volatility On Production Patterns and Apparent Retreat Into Subsistence Farming By Kenyan Smallholders.

Led by KIPPRA, in collaboration with IPAR, Nairobi and Tegemeo, is collecting survey data in Makueni and Kakamega districts to analyze the effects of the changing food market structure on price distributions and crop production patterns and marketing strategies among small-scale farmers.

- Enhancing Access, Accountability and Empowerment for the Poor through Decentralization and Participation Case for agricultural extension services.

Led by IPAR in cooperation with Tegemeo, KIPPRA and the University of Nairobi, is conducting primary data collection in Kakamega and Makueni Districts to establish the extent to which decentralization of agricultural extension services strengthens popular participation, local accountability and empowerment of the poor by enhancing access to agricultural extension information, as well as how this affects efficacy in serving the poor.

Madagascar:

In order to assess the efficiency and equity of the Malagasy health care system, particularly in light of recent decentralization efforts and the government's cost recovery (user fee) policy, and to suggest ways to improve both efficiency and equity in health care, SAGA is contributing to the collection and analysis of several surveys:

- Facilities survey.

Detailed questionnaires were administered to the main public clinic or hospital and the main private facility serving the 80 communities covered by the survey. The surveys were designed with the help of and administered by medical professionals. They contain information on physical characteristics of the facility, availability of equipment, medicines, skilled personnel and other supplies, and personnel policies, and feature direct observations by medical professionals of facility health practitioners with their patients.

- Health District survey.

With decentralization, financial and organizational decision making shifted to the country's 111 health districts. These surveys provide information on the relations of the health district authority with local facilities on the one hand, and the central health authority, on the other.

- Household welfare and health care survey.

These surveys are administered to households previously surveyed in selected communities in the 2003 nationwide household survey. They collect a range of data on household welfare and health care usage in particular, including perceptions on the quality of local public and private services.

- Client survey.

Exit surveys of patients of the health facilities chosen for the facility surveys, gathering information on perceptions of the quality of care and costs of services.

The Ministry of Education has also asked our help in designing and implementing several school and education focused surveys. They are in the planning stages, and we expect them to begin in the spring of 2004. We have secured financing for the surveys from the World Bank.

West Africa:

Senegal:

Low educational attainment, poor quality of schooling resulting in low cognitive skill development, and a large gender gap in schooling, affect much of Africa and Senegal in particular. This data collection was conceived to provide detailed information on the impacts of household, community, and school factors on schooling outcomes of boys and girls in Senegal. This effort involves several related surveys:

- PASEC survey and tests of academic achievement.

A cohort of students in randomly selected rural and urban public primary schools were given scholastic tests in the second grade and again in the fifth grade to chart academic progress.

- Household survey.

The current research visits the children in the original cohort for the PASEC tests (whether still in school or not), as well as a random sample of similar-aged children at their homes and conducts detailed household interviews. The surveys are standard household surveys but are adapted to elicit specific information related to the schooling history of the children, e.g. past events such as family illness that may have affected performance or attendance at school. All school age students are also administered tests of academic knowledge and knowledge of 'life skills'.

- School survey.

Detailed information was collected from local primary and lower secondary schools, including but not limited to the school covered by the original PASEC study. The information involves various aspects of school quality and pedagogical practice, especially practices that may differentially affect enrollment and learning of girls and boys.

- Community survey.

Local leaders and officials were interviewed to gather information on the local environment that may affect the demand for schooling and its quality, including, for example, the extent of community involvement in the operation of local schools.

VI—RESEARCH OUTPUT

We selected our geographical focus (Ghana, Kenya, Madagascar, South Africa, Uganda, and the West African region) from countries with USAID country missions and groups of countries comprising regional missions, and with commitments to working with the local members of The Secretariat for Institutional Support for Economic Research in Africa (SISERA). Below is a listing of research output from the work in these various countries.

Multi-Country:

Completed

Social Identity and Manipulative Interhousehold Transfers Among East African Pastoralists

October 2002

Huysentruyt, Marieke, Christopher B. Barrett, and John G. McPeak

We model interhousehold transfers between nomadic livestock herders as the state-dependent consequence of individuals' strategic interdependence resulting from the existence of multiple, opposing externalities. A public good security externality among individuals sharing a social (e.g., ethnic) identity in a potentially hostile environment creates incentives to band together. Self-interested interhousehold wealth transfers from wealthier herders to poorer ones may emerge endogenously within a limited wealth space as a means to motivate accompanying migration by the recipient. The distributional reach and size of the transfer are limited, however, by a resource appropriation externality related to the use of common property grazing lands. When this effect dominates, it can induce distributionally regressive transfers from ex ante poor households who want to relieve grazing pressures caused by larger herds. As compared to the extant literature on transfers, our model appears more consistent with the limited available empirical evidence on heterogeneous and changing transfers patterns among east African pastoralists.

