



SAGA

**Strategies and
Analysis for
Growth and
Access**

SAGA PROGRESS REPORT (12/03-12/04)

&

UPCOMING WORKPLAN (1/05-12/05)

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EXECUTIVE SUMMARY

SAGA is now beginning its fourth year, chronologically, but only the third year of project activities given delays in start-up and funding shortfalls. While only at the half way point of the cooperative agreement, we already have significant achievements toward SAGA's objectives of high quality poverty research, institution strengthening, and policy outreach. This report familiarizes and informs USAID and others about our progress and plans.

In **research**, over 120 papers have been prepared under SAGA, many of which uncover surprising findings that will alter the way policy makers need to think about key issues. For example:

- We find that while school attainment is influenced by the education of parents, this does not apply to cognitive skills. Instead, once we control for school attainment, parental education and other household characteristics have little impact on test scores. This implies that public investments in quality schools and other initiatives that keep children in school will have high returns, regardless of the child's home environment.
- Asset and income dynamics of rural households in sub-Saharan Africa exhibit patterns consistent with the poverty traps hypothesis. Systems characterized by poverty traps need targeted interventions to build up the assets of the poor – perhaps especially through education, health and nutrition to sustain and improve the quality of household labor endowments – and safety nets to protect the limited productive assets the poor own. Much remains to be learned in this nascent area, but the SAGA team and its collaborators in Africa are at the forefront of this exciting area of research.

SAGA is **building capacity** in partner institutions to conduct high quality research, to raise funding for research, and to raise their national and international profiles. Prominent examples are:

- SAGA has run intensive workshops on poverty and inequality analysis for researchers at partner institutions in Uganda, Kenya, Tanzania, and Zambia; for faculty at the historically disadvantaged universities in South Africa, and for South Africa's Treasury and Department of Social Development.
- Many SAGA research papers are co-authored by researchers at Cornell and researchers at SISERA institutions. Others are written by SISERA researchers with technical support from SAGA.
- With seed money and technical assistance from SAGA, the Institute for Statistical, Social, and Economic Research at the University of Ghana received support from the ACBF to found the Network on the Economy of Ghana.

- SAGA supported the Development Policy Research Unit's effort to expand the scope of its annual conference on the economy of South Africa to research and researchers from all of Africa.
- SAGA's grants program has supported extended visits of 21 U.S.-based researchers at SISERA institutions around the continent.

SAGA researchers and our partner institutions are reaching out to the policy making community in a variety of ways. In the month of November 2004, there were 21,182 hits on the SAGA website and 4,673 downloads of PDF files. In the period January-November, 2004, the SAGA website registered 83, 298 hits, and there were 24,354 downloads of SAGA publications. We have held 15 policy-oriented conferences and workshops, and we regularly engage policy-makers and stakeholders directly in our effort to promote evidence-based policy making. This is illustrated by:

- The active participation of Chris Barrett and his Kenyan research partners in high level policy deliberations around the PRSP, the Kenya Rural Development Strategy, and in the founding of a Kenya Policy Research and Outreach Forum;
- Ravi Kanbur's continued engagement of high level policy makers in South Africa, including through presentations to parliamentarians and engaging Ministerial level officials in conferences and workshops to help shape policy dialogue in South Africa;
- The interest that the Minister of Education and the Secretary General in Madagascar have taken in SAGA's efforts to promote evidence-based policy making. The outcome of regular meetings between David Sahn and the Minister and his staff includes identifying a set of information and institution strengthening initiatives that has resulted in the Ministry contracting directly with Cornell University to provide policy guidance and training to its staff.

The coming year will see continued progress on a variety of projects addressing SAGA's basic themes of: (i) schooling, education and human capital, (ii) health and nutrition, (iii) risk, vulnerability and poverty dynamics, and (iv) empowerment and institutions. In addition to bringing or work in progress to fruition, we will continue to be responsive to opportunities and challenges as they arise, an approach made possible by the flexibility inherent in SAGA's demand driven work plan.

I. INTRODUCTION AND SUMMARY

Strategies and Analyses for Growth and Access (SAGA) is a multi-year cooperative agreement between USAID and Cornell and Clark-Atlanta Universities. SAGA has three core objectives:

- To advance understanding of poverty and poverty reduction in Africa through high quality research in four broad areas: (i) schooling, education and human capital, (ii) health and nutrition, (iii) risk, vulnerability and poverty dynamics, and (iv) empowerment and institutions.
- To build capacity in African economic research institutions to undertake such research.
- To ensure that research informs the policy process in African countries and in USAID.

Although some of our activities are multi-country in nature, most are focused on a set of specific core countries: Ghana, Kenya, Madagascar, Senegal, South Africa and Uganda. These were selected after extensive consultation with USAID missions, potential collaborating research institutions in-country, and local policy makers. The main modality of our activities is through collaboration with African partner institutions in the SISERA network, which in our core countries are:

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

Kenya: Institute of Policy Analysis and Research, Nairobi, Kenya (IPAR)

Madagascar: Institut National de la Statistique (INSTAT)¹

South Africa: Development Policy Research Unit, University of Cape Town (DPRU)

Uganda: Economic Policy Research Center, Makerere University (EPRC)

Senegal: Centre de Recherche en Economie Appliquée (CREA)

- We conduct research, dissemination and policy outreach in partnership.
- We offer technical assistance to develop research proposals, evaluate research, conduct courses, and more generally to help to raise the partner SISERA institutions' profiles nationally and internationally.
- We run a small grants program that helps to post U.S.-based researchers to research institutions in Africa.

We provide a detailed account of SAGA activities under different operational headings in a complementary document which provides more details and is available at:

<http://www.saga.cornell.edu/saga/annreport/annrep.html>. This report summarizes our achievements and future plans for each of our core objectives of research, institution building,

¹ Note that INSTAT is not a SISERA institution, but has become the focal point of our institutional collaboration since the local SISERA institution is no longer part of the network owing to its demise.

and policy outreach. We note at the outset that these divisions are somewhat arbitrary and artificial. By design, most SAGA activities address more than one objective. When a research output is co-authored between someone at Cornell and someone at a partner institution, it builds capacity (at both institutions). When such a paper is presented to policy makers in a workshop, it raises the profile of our partner institutions. Despite these obvious synergies, we organize this report along the lines of objectives to keep the focus on SAGA's goals.

II. RESEARCH

Despite two decades of economic reforms, African growth and poverty reduction remains disappointing. The central tenet of SAGA's research is that there is much to be learned about this disappointment from adopting a "bottom-up" analysis of poverty and poverty reduction. This strategy starts with the capabilities of individuals, households, and communities — their productivities, vulnerabilities, institutions, and environment — to consider how development can and does play out at the ground level, and to understand what factors keep Africa's poor from prospering. This is in contrast to the bulk of research on policy and poverty which takes a "top-down" approach from policy (usually macroeconomic or structural) to individuals.

To maximize the policy relevance of our efforts, we develop SAGA's research program collaboratively with our partner institutions, USAID missions, policy makers, and other stakeholders in each core country. To date, SAGA researchers have completed 121 papers and many more are in progress. We have also fielded several major surveys and sponsored around 15 research workshops and conferences. Here, we highlight selected results and our plans to build upon this work for the upcoming year.

II.1. Schooling, Education, and Human Capital

II.1.2 Schooling Attainment and Cognitive Ability

The vast majority of research on education and human capital uses attainment — years of schooling completed — as its outcome measure. Yet in systems where the quality of schooling is variable and poor, this is not a good measure of human capital accumulation. In Africa, a variety of individual, household, and institutional factors conspire to ensure that too many children do not learn in school. Policy makers need to understand what factors contribute to children's learning, not just their attendance. To address those questions, SAGA has co-funded large and ambitious surveys of children, their households, schools, and communities in Madagascar and Senegal to understand the determinants of children's cognitive ability as measured by standardized tests. This effort is just entering into the analysis stage in each country, but already some interesting descriptive results are emerging. Highlights include:

From Madagascar (<http://www.saga.cornell.edu/images/wp113.pdf>):

- Poor households are substantially more price-responsive than wealthy ones. Fee increases for public primary schools--even if used to pay for quality improvements--will have negative effects on equity in education.

- Parents respond strongly to school quality. Most importantly, poor facility condition and the practice of multigrade teaching (several classes being taught simultaneously by one teacher) have strongly negative impacts on public school enrollments.

From Senegal (<http://www.saga.cornell.edu/images/wp171.pdf>):

- More than half of children repeat at least one primary grade, and only about 52% of children who entered primary school complete it.
- Among children who do manage to complete primary school, most (just over three quarters) go on to secondary school.
- There is a strong positive relationship between test scores in second grade and the subsequent probability of both completing primary school and continuing on to secondary school. This suggests that early learning and academic performance is a good predictor of subsequent academic achievement.
- Parental education is the key to explaining school attainment, as are household and community shocks. Conditional upon level of schooling, however, *cognitive* skills are unaffected by parental background and most other factors generally thought to be associated with achievement.

Next Steps

Given that this work is still in its early stages in both Madagascar and Senegal, we will be focusing on preparing a series of papers along the following dimensions over the next year:

- *Comprehensive descriptive and statistical report:* This will cover in detail all the main aspects of the study, including: primary enrollment; grade repetition and dropout during primary and lower secondary school cycles; transitions from primary to secondary school; performance on 2004 academic and life skills tests; indicators of public and private school quality; school management practices; community-school interactions; parents' perceptions about education and school quality and awareness of education policies.
- *School enrollment and school choice:* This study will use the detailed data on local schools and on households to measure the importance of factors such as family background, school availability, and quality on the decision to enroll a child in school.
- *Progress through school:* This paper will examine the determinants of education trajectories. It will consider the role of family background, school availability and school quality, child health, and initial performance on tests (measured in the 1998 PASEC survey) in determining how long a child stays in school.

- *Determinants of scholastic achievement (test performance)*: This will be a multivariate regression analysis of the determinants of children’s achievement on standard math and French tests.
- *Acquisition of “life skills”*: This analysis will measure the determinants of basic practical knowledge as measured by the ‘life-skills’ tests given to 14-17 children in the sample. The tests measure knowledge of good health practices, agricultural knowledge, knowledge of civic and government institutions, etc. It should provide insights into whether and how school curricula should be changed to better address these skills.

II.2. Health

SAGA’s work on health and nutrition falls into three categories: the impact of finance, decentralization and the characteristics of health delivery systems on utilization and health outcomes; the behavioural aspects of preventing HIV; and the use of health-related measures of well-being in poverty analyses.

II.2.1 Institutional Analysis and Health Delivery Systems

This work is concentrated in Madagascar where we have collaborated with the World Bank, INSTAT and the Ministry of Health to conduct a health facilities and user survey. We completed the first preliminary report on the impacts of the economic crisis and subsequent elimination of cost recovery on the supply side—in particular, on the quality of services provided in public health centers.

- The survey of health facilities reveals severe inadequacies in infrastructure: for example, only 53% had electricity and only 60% had an adequate source of water (tap or pump) and less than 38% of facilities have supplies of drugs adequate to their needs.
- The effects of the 2002 crisis on health care utilization was severe but apparently short-lived: consultations fell by about 10% but since then have rebounded strongly.
- Direct observation of health practitioners (by doctors carrying out this part of the survey) suggests that standard treatment protocols are often, even typically, not followed completely. For example, in only about a fifth of the centers did practitioners note lethargy in their patients.

Next steps

Over the next year we will continue our analysis of the data, focusing on whether demand for health services has begun to recover, and in particular, has it done so for the poorest groups? Secondly, our present work now focuses on a more general but equally important aim—to provide a clear and comprehensive picture of the functioning of the Malagasy public health sector some seven years into the policy of health sector decentralization, making use of detailed facility data.

In addition, we will study the demand for public and private health care services in Uganda, another country that has made substantial progress in the decentralization of health services and has also eliminated user fees for basic health care.

II.2.2 HIV/AIDS

Our work on HIV has focused on knowledge acquisition and prevention knowledge. Using the Demographic and Health Surveys (DHS) we have recently completed a 7-country study (Burkina Faso, Ghana, Kenya, Nigeria, Tanzania, Uganda and Zambia) that examines the determinants of, and changes in knowing how to prevent HIV/AIDS, attitudes toward testing and access to voluntary counseling and testing programs. (See http://www.commerce.uct.ac.za/dpru/dpruconference2004/Papers/Changes_in_HIV-AIDS_Knowledge_Glick_Sahn.pdf). Highlights of the results include:

- Knowledge of HIV prevention has been strongly increasing over time. This is encouraging, but even where prevention knowledge is relatively high—as in urban areas of Uganda or Kenya—a substantial minority of individuals do not know that using condoms or having just one partner can reduce the risk of infection.
- Further, substantial gaps between men and women, and between urban and rural areas, remain. Overall, the gaps between rural and urban areas have been falling, but not the gaps between men and women.
- In most cases, the large differences in HIV knowledge between non-poor and poor and between educated and uneducated have either stayed the same over time or increased.

Related to this cross-country work is an in-depth analysis of knowledge and high-risk behaviors in Madagascar (<http://www.saga.cornell.edu/images/wp168.pdf>). Key conclusions are:

- In both rural and urban areas of Madagascar, more educated and wealthier women are more likely to know about means of preventing infection, less likely to have misconceptions about transmission, and more likely to use condoms. Community factors such as availability of health centers and access to roads also lead to greater HIV knowledge.
- However, most of the large rural-urban difference in mean knowledge is due not to location per se but to differences in schooling and wealth; rather than simply being geographically targeted, AIDS education efforts must be designed to target and be understood by uneducated and poor subpopulations.
- The results also suggest that spreading information via radio broadcast may be highly effecting at increasing HIV/AIDS knowledge, especially in rural areas where there are fewer alternative sources of information.

Next Steps

Next steps in SAGA's cross-country HIV work will involve a similar analysis of sexual behaviors, with a focus on at-risk behaviors. Again, our approach will be to focus on behavioral analysis to gain insight into personal attributes and policy variables that can reduce the transmission of HIV through high-risk behaviors. In the case of Madagascar, which has just completed a new round of the DHS, we will explore in great detail the changes that have occurred since the earlier 1997 survey that was the basis for our original paper.

II.2.3 Non-Income Measures of Well-Being and Poverty

Most poverty researchers accept Sen's argument that poverty is multidimensional, involving not just lack of income, but inadequate capabilities and functionings, including poor health, illiteracy, and lack of political voice. Yet in practice, virtually all empirical poverty research measures deprivation in incomes or expenditures alone. SAGA researchers have begun to address this limitation of the empirical work with a series of papers that address non-income measures of well-being in Uganda. Key results include:

- Despite Uganda's rapid growth during the 1990s, both infant mortality rates and children's heights have stagnated.
- Household incomes are significantly correlated with children's heights and their survival probabilities, but the correlation is small, so that even if Uganda's rapid growth were to continue for another decade the impact on IMRs and children's heights will be small up to 2015.
- Even under optimistic assumptions about improvements in health care and mother's education, both of which have significant effects on IMRs, Uganda will not achieve the MDG for infant mortality.
- Increased reliance on cash crops relative to food crops by poor households does not worsen their children's nutritional status in Uganda. If anything, the opposite seems to be the case.

Next steps

We will bring together these papers and others into an edited volume of poverty analyses in Uganda.