Urban-Rural Inequality in Africa

September 2002

Sahn, David E. and David C. Stifel

In this paper we examine the relative importance of rural versus urban areas in terms of monetary poverty and seven other related living standards indicators. We present the levels of urban-rural differences for several African countries for which we have data. Then we examine the relative and absolute rates of change for urban and rural areas. Next, we employ simple cross-country regression analysis to examine how some potential covariates (e.g. openness, PPP GDP per capita, urbanization) affect urban-rural disparities in well-being. And finally, we conduct urban-rural decompositions of inequality, examining the within versus between (urban and rural) group inequality for asset inequality, education inequality, and health (height) inequality.

Bayesian Herders: Asymmetric Updating of Rainfall Beliefs In Response To External Forecasts

February 2003

Lybbert, Travis J., Christopher Barrett, John G. McPeak, and Winnie K. Luseno

Temporal climate risk weighs heavily on many of the world's poor. Recent advances in model-based climate forecasting have expanded the range, timeliness and accuracy of forecasts available to decision-makers whose welfare depends on stochastic climate outcomes. There has consequently been considerable recent investment in improved climate forecasting for the developing world. Yet, in cultures that have long used indigenous climate forecasting methods, forecasts generated and disseminated by outsiders using unfamiliar methods may not readily gain the acceptance necessary to induce behavioral change. The value of model-based climate forecasts depends critically on the premise that forecast recipients actually use external forecast information to update their rainfall expectations. We test this premise using unique survey data from pastoralists and agropastoralists in southern Ethiopia and northern Kenya, specifying and estimating a model of herders updating seasonal rainfall beliefs. We find that those who receive and believe model-based seasonal climate forecasts indeed update their priors in the direction of the forecast received, assimilating optimistic forecasts more readily than pessimistic forecasts.

Smallholder Identities and Social Networks: The Challenge of Improving Productivity and Welfare

July 2003

Barrett, Christopher B.

This paper proposes a general framework for resolving the puzzle of how to reconcile the mass of recent evidence on the salutary effects of social capital at the individual level with the casual, larger-scale observation that social embeddedness appears negatively correlated with productivity and material measures of welfare. It advances an analytical framework that not only explains individual productivity or technology adoption behavior as a function of the characteristics or behaviors of others, but that also explains the aggregate properties of social systems characterized by persistently low productivity. Examples from Kenya and Madagascar are used to illustrate the phenomena discussed.

Fractal Poverty Traps

September 2003

Barrett, Christopher B. and Brent M. Swallow

This paper offers an informal theory of fractal poverty traps that lead to chronic poverty at multiple scales of socio-spatial aggregation. Poverty traps result from nonlinear processes at individual, household, community, national and international scales that cause the coexistence of high and low equilibrium levels of productivity and income and high and low rates of economic growth. Multiple equilibria result from key threshold effects that exist at all scales due to market failures and nonmarket coordination problems. Key implications of fractal poverty traps include (i) the importance of recognizing meso-level phenomena in addition to conventional micro- and macro-level

issues, (ii) inter-connections across social-spatial scales that foster or ameliorate chronic poverty, (iii) the importance of identifying and overcoming thresholds at which accumulation and productivity dynamics bifurcate, and (iv) the significant potential role of transitory donor and government interventions and safety nets to ignite sustainable growth among the poor.

Rural Poverty Dynamics: Development Policy Implications

September 2003

Barrett, Christopher B.

This paper summarizes a few key findings from a rich and growing body of research on the nature of rural poverty and, especially, the development policy implications of relatively recent findings and ongoing work. Perhaps the most fundamental lesson of recent research on rural poverty is the need to distinguish transitory from chronic poverty. The existence of widespread chronic poverty also raises the possibility of poverty traps. I discuss some of the empirical and theoretical challenges of identifying and explaining poverty traps. In policy terms, the distinction between transitory and chronic poverty implies a need to distinguish between "cargo net" and "safety net" interventions and a central role for effective targeting of interventions. Prepared for invited presentation to the 25th International Conference of Agricultural Economists, August 17, 2003, Durban, South Africa.

Forthcoming

A Comparative Analysis of the Determinants of HIV/AIDS Related Knowledge and Behavior

Peter J. Glick and David E. Sahn

In this paper we explore the determinants of HIV/AIDS related knowledge and behavior in four sub-Saharan African countries: Burkina Faso, Tanzania, Uganda and Zimbabwe. We use multiple point in time Demographic Health Surveys to explain both women's knowledge of ways of preventing the spread of HIV/AIDS, as well as the utilization of condoms and nature of sex partners. In addition, we examine the determinants of testing behavior. A set of household, individual, and community explanatory variables are employed. Given that we have data from more than one survey in each country, we are able to both examine the changes in levels of knowledge and behavioral outcomes, and additionally, we can determine the extent to which they are driven by changes in the role of various covariates, for example, education or geographic location.

Ghana:

Forthcoming

The following papers to be published in a volume “Understanding Poverty in Ghana”, edited by Ernest Aryeetey and Ravi Kanbur:

Land and Rural Institutions Transformation
Ernest Aryeetey and Dzodzi Tsikata

Decentralization
Felix Asante and Joseph Ayee

Qual-Quant
Ellen Bortei-Doku Aryeetey and Ravi Kanbur

Public Expenditure Monitoring
Charles Jebuni and Anthony Tsekpo

Health Insurance
Kwadwo Asenso Okyere and K. Osei-Akoto

Education for HIV/AIDS
John Anarfi and Ernest Appiah

Household Asset Choice
Ernest Aryeetey

Skills Acquisition by the Poor
William Ahadzie and George Botchie

Inflation and the Poor
Nii Kwaku Sowa

Poverty Dynamics- Risk and Vulnerability
Abena Oduro and Kojo Appiah-Kubi

Non-traditional Exports and Poverty Reduction
Victor Nyanteng and Wayo Seini

Trade and Poverty
Charles Jebuni

Kenya:

Completed

Decomposing Producer Price Risk: A Policy Analysis Tool With An Application to Northern Kenyan Livestock Markets

October 2002

Barrett, Christopher B., and Winnie K. Luseno

This paper introduces a simple method of price risk decomposition that determines the extent to which producer price risk is attributable to volatile inter-market margins, intra-day variation, intra-week (day of week) variation, or terminal market price variability. We find that large, variable inter-market basis is the most important factor in explaining producer price risk in animals typically traded between markets. Local market conditions explain most price risk in other markets, in which traded animals rarely exit the region. Variability in terminal market prices accounts for relatively little price risk faced by pastoralists in the dry lands of northern Kenya although this is the focus of most present policy prescriptions under discussion.

Poverty Traps and Safety Nets

September 2003

Barrett, Christopher B. and John G. McPeak

This paper uses data from northern Kenya to argue that the concept of poverty traps needs to be taken seriously, and that if poverty traps indeed exist, then safety nets become all the more important. However, as presently practiced, safety nets based on food aid appear to be failing in northern Kenya.

Forthcoming

Enhancing Access, Accountability and Empowerment for the Poor through Decentralization and Participation: The case of agricultural extension services

Omiti, John, et al.

This study explores the extent to which decentralization of agricultural extension strengthens popular participation, local accountability and empowerment of the poor by enhancing access to agricultural extension information, as well as how this affects efficacy in serving the poor.

The Role of Rural Factor Markets in Reducing Poverty, Risks and Vulnerability in Rural Kenya

Karugia, Joseph, Willis Oluoch-Kosura, and Paswel P. Marenya.

This study investigates the role of access to rural factor markets in influencing poverty, risk and vulnerability among the rural poor in western Kenya.

Effects of Market Price Volatility On Production Patterns and Apparent Retreat Into Subsistence Farming by Kenyan Smallholders

Nyangito, Hezron, et al.

This study analyzes the effects of the changing food market structure on price distributions and crop production patterns and marketing strategies among small-scale farmers in Makueni and Kakamega districts in Kenya.

A Study of Producer Organisations in the Liberalised Kenyan Economy

Nyoro, James, et al.

This study explores the factors that drives institutional change at the level of producer cooperatives, self-help societies and other grass-roots level organisations and the impact of those changes on market participation, incomes, risk exposure and general welfare of farmers in Kenya.

Papers from the March 2004 Workshop on *Mixing Qualitative and Quantitative Methods of Poverty Analysis in Kenya*:

- *Quantitative Perspective on Poverty Dynamics in Kenya.*
Germano Mwabu;
- *Social Aspects of Dynamic Poverty Traps.*
Nelson Mango;
- *Qualitative and Quantitative Poverty Appraisal: Maximizing Complementarities and Minimizing Tradeoffs.*
Christopher B. Barrett
- *Pathways out of Poverty in Western Kenya.*
Anirudh Krishna, Patti Kristjanson, Maren Radeny and Wilson Nindo;
- Two further papers to be finalized.

Madagascar:

Completed

Determinants of HIV Knowledge and Behavior in Madagascar: An analysis using DHS Data.