II.3. Empowerment and Institutions

II.3.1 Q-Squared

Economists' analysis of poverty is almost always quantitative, based on survey data, while anthropologists and sociologists are more likely to rely on qualitative poverty assessments. That these different methods often arrive at different conclusions about poverty changes is disturbing, and has begun to attract the attention of scholars in many social sciences. SAGA researchers have been at the forefront of efforts to bring together researchers from different disciplines to reconcile the apparent contradictions of quantitative and qualitative approaches to poverty analysis. Activities to date include:

- At a first conceptual stage, SAGA co-funded a workshop held at Cornell that set out the broad parameters of collaboration between quantitative and qualitative approaches in poverty analysis. This led to a volume entitled *Q-Squared* edited by Ravi Kanbur, published in 2003 (<https://www.vedamsbooks.com/no31075.htm>).
- The second stage has been more empirical, focusing on researchers' actual attempts to use both quantitative and qualitative methods in practice. SAGA supported a conference organized jointly by Cornell and the University of Toronto in May 2004, with co-financing from DFID and IDRC (<http://www.utoronto.ca/mcis/q2/>). A selection of these papers will be published as a special issue of the journal *World Development*.
- SAGA organized a workshop on "Mixing Qualitative and Quantitative Method of Poverty Analysis in Kenya," hosted by KIPPRA in Nairobi on March 11, 2004 (see <http://www.saga.cornell.edu/saga/q-qconf/qqconf.html>). The workshop was attended by about 50 representatives from government ministries, Kenyan universities and research institutes and national media. A proceedings volume from the event will be published later in the year.

Next Steps

The third stage will focus on combining mixed methods in the context of policy making and policy dialogue. The focus will be on mechanisms to ensure that within national statistical offices there is cross-fertilization between qualitative and quantitative information. Discussions on these are just beginning, and we expect a conference to take place in 2006.

II.3.2 Labor Market Institutions

An important institution that affects the well-being of the poor is the function of the labor market. SAGA's work program in South Africa and Madagascar has a focus in this area.

From South Africa

Work conducted under the SAGA project presents one of the most comprehensive analyses of the evolution of the South African labor market in the last decade, (see http://www.commerce.uct.ac.za/dpru/dpruconference2004/Papers/The_post_apartheid_SA_Labor_market_oosthuizen_Bhorat.pdf.) Major findings include:

- Unemployment at the end of the period stands at a staggering 41.8% and is concentrated among African, female, poorly educated, and young workers.
- Almost nine in ten unemployed individuals having been unemployed for more than three years or having never had a job at all.
- There is a rapidly growing number of unemployed workers with relatively high levels of education (specifically tertiary qualifications). This problem is particularly acute amongst Africans.
- The unemployed are also increasingly marginalized in households with no wage or salary earners and are relying more and more on state transfers (pensions and other grants).

From Madagascar

Our work on the urban labor market in Madagascar uses household and labor force survey data to analyze changes in the structure of the urban labor market and earnings in Madagascar since the early 1990s. Major findings are: (see http://www.commerce.uct.ac.za/dpru/dpruconference2004/Papers/Glick_Roubaud_Export_processing_zone.pdf):

- The most significant change was the dynamism of the urban labor market and rapid rise of urban manufacturing employment in Madagascar's export processing zone, especially for women.
- The evidence suggests that the export processing zones provide better employment opportunities—in terms of wages and job benefits—for semi-skilled women than are generally available to them elsewhere in either the formal or informal economy.

Next Steps

We plan to use continuing household and labor force surveys to investigate the extent of the recovery of export manufacturing and employment from the 2002 crisis, and the longer term impacts of these changes in the labor market on urban poverty and gender equality.

II.3.3 Access to Social Services

An important aspect of our work in this research theme is on the functioning of institutions that deliver services directly to the poor. In Madagascar, we use data from three rounds of nation-wide household surveys to find (<http://www.saga.cornell.edu/images/wp128.pdf>):

- Education and health services for the most part are distributed more equally than household expenditures.
- However, few services other than primary schooling accrue disproportionately to the poor in absolute terms and some services such as post-primary schooling are in effect targeted to the non-poor. Significant disparities exist as well in the use of services between rural and urban areas, and by province, but there are no notable gender differences in coverage.
- With regard to changes over the decade, primary enrollments rose sharply and also become significantly more progressive. The improvement in equity in public schooling occurred in part because the enrollment growth was in effect regionally targeted: it occurred only in rural areas, which are poorer.

In Kenya, SAGA work undertaken by IPAR and by Cornell University in collaboration with Egerton University has explored how rural households access extension and other services, with an eye towards understanding the likely impacts of further decentralization of the provision of government services and of donor and government-directed creation of farmer groups. Preliminary analysis of the original survey and focus group discussion data indicate that:

- Limited experience with decentralization does seem associated with increased household-level access to extension services, although the direction of causality remains somewhat unclear and the effect is most pronounced among wealthier households.
- Rural households' mean willingness to pay for extension services in medium-to-high potential rural areas appears to be at least equal to prevailing rates charged by private service providers.
- Community groups created in concert with extra-village entities (e.g., government, NGOs or private firms) leverage more resources than groups that originate indigenously, from within the village, and have a greater positive impact on household incomes and propensity to adopt improved technologies as a result of the added access to resources.

II.3.4 Land tenure

USAID/Ghana has recently funded an ISSER proposal for a three-year program of multi-disciplinary research into Ghana's land tenure and administration systems. This research is

timed to produce resources for deliberations about the directions, processes, components and likely impacts of reforms under the Land Administration Project (LAP). Also, it will contribute to discussions about the place of land tenure in poverty reduction through the GPRS. This project is just beginning and will begin to produce results in 12 months' time.

II.4. Risk, Vulnerability and Poverty Dynamics

The risk of falling into poverty (measured in many possible dimensions) deserves considerable attention given the importance that poor people place on vulnerability and the relative scarcity of research on the subject and related issues such as poverty traps and dynamics. This is especially true for Africa's poor who face unusually high risks, especially, but not exclusively among those living in rural areas. The poor have fewer means for dealing with the risks that they face, and lack access to assets and a range of institutions usually associated with mitigating the wide range of risks and shocks that affect households in Africa.

From South Africa

Some recent work presented at the SAGA sponsored conference in Cape Town has examined the role of asset accumulation and shocks in South Africa using the Kwazulu-Natal Income Dynamics Survey (KIDS) and the South African Participatory Poverty Assessment (SA-PPA) (see

http://www.commerce.uct.ac.za/dpru/dpruconference2004/Papers/An_Improved_Data_set_May.pdf). Key findings include:

- Participants in the SA-PPA provide commentary on job losses, the death and illness of household members, theft and destruction of property, and in each case, link these shocks to permanent declines in income.
- Access to finance is also identified as an important constraint. The central finding—the strong links between temporary shocks and permanent poverty—focuses attention on preventing and mitigating these shocks.

From Ghana

In Ghana SAGA has taken an asset based approach to analyzing rural poverty based on household survey data (see

<http://www.issier.org/Poor%20Household%20Asset%20Choice%20in%20Ghana%201.pdf>).

Major results include:

- For most people, there are hardly any institutions in rural Ghana that offer a positive real return on savings. Aside from the poor return, savings mobilization in rural Ghana has very little institutional organization, not even with the informal sector participation.
- Savings does not necessarily generate access to a credit market in order to generate liquidity when desired. The institutional characteristics of the financial market lead to

substantial transaction costs that reduce the real return on financial assets for rural households.

From Madagascar

Collaborative research between Cornell and FOFIFA has shown that:

- Income and asset dynamics in the central and southern highlands exhibit patterns consistent with the notion of a poverty trap. Shocks such as the 2001-2 political crisis have a significant, covariate, adverse effect on households in rural areas. Health and mortality shocks appear the most common explanations for households falling into chronic poverty (<http://www.saga.cornell.edu/images/wp169.pdf>).
- Limited uptake of a promising new rice production method developed in Madagascar (SRI) may be due to increases in yield risk significant enough to offset the roughly 80% increase in expected yields. This risk combined with seasonal liquidity constraints that limit the poor's capacity to experiment with SRI, appears to be the main obstacles to SRI uptake. (<http://www.blackwell-synergy.com/links/doi/10.1111/j.0002-9092.2004.00640.x/abs/> and <http://www.saga.cornell.edu/images/wp158.pdf>)

From Uganda

A SAGA-funded study at EPRC has found:

- Even though poverty fell significantly in the 1990s, most Ugandans remain vulnerable to shocks that could drop them below the poverty line.
- The most important shocks to households are the illness or death of a family member. For communities, the most important shocks are crop losses due to disease or poor weather.
- The least vulnerable group, and the group whose poverty declined most over the decade, are those households with a public sector worker.

From Kenya

SAGA co-funded work based at Cornell with Kenya-based collaborators at KARI, the University of Nairobi and Egerton University has found:

- Price risk faced by livestock producers in the arid and semi-arid lands of the north can be attributed almost wholly to variability in the inter-market margins between up-country and Nairobi terminal markets. The highest return investments in stabilizing livestock market conditions would therefore come from improvements in transport and security that affect inter-market basis risk.
(http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VCB-4D8VHNV-2&_user=10&_handle=B-WA-A-W-E-MsSAYWA-UUA-AAUAWYVVEV-AUEYYZCWEV-DUAWDBEDD-E-)

[U& fmt=summary& coverDate=08%2F01%2F2004& rdoc=6& orig=browse& srch=%23toc%235950%232004%23999709995%23523650!& cdi=5950&view=c& acct=C00050221& version=1& urlVersion=0& userid=10&md5=3f9d0d495e23cc017bbc7d200aae92cc\)](http://www.saga.cornell.edu/images/wp154.pdf)

- Income and asset dynamics in western and northern Kenya exhibit patterns consistent with the notion of a poverty trap. Nonlinear asset and welfare dynamics create critical thresholds, points at which safety nets become especially important to guard against shocks that could make people permanently poor and to induce people to manage risk without severely compromising expected income growth. Health and mortality shocks appear the most common explanations for households falling into chronic poverty. (<http://www.saga.cornell.edu/images/wp154.pdf> and <http://www.saga.cornell.edu/images/wp169.pdf>)
- Using high frequency panel data among Ethiopian and Kenyan pastoralists we establish that self-targeting food-for-work or indicator-targeted free food distribution more effectively reach the poor than does food aid distributed according to community-based targeting. Food aid flows do not respond significantly to either covariate community-level income or asset shocks. Rather, food aid flows appear to respond mainly to more readily observable rainfall measures. Finally, food aid does not appear to affect private transfers in any meaningful way, either by crowding out private gifts to recipient households nor by stimulating increased gifts by food aid recipients. (<http://www.saga.cornell.edu/images/wp170.pdf>)

Next Steps

- A national policy conference on reducing risk and empowering the poor in rural Kenya, early February 2005, hosted by IPAR, showcasing SAGA research by IPAR, KIPPRA, Tegemeo, University of Nairobi and Cornell.
- SAGA will co-sponsor with the World Bank and USAID a substantial, regional conference on Pastoralists, Poverty and Vulnerability: Policies for Progress, tentatively scheduled for January 2006 at a venue to be determined in Kenya. The aim of this event would be to draw lessons from research in Ethiopia, Kenya, Somalia, Tanzania, and Uganda on the problems confronting governments, donors and NGOs trying to reduce poverty, risk exposure and vulnerability among pastoralist populations. We are presently in discussions with the Office of the President's Arid Lands Resources Management Program about co-hosting this event so as to increase its visibility among high-level policymakers.
- SAGA researchers, working with FOFIFA (Centre National de Recherche Appliquée au Développement Rural) and INSTAT (Institut National de la Statistique), will continue exploring the relationship between agricultural technologies, transport infrastructure, rice productivity and patterns of poverty and food insecurity throughout the country so as to help establish the likely relative poverty reduction efficacy of strategies based on improving agricultural productivity versus improving market access. At the same time,

we will be studying the dynamics of rice productivity at plot and household level to try to identify sources of stagnation in rural productivity and incomes in Madagascar and the interrelationship between farm and non-farm activities in household level welfare.

III. INSTITUTION BUILDING AND TECHNICAL ASSISTANCE

A principal goal of SAGA is to strengthen the capacity of the SISERA institutions to conduct high quality research, to do outreach that raises their profile and among national and international policy makers, and to engage in policy dialogue. We believe that building up such local capacity is the only sustainable way to affect the policy dialogue through research. With SAGA support, our partner institutes have produced numerous research papers. They have also organized major national and international conferences; have bid for and won research grants that expand their research resources beyond SAGA's contribution; and have made significant contributions to the national policy dialogue. The names of our major partners are provided at the SAGA website. Here we highlight several illustrative examples.

From Ghana

- Following on discussions started with USAID-Ghana under the umbrella of SAGA, ISSER has now won a \$600,000 contract from USAID-Ghana to work on the issue of land tenure over the next three years.
- With SAGA's assistance, ISSER has proposed the Economy of Ghana Network (EGN). The Economy of Ghana Network will develop an interactive website that will be used as the main platform for discussion among members. The Network will initially be managed by ISSER. The proposal has just been approved by the African Capacity Building Foundation for a grant of \$300,000 over three years.
- With SAGA's assistance, ISSER organized a major conference on "Ghana at Half Century", with Ghanaian and international participants. A selection of papers presented will be collected in a volume co-edited by the Director of ISSER.

From South Africa

- SAGA is supporting the publication of a volume, *Poverty and Policy in Post-Apartheid South Africa*, with contributions by leading South Africa researchers. The volume will be co-edited by the Director of DPRU.
- Since 2001 DPRU has organized an annual conference on the South African economy. In 2004, SAGA supported DPRU's efforts to expand this conference to a region-wide forum, held in Capetown. Authors from around the world presented almost 50 papers.

Next Steps

Following on the success of the Cape Town conference, the World Bank has agreed to take the lead in funding another Africa-wide conference, this time to be hosted by our partner in Ghana, ISSER.

In Uganda, EPRC has leveraged SAGA support to fund a major conference on Uganda's economic progress and prospects, to be held in early 2005, with co-financing from the Bank of Uganda and the World Bank. SAGA-funded research (discussed above) provide the basis for presentations on poverty reduction, vulnerability, and progress toward the MDGs.

From Madagascar

In Madagascar, we have been extensively involved with our major research partners, Institut National de la Statistique (INSTAT) and the Ministry of Education, in a wide range of capacity building activities. Highlights of this have included:

- Researchers at INSTAT visiting Cornell in November 2004 to work on the preparation of analysis files for a national health survey.
- In preparation for the upcoming national education survey, five Malagasy researchers visited Cornell in February and March of 2004.
- Christelle Dumas, from the Institut National de la Recherche Agronomique (INRA), Paris, France, provided technical assistance on the development of a program of education research, including training for and design and implementation of the major education survey that is part of SAGA's research program in Madagascar.
- Bart Minten continues to work with INSTAT and FOFIFA on a wide range of issues such as training in assessing the benefits of public provided services and the impact of user fees.

Next steps

A series of collaborative and institutional strengthening efforts are planned for the year ahead, beginning with the visit of two members of INSTAT and the Ministry of Education to Cornell University in November for a few weeks to work on the preparation of the preliminary report of our education survey. This will include training in data and policy analysis.

From Kenya

- Direct Cornell collaboration with IPAR, Tegemeo, Egerton University and the University of Nairobi on studies related to SAGA themes on empowering the rural poor and on reducing risk and vulnerability in rural Kenya. This has included extended field collaboration between Cornell graduate students and researchers at these institutions and substantive mentoring of SAGA research by these institutions.
- The nascent Kenya Policy Research and Outreach Forum (K-PROF), begun in 2002 partly under the auspices of SAGA, has now met several times and is slowly evincing real potential to link policy research to policy formulation in Kenya. K-PROF brings together Kenyan research institutions (e.g., IPAR, KIPPRA, Tegemeo, various universities, the Kenya Agricultural Research Institute, the Central Bureau of Statistics), and Kenya-based international research institutions (e.g., the International Livestock Research Institute and the World Agroforestry Centre) with government ministries for the purposes of keeping each other informed of recent research findings, of availing government and donors of a range of policy research, and of sparking collaboration in emerging policy research issues.

III.1. The Small Grants Program

The Small Grants Program of SAGA has awarded 21 individuals with research grants (<http://www.saga.cau.edu/>). Thirteen students (5 women) and 7 faculty (2 women). Tangible outputs from these collaborative research efforts include:

- Applied research in collaboration with individuals in the host institutions (confirmed by those Directors who had the opportunity to host a Small Grants researcher during the annual meeting).
- Dissemination of research results through exit seminars at the host institutions, and papers/reports and publications.
- Continued collaboration/communication between the U.S.-based principal researcher and both senior and junior researchers at the host institution.
- Creating databases for the host institution.
- Completion of Ph.D. degrees and subsequent publications.

Next steps

In an effort to ensure a successful research experience for the awardees, we remain in contact with those still in the field as well as with those still completing their final reports on their projects. This requires us to not only be a backstop for all awardees who are either in the field or have returned in collaboration with the SISERA host institutions but also to follow up on deliverables and distribution of project outputs.

More specifically we plan to:

- Advertise the opportunities under the Small Research Grant Program;
- Receive, process, and evaluate/review proposals;
- Coordinate the visit of the recipients with the research institution;
- Process and coordinate the return of all awardees from Year 2;
- Follow up and assemble all final reports and other papers from all Year 2 awardees;
- Conduct/complete follow up surveys with the Awardees and their respective host institutions (i.e., we will use the survey instrument used in Year 1); and
- Post all grantees' research papers on the web.

III.2 Technical Assistance.

SAGA's technical assistance activities include support to SISERA's own SAGA-funded research competition, posting of Cornell staff for extended periods at collaborating institutions, and training workshops. Highlights include:

SISERA Research Support

- Until recently, SISERA has funded research at its member institutions through a competitive grants program. In support of that program, we have reviewed 52 proposals submitted to SISERA and, where appropriate, provided coaching to the researchers to improve their proposals before they are sent for external review. With SISERA's demise, this activity will now cease.

From South Africa

- In 2003, DPRU and Cornell gave a two-week workshop on poverty and inequality analysis for the faculty of South Africa's Historically Disadvantaged Universities. While SAGA financed some of the time of the Cornell participants, the bulk of the costs were met by USAID-South Africa and other donors.
- Upon hearing the feedback from the 2003 course, the South African Government's Department of Social Development (DSD) and the National Treasury asked for the course to be provided to their staff as well, paid for by the government's own funds. This course was duly given in 2004. As a result of this, DPRU got an "entré" into DSD, and they have now been asked to do a major analysis of social transfers for the Department.

From Uganda

- Cornell and EPRC ran an intensive two-week training workshop on poverty analysis for researchers from various government ministries, several departments at Makerere University, EPRC itself, and SISERA institutions in Kenya, Tanzania, and Zambia.

IV. POLICY OUTREACH

The SAGA team believes that there are many channels through which high quality policy oriented research can flow into policy dialogue and have policy impact. Although we can cite examples of direct input to policy makers and the policy process, we believe that our greatest contribution to policy outreach is an indirect one, fostering a culture of evidence-based policy making in Africa.

IV.1. SAGA Website

We have witnessed a steady growth in web hits to the SAGA website in the past year. In the month of November 2004, there were 21,182 hits on the website and 4,673 downloads of PDF files. In the period January-November 2004, the SAGA website registered 83, 298 hits. In this same period, there were 24,354 downloads of SAGA publications.

IV.2. Conferences and Workshops

We are also actively engaged in organizing and hosting policy-oriented conferences and workshops. Examples include:

From South Africa

- SAGA co-financed the aforementioned DPRU conference on African Development and Poverty Reduction: the Macro-Micro Linkage, held in Cape Town (<http://www.commerce.uct.ac.za/dpru/dpruconference2004/>). The conference brought together researchers and policy makers. The keynote address was given by the new Chief Economist for Africa at the World Bank, and the senior economic adviser from the South African President's office was present throughout.

From Ghana

- We held a major conference, Ghana at Half Century (<http://www.saga.cornell.edu/saga/ghhfcent.html>). It was designed as the first of a series of events to analyze economic and social policy in the run up to 2007, Ghana's 50th year of independence. There were academic papers as well as policy panels, with the country's leading policy makers, from past and present, participating and taking the long view on policy making.
- The idea of the Economy of Ghana Network (EGN), to bring together academic research and policy makers, was approved by a general meeting of academics and policy makers. The structures are now in place and the network is being developed by ISSER.

IV.3. Direct Engagement of Policy Makers

A third pillar of our outreach efforts to affect policy is a variety of more targeted efforts at engaging in policy-makers directly dialogue. Examples include:

From South Africa

- Ravi Kanbur has been available as requested to provide a global perspective on discussion of South African issues. At the request of USAID-South Africa he has addressed a gathering of Parliamentarians and a gathering of senior South African officials including the Director General of the Treasury. He has served as adviser and peer reviewer to the Fiscal and Finance Commission a statutory body reporting to Parliament on Center-Province financial relationships.

From Madagascar

- David Sahn has been engaged in direct talks and discussions with the Minister of Education to discuss opportunities and challenges that result from a move to eliminate user fees, as well as working intimately with the Director General for planning in the Ministry on identifying key investment strategies to increase enrollments, improvement school quality, and raise test score results. Toward this end, the Ministry of Education has asked Cornell University to take a lead role on developing the analytical capacity of the Ministry in the formulation of a new education strategy. Given the extended effort this involves in terms of data collection, analysis and staff time, which goes beyond the core abilities of SAGA to finance, we have a \$200,000 contract directly with the government to help them realize these objectives.

Next Steps

Over the next year, we anticipate continuing our efforts in terms of outreach. Among the activities that we have already put into play are:

- In Madagascar we are engaged in discussion with the Minister of Education to broaden our activities. We anticipate a follow-up for another \$100,000 of services in the next calendar year for the SAGA teams to directly assist in incorporating our research findings in the planning process.
- A major activity that is being planned is a “Northern Road Show” in Ghana. Almost all technical seminars and conferences in Ghana take place in Accra. Our intention is to take a group of prominent Ghana experts, from inside and outside Ghana, for a week of seminars in the poorer northern part of the country, to engage researchers and policy makers in their home institutions on questions of growth and poverty reduction.
- We have begun discussing the next phase of activities in South Africa, and prominent among the options are to take the research and related policy discussions down to the

Province level, where much of the implementation actions is. At the same time, we will aim to support DPRU's interest in raising its profile to the regional level.

- Ravi Kanbur's interactions with South Africa policy making institutions will continue as the demand arises from USAID-South Africa and others.
- To improve outreach with the Agency, SAGA researchers have begun a monthly seminar at USAID in Washington to disseminate key lessons and findings from SAGA.

V. MONITORING AND EVALUATION

Our monitoring and evaluation efforts focus on a set of yearly quantitative indicators, such as publications, workshops and, and small grants issued. Progress along these dimensions is found at www.saga.cornell.edu. In addition, we developed with USAID/Washington a series of instruments and conducted a survey of users and clients, distinguishing among four groups: USAID Missions, African research collaborators, stakeholders, conference and workshop participants, and recipients of grant awards. Details of the results are found at our website. However, our client surveys suggest broad satisfaction for each group of participants, along each dimension of the SAGA program. Some highlights include:

- Of the respondents from USAID Missions involved in SAGA to 15 questions about the consistency of SAGA research and responsiveness to the Mission requests, 49.2% of the responses strongly agreed (most positive possible response on 1 to 5 basis), and 39.0% of the responses agreed (second most positive response on 1 to 5 basis).
- Of the responses by research partners to 12 questions about their interest in SAGA, the relevance of the research both to policy and strengthening their institution's capacity, 70.8% of their responses indicate that they strongly agree that SAGA is achieving these objectives, 25.0% of their responses show that they agree and 4.2% of their answers are that they neither agree or disagree (the middle response on a 1 to 5 basis).
- Among workshops participants who responded to the questions on a 1 to 5 scale about the organization, content and impact of the SAGA workshops, (where 5 is strongly agree, 4 is agree, 3 is neither agree nor disagree, etc.), 29.8% report 5s, 46.0%, 4s, 12.5%, 3s, 4.9%, 2s, and 0.5%, 1s. An additional 6.3% of the answers were either not known or considered not applicable by the respondents.
- Responses by stakeholders to questions about their knowledge of SAGA, the relevance of the research questions, and the impact of the research indicate that the vast majority answer that they strongly agree or agree that SAGA is effective along these dimensions. For example, all respondents state that they strongly agree that they hope to have more contact and interaction with SAGA, and 67% state that they strongly believe that SAGA is "an example of the type of useful technical assistance and training that USAID should be encouraged to support," with the other 33% stating that they agree with this statement.

Next Steps

During the next year we will continue our quantitative monitoring of output and activities, including:

1. Number of publications
2. Number of workshops and conferences
3. Number of visits by SAGA researchers and small grants coordinator to collaborate with African colleagues and vice versa
4. Number of hits on SAGA websites
5. Number of research proposals reviewed
6. Number of small-grants issues
7. Number of workshops/conferences and presentations by SAGA

VI. LEVERAGE

Apart from the time and travel of its PIs, SAGA's budget is relatively limited. It would not have been possible to achieve what we have to date, nor will it be possible to complete all that we have planned, without complementary funding from non-SAGA sources. Fortunately, we have been quite successful at leveraging SAGA funding with support from other institutions. The flexibility inherent in our cooperative agreement with USAID enables us to both create and respond to opportunities in a timely fashion, which is consistent with the demand-driven nature of our approach to defining research topics, providing technical assistance, and engaging in policy outreach. While we have mentioned many of these throughout the report, we highlight them again here:

- We arranged for our SISERA partner in Senegal, CREA, to receive around \$100,000 funding from the World Bank and UNICEF to support the education survey in Senegal.
- ISSER received \$708,225 in funding from USAID/Accra to support research on land tenure.
- ISSER received \$300,000 in support from the ACBF to start the Economy of Ghana Network.
- DPRU and TIPS received a substantial level of support from GTZ, IDRC, and the Freidrich Ebert Stiftung (SA) for their 2004 conference.
- Following on the DPRU/TIPS conference, ISSER will receive support from the World Bank to run a continent-wide conference in 2005.
- EPRC will receive support from the World Bank and the Bank of Uganda to run a conference on Uganda's economic progress and prospects in 2005.

- The Ministry of Education in Madagascar already contributed \$200,000 to INSTAT for the conduct of the survey and related data analysis and has committed to another \$120,000 in the year ahead.
- The World Bank financed the health facilities survey in Madagascar in a collaborative effort with INSTAT.

VII. USAID MISSIONS

The content of our collaborative research and training activities, as mentioned previously, are demand-driven, based on consultation with a wide range of stakeholders, inside and outside of government. Responding to the research interests of the USAID Missions is of great priority. The success of this consultation process is facilitated where our partner institutions have ongoing partnerships with the USAID missions in their countries. This is illustrated by, for example, DPRU in South Africa, ISSER in Ghana, and INSTAT in Madagascar.

Specific examples of how our research supports Mission activities include:

- In Ghana, a component of the work program identified early on was land issues—an important part of USAID-Ghana’s country strategy. USAID-Ghana just approved a \$600,000 program of work to be undertaken by ISSER on land issues in Ghana.
- In South Africa, the USAID mission has been involved in partially financing the courses that Cornell and DPRU have run for staff of Historically Black Universities in South Africa, and for staff of the Department of Social Development. Ravi Kanbur has also addressed members of the South African parliament, and senior South African civil servants, at the request of USAID-South Africa.
- In Senegal, our work on education was specifically designed based on this being a strategic objective of the Mission. We are also working with the Mission on the design of a large regional conference to bring researchers and policy makers together to discuss recent research findings and draw relevant policy implications.
- In Madagascar, we continue to support Mission programming along a number of dimensions. This includes our research on HIV/AIDS knowledge and behavior using the Demographic Health Surveys to address the Missions focus on prevention of this disease, our work on education in support of Madagascar being one of the focus countries of the President’s Africa Education Initiative, and our continued work on agricultural markets and productivity in support of the Mission’s agricultural and trade program which concentrates on accelerating economic growth through market development.

STRATEGIES AND ANALYSES FOR GROWTH AND ACCESS (SAGA)

ANNEX TO

**PROGRESS REPORT AND UPCOMING WORKPLAN
2004**

Cornell University and Clark Atlanta University

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STRATEGIES AND ANALYSES FOR GROWTH AND ACCESS (SAGA)
ANNEX TO
PROGRESS AND PLANS

Cornell University and Clark Atlanta University
2004

I. INTRODUCTION

We are completing the end of the third year of SAGA. In this semi-annual report, which also serves as the basis for discussions at our annual Advisory Board meeting, we focus on the work during the previous six months, and the plans for the months ahead. There are three major sections of the report, corresponding to the research, technical assistance, and competitive grants portions of SAGA.

II. RESEARCH

Most of this section is organized by the activities being planned and implemented in the countries and regions of SAGA's focus—Ghana, Kenya, South Africa, Uganda, the West African region. Overall, the SAGA research team is pleased with the progress made to date, especially given the adversity of budgetary shortfalls and uncertainty of future funding. The new participation and engagement of PASSN (Poverty Analysis and Social Safety Net) in SAGA has been instrumental in SAGA's survival, and we are excited about our new partners in this effort. Along with the continued support arranged through the efforts of Rita Aggarwal and her colleagues to generate support for SAGA from the Africa Bureau and the IEHA (Initiative to End Hunger in Africa), we are hopeful that we can once again return to a focus on our research and institution building, along with a renewed emphasis on integrating the results of our efforts in the policy-making arena.

In reviewing the details of activities and plans below, in terms of process, progress, and research emphasis, other exogenous events, in addition to the delay in funding, will condition the nature and scope of our work for the remainder of SAGA. First, we still face uncertainty over future resource flows—although, the extension of SAGA through 2007 enables us to continue to take a deliberate approach to planning and implementing our work and afford opportunities for undertaking exciting opportunities in the years ahead. Second, the past few months have witnessed the demise of SISERA (Secretariat for Institutional Support for Economic Research in Africa). We are disappointed with this decision, which we feel was ill-advised. However, we also feel that our mandate to support and assist the technical capacity and policy relevance of African research institutions is not diminished. We therefore continue to put a premium on developing collaborative efforts with African research institutions.

In the remainder of this section of the progress report, we summarize accomplishments and activities during the past year, with a focus on the previous six months since the prior

progress report. We then present a description of planned activities over the next year, again, with a focus on the next six months.

A. GHANA

The objective of SAGA-Ghana is to help the Institute of Statistical, Social and Economic Research (ISSER), Ghana's SISERA Institution, to build its capacities to conduct research in the broad areas identified in the SAGA proposal, refined and specified further in collaboration with ISSER itself.

Ghana: Previous Activities

The last six months have seen the culmination of a number of activities to support our partner institution, ISSER, raising even further its profile in national and international circles.

Conference on Ghana at Half Century

Much of ISSER's effort and our effort in the last six months went into preparing for this major conference. Papers were selected from submissions in response to an international call for papers. Approximately 45 papers were presented. The draft program is available at:

<http://www.isser.org/draft%20conference%20program.htm>,

and most of the papers can be downloaded at:

http://www.isser.org/list_of_papers.htm.