Randriamamonjy, Josee, Peter J. Glick, David E. Sahn

Madagascar's low prevalence of HIV/AIDS, just 0.3%, suggests that it has so far escaped the epidemic that has plagued other countries in southern African. However, Madagascar is also characterized by a set of ideal conditions for the rapid spread of HIV to the general population: limited access to health and social services, the presence of high illiteracy, low condom use, widespread poverty, and high rates of sexually transmitted infections. To estimate the determinants of HIV/AIDS knowledge and sexual behavior among adolescent women aged 15 to 49 years old in Madagascar, we use data from the Malagasy Demographic and Health Surveys conducted in 1997 and the Commune Census conducted in 2001.

The Complex Dynamics of Smallholder Technology Adoption: The Case of SRI in Madagascar.

Moser, Christine M. and Christopher B. Barrett

This paper explores the dynamics of smallholder technology adoption, with particular reference to a high-yielding, low-external input rice production method called the System of Rice Intensification (SRI) in Madagascar. We present a simple model of technology adoption by farm households in an environment of incomplete financial and land markets. We then use a probit model and a symmetrically trimmed least squares estimation of a dynamic Tobit model to analyze the decisions to adopt, expand and disadopt the method. We find that seasonal liquidity constraints discourage adoption by poorer farmers. Learning effects – both from extension agents and from other farmers – exert significant influence over adoption decisions.

Better Technology, Better Plots or Better Farmers?

Identifying Changes In Productivity And Risk Among Malagasy Rice Farmers

Barrett, Christopher B., Christine M. Moser, Joeli Barison and Oloro V. McHugh

It is often difficult to determine the extent to which observed output gains are due to a new technology itself, rather than to the skill of the farmer or the quality of the plot on which the new technology is tried. This attribution problem becomes especially important when technologies are not embodied in purchased inputs but result instead from changed farmer cultivation practices. We introduce a method for properly attributing observed productivity and risk changes among new production methods, farmers and plots by controlling for farmer and plot heterogeneity using differential production and yield risk functions. Results from Madagascar show that the new system of rice intensification (SRI) is indeed a superior technology. Although most observed productivity gains appear due to farmer aptitude, the technology alone generates estimated average output gains of more than 37 percent. These findings also help resolve

several outstanding puzzles associated with observed low and incomplete uptake and high rates of disadoption of SRI in spite of the technology's manifest superiority.

Forthcoming

Characteristics of the Malagasy health care system.

A detailed descriptive overview of the data from the several surveys we are conducting.

Impact of the crisis and the suspension of user fees on the quality, efficiency and equity of the Malagasy health sector.

This study will examine the effects of the 2002 political and economic crisis, which led effectively to transportation blockade over much of the country, on the quality of and demand for health services. At the same time, it will examine the effects of the temporary suspension of the fee policy (PFU) at the end of the crisis. The effect of user fees, especially on health care utilization by the poor, is a crucial policy question in Madagascar, especially since the government has recently decided to reinstate the fees.

Explaining Efficiency in the Malagasy health sector.

This study will provide a statistical analysis of the efficiency of service delivery by public and private health care providers. It will apply recent techniques in stochastic frontier analysis to measure quality-adjusted efficiency in different facilities. It will then use econometric methods to explain the differences in efficiency between facilities, e.g. what policy factors seem to influence efficiency the most?

Determining policies to maximize incentives for efficiency and quality in public health care.

Lack of monitoring and incentives for good performance are often cited as key factors behind poor efficiency and quality in the public health care system. Related to this is said to be the inability of managers to exercise control over resources and personnel. This study will use the detailed information on incentives facing health care practitioners, facility managers, and health district commissioners to assess the impacts on quality and efficiency of incentives and management discretion in personnel policy and resource allocation, and to suggest ways to improve the performance of the health care system.

Equity in the Malagasy health care system.

This study will assess equity consideration in health care, addressing questions such as: Do the poor have less access to health care services? Do they have less access to high quality care? Are they able to benefit from private alternatives? What are the implications of the reinstatement of the fee policy and decentralization of the health sector for the poor's use of and quality of health care services?

South Africa:

Forthcoming

We expect to publish a volume “Poverty and Policy in Post-Apartheid South Africa,” edited by Haroon Borhat and Ravi Kanbur, that will include the following papers:

An assessment of Distributional Data in South Africa
Murray Leibbrandt & Ingrid Woolard

Evolution of Poverty and inequality, 1995-2000
Morne Oosthuizen & Laura Poswell

Evolution of the labor market using the 1995 and 2002 LFS/OHS
Haroon Borhat

Human Capital Accumulation & Household Poverty
Harris Selod & Yves Zenou

Inflation and the Poor
Haroon Borhat, Ravi Kanbur & Morne Oosthuizen

Is Public Expenditure Pro-poor?
Servaas van der Berg

Trade, Openness, Employment and Poverty
Rashad Cassim

Exchange Rate Volatility and Poverty
Lawrence Edwards

The earner/non-earner composition of poor and non-poor households, with implications for the impact of minimum wages on unemployment and poverty.
Ravi Kanbur

HIV/AIDS and Poverty using the 1998 DHS.
Haroon Borhat

Crime and poverty
Berk Ozler

Mobility in the post-1994 period
Michael Carter & Julian May

Economic growth, the Macroeconomic Environment & Poverty
Johannes Feddercke & Farah Pirouz

Internal Migration & Household Poverty post-1994
Dori Posel & Daniela Casale

Social Security & Poverty Alleviation
Charles Meth

Uganda:

Completed

Growth and Poverty Reduction in Uganda, 1992-1999: A Multidimensional Analysis of Changes in Living Standards.

October 2003

Younger, Stephen D.

This paper examines Uganda's progress on poverty reduction when poverty is measured in multiple dimensions. In particular, I consider poverty measures that are defined across household expenditures per capita or household assets, children's health status, and in some cases, mother's literacy. The comparisons are robust to the choice of poverty line, poverty measure, and sampling error. In general, I find that multidimensional poverty declined significantly in Uganda during the 1990s, although results for the latter half of the decade are more ambiguous. While there was clear progress in the dimension of expenditures and assets, improvement in children's height-for-age z-scores is less certain for the 1995-2000 period. I also make poverty comparisons for individual regions and urban and rural areas in the country. Rather surprisingly, progress on multivariate poverty reduction is less clear in Central region and in urban areas.

Robust Multidimensional Spatial Poverty Comparisons in Uganda.

May 2003

Duclos, Jean-Yves, David E. Sahn, and Stephen D. Younger

We investigate spatial poverty comparisons in Uganda using multidimensional indicators of well-being. In contrast to earlier work, our methodology applies equally well to what can be defined as "union", "intersection," or "intermediate" approaches to dealing with multidimensional indicators of well-being. Further, unlike much of the stochastic dominance literature, we compute the sampling distributions of our poverty estimators in order to perform statistical tests of the difference in poverty measures. We apply our methods to two measures of well-being from the 1999 Uganda National Household Survey, the log of household expenditures per capita and children's height-for-age z-scores. Univariate comparisons based on expenditures alone rank the regions from richest to poorest as Central, Western, Eastern, and Northern. When comparing results for urban areas in one region with rural areas in another, however, we have a richer set of results.

Forthcoming

Determinants of Poverty Dynamics.

Mukunge, Ashie and Ibrahim Kasirye

This paper uses the 1992-1999 panel of households in the Integrated Household Survey (IHS) and National Household Survey (NHS) to model change in poverty status over time. A draft is circulating internally for comments, and the authors expect to release a working paper version before the end of the year.

Multidimensional Intertemporal Poverty Comparisons.

Younger, Stephen D.

This paper uses the 1992 IHS and 1999 NHS cross-sections to compare poverty over time in Uganda, where poverty is measured in multiple dimensions. In particular, the author considers household expenditures per capita, children's nutritional status (height), and mother's literacy. Results are less optimistic than univariate comparisons of expenditures (e.g., Appleton, 2001), with some regions and areas not showing multivariate improvement. A draft is circulating internally for comments, and the authors expect to release a working paper version before the end of the year.

Multidimensional Spatial Poverty Comparisons.

Younger, Stephen D., David E. Sahn, Jean-Yves Duclos

This paper builds on Duclos, Sahn, and Younger (2003a, 2003b) to make spatial poverty comparisons when poverty is measured in the dimensions of household expenditures per capita and children's nutritional status (height) in Uganda and other African countries. Most regional comparisons are consistent with prior expectations based on univariate poverty comparisons based on expenditures alone. However, comparisons of rural areas in one region with urban areas in others are more nuanced, with rural areas in some regions actually appearing less poor than urban areas in others. The Uganda results are published in Duclos, Sahn, and Younger (2003b), and the authors are now adding results from other countries for this paper.

Modeling Infant Mortality over Time.

Ssewanyana, Sarah and Stephen D. Younger

This paper, like the previous two, will address the concern in Uganda that not all dimensions of well-being are improving as rapidly as incomes. It will use birth history recall data from the DHS to construct time series for infant mortality from the mid-1970s to 2000. It will then model infant mortality rates, attempting to understand how both macro and micro variables have influenced mortality rates over time. To date, the authors have a preliminary set of results. They expect to have a draft ready before the end of the year.