The event was reported in the local press (an article from the *Accra Daily Graphic* is attached here. See Attachment 1.), and had high level policy maker participation throughout, listening to the research papers by young and old researchers, from inside and outside Ghana.

Previous reports have discussed progress of the Understanding Poverty volume, for which papers have gone through a couple of drafts. Most of the papers commissioned were also presented at the conference. After the conference, we were so impressed by the overall pool of papers that we decided to prepare two volumes on Ghana, under the titles:

Analytical Perspectives on the Economy of Ghana. Volume I: Macroeconomics, Trade and Finance

Analytical Perspectives on the Economy of Ghana. Volume II: Microeconomics and Poverty

These volumes will be edited by Ernest Aryeetey of ISSER and Ravi Kanbur of Cornell. The second volume will contain the best of the commissioned papers for the Understanding Poverty volume, together with the best of other papers in the area presented at the conference.

Economy of Ghana Network

We have been working with ISSER to launch this network. It will be a virtual network of those working on Ghana, whether located inside or outside Ghana. Details are given at

<http://www.isser.org/EGN.htm> .

The launch meeting coincided with the Conference on Ghana at the Half Century. A steering committee was formed, chaired by Ernest Aryeetey, and with Ravi Kanbur as one of the members. Over the next year, the operational details will be worked out, and new activities launched. While SAGA effectively provided the seed money for the early work, ISSER has now received a grant from the African Capacity Building Foundation (ACBF) of \$300,000 over three years to establish and manage this network.

Land Tenure

From the start of the SAGA process, ISSER has been working with USAID-Ghana to define a project on Land issues, commensurate with USAID-Ghana's high priority for this topic. We have now learned informally that USAID-Ghana has approved a \$600,000 grant over three years in support of ISSER's proposal. Work on this project will start over the next six months.

Panel Data Sets

In January, the ISSER/CEPA (Center for Policy Analysis) team responded to referees' comments on the proposal submitted to SISERA. We have now learned that while the proposal has been approved the basis of its quality, SISERA's current status means that they can only support one year of research. One year of a panel data set is, of course, not useful, so we are searching for other sources of funding. We face the possibility that, because of this SISERA debacle, our efforts may not yield an end result—although, the ISSER-CEPA team have certainly benefited from the process of developing a proposal).

Ghana: Planned Activities

The next six months will see movement forward on all of the activities identified above. Some specific possibilities are listed below.

Editing of Ghana volumes

Ernest Aryeetey and Ravi Kanbur will shepherd the two Ghana volumes through editing and to the publishers. Actual publication will probably be in late 2005.

Economy of Ghana Network: “Northern Road Show”

The EGN committee will continue to work on finalizing arrangements for the operation of the EGN.

A major activity that is being planned is a “Northern Road Show.” The idea behind this is quite straightforward. Almost all technical seminars and conferences in Ghana occur in Accra. Our intention is to take a group of prominent Ghana experts, from inside and outside Ghana, for a week of seminars in the poorer northern part of the country, to engage researchers and policy makers in their home institutions on questions of growth and poverty reduction.

Land Tenure and Panel Data sets

On the issue of Land Tenure, in the next six months, implementation activities will be underway, with the approval of the ISSER proposal. We will plan a conference for the following six month period, to get early feedback on the research.

On Panel Data sets, the efforts will not so much be substantive but rather fundraising in nature, to try to salvage the Panel Data sets project from the disaster of SISERA’s collapse.

B. KENYA

By African standards, Kenya enjoys relative abundance of good quality primary data for economic analysis and of skilled researchers doing rigorous, policy-relevant research. SAGA seeks to exploit this comparative advantage through a decentralized design that draws in work from several able economic research institutions in Kenya. SAGA also tries to use this team approach to help improve coordination of policy research and outreach in Kenya through the advancement of a nascent Kenya Policy Research and Outreach Forum (K-PROF). The aim of the individual and collective research efforts and the emergence of K-PROF is to inform debate on high profile policy questions, such as those that underpin the government’s Kenya Rural Development Strategy (KRDS) and Poverty Reduction Strategy Paper (PRSP).

Kenya: Previous Activities

The PRSP has identified agricultural and rural development as Kenya’s number one priority for poverty alleviation and economic growth. The KRDS has emphasized problems of risk and vulnerability, market access, and smallholder empowerment as central to agricultural and rural development. USAID-Kenya is actively addressing these issues through its own program of work (under Mission SOs 6 and 7). Toward those ends, the SAGA-Kenya research program is organized as a set of subsidiary research projects conducted by a consortium of research institutions around two core, interrelated

sub-themes: “Reducing risk and vulnerability in rural Kenya” and “Empowering the rural poor”.

SAGA-Kenya Research Program

Research under these sub-themes has been ongoing for more than a year.

Reducing Risk and Vulnerability in Rural Kenya

Under this theme, the team is pursuing interrelated sub-projects on the following sub-themes, and expects to hold a policy workshop in the first half of 2005:

- *The role of producer organizations in reducing smallholder vulnerability*: Led by Tegemeo, this sub-project analyzes the impact of producer organizations on smallholder market access and vulnerability to income shocks, price and yield volatility, identifying what organizational functions prove most effective and how these functions are most efficiently and reliably provided, especially to poorer smallholders.
- *Agricultural marketing systems, price volatility and vulnerability of smallholder producers and poor consumers*: Led by the Kenya Institute for Public Policy Research and Analysis (KIPPRA), this sub-project studies changing marketing systems and household strategies for coping with market risk, seeking in particular to explain and identify effective strategies to reverse the apparent widespread retreat toward subsistence production by many smallholders. The KIPPRA project is augmented by Cornell-Syracuse research on livestock markets and price risk faced by pastoralists in the arid and semi-arid lands of northern Kenya.
- *Improving factor market access to reduce rural vulnerability*: Led by the University of Nairobi’s Department of Agricultural Economics, this research focuses in particular on rural land and finance markets, and how increasing land pressure and conflict and the changing shape of liberalizing financial sectors affect smallholders’ security of access to land.
- *Safety nets in marginal areas*: Led by Cornell and Clark Atlanta, with collaboration from Syracuse University (all with non-SAGA funding), this subproject focuses on the interrelationship between public safety nets such as food aid and livestock destocking/restocking programs, and private assistance schemes based on social insurance mechanisms, informal lending and altruistic transfers, particularly in arid and semi-arid areas especially prone to climate, conflict and market shocks.

Empowering the Rural Poor

Under the SAGA-Kenya's second theme, the team is pursuing interrelated sub-projects on the following sub-themes, and expects to hold a policy workshop in July-August 2004:

- *The role of producer organizations in enhancing smallholder market participation:* Led by Tegemeo, this sub-project is identifying appropriate institutional frameworks for producer organizations so as to enhance small farmers' participation and efficiency in input and output markets. The Tegemeo project is augmented by dissertation research by a Kenyan economics Ph.D. candidate at Cornell, Andrew Mude, doing closely related research in Muranga District on why coffee cooperatives appear vulnerable to elite capture, undermining the intended empowerment of poor growers.
- *Decentralization and participation:* Led by the Institute of Policy Analysis and Research (IPAR), this sub-project focuses the decentralization of and participation in agricultural extension services in rural Kenya, examining the level, scope, nature and quality of popular participation in decentralized allocation mechanisms, fiscal accountability under these arrangements, and the factors that determine the capacity and effectiveness of the poor participating in and benefiting from these programs.
- *Community groups and networks:* Led by Cornell (on non-SAGA funding), this sub-project studies social networks and community groups and their effects on risk-taking, technology adoption and livelihood strategy choice in rural communities. One component has been funded by the Rockefeller Foundation for a dissertation project by Cornell education Ph.D. candidate David Amudavi, a lecturer at Kenya's Egerton University. Another component has been funded by Cornell University, the National Science Foundation and the Social Science Research Council, for dissertation field research by Cornell agricultural economics Ph.D. candidate Heidi Hogset.

As Kenya's lone SISERA member institute, IPAR is "first among equals" and coordinates the SAGA-Kenya program, serving as host or co-host for prospective SAGA small grant awardees, primary contact point for communications between the different institutions, and the logistical coordinator for the upcoming SAGA policy conference. IPAR, KIPPRA, Tegemeo, and the University of Nairobi each have a separate subcontract from Cornell for research under SAGA-Kenya, according to which institution leads a given sub-project, several of which are jointly staffed, encouraging new collaborations. KIPPRA also hosted the successful March 2004 workshop on Mixing Qualitative and Quantitative Methods. The University of Nairobi has hosted the initial activities of the nascent Kenya Policy Research and Outreach Forum (K-PROF). Finally, at the encouragement of Clark Atlanta and Cornell Universities, Tegemeo began exploring the possibility of membership in SISERA.

The SAGA research program in Kenya was developed collaboratively through repeated consultations, both in Kenya and via email and by telephone, between Cornell, Clark Atlanta, IPAR, KIPPRA, Tegemeo, the University of Nairobi, USAID-Kenya, USAID-REDSO and USAID-Washington. A series of meetings were held in Nairobi in 2002 and 2003 between SAGA-Kenya Cornell team leader Chris Barrett, Kenyan partners and other collaborators (e.g., Dr. Mesfin Bezuneh of Clark Atlanta University, Dr. John McPeak of Syracuse University). Barrett and all of the Kenya-based principals held coordinating team meetings in Durban, South Africa, where we were all attending the 25th triennial meetings of the International Association of Agricultural Economists, in August 2003 and in Nairobi in March 2004.

It took quite some time to get terms of reference and subcontracts finalized between Cornell and each of the participating institutions, which caused a delayed start to the field research. But the last of the subcontracts was put in place and the last of the budgetary advances were made in November 2003. Primary research has thus been underway for roughly a year for each of the SAGA Kenya institutions.

Mixing Qualitative and Quantitative Methods of Poverty Analysis in Kenya

SAGA organized a workshop on “Mixing Qualitative and Quantitative Methods of Poverty Analysis in Kenya”, hosted by KIPPRA in Nairobi on March 11, 2004. The workshop was attended by 50 or so representatives from various government ministries, the Central Bureau of Statistics, donor agencies (e.g., USAID/Kenya, USAID/REDSO, World Bank, DfID, EU), Kenyan universities and research institutes, international research institutions (e.g., CIMMYT, ICRAF, ILRI), as well as several different national media outlets (print, radio and TV). The program featured an opening address by David Nalo, Permanent Secretary of the Ministry of Planning and National Development, eight papers by scholars from different social science disciplines exploring different dimensions and experiences of mixing qualitative and quantitative methods of poverty analysis in Kenya, and an expert panel discussing how best to integrate qualitative and quantitative methods of poverty analysis in emerging policy-oriented research in Kenya. Highlights of this workshop are found at:

<http://www.saga.cornell.edu/saga/q-qconf/qqconf.html> .

The event was widely regarded as highly informative and enjoyable. Although there was much interest in the use of mixed methods of poverty analysis within the Kenyan research community, this was the first concerted effort to reflect on how and why such integration might be useful and the means by which research teams can integrate qualitative and quantitative methods successfully. The event drew widespread attention, not just from the SAGA institutions (IPAR, KIPPRA, Tegemeo, University of Nairobi), but also within the Ministries (e.g., Agriculture, Livestock Development), the Kenya Agricultural Research Institute, and various universities, donors and NGOs active in the country.

The papers from the event are currently being edited into a proceedings volume, edited by Drs. John Omiti (IPAR) and Walter Odhiambo (KIPPRA), to be published later in 2004 or early 2005. The volume should serve as a very useful reference for researchers and institutions interested in integrating qualitative and quantitative methods of poverty analysis in the future. The volume includes the following nine original papers:

- Enos H.N. Njeru, “Bridging the Qualitative-Quantitative Methods of Poverty Analysis”
- Germano Mwabu, “Quantitative Poverty Analysis”
- Christopher B. Barrett, “Mixing Qualitative and Quantitative Methods of Analyzing Poverty Dynamics”
- Kulundua D. Manda, “Poverty In Kenya: A Review of Quantitative and Qualitative Studies”
- Mary Omosa, “Researching Poverty in Rural Kenya: A Sustainable Livelihoods Framework Approach to Measuring the Impact of Agricultural Technologies on Poverty”
- Patti Kristjanson, Nelson Mango, Maren Radey and Wilson Nindo, “The Role of Livestock in Pathways out of Poverty: Approach and Findings from Western Kenya”
- Anthony K.M. Kilele and Godfrey K. Ndeng’o, “Poverty Mapping: The Case of Kenya”
- Nelson Mango, Josephat Cheng’ole, Gatarwa Kariuki and Wesley Ongadi, “Social Aspects of Dynamic Poverty Traps: Cases from, Vihiga, Baringo and Marsabit Districts, Kenya”
- Willis Oluoch-Kosura, Paswel Phiri Marenya, Frank Place and Christopher B. Barrett, “Indices and Manifestations of Poverty: Informing anti-poverty Policy Choices”

Kenya Policy Research and Outreach Forum (K-PROF)

Begun in 2002 under the auspices of the USAID-funded BASIS CRSP and SAGA, K-PROF has met several times and is slowly evincing real potential to link policy research to policy formulation in Kenya. K-PROF brings together Kenyan research institutions (the SAGA team as well as the Kenya Agricultural Research Institute, the Central Bureau of Statistics, and Kenya-based international research institutions such as the International Livestock Research Institute and the World Agroforestry Centre) with government ministries for the purposes of sharing recent research findings, of availing government and donors of a range of policy research, and of sparking collaboration in emerging policy research issues. The University of Nairobi’s Department of Agricultural Economics took initial leadership of K-PROF. This was informally coordinated by Prof. Willis Oluoch-Kosura, then Department Chair, who organized the initial K-PROF meeting. That meeting took stock of what the various research institutions based in Kenya were doing and how the research outputs could be better used in policy formulation. There was general agreement that there is a need for improved coordination of policy research efforts, especially in the setting of research priorities, sharing of resources through the joint implementation of some activities, and sharing of information

among the researchers and policy makers. No formal agreements were reached but the beginnings of fruitful coordination and collaboration were apparent. When Prof. Olouch-Kosura left on sabbatical to help launch a regional effort at improving graduate training in agricultural economics and the African Association of the Agricultural Economists, the next Department Chair, Dr. Joseph Karugia, stepped up to organize a March 2003 K-PROF meeting with modest financial support from DfID. When Dr. Karugia left for a position with the World Bank, Dr. Rose Nyikal, the current Department Chair, agreed to take on the convener's role. On January 27, 2004, they organized another policy researchers and policymaker/stakeholders meeting at KARI headquarters to review the status of the links of research findings to policy making in the country. This meeting featured senior representatives from the Ministry of Planning and KARI, as well as DfID, the World Bank, USAID and the Rockefeller Foundation. The World Bank has followed this with an effort to take stock and synthesize the various research efforts in the agricultural sector in the recent past, identify the gaps and the policy implications, under the direction of Prof. Chris Ackello-Ogutu of the University of Nairobi Department of Agricultural Economics, Dr. John Omiti of IPAR and Mr. James Nyoro of Tegemeo. That effort culminated in a two-day workshop 24-25 June 2004 to discuss the way forward for policy research in the country. That meeting was attended by senior officials of the Ministries of Agriculture, Livestock and Fisheries Development, and Planning, the Kenya Agricultural Research Institute, about six MP members of the Parliamentary committee on Agriculture, and the World Bank. One of the major challenges highlighted during the presentations was the lack of a clear process of collecting, storing and using primary data for policy making processes in the country.

K-PROF is slowly acquiring a life of its own. There are now a few joint policy research efforts underway between the participating organizations, opening up a new chapter in demand-driven research and outreach for evidence-based policy design and implementation in Kenya (e.g., on smallholder dairy, on medicinal plants, on the maize seed industry, on peri-urban agriculture). This is the kind of work K-PROF aims to promote—policymakers can request that the group undertake a specific study in some priority area with the aim of using the results for policy formulation. These assignments are to be carried out in addition to coordination meetings for the group to exchange information and to set policy research priorities, which can sometimes be implemented jointly. SAGA deserves some small credit for helping kick-start this initiative.

Research Papers

Finally, based on previously collected data, several research papers to which SAGA directly contributed have been released, including:

- **“Decomposing Producer Price Risk: A Policy Analysis Tool With An Application to Northern Kenyan Livestock Markets,”** Christopher B. Barrett and Winnie K. Luseno, *Food Policy* 29 (2004):393-405. 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 apply the method to livestock markets in northern Kenya, a setting of dramatic price volatility where price stabilization is a live policy issue. In this particular application, 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.

- [“Social Identity and Manipulative Interhousehold Transfers Among East African Pastoralists,”](#) Marieke Huysentruyt, Christopher B. Barrett and John G. McPeak, July 2004. 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.
- [Bayesian Herders: Asymmetric Updating of Rainfall Beliefs In Response To External Forecasts,](#)” Travis J. Lybbert, Christopher B. Barrett, John G. McPeak and Winnie K. Luseno, July 2004. This paper fits within the SAGA theme on reducing risk and vulnerability in rural Kenya. It explores how east African pastoralists in northern Kenya and southern Ethiopia assimilate and adapt their rainfall expectations for the upcoming season to model-based climate forecasts released by the Drought Monitoring Centre in Nairobi. 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,”](#) Christopher B. Barrett, in Christopher B. Barrett, ed., *The Social Economics of Poverty: On Identities, Communities, Groups and Networks* (London: Routledge, 2005). 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.

- [“Rural Poverty Dynamics: Development Policy Implications,”](#) Christopher B. Barrett, *Agricultural Economics* (forthcoming). This paper, prepared as a plenary address to the 25th triennial meetings of the International Association of Agricultural Economists, held in Durban, South Africa, 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. The paper uses data from Kenya and Madagascar to illustrate the core points.
- [“Fractal Poverty Traps,”](#) Christopher B. Barrett and Brent M. Swallow, September 2003. 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.
- [“Poverty Traps and Safety Nets,”](#) Christopher B. Barrett and John G. McPeak in Alain de Janvry and Ravi Kanbur, editors, *Poverty, Inequality and Development: Essays in Honor of Erik Thorbecke* (Amsterdam: Kluwer, forthcoming). 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.

- [“Welfare Dynamics in Rural Kenya and Madagascar,”](#) Christopher B. Barrett, Paswel Phiri Marenja, John G. McPeak, Bart Minten, Festus M. Murithi, Willis Oluoch-Kosura, Frank Place, Jean Claude Randrianarisoa, Jhon Rasambainarivo and Justine Wangila, September 2004. This paper documents how income and asset patterns in rural areas of Kenya and Madagascar follow patterns consistent with the notion of a poverty trap. Nonlinear asset and welfare dynamics create critical thresholds, points at which safety nets become especially important to guard against shocks that could make people permanently poor and to induce rural people to manage risk without severely compromising expected income growth.
- [“Food Aid Targeting, Shocks and Private Transfers Among East African Pastoralists,”](#) Erin Lentz and Christopher B. Barrett, May 2004. This paper uses high frequency panel data among Ethiopian and Kenyan pastoralists to test the efficacy of food aid targeting under three different targeting modalities, food aid’s responsiveness to different types of shocks, and its relationship to private transfers. We find that, in this region, self-targeting food-for-work or indicator-targeted free food distribution more effectively reach the poor than does food aid distributed according to community-based targeting. Food aid flows do not respond significantly to either covariate, community-level income or asset shocks. Rather, food aid flows appear to respond mainly to more readily observable rainfall measures. Finally, food aid does not appear to affect private transfers in any meaningful way, either by crowding out private gifts to recipient households nor by stimulating increased gifts by food aid recipients.

Kenya: Planned Activities

SAGA-Kenya Research Program

SAGA research partners will complete the drafting of policy research papers in the final months of 2004. First drafts of these reports will be presented in an intra-team meeting to be held in Nairobi on Friday, November 19, hosted by the World Bank Country Office, with a videoconference link to Cornell University. Each institution within the team will present preliminary draft presentations that day for comment by the team. These presentations, and the papers from which they are drawn, will subsequently be revised and summarized in short policy briefs for presentation at a policy conference to be held in late January or early February 2005, hosted by IPAR (exact dates and venue to be determined). This event will involve policymakers and donors on the program and will be well-publicized to the Kenya press. The background papers from the policy conference will then be reviewed, revised and edited into a published volume.

K-PROF

Much more is needed to advance and institutionalize K-PROF. A full-time secretariat will be needed with a part-time Director to coordinate such work. To date, this has been

somewhat catch-as-catch-can, depending on the initiative and goodwill of individuals overtaxed by their pre-existing responsibilities.

Regional Conference Planning

Discussions are underway with the Office of the President's Arid Lands Resources Management Program about the possibility of hosting a regional conference on Pastoralists, Poverty and Vulnerability: Policies for Progress, likely in January 2006. The aim of this event would be to draw lessons from research in Ethiopia, Kenya, Somalia, Tanzania, and Uganda on the problems confronting governments, donors and NGOs trying to reduce poverty and vulnerability among pastoralist populations.

The project will also continue to release original working papers funded wholly or partially by SAGA.

C. MADAGASCAR

We have concentrated our efforts in two areas related to our health and education research themes.

Madagascar: Previous Activities

Health

We have completed the research on the examination of the determinants of HIV/AIDS related knowledge, and sexual practices based on analysis of the Demographic Health Survey. This paper, "Determinants of HIV-Related Knowledge and Behavior in Madagascar: An Analysis of the Demographic and Health Survey" is now available at

<http://www.saga.cornell.edu/images/wp168.pdf>.

We now are turning to an analysis of the 2003 DHS survey where we will examine changes in HIV related behavior and knowledge. Our focus will be on estimating and comparing statistically HIV knowledge and behavior 'returns' to schooling, wealth, age, and other important covariates in early and later survey years. Our paper, "Changes in HIV/AIDS Knowledge and Testing Behavior in Africa: How Much and for Whom" (Peter Glick and David Sahn) was presented at the SAGA/DPRU conference in South Africa in October, and is available at:

<http://www.saga.cornell.edu/images/wp172.pdf>

Our work on health facilities and user survey has been put in abeyance during the past six months which we awaited clarification on funding. We completed the first preliminary report on the impacts of the crisis and subsequent elimination of cost recovery on the supply side as well—in particular, on the quality of services provided in public health centers:

The Study of Efficiency and Equity in Health Care in Madagascar: Descriptive Analysis

Peter Glick, Mead Over, Mamisoa Razakamanantsao, and Waly Wane

This was presented at a seminar in Madagascar in December. We have now begun work on the analysis of the data, focusing on whether demand for health services has begun to recover, and in particular, has it done so for the poorest groups? Secondly, our present work now focuses on a more general but equally important aim—to provide a clear and comprehensive picture of the functioning of the Malagasy public health sector some seven years into the policy of health sector decentralization, making use of detailed facility data.

Education

The education system in Madagascar is characterized by resource inefficiencies and misallocations in the composition of public spending across educational levels. The quality of schooling from elementary to higher education is low, as are gross enrollment rates both at the primary and secondary levels, even when compared with the averages for Sub-Saharan Africa. In addition to low initial enrollment, grade repetition and dropping out of primary school before completion are serious problems in Madagascar. Consequently, few children proceed to lower secondary school. This problem also reflects the small number of lower secondary schools in the country and the significant distances many children would have to travel to attend them. Further, the lack of access to secondary schools may be inhibiting primary, not just secondary, enrollments. Parents often see the value of primary education in terms of gaining entrance to higher levels of schooling and the concomitant earnings and occupational benefits that result. If they expect to be rationed out of secondary school either through restrictions on places or through distance, they may choose not to enroll or keep their children in primary school.

For those who do make it to secondary school, repetition continues to be a problem. Finally, girls are at a particular disadvantage. Across all grades, repetition and dropout rates are systematically higher for girls than for boys. Clearly, the ability of the country to increase its human capital, which is essential for development, has been seriously weakened. Our research is therefore focused on understanding the factors at different levels—household, school, and community—that affect education outcomes in Madagascar, particularly for primary and lower secondary schools. More specifically, the research has multiple objectives, reflecting (as well as determining) the broad nature of the data that will be available for the analysis. The objectives pertain to three main subject areas: (1) determinants of school enrollment and grade attainment, (2) determinants of learning, both academic (as measured by student test scores) and non-academic (acquisition of life skills), and (3) development of empirical methodologies that are applicable and appropriate to the Malagasy context. In addition, the research will examine related factors such as entry into the workforce after school, children's time allocation, and schooling differences among siblings and between boys and girls, and migration and health and their relationships to education.

Household, Community and School-Level Determinants of Education Outcomes

The research project “Etude sur la Progression Scolaire et la Performance Academique en Madagascar” was initiated to investigate the household, community, and school-level determinants of the following education outcomes in Madagascar: primary and secondary enrollment, grade repetition and dropout during primary and lower secondary school cycles, transitions from primary to secondary school, and learning—both academic (math and French test scores) and non-academic (“life-skills”). The second main objective of the research is to investigate the impacts of a number of recent education reforms and policy changes in Madagascar, such as the elimination of primary schools fees, the provision of free textbooks, decentralization policies, and efforts to make school financial transactions more transparent.

The research involves collection and analysis of nationwide survey data on school-age children and their families, with additional comprehensive data collection on their communities and school alternatives. The sample was designed to overlap with that for the 1998 PASEC survey which collected primary students’ test scores and other information. These children, now of lower secondary school age, were tested again, as were randomly selected children in other households. By retesting the PASEC sample, it will be possible to evaluate the determinants of improvements in academic performance and the role of early performance in affecting school dropout or continuation.

The initial phase of the project was a collaborative effort by Ministère de l’Education, Nationale et de la Recherche Scientifique (MENRS), Institute National de la Statistique (INSTAT), and Cornell University. It consisted of survey design and field testing, supervisor and enumerator training, survey implementation, data entry and cleaning, and preparation of an initial descriptive report. The survey was successfully implemented in June-August 2004, and the data entry process is now complete. Data analysis and preparation of the initial descriptive report will be completed by the end of 2004.

The next phase of the project will permit the comprehensive analysis of the data to address the key policy questions that the study has been designed to address. As with the first phase, all stages of the work in this proposal will be fully collaborative. In particular, the proposal specifies additional workshops and trips by INSTAT and MENRS researchers to Cornell University as well as visits by Cornell researchers to INSTAT and MENRS in the coming year.

Poverty Dynamics and Risk and Vulnerability

In addition to the work on health and education themes described above, our work in the areas of risk and vulnerability, poverty dynamics and food security has involved the use of secondary data collected through previous collaborative efforts, SAGA has contributed to the following research papers based on data from and policy issues in Madagascar:

- [“Smallholder Identities and Social Networks: The Challenge of Improving Productivity and Welfare,”](#) Christopher B. Barrett. Forthcoming in *The Social Economics of Poverty: Identities, Groups, Communities and Networks*, Christopher B. Barrett, editor, London: Routledge, 2005.

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.
- **Better Technology, Better Plots or Better Farmers? Identifying Changes In Productivity and Risk Among Malagasy Rice Farmers,**” Christopher B. Barrett, Christine M. Moser, Oloro V. McHugh, and Joeli Barison, Forthcoming in *American Journal of Agricultural Economics* 86(4):869-888 (November).

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. 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 functions. Results from Madagascar show that the new system of rice intensification (SRI) is indeed a superior technology. Although about half of the observed productivity gains appear due to farmer characteristics rather than SRI itself, the technology generates estimated average output gains of more than 84 percent. The increased estimated yield risk associated with SRI would nonetheless make it unattractive to many farmers within the standard range of relative risk aversion.
- [“Welfare Dynamics in Rural Kenya and Madagascar,”](#) Christopher B. Barrett, Paswel Phiri Marennya, John G. McPeak, Bart Minten, Festus M. Murithi, Willis Oluoch-Kosura, Frank Place, Jean Claude Randrianarisoa, Jhon Rasambainarivo and Justine Wangila, September 2004. This paper documents how income and asset patterns in rural areas of Kenya and Madagascar follow patterns consistent with the notion of a poverty trap. Nonlinear asset and welfare dynamics create critical thresholds, points at which safety nets become especially important to guard against shocks that could make people permanently poor and to induce rural people to manage risk without severely compromising expected income growth.

Madagascar: Planned Activities

Research Papers

Our plans are to prepare the following reports in the next year:

- *Comprehensive descriptive and statistical report:* This report will significantly expand upon the preliminary report from the first phase of our education research project. It will cover in detail all the main aspects of the study, including: primary enrollment; grade repetition and dropout during primary and lower secondary school cycles; transitions from primary to secondary school; performance on 2004 academic and life skills tests; indicators of public and private school quality; school management practices; community-school interactions; parents' perceptions about education and school quality and awareness of education policies. The report will be descriptive as well as statistical, that is, it will apply statistical tests of significance where appropriate.
- *School enrollment and school choice:* This study will use the detailed data on local schools and on households to measure the importance of factors such as family background and school availability and quality on the decision to enroll a child in school and the choice of school. Among the school characteristics to be considered are costs and availability of textbooks, two factors that recent education policy in Madagascar has sought to change. An important consideration to be addressed is whether there are differences in quality among public and private primary schools, how this affects the choice of school, and how much the availability of private alternatives affects the rate of primary enrollment. The analysis will use standard techniques for analyzing discrete choice, for example multinomial logit or probit.
- *Progress through school:* This paper will examine the determinants of education 'trajectories.' It will consider the role of family background (e.g., parental education and wealth), school availability and school quality, child health, and initial performance on tests (measured in the 1998 PASEC survey) in determining how long a child stays in school and the reasons for early dropout or non-transition from the primary to college level. It will also consider the impacts of unanticipated events such as parental illness or death and poor harvests or enterprise losses on the ability of boys and girls to stay in school. Hence the paper aims to identify the reasons for one of the most important problems for education policymakers in Madagascar: very high dropout rates, especially in primary school. The analysis will use appropriate econometric techniques such as ordered or sequential probit and duration analysis.
- *Determinants of scholastic achievement (test performance):* This will be a multivariate regression analysis of the determinants of children's achievement on standard academic (math and French) tests. These tests were administered to all children in the 14-17 age range in the sample, not just those were still in school.

The study will determine the relative importance of years of schooling, school quality, and parental and household factors (in particular, parental education) for determining how well children learn. Since the survey included in the testing sample children who had left school, the analysis will be able to address the question of how well children retain knowledge after they leave school—an important question in an environment where so many children do not even finish their primary schooling. Finally, for the subsample of children who were also tested in 1998, the analysis will measure the determinants of how much children gain in knowledge relative to initial levels of academic skills. That is, it will consider the role of early test performance as a predictor of later academic performance.