Modeling Behavior and HIV/AIDS.

Sahn, David E. and Peter J. Glick

This research will model a variety of behaviors that both determine and are affected by HIV/AIDS transmission in Uganda. Using DHS data, the authors will examine the impact of knowledge about HIV/AIDS and other public interventions on the probability of choosing to be tested for HIV, condom use, and sexual activity. The authors have preliminary results and expect to complete a draft in early 2004.

Tax Incidence.

Matovu, John, and Margaret Banga.

This study will examine the incidence of taxes in Uganda in 1999, updating a previous study by Chen, Matovu, and Reinikka (2001) for 1992 data. A particular concern is to look at the graduated tax, which is a main source of revenue for districts and thus key to Uganda's decentralization plans. Both participatory assessments in Uganda have found this tax to be extremely unpopular. The authors have begun their analysis and expect to complete a draft early in 2004.

Demand for Health Care Consultations.

Ssewanyana, Sarah, and Stephen D. Younger

The 2002 round of the National Household Survey has an unusually rich set of information on respondents' access to health care and the quality of those services. This paper will use this information to estimate the demand for public and private health care. Given that user fees were recently abolished, understanding these demands is particularly relevant for policy makers in Uganda. The authors expect to begin work early in 2004.

Public Water Supply and Women's Time Use.

Glick, Peter J., and Stephen D. Younger

This paper uses an econometric analysis to ask whether public investments in water supply will reduce the work burden on females relative to males. It considers the implications for time allocated to the following activities: water collection itself, all domestic activities, market oriented work, and leisure. The preliminary results suggest that, in Uganda and Madagascar, such investments can have at best only limited impacts on time use and the gender distribution of work and leisure. The authors have an extensive set of results, and they plan to prepare a draft before the end of the year.

Agricultural Commercialization and Children's Nutritional Status.

Bahiigwa, Godfrey, and Stephen D. Younger

This paper responds to a direct request and concern of the Ministry of Agriculture in Uganda. The Plan for the Modernization of Agriculture (PMA) is a central feature of Uganda's poverty reduction strategy. The PMA, in turn, aims to promote the transformation from subsistence to commercial farming. This strategy has raised the concern, however, that commercialization may have negative consequences for children's nutrition. While available evidence casts doubt on this concern (e.g., von Braun and

Kennedy, 1994), examining the issue for Uganda-specific data will be more persuasive for Uganda's policy-makers. Authors plan to begin work in early 2004.

WEST AFRICA

Senegal:

Completed

The impact of family literacy on the earnings of illiterates: Evidence from Senegal.

October 2003

Sarr, Leopold

The paper investigates the extent to which the sharing of literacy knowledge within the household affects the labor force participation and the earnings of illiterate workers in Senegal. The paper uses an intra-household model of literacy to a Senegalese household dataset and provides evidence that parental literacy and education do not capture all sources of external literacy benefits and that illiterate members also benefit from other literate members of the household.

Forthcoming

Determinants of primary enrollment of girls and boys.

Will address the reasons for low primary enrollment in Senegal, especially of girls, by examining the role of household factors, school factors (e.g., quality and distance), and community level factors. The choice among public and increasingly important private and community school alternatives will also be considered.

Dropout and Progression through school in Senegal.

This report will explore the reasons for the very high rates of repetition and dropout in the Senegal school system. The roles of gender, exam performance, school and teacher quality and practices, and household wealth and changes in household fortunes (e.g. though illness or bad harvest years) will be considered. The report will also specifically address the factors influencing the transition (or lack of transition) from primary to lower secondary school of girls and boys, and recommend policies to encourage or enable parents to enroll and keep their children in school.

Determinants of student learning.

Little is known about the school and household factors that affect learning, as measured by test scores. This report will address this gap by combining the test score information with the wide range of information from the complementary surveys on household factors (parental education, assets, etc) and school factors (teacher skills and practices; quality of school facilities; staff monitoring and management; use of muti-

grade teaching; and for girls, teacher gender and attitudes and gender-related aspects of the school environment). Specific school factors will be identified that can be used to boost student learning, and especially, girls' learning.

Schooling and acquisition of 'life skills'.

We will assess whether schools also impart crucial non-academic knowledge and skills, for example, basic health knowledge. This will be done using tests administered to school age children in their homes, thus allowing us to compare knowledge of life skills of children who have attended school and those who have not (or who have dropped out).

VII—ENGAGEMENT IN POLICY PROCESS

Ghana:

- Cornell-SAGA is helping ISSER set up the new Network on the Economy of Ghana, whose aim is to link policy makers with the very best in global research on Ghana, through an electronic network. Plans are also under way for a major conference under the auspices of the NEG, to bring together policy makers and researchers.
- At the conference on designing the SAGA-Ghana research program, the National Development Planning Commission was an active participant (along with USAID and other donor missions).