- *Acquisition of “life skills”*: This analysis will measure the determinants of basic practical knowledge as measured by the ‘life-skills’ tests given to 14-17 children in the sample. The tests measure knowledge of good health practices, agricultural knowledge, knowledge of civic and government institutions, etc. Schools potentially have an important role to play in transmitting this knowledge in addition to teaching more academic skills, but impact is not known. As with the academic tests, these tests were given to all such children in the sample, not just those were still in school. The regressions will include household factors such as parental schooling and wealth as well as variables representing school attainment and school quality. Therefore the analysis will address the question of how useful schools in Madagascar are for the acquisition of important non-academic knowledge. It should provide insights into whether and how school curricula should be changed to better address these topics.

Conference

Paramount to SAGA’s objectives is to ensure that the findings of the proposed research are integrated into the policy making process. Our proposal therefore also includes two workshops to be held at the end of the project in Antananarivo to present the findings of the different research areas investigated by the study. The first will be held in February to present the descriptive results of the study to policy-makers and stakeholders. A second workshop will be held at the end of 2005 where we will present the results of the various papers listed above.

D. SOUTH AFRICA

South Africa: Previous Activities

Our strategy in South Africa has been to work to strengthen our partner institution, DPRU’s (Development Policy Research Unit of the University of Cape Town) excellent national profile and to raise its international profile. To this end we are supporting DPRU

in its interactions with South African institutions, and helping to bring out volumes with the DPRU at the helm and support international events hosted by DPRU.

Volume on Poverty in Post Apartheid South Africa

This edited volume, with contributions by many of South Africa's leading economists working on this topic, has been coming together this last six months. We now have most of the papers (listed in earlier reports) in first draft, and some of them will be presented at the Africa conference in October (see below). The volume will be edited by Haroon Borhat, Director of DPRU, and Ravi Kanbur. See Attachment 2 for a tentative table of contents.

Conference on "African Development and Poverty Reduction: the Macro-Micro Linkage"

This conference was jointly organized by DPRU, Trade and Industrial Policy Strategies (TIPS) and Cornell, with support from USAID under the SAGA program. It included papers selected from an international Call for Papers. The conference was on October 13-15 and the program is available at:

<http://www.commerce.uct.ac.za/dpru/dpruconference2004/Programme.htm>

The opening keynote address was given by John Page, the new Chief Economist of the Africa Region of the World Bank. A glance at the papers presented, over forty of which can be downloaded from

<http://www.commerce.uct.ac.za/dpru/dpruconference2004/DownloadPapers.htm>

indicate the high average quality. In fact, the *Journal of African Economies* has agreed to publish an edited symposium issue from the papers presented at the conference, the editors being Haroon Borhat, Stephen Hanival (Director of TIPS), and Ravi Kanbur. There may also be an additional edited volume published by an academic press.

Course on Poverty Analysis for staff of National Treasury and the Department of Social Development

DPRU and Cornell Faculty provided the course. Further details on this event are given in the Technical Assistance Section. Suffice to note here that our research relationship with DPRU is the base on which this course is founded.

Interactions with various South African Policy Making Institutions

Ravi Kanbur gave a public lecture, organized by the USAID mission in South Africa, on "Growth, Inequality and Poverty: Some Hard Questions." The lecture was chaired by the USAID Director in South Africa, and was

attended by senior South African officials, including the Director General of the Treasury.

Ravi Kanbur led a seminar on the African Peer Review Mechanism (APRM) of NEPAD. The seminar was chaired by the Regional Director of UNDP, and the lead discussant was Chris Stals, former Governor of the Central Bank of South Africa, and now a member of the Eminent Africans APRM Panel.

Ravi Kanbur continued his role as advisor and peer reviewer for the Fiscal Finance Commission, a statutory body that reports to Parliament.

South Africa: Planned Activities

The next six months will see a completion of the first phase of activities started under SAGA. In particular, effort will be devoted to editing the volume *Poverty in Post Apartheid South Africa* and the volumes coming out of the October 2004 conference.

We will also begin discussing the next phase of activities, with a focus on expanding the hugely successful Poverty Analysis course to the Provinces and to Historically Disadvantaged Universities.

Ravi Kanbur's interactions with South Africa policy making institutions will continue as the demand arises.

Additional research for South Africa: Information on distance learning that includes proposed activities in South Africa is included below in the section, "Community Education and Distance Learning" (see p. 26).

E. UGANDA

Uganda: Past Activities

Due to SAGA's cash flow problems, research activity in Uganda slowed considerably in the second half of the past fiscal year. While several of the core research papers authored at Cornell have been completed, our inability to commit to funding for the Economic Policy Research Centre (EPRC) made researchers there put SAGA activities, understandably, at a lower priority status. We have only recently signed a contract with EPRC for delivery of its part of the following papers, and a conference to be held in Kampala shortly.

As discussed in our previous reports, a key focus of the SAGA research effort to date in Uganda is to make better use of existing data, of which there is an abundance, but which gets relatively little use. Researchers at the Economic Policy Research Centre (EPRC) and Cornell have started nine research papers, all of which make use of existing data, primarily national surveys of household income and expenditure (IHS and NHS) and the

Demographic and Health Surveys (DHS). Those projects, their principal investigator(s) and status, follow.

- *Determinants of Poverty Dynamics* (Ibrahim Kasirye) - *being revised*. 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. After receiving comments on the initial draft, the authors are revising the focus to include an analysis of vulnerability. Steve Younger has been assisting on his frequent trips to Uganda in the past three months. A draft will be ready for the upcoming conference.
- *Multidimensional Intertemporal Poverty Comparisons* (Stephen Younger) - *completed, published as a SAGA working paper, presented at the Centre for the Study of African Economies' annual research conference and at a USAID brown bag lunch in Washington*. 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.
- *Multidimensional Spatial Poverty Comparisons* (Stephen Younger, David Sahn, Jean-Yves Duclos) - *completed, published as a SAGA working paper*. 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* (Sarah Ssewanyana and Stephen Younger) - *Completed and presented at the recent DPRU conference in South Africa*. This paper, like the previous two, addresses the concern in Uganda that not all dimensions of well-being are improving as rapidly as incomes. It uses birth history recall data from the DHS to construct time series for infant mortality from the mid-1970s to 2000. It then models infant mortality rates, attempting to understand how both macro and micro variables have influenced mortality rates over time. An innovation of the paper is to use the model to project infant mortality to 2015, the target year for the Millennium Development Goals. Even under optimistic assumptions about policy changes to reduce infant mortality rates, Uganda will fall short of the two-thirds reduction IMR targeted by the MDGs.

- *Tax Incidence* (John Matovu, Margaret Banga, Sarah Ssewanyana, and Stephen Younger). This study will examine the incidence of taxes in Uganda in 1999 and 2003, 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, but which the President has suggested may be eliminated before the 2005 elections. Both participatory assessments in Uganda have found this tax to be extremely unpopular. Unfortunately, John Matovu has been unable to participate in this project due to the demands of his regular duties at the IMF, and Margaret Banga has left EPRC to pursue her PhD at the University of Dar es Salaam. Nevertheless, the Ministry of Finance and the World Bank have recently expressed interest in a study of tax incidence, so Ssewanyana and Younger will pick up the project, hoping to complete it before the end of 2004, in time to inform the 2005 budget.
- *Demand for Health Care Consultations* (Sarah Ssewanyana and Stephen Younger) - *being revised*. 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 uses 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.
- *Public Water Supply and Women's Time Use* (Peter Glick and Stephen Younger) - *Completed*. 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 results suggest that, in Uganda, such investments can have at best only limited impacts on time use and the gender distribution of work and leisure, largely because women (and children) with access to wells in rural areas, where most Ugandans live, spend as much time fetching water as those that use surface sources.
- *Agricultural Commercialization and Children's Nutritional Status* (Godfrey Bahigwa and Stephen Younger). *Being revised*. 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 complete work before the upcoming conference.

Stephen Younger visited Uganda in March and September, 2004 to further the research projects outlined above. In addition, we have begun discussions with EPRC and other stakeholders about the best direction for future SAGA research activity in Uganda.

Uganda: Planned Activities

Conferences

The EPRC conference for high-level policy makers first described in our March, 2004 report continues to evolve. In addition to SAGA and the World Bank, the Bank of Uganda is now a third sponsor, and the meeting has developed a more macroeconomic focus than previously envisioned, though poverty issues and the MDGs remain prominent in the program. The conference organizers arranged a very high profile program, including David Bevan, Paul Collier, Louis Kasakende, Benno Ndulu, and Jeffrey Sachs, in addition to the (courageous!) participation of EPRC researchers Godfrey Bahiigwa, John Okidi, and Sarah Ssewanyana. Given the marquis quality of the participants, EPRC and Cornell felt that it was better not to present SAGA research papers in conjunction with the policy conference, because it was unlikely that people would be willing to miss four consecutive days of work and that, given the option, most would attend the high profile sessions rather than the SAGA research sessions.

As a result, we decided to hold a separate event at a different time to present the SAGA research. SAGA will still support the high-level policy conference, and SAGA research provides the background for EPRC's presentations on poverty and the MDGs there. But the nature of the presentations in this forum will be less academic. Originally scheduled for October 18-19, the organizers postponed the event due to last minute cancellations by some of the participants. They expect to hold the conference in January of 2005.

The target audience for the SAGA research conference will be mid-level, technical staff from the government, donors, and NGOs, along with academic researchers at universities and think tanks in Uganda. In addition to researchers from Cornell and EPRC, we have invited Simon Appleton to discuss the recent controversy over poverty changes in Uganda between 1999 and 2003. Our hope is to run this conference in November or December of 2004, but we are waiting for confirmation from Appleton before setting a firm date. A tentative agenda is attached. See Attachment 3.

As part of SAGA's institution building effort, we have endeavored to put EPRC rather than SAGA (or the World Bank or the Bank of Uganda) front and center. They are organizing the conferences, and it will be clear to all that they are running them. Our goal is to build EPRC's reputation as a place where quality research and policy analysis is done in Uganda.

Volume of Papers

Once we have completed the conferences, authors will revise their papers in light of criticism and comments received. We then intend to prepare an edited volume of the

conference papers, other SAGA papers left out of the conference due to time constraints, and perhaps also a contribution from Simon Appleton and Sarah Ssewanyana on recent poverty trends. While preparation of this volume will require a substantial amount of time from the editors (John Okidi and Stephen Younger), most of the research work for the first phase of SAGA activities in Uganda is coming to a close.

Planning for Next Phase of Research

Accordingly, researchers at EPRC and Cornell have begun to consider options for a second phase of activities. During visits to Kampala in March, September, and October, 2004, Stephen Younger consulted with EPRC and a variety of stakeholders in Uganda (USAID, government staff, and donors) about possible research areas of interest. To date, two potential topics have emerged: an expanded audit of local government finances, and a detailed consideration of the poverty changes in recent years in Uganda. A brief discussion of the issues and interests for each possibility follows.

Local government finance

The interest in local government finance is driven by existing research including work done at EPRC (Bahigwa and Ellis, 2003) and the Uganda Participatory Poverty Assessments (UPPAP). Both studies found considerable unhappiness amongst rural Ugandans regarding local revenue generation from the graduated tax (a cross between a poll tax and a very roughly calculated property tax) and from a variety of market fees and taxes to transport goods across local government borders. This issue is important because Uganda has gone a long way towards decentralizing public administration, and the government is intent on finding ways to increase local government revenues. But at the same time, taxing markets and the transport of agricultural produce clearly runs counter to the government's Plan to Modernize Agriculture (PMA) which aims to promote commercial agriculture.

The public accounts suggest that locally generated revenues are very small, less than one-half a percent of GDP including the graduated tax. This seems somewhat inconsistent with the level of dissatisfaction expressed about these taxes. There are two possible explanations: (1) even though the revenues raised are small, people do not see local governments doing anything with the funds beyond paying "sitting fees" to local government councilors and administrators; and (2) substantially more funds are actually collected, but they never make it to the local government's accounts. To pursue these ideas, we are considering an expanded audit of local government accounts. This would include internal audits of the local government's books, something that is supposed to be done by the Local Government Finance Commission. This audit would trace the flow of funds from local revenue generation to locally provided services or other expenses. More interestingly, we also would survey taxpayers (farmers and market participants) about taxes and fees paid, with the goal of cross-checking this amount with reported revenues at the local government level.

Poverty survey and analysis

The fact that reported poverty increased from 34 to 38 percent between 1999 and 2003, despite continued growth in per capita GDP, is of grave concern to many people in Uganda. The result is so surprising that it has already received considerable attention, both politically and by researchers. To date, no attempt to explain away this result has been compelling. It is our opinion that only a painstaking dissection of survey sampling issues, the poverty calculations, and the national income accounts will resolve this apparent contradiction. Such a project is of obvious interest to policy makers, in Uganda and elsewhere. But it also has two obvious risks. First, even a painstaking analysis might not uncover a plausible explanation of the result. (Witness the long-running controversy over poverty in India in the 1990s.) Second, it may be the case that by the time we are able to uncover an explanation, policy makers will have moved on, so that the policy impact is small or non-existent.

Both of these projects would require considerably more effort than any of the individual papers currently being completed under SAGA. As such, they imply a change in focus of SAGA research from a broad range of topics united largely by a poverty theme and a reliance on existing survey data, to an in-depth pursuit of a specific research project.

F. WEST AFRICA

1. SENEGAL

Education and Vulnerability

As noted in the previous annual report, one of our major research foci is to investigate the household, community, and school-level determinants of the following education outcomes in Senegal: primary and secondary enrollment, school level transitions and progress through school, grade repetition and dropout rates, and learning—both academic (math and French test scores) and non-academic (“life-skills”) to address the following types of questions.

- What are the main determinants—at the household, school, and community levels—of primary and lower secondary enrollment? How do these factors affect the choice of school when there are different alternatives available to the households (e.g., public, private, community school)?
- Why do so many children drop out of primary school before completion, or interrupt their primary schooling for significant periods? Do children drop out because they perform poorly in school, i.e., obtain low grades or test scores? Or do children stop going to school (permanently or temporarily) as a result of asset, income, or health shocks to the household, for example the illness of a parent that requires the child to work on the farm or in the home? Are the same factors also associated with grade repetition?

- For those who complete primary school, what determines transition to lower secondary school and the progression through secondary school? That is, what is the importance of the distance to school or rationing of places? Of academic performance in primary school? Of household economic status (income, wealth)? How do girls' probabilities of transition to, and continuation in, secondary school differ from boys, and why? Do children who do not continue in school enter the labor market or work in productive activities in the home, and if so, in what specific activities?

For student achievement, we seek to address the following questions:

- What are the determinants of student learning as measured by test performance? For example, at the household/individual level, what are the roles of maternal and paternal schooling and household income? Is poor health and nutrition of the child a significant deterrent to learning?
- What are the effects on learning of school and teacher factors such as teacher qualifications and gender, and how do these vary by grade level? Do girls who have a female teacher score better on tests? How do school and classroom management factors—staff management and monitoring practices, pedagogical practices, the use of double shifting and multi-grade systems, etc.—affect learning?
- Beyond standard academic skills, is schooling effective at imparting knowledge of important 'life skills' such as good health practices that non-schooled children are not able to learn, or learn as well? What kinds of schools or school characteristics are associated with better acquisition of these skills?
- Do children who stop their schooling after several years of primary education, or after completing primary school, retain the skills and knowledge they have learned, or is this knowledge lost?

Most of the previous 12 months was dedicated to working on the cleaning and analysis of the household survey data. We have completed the first descriptive report which has been reviewed and commented upon in Senegal. "Progression through School and Academic Performance in Senegal: Descriptive Survey Results" can be found at

<http://www.saga.cornell.edu/images/wp171.pdf>.

In addition, as part of this project, a second paper has been completed, "The Impact of Family Literacy on the Earnings of Illiterates: Evidence from Senegal", which can be found on the SAGA website at

<http://www.saga.cornell.edu/images/wp159.pdf>.

This 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.

In addition, we have made substantial progress on a number of other papers that address the motivating questions identified above. We anticipate completion of these over the next twelve months.

2. Côte d'Ivoire, Senegal (and South Africa)

Community Schools and Distance Learning

From the beginning, we have proposed to work with African colleagues on two major topics: "Community Schools" and "Distance Learning and Teacher in Training," within the broad theme of education as it related to the other themes. We selected Côte d'Ivoire and Senegal for the community schools and Côte d'Ivoire and South Africa for the relevant and effective use of distance learning to increase enrollment and internal efficiency especially among marginalized groups by training more qualified teachers for elementary and secondary schools.

Both community schools and teacher training and skills improvement through distance education can make a significant contribution in the efforts to reach the EFA (education for all) goals. The achievement of these goals is hampered by many challenges, particularly: a) the devastating effect of HIV/AIDS in the general population with particular educational implications among the teachers in several countries, especially in Southern Africa but also in countries in other sub-regions, including Côte d'Ivoire, and b) the set-backs caused by various forms of conflicts in countries such as Côte d'Ivoire and also in Senegal considering the prolonged situation in the Casamance region. Even though South Africa celebrated this year its 10th anniversary of majority rule and has a more powerful economy, the remnants of apartheid and sheer poverty in some localities are to a certain extent similar to other post-conflict manifestations and, thus, also call for continued mobilization of resources and upgrading of educational services to the previously marginalized groups and areas.

Generally, in post-conflict contexts, demands for rebuilding educational systems in increasing attendance to reach the pre-conflict levels and/or in making progress towards universal enrollment at the primary level, require that non-conventional means and approaches be also used in the efforts. Indeed, reconstruction, in educational terms, cannot be considered as mainly the task of building new physical infrastructures. Qualified teachers constitute a crucial factor for the provision of quality education for all both as a human right and an investment in combating and eradicating poverty.

While the focus on teacher training is based on the assumption and fact that teachers constitute a major factor in the educational process and outputs, the determinants of the patterns of enrollment, retention, and progress, and attrition are complex. The quality of

the teachers may not be enough to ensure enrollment, retention and high internal efficiency across class, gender, region, and locality, and in the case of South Africa, race. Concerning community schools, while they are considered a viable component of educational systems and can constitute a forum for the hitherto marginalized populations and communities members (e.g., the formally illiterate especially women) to actively and substantively participate in educational decision making, legitimate criticism have been expressed as whether these schools not for the poor and the marginalized social groups that have neither the means nor the choice for better schools.

Following a long period of exchange and communication including face-to-face discussion and brainstorming (e.g., in Côte d'Ivoire and Senegal) and considerable exchange of written communication, five proposals for comprehensive studies on these topics have been selected out of seven submitted. They aim to undertake major studies to elucidate complex issues involved and to make policy recommendations. They constitute the research that will be undertaken in the next two years.

N'Dri Assié-Lumumba is formally on the team of the study of community schools in Senegal. The team of the research on distance education for teacher training chose to formally list her as a resource person (a role that de facto, she have played and will continue to play, for the other studies as well).

These proposals will be submitted shortly, although sections of the three proposals in French will require translation.

See Attachment 4 for a table summarizing some basic information on the five proposals.

The scholars/researchers enthusiastically endorsed the multidisciplinary approach and cross-national focus that we proposed initially and which included systematic comparison and sharing of research methods, process and results. One of the main objectives was to also build teams of researchers and institutions (national and across-national institutions) that would continue to work together beyond the SAGA project. While circumstances did not make it possible to pursue this approach, there are various mechanisms (e.g., sharing of research results through documents and seminars/workshops/conferences) that will provide to the researchers, their respective institutions, and the countries (including the ones that did not directly have a SAGA research carried out) the opportunity for cooperation on these key components of education systems and processes through this SAGA-funded research. After much delay and considerable time spent in the preparation, we are confident that the selected research will be successfully carried out and will bring significant insights both intellectually and in terms of policy with immediate application.

G. MULTI-COUNTRY STUDIES

HIV/AIDS

Our work on HIV prevention knowledge, as well as in HIV testing behavior and attitudes toward testing, has focused on taking advantage of a number of African countries in which more than one round of Demographic and Health Surveys (DHS) with comparable HIV-related information has been carried out. We examine changes in these outcomes in Burkina Faso, Ghana, Kenya, Nigeria, Tanzania, Uganda, and Zambia over periods of 3 to 6 years during the mid to late 90s and early 00s, as dictated by the survey years. In addition we ask how changes in knowledge and testing behavior are distributed across the distributions of schooling and household income as well as by gender and rural vs. urban location. We address this question descriptively and econometrically, the latter by estimating and comparing statistically HIV knowledge ‘returns’ to schooling, wealth, and age in early and later survey years. These questions are important for policymaking. For example, if the impact of schooling on the probability of knowing that condoms can prevent infection is found to have risen over time, this would indicate that public information campaigns have been more successful at reaching the better educated, or else at providing information that is more easily processed by them. It would signal a need to better target or tailor messages to those with less schooling. Similar considerations would apply to findings of an increasing gradient with respect to wealth, or to increasing or persistent rural-urban and gender gaps in HIV/AIDS knowledge. The completed draft of the paper is available at

http://www.commerce.uct.ac.za/dpru/dpruconference2004/Papers/Changes_in_HIV-AIDS_Knowledge_Glick_Sahn.pdf

Also, forthcoming is “Scaling up HIV Voluntary Counseling and Testing in Africa: What Can Evaluation Studies Tell Us About Potential Prevention Impacts?” by Peter Glick.

Q-Squared”--Combining Qualitative and Quantitative Methods in Poverty Analysis

The SAGA proposal noted that while our analytical base would be quantitative-economic in nature, we would also engage in limited exploration, where possible and where there was interest among our partner institutions, methods that go beyond conventional methods to qualitative approaches and, in particular, combining qualitative and quantitative methods. The country-specific manifestations of this are provided in individual country reports.

However, SAGA also fits into a broader process at Cornell of investigating and exploring the possibilities of “Q-Squared” Poverty Analysis. This is seen as a three-stage project. The first stage was conceptual, setting out the broad parameters of collaboration between quantitative and qualitative approaches in poverty analysis. A volume entitled *Q-Squared* was published in 2003. The second stage is empirical. A conference was organized

jointly by Cornell and the University of Toronto in May 2004, with financial support from DFID and IDRC, where a number of papers using mixed methods were presented (<http://www.utoronto.ca/mcis/q2/>).

A selection of these papers will be published as a special issue of the journal *World Development*. The third stage will focus on combining mixed methods in the context of policy making and policy dialogue. Discussions on these are just beginning, and we expect the conference to take place in 2006.

III. TECHNICAL ASSISTANCE (TA)

Technical assistance under SAGA has included three types of activities: formal training workshops, support to SISERA's research competition, and support to individual SISERA institutes in proposal preparation, planning research projects, and executing those projects.

Workshops

Kenya

In March, 2004, Chris Barrett co-led a SAGA workshop on the integration of qualitative and quantitative poverty methods. The workshop was hosted by KIPPRA, with about 50 participants from government ministries, the Central Bureau of Statistics, ILRI, ICRAF, Tegemeo, IPAR, KIPPRA, the University of Nairobi, and Kenyatta University. David Nalo, Permanent Secretary of the Ministry of Planning and National Development, gave the keynote address. The workshop received local radio and newspaper coverage. John Omiti and Walter Odhiambo are preparing a workshop proceedings volume.

East Africa

As it turns out, not everyone interested in combining qualitative and quantitative methods resides at Cornell! The East African Poverty Analysis and Data Initiative (PADI) at the World Bank contacted SAGA in January, 2004 about the possibility of a training workshop for East African participants. Because we, too, had planned such a workshop, we agreed to collaborate. In the end, SAGA did not contribute to the funding of this workshop because of our budget crisis, but we did send frequent collaborator Paul Shaffer as a resource person.

South Africa

SAGA's June, 2003 training workshop at the Development Policy Research Unit (DPRU) of the University of Capetown (UCT) led to demand for further such workshops in South Africa. In March, 2004, Ravi Kanbur, Paul Cichello, Ching-Mei Chen, and Stephen Younger worked with the DPRU to offer a two-week training course in poverty and

inequality analysis for the Department of Social Development (DSD), the government agency charged with design and management of most of South Africa's transfer payments. The workshop was held in Pretoria at the government's information technology training center. The course covered both theoretical and empirical aspects of poverty and inequality analysis, with daily hands-on training with Stata software in a computer lab.

As with our previous workshop, participants' feedback was quite positive, with great demand for follow-on courses. Managers from the DSD also expressed interest in the possibility of collaborative research to analyze the data that they collect as part of their transfer payment schemes. Staff at DPRU agreed to a series of discussions about possible topics.

SISERA Proposal Review

As per the mode of operation described in last year's report Stephen Younger continues to pre-screen proposals submitted to SISERA's research competition. This includes recommendations to improve proposals, where appropriate, and suggestions for international experts to "coach" proposals through the preparation and review process. To date, we have reviewed 52 proposals, eight of which SISERA has funded, with two being multi-year projects.

In January, 2004, Stephen Younger attended the first meeting of researchers supported by SISERA's SAGA grants. Most researchers have only recently received their funds, so progress is limited to date. But the two-day meeting allowed plenty of time for discussions of proposed topics and methods.

Note that this activity will now cease due to SISERA's demise.

Support to Research at SISERA Institutes and other African Institutions

Ghana

In Ghana, SAGA funded the participation of Andrew McKay and Paul Schaffer as resource persons for the Ghana at the Half Century Conference. McKay has also helped design the panel household survey that is a major part of ISSER's future SAGA research effort. In addition, as part of SAGA's focus on qualitative and quantitative methods, Ellen Bortei-Doku and Laura Poswell (from DPRU in South Africa) participated in a major international conference on this topic in Toronto in May.

Kenya

In Kenya, as local authors progress in their research and in particular, as they revise papers prepared for the workshop discussed above, Cornell-based faculty and graduate students Chris Barrett, John McPeak, Andrew Mude, Heidi Hogset, and David Amudavi

have provided comments on drafts and suggestions for revisions. As future work begins, Cornell staff are also assisting with new survey designs and other research methods for IPAR, Tegemeo, the University of Nairobi, and KIPPRA.

Madagascar

In Madagascar Mamisoa Razakamanantsoa, a researcher at the Institut National de la Statistique (INSTAT), visited Cornell in November to work with Peter Glick and David Sahn on the preparation of analysis files for a national health survey. Formal and informal training was provided in this area, in addition to the preparation of preliminary descriptive statistics from the surveys.

In preparation for the upcoming national education survey, five Malagasy researchers visited Cornell in February and March of 2004: Tahina Razafindramary, Arsène Ravelo, and Voahangy Rahelimanantsoa from the Ministry of Education, and Tiaray Razafimanantena and Harivelo Rajemison from INSTAT.

Bart Minten and Christelle Dumas provided technical assistance on the development of a program of education research, including training for and design and implementation of the major education survey that is part of SAGA's research program in Madagascar. This included hosting a weeklong workshop to train enumerators, supervisors and other key personnel involved in the effort. In addition, Bart Minten continues to work with INSTAT and FOFIFA on a wide range of issues such as training in assessing the benefits of public provided services and the impact of user fees.

Senegal

Leopold Sarr continued to provide technical assistance to CREA in Senegal to assist in the cleaning of the data and the preparation of analysis files from the education survey in that country. This involved several trips to Dakar, and interaction with a broad range of technical staff and policy-makers.

Tanzania

Stephen Younger brought together Joachim de Weerd, a young Belgian researcher, and researchers at ESRF. Joachim is doing a follow-up survey of the people interviewed in the famous Kagera HIV/AIDS surveys of ten years ago. He has generated sufficient funds to carry out the survey, but not to fund analysis of it. By putting him in contact with ESRF, with whom he has worked before, we hope to bring about a joint proposal to SISERA's research competition that would analyze some aspects of this very exciting new survey.

Uganda

Stephen Younger continues to provide support to young professionals at EPRC who are carrying out SAGA-related research. Projects include an analysis of poverty changes in

Uganda (Ashie Mukunge and Ibrahim Kasirye), demand for health care services (Sarah Ssewanyana), tax incidence (Margaret Banga), and agricultural commercialization and poverty (Godfrey Bahiigwa).

Planned Activities

The demise of SISERA has caused us to rethink our technical assistance activities, for two reasons. First, SISERA has co-financed most of our workshops, especially the costs of participant travel and maintenance. (This is not completely offset by the fact that we no longer need to dedicate time to reviewing SISERA research proposals.) Loss of that source of funding implies a reduced level of TA activity. Second, SISERA has been our main point of contact for marketing SAGA technical assistance to its affiliated research institutions. The SAGA TA program has been a demand-driven effort, as planned in our proposal. Nevertheless, we have found that with the exception of DPRU in South Africa, it is easy for SISERA directors to lose sight of the fact that they can come to Cornell and Clark-Atlanta for technical assistance. Thus, regular contact with the directors via SISERA has been quite helpful.

Both of these considerations may lead to SAGA TA to focus less on workshops and more on long-term support to research activities at the economic research institutions themselves, including research activities that are funded by SAGA. This could include more long-term stays at such institutes by Cornell and Clark-Atlanta researchers, as well as greater support to institute staff doing SAGA research without a Cornell or Clark-Atlanta co-author. This latter activity will take on increasing importance as research papers come on line and are revised.

IV. COMPETITIVE GRANTS RESEARCH PROGRAM

As of date, the Small Grants Program of SAGA has awarded 21 individuals with research grants. Thirteen (13) students (5 females) and 7 faculty (2 females). All the recipients of the grant are (were) based in one of the member research institutes of the Secretariat for Institutional Support for Economic Research in Africa (SISERA) during their field research period. The SISERA institutions participating in hosting these awardees include:

1. Economic Policy Research Center, **Uganda**;
2. Institute of Statistical, Social and Economic Research, **Ghana**;
3. Economic and Social Research Foundation, **Tanzania**;
4. Centre d'Etudes et de Recherches en Economie et Gestion, **Cameroun**;
5. Institute of Policy Analysis and Research, **Kenya**;
6. Centre de Recherche Economique Appliquée, **Senegal**;
7. Institute of Economic and Social Research, **Zambia**;

8. National Institute of Economic Policy, **South Africa**;
9. Groupe de recherché en economie appliqué et théorique, **Mali**;
10. African Institute of Applied Economics, **Nigeria**;
11. Botswana Institute for Developmental Policy Analysis, **Botswana**;
12. Centre d'Orientation et de Recherche en Compétitivité, en Economie et en Décision Organisationnelle, **Benin**.

All except four of the awardees have completed their fieldwork and have submitted expense and trip reports. Seven of Year 1 awardees have completed their final report, and three of them have written papers for publication. Hence, we are observing a number of “intermediate” levels of outputs from these collaborative research efforts (See Attachment 5). These include:

1. Carrying out applied research in collaboration with individuals in the host institutions (confirmed by those Directors who had the opportunity to host during the annual meeting).
2. Dissemination of research results through exit seminars at the host institutions, and papers/reports and publications.
3. Continued collaboration/communication between the U.S.-based principal researcher and both senior and junior researchers at the host institution.
4. Creating database for the host institution.
5. Other outputs include completion of Ph.D. degrees, publications.