Kenya:

- Our SAGA team includes two members who are writing the government's Kenya Rural Development Strategy.
- Our SAGA consultations included two members who are writing the government's Kenya Rural Development Strategy. Hezron Nyangito, the Acting Director of KIPPRA (the Kenya Institute for Public Policy Research and Analysis, roughly Kenya's equivalent of the Congressional Research Service), leads one of our teams. James Nyoro of Tegemeo, who leads another of our subprojects, chairs the government's parliamentary advisory group on reforms in the coffee sector.
- The planned March 2004 working on Mixing Qualitative and Quantitative Methods of Poverty Appraisal in Kenya has already attracted senior level interest from the Ministry of Agriculture and the Office of the Presidency, which expect to send representatives.

Madagascar:

- The Secretary General, Mme. Josianne Rabetokotany of the Ministry of Education, along with the Prime Minister, requested and secured financial support from the World Bank at a Paris donor's meeting for a survey to be jointly designed and conducted by SAGA and the Ministry to improve the knowledge base for the Ministry's policy making and investments.
- At a workshop in March 2003, organized by Cornell, FOFIFA and INSTAT, the results we not only used to define the SAGA research agenda, but fed directly into the Ministry of Agriculture and the Presidency's deliberations on the PRSP later that month.

South Africa:

- Ravi Kanbur has been involved in a number of outreach activities at the request of USAID-South Africa and DPRU. He has addressed Parliamentarians on the issue of globalization and poverty, made presentations to South Africa Treasury staff on a range of issues, and has become a peer reviewer for the Fiscal and Finance Commission for their next report to Parliament. The research collaboration with DPRU has complemented well the training course on poverty analysis that Cornell and DPRU held in Cape Town for staff from Historically Disadvantaged Universities
- Haroon Borat, Director of DPRU is a member of the South African Fiscal Finance Commission. At the request of DPRU and FFC, Ravi Kanbur made a presentation on his recent research on Spatial Inequality and development, a special interest of the FFC, and agreed to become a peer reviewer on their report to Parliament.

Uganda:

- Godfrey Bahigwa and Stephen Younger have one working paper in progress that examines the impact of policies proposed and/or implemented under the Plan for the Modernization of Agriculture (PMA) on children's nutritional status. The Ministry of Agriculture specifically requested this paper at a presentation we made to solicit suggestions about SAGA's research program in Uganda.
- We have three working papers that address an issue that both the Ministry of Finance and the World Bank explicitly expressed interest in, that being the apparent contradiction between rapid progress on income poverty reduction with little or no improvement in non-income measures of well-being like infant mortality and children's nutritional status. One, by Stephen Younger, is finished. Two more, by Sarah Ssewanyana and Stephen Younger and by Ashie Mukungu and Ibrahim Kasirye, are under way.

West Africa:

Senegal:

- With our colleagues at CREA, we are organizing a workshop in April with the Director of Planning in the Ministry of Education to help formulate the new education strategy that is being prepared. As part of this effort, we are both engaged in primary data collection, analysis and training, as well as in organizing a series of policy seminars, the first being planned for April 2004.

VIII—TECHNICAL ASSISTANCE

We are providing technical assistance to SISERA partner institutes on a demand-driven basis, including:

- **Review and critique** 44 proposals submitted to the SISERA research competition;
- **Uganda Survey Data Analysis Workshop** in Fall 2002, brought together researchers from Kenya (IPAR), Tanzania (ESRF), and Uganda (EPRC, various departments at Makerere University, and the Bank of Uganda) to develop skills for survey data analysis. We also included participants in a daylong consultation with government representatives, donors, university faculty, and the press, to define specific policy-relevant research topics for SAGA in Uganda.
- **A Workshop on Poverty and Inequality** for faculty at South Africa’s historically disadvantaged universities was held June 23-July 4, 2003, involving 25 participants and staff from Cornell, DPRU, and NIEP.
- **Analytical and Empirical Tools for Poverty Research Workshop** on August 16, 2003, in Durban, South Africa, was co-organized by SAGA and the World Bank at the triennial meetings of the International Association of Agricultural Economists. Leading poverty researchers introduced frontier techniques in poverty research, and a panel of scholars discussed research and policy priorities for addressing rural poverty with 110 participants from 22 mostly African countries.
- **Thirteen site visits to SISERA institutes by Cornell researchers** to support research activities at those institutes in five countries (Kenya, Ghana, Senegal, South Africa, and Uganda).
 - One example is the technical assistance in Senegal where SAGA provided training in household, community, and school-level questionnaire design to examine education outcomes, planning and design of sampling procedures, and data analysis. The SAGA team worked directly with Centre de Recherche en Economie Appliquée (CREA) researchers, and SAGA’s Leopold Sarr managed and implemented the household survey conducted by the Ministry of Education and CREA.
 - A second example is the mentoring of junior researchers at SISERA institutes by Cornell faculty with the aim of including these young professionals’ research in the SAGA research program.

IX—COMPETITIVE GRANTS

NAME	UNIVERSITY	PROPOSAL TITLE	SISERA INSTITUTE	COUNTRY	STATUS	DATE
Armah, Paul (F)	Arkansas State University	Ensuring Food Security in Ghana – The Role of Maize Storage Systems	ISSER	Ghana	In Progress	6-03-Present
Bawalya, Samuel (S)	University of Rhode Island	Forest Policy and Administration in Zambia: Economic Instruments for Welfare, Sustainability and Revenue Recovery	INESOR	Zambia	Complete	6/02-9/03
Downs, Maxine (S)	University of Florida	Why Don't Women Dye for Credit?: A Study of the impact of social networks on urban women cloth dyers of Bamako, Mali	GREAT	Mali	Complete	6/01/-10/03
Eloundou, Parfait (F)	Cornell University	Access to Schooling and Employment in Cameroon: New Inequalities and Opportunities	CEREG	Cameroon	Complete	6/02-9/02
Gandonou, Jean-Marc (S)	University of Kentucky	An Economic Evaluation of the Profitability and Adaptability of Precision Agriculture for Cotton Production in Benin	CORCEDO	Benin	Complete	6/03-11/03
Gugerty, Mary (F)	University of Washington	The impact of Commitment Mechanisms on Savings for the Poor	ESRF	Tanzania	Complete	6/02-8/03
Hu, Chia (F)	George Washington Univ.	A study of the relationship between empowerment and local institutions in two communities, Oledai and Agolithom in rural Uganda	EPRC	Uganda	Completed (Ph.D.)	6/02-2/03
Kabahenda, Margaret (S)	University of Georgia	Evaluating the Nutritional Status of Ugandan Children	EPRC	Uganda	In Progress	6/03-Present
Kaliba, Aloyce (F)	University of Arkansas	Potential Impact of AGOA on Poverty Alleviation: The case of Tanzania	ESRF	Tanzania	In Progress	6/03-Present

NAME	UNIVERSITY	PROPOSAL TITLE	SISERA INSTITUTE	COUNTRY	STATUS	DATE
Karlan, Dean (S)	M.I.T./Princeton	The Impact of Microlending on Micro-business and households	NIEP	South Africa	Completed (Ph.D.)	6/02-8/03
Lucas, Linda (F)	Eckerd College	The work of Women in Uganda: Contributions of the Macroeconomy	EPRC	Uganda	In Progress	6/03-Present
Mude, Andrew (S)	Cornell University	A Cross Sectoral Comparative Study of Institutional Arrangement: The Case of the Small holder Tea and Coffee Sub-sector in Kenya	IPAR	Kenya	In Progress	6/03-Present
Mulaa, John (S)	University of Maryland	Social Capital and Education: The Case of Busia, Western Kenya	IPAR	Kenya	Complete	6/03-10/03
Mutambatsere, Emelly (S)	Cornell University	Regional Integration of Cereals Markets in Southern Africa: A Case of Wheat, Rice and Maize Trade	BIDPA	Botswana	In Progress	6/03-Present
Nwokolo, Benedict (F)	Grambling University	The Role of Investment Strategies in Poorly Accessible Regions of Nigeria as Tools for Economic Uplift	AIAE	Nigeria	Complete	6/03-8/03
Nyankori, James (F)	Clemson University	Determinants of Access to Primary Education in Uganda and Implications for Strategic Interventions	EPRC	Uganda	Complete	6/02-9/02
Vanderpuye-Orgle, Jacqueline (S)	Cornell University	Risk Management and Social Insurance – A closer look at credit transactions and social networks in Ghana	ISSER	Ghana	In Progress	6/02-Present
Sarr, Leopold (S)	Cornell University	The Determinants of Schooling Transitions in Senegal	CREA	Senegal	In Progress	6/03-Present
Werema, Gilbert (S)	University of Georgia	Regional Differences and Food Consumption Behavior	ESRF	Tanzania	In Progress	6/03-Present
Yeboah, Godfred	University of Kentucky	Challenges Facing Potential Investors In the Pineapple Industry in Ghana	ISSER	Ghana	Complete	6/02-11/02

Note:
F = Faculty
S = Student