Activities

During this reporting period (October 1, 2003 – September 27, 2004) we continued to remain in contact with all those returned from the field as well as with to those awardees still completing their fieldwork. More specifically, these included:

1. Backstopping the program for those continuing to complete their deliverables;
2. Processed and completed all the closeout budgetary and reporting activities of all of Year 1 Awardees. This included processing all relevant receipts submitted by awardees, and preparing a reimbursement packet for the awardees consisting of any and all monies due for direct expenditures incurred during their fieldwork, including the Host Institutions. We also assembled fieldwork trip reports, and provided an updated copy of the expected deliverables still due to the SAGA Research Grants Office;

3. Modified and updated the survey instrument used in Year 1 to collect information of the research experiences of the awardees and the host institutions. We disseminated this survey instrument to all of Year 2 Awardees;
4. Processed and coordinated the departure of 9 (out of the 11) Awardees from Year 2. And, have begun processing the return of 2 Awardees from Year 2, which includes the process of preparing their reimbursement packet and collecting their fieldwork trip reports;
5. Up-dated the Competitive Research Grants web site. The revised version includes abstracts of all funded research projects for the last two (2) years of the grant, and field trip reports of all awardees from Year 1;
6. Drafted a brochure, which summarizes and highlights the accomplishments of the two funding cycles.

Work Plan (*October 1, 2004 –September 27, 2005*)

In an effort to ensure a successful research experience for the awardees, we remain in contact with those still in the field as well as with those still completing their final reports on their projects. This requires us to not only be a backstop for all awardees who are either in the field or have returned in collaboration with the SISERA host institutions but also to follow up on deliverables and distribution of project outputs.

More specifically we plan to:

1. Advertise the opportunities under the Small Research Grant Program;
2. Receive, process, and evaluate/review proposals;
3. Coordinate the visit of the recipients with the research institution;
4. Process and coordinate the return of all awardees from Year 2;
5. Follow up and assemble all final reports and other papers from all Year 2 awardees;
6. Conduct/complete follow up surveys with the Awardees and their respective host institutions (i.e., we will use the survey instrument used in Year 1); and
7. Finalize the brochure.

V. CONFERENCES AND WORKSHOPS

We have held 14 policy-oriented conferences and workshops, and have plans now for nine more. The past events and prospective meetings are included below, grouped by geographical region.

Multi-Country:

- IAAE—Analytical and Empirical Tools for Poverty Research, August 16, 2003, Durban, South Africa

This one-day learning workshop was co-sponsored by SAGA as a lead in to the 25th triennial meeting of the International Association of Agricultural Economists (IAAE). The workshop, co-organized by SAGA co-PI Chris Barrett (Cornell) and Csaba Csaki (World Bank), featured five hour-long sessions by leading poverty researchers introducing frontier techniques in poverty research and a 90-minute panel featuring shorter remarks by five distinguished scholars on research and policy priorities for addressing rural poverty. A range of international donors, including GTZ, IDRC, the World Bank, the Kellogg Foundation and others, supported the registration and travel costs of delegates from developing countries. More than 110 participants from at least 22 different countries registered for the learning workshop, including economists and other poverty researchers or program managers from line ministries in various African governments, universities from six continents, USAID, the World Bank, CGIAR centers, and other national and multinational organizations.

- 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.

Upcoming Event

- Q-Squared Poverty Analysis, 2006.

This multi-country conference follows the conference organized jointly by Cornell University and the University of Toronto in May 2004, with financial support from DFID and IDRC. In the third stage of this project, the focus will be on combining mixed methods in the context of policy making and policy dialogue.

Ghana:

- Ghana at the Half Century, July, 2004.

This major conference included presentations of approximately 45 papers, selected from submissions in response to an international call for papers. The draft program is available at <http://www.issr.org/draft%20conference%20program.htm>

Most of the papers can be downloaded at http://www.issr.org/list_of_papers.htm. The event had a high level of participation by policy makers. The launch meeting of the Economy of Ghana Network (EGN) coincided with this conference.

- Understanding Poverty, January 2004.

The authors' conference on the first drafts of papers for Understanding Poverty in Ghana was organized by our partner institution, the Institute of Statistical, Social and Economic

Research (ISSER), in January. The conference was opened by the Vice Chancellor of the University of Ghana (who is himself an author of a paper for the volume), and the final session was chaired by the Director General of the National Development Planning Commission, which is the agency charged with coordinating the Ghana Poverty Reduction Strategy.

- *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.

- *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.

- *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.

Kenya:

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

SAGA organized this workshop, hosted by KIPPRA in Nairobi on March 11, 2004. The workshop was attended by 50 or so representatives from various government ministries, the Central Bureau of Statistics, donor agencies (e.g., USAID/Kenya, USAID/REDSO, World Bank, DfID, EU), Kenyan universities and research institutes, international research institutions (e.g., CIMMYT, ICRAF, ILRI), as well as several different national media outlets (print, radio and TV). The program featured an opening address by David Nalo, Permanent Secretary of the Ministry of Planning and National Development, eight papers by scholars from different social science disciplines exploring different

dimensions and experiences of mixing qualitative and quantitative methods of poverty analysis in Kenya, and an expert panel discussing how best to integrate qualitative and quantitative methods of poverty analysis in emerging policy-oriented research in Kenya. Highlights of this workshop are found at

<http://www.saga.cornell.edu/saga/q-qconf/qqconf.html>.

Upcoming Events

- *IPAR Policy Conference 2005*

First drafts of SAGA-Kenya research papers will be presented in an intra-team meeting to be held in Nairobi on Friday, November 19, hosted by the World Bank Country Office, with a videoconference link to Cornell University. Each institution within the team will present preliminary draft presentations that day for comment by the team. These presentations, and the papers from which they are drawn, will subsequently be revised and summarized in short policy briefs for presentation at a policy conference to be held in late January or early February 2005, hosted by IPAR (exact dates and venue to be determined). This event will involve policymakers and donors on the program and will be well-publicized to the Kenya press. The background papers from the policy conference will then be reviewed, revised and edited into a published volume.

- *Regional Conference, 2006.*

Discussions are underway with the Office of the President's Arid Lands Resources Management Program about the possibility of hosting a regional conference on Pastoralists, Poverty and Vulnerability: Policies for Progress, likely in January 2006. 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.

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.

Upcoming Events:

- *Conference on Education, February, 2005.*

The first of two conferences, at the completion of the "Etude sur la Progression Scolaire et la Performance Academique en Madagascar" Project will present descriptive results of

the study to policy makers and stakeholders.

- Conference on Education, 2005.

A conference, tentatively scheduled for the end of 2005, will present the findings of the different research areas investigated by the “Etude sur la Progression Scolaire et la Performance Academique en Madagascar.”

South Africa:

- DPRU Conference on Poverty and Policy in South Africa, October 13-15, 2004.

This conference was jointly organized by DPRU, Trade and Industrial Policy Strategies (TIPS) and Cornell, with support from USAID under the SAGA program. It included papers selected from an international Call for Papers. The program is available at:

<http://www.commerce.uct.ac.za/dpru/dpruconference2004/Programme.htm>

and the conference papers can be downloaded from

<http://www.commerce.uct.ac.za/dpru/dpruconference2004/DownloadPapers.htm>

- Workshop on Analysis and Measurement of Poverty and Inequality, June 23-July 4, 2003, Cape Town, South Africa.

SAGA researchers Paul Cichello, Ravi Kanbur, and Stephen Younger worked with the Development Policy Research Unit (DPRU) and the National Institute for Economic Policy (NIEP) to present a two-week poverty and inequality workshop for faculty at South Africa’s historically disadvantaged universities. The aim of this course was to provide participants with competences in working with South African survey datasets, particularly in the fields of labour markets, and the analysis of poverty and inequality. The course included formalized reading time and lectures based on the assigned readings. Practical computer-based exercises using the statistical software package STATA drew on the readings and lectures. Program content for poverty analysis included household surveys as an instrument for measurement, derivation of poverty lines, alternative classes of poverty measures, poverty decompositions, and uses of poverty measures with applications to developing countries. Topics for analysis of inequality included building and choosing an inequality measure, modelling inequality, decompositions of inequality measures, and the application of inequality measures to developing countries.

- Workshop on Analysis and Measurement of Poverty and Inequality, March, 2004, South Africa.

The success of the June 2003 training workshop at the Development Policy Research Unit (DPRU) of the University of Cape Town led to demand for more such workshops. Ravi Kanbur, Paul Cichello, Ching-Mei Chen, and Stephen Younger worked with the DPRU to offer a two-week training course in poverty and inequality analysis for the Department of Social Development (DSD), the government agency charged with design and management of most of South Africa’s transfer payments. The workshop was held in

Pretoria at the government's information technology training center. The course covered both theoretical and empirical aspects of poverty and inequality analysis, with daily hands-on training with Stata software in a computer lab.

Upcoming Events:

The possibility of expanding the Poverty Analysis course to the provinces and to historically disadvantaged universities will be discussed in the next phase of activities in South Africa

Uganda:

• *EPRC/SAGA Research Conference, 2005.*

This conference will be targeted to mid-level, technical staff from the government, donors, and NGOs, along with academic researchers at universities and think tanks in Uganda, to present the findings of the SAGA research program. We have invited Simon Appleton to discuss the recent controversy over poverty changes in Uganda between 1999 and 2003, as well as presentations from EPRC and Cornell researchers.

• *EPRC-SAGA-World Bank-Bank of Uganda Conference, January, 2005.*

This policy conference will have a high profile program, including David Bevan, Paul Collier, Louis Kasakende, Benno Ndulu, and Jeffrey Sachs, in addition to the participation of EPRC researchers Godfrey Bahigwa, John Okidi, and Sara Ssewanyana. SAGA's research provides the background for the EPRC presentations. The conference was originally scheduled for October 2004, but has been postponed until January, 2005.

• *Survey Data Analysis Workshop, August 26-September 6, 2002.*

With joint coordinators Stephen Younger from Cornell and John Okidi from the Economic Policy Research Centre, Uganda's SISERA partner in Kenya, this workshop brought together researchers from EPRC and neighboring SISERA institutes, Makerere University, and the Bank of Uganda to develop skills for survey analysis. This technical assistance was designed to address the imbalance between abundant data and scarce researchers in Uganda. We discussed general poverty analysis and poverty comparisons; the incidence of public expenditures and taxes; agricultural development; and the demand for public social services. For each topic, we reviewed two or three key papers that use survey data to address a policy issue. We then worked through the steps of how to conduct a similar analysis with data available in Uganda. This latter activity was very much hands on. EPRC provided one computer for each pair of participants so that everyone could work through the program required for the analysis. This was followed by exercises in which each pair had to work through a similar problem with new data. We also included participants in a day-long consultation with government representatives, donors, university faculty and the press, to define specific policy-relevant research topics.

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 policymakers in Senegal charged with re-designing the country's education strategy.

- *Dissemination Workshops on Informing Education Policy, June, 2005.*

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.

VI. RESEARCH OUTPUT

Below is a listing of research output—working papers, published papers, and conference papers from the work in various countries. We have posted 125 papers to the SAGA website: <http://www.saga.cornell.edu/saga/workpap.html>

Multi-Country:

Welfare Dynamics in Rural Kenya and Madagascar, September 2004.

Christopher B. Barrett, Paswel Phiri Marenya, John G. McPeak, Bart Minten, Festus M. Murithi, Willis Oluoch-Kosura, Frank Place, Jean Claude Randrianarisoa, Jhon Rasambainarivo and Justine Wangila.

This paper documents how income and asset patterns in rural areas of Kenya and Madagascar follow patterns consistent with the notion of a poverty trap. Nonlinear asset and welfare dynamics create critical thresholds, points at which safety nets become especially important to guard against shocks that could make people permanently poor and to induce rural people to manage risk without severely compromising expected income growth.

Food Aid Targeting, Shocks and Private Transfers Among East African Pastoralists, May 2004

Erin Lentz and Christopher B. Barrett,

This paper uses high frequency panel data among Ethiopian and Kenyan pastoralists to test the efficacy of food aid targeting under three different targeting modalities, food aid's responsiveness to different types of shocks, and its relationship to private transfers. We find that, in this region, self-targeting food-for-work or indicator-targeted free food

distribution more effectively reach the poor than does food aid distributed according to community-based targeting. Food aid flows do not respond significantly to either covariate, community-level income or asset shocks. Rather, food aid flows appear to respond mainly to more readily observable rainfall measures. Finally, food aid does not appear to affect private transfers in any meaningful way, either by crowding out private gifts to recipient households nor by stimulating increased gifts by food aid recipients.

Integrating Education and Population Policy: The Gender-Equity Payoffs of Reducing Pregnancy-Related Dropouts, May 2004

Eloundou-Enyegue, Parfait M., J. Mayone Stycos, and Fatou Jah

Plausible arguments suggest that policies to avoid pregnancy-related dropouts can help close gender gaps in education in Africa but these payoffs require quantification. This research uses schooling life tables to simulate how the gender gaps in secondary school completion within 23 sub-Saharan African countries would narrow if these countries reduced the incidence of pregnancy-related dropouts. Results suggest that reducing pregnancy-related dropouts is neither indispensable nor sufficient to close current gender gaps in most cases, yet it could halve these gaps in one third of the countries studied. Forthcoming in *Applied Population and Policy*

Growth and Poverty Reduction in Sub-Saharan Africa: Macroeconomic Adjustment and Beyond, May 2004

Sahn, David E. and Stephen D. Younger

We begin this paper by taking a look back at the adjustment, growth, and poverty debate. Our analysis suggests that while the poor do not bear the disproportionate costs of adjustment policies, it is also the case that policy reforms have largely failed to contribute to the alleviation of poverty. We therefore explore the microeconomic, structural, and institutional constraints to growth and poverty reduction. The three areas that we concentrate on in terms of removing the structural and fundamentally microeconomic constraints that impede growth and poverty alleviation are human resource development, vulnerability and risk management, and fiscal management through decentralization. In *Journal of African Economies* 13(90001):i66-i95

Smallholder Identities and Social Networks: The Challenge of Improving Productivity and Welfare, April 2004

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. Forthcoming in *The Social Economics of Poverty: Identities, Groups, Communities and Networks*, Christopher B. Barrett, editor, London: Routledge, 2005.

Mixing Qualitative and Quantitative Methods of Analyzing Poverty Dynamics, March 2004

Barrett, Christopher B.

This paper outlines my current thinking and recent experience in mixing qualitative and quantitative methods of data collection and analysis so as to gain a firmer and more useful understanding of poverty dynamics, especially in rural Kenya. We first explore the very real differences between qualitative and quantitative poverty analysis methods, differences that make them useful complements. Then we debunk a few myths about differences that do not really exist. Finally, I discuss key lessons learned from four multi-year research projects in Kenya that have tried to implement mixed qualitative and quantitative research methods with a range of researchers from animal science, anthropology, economics, geography, range science, sociology and soil science.

The African Peer Review Mechanism (APRM): An Assessment of Concept and Design, January 2004

Kanbur, Ravi

The African Peer Review Mechanism (APRM) has been proposed as a key element of the New Partnership for Africa's Development (NEPAD). It is important that the APRM be thoroughly debated in terms of concept and design. This paper is a contribution to the debate. The paper derives design criteria for peer review mechanisms after looking at some functioning examples. These criteria are—Competence, Independence, and Competition. It is argued that while the APRM is a welcome addition to pan-African institutional structure, its design will have to be improved for it to be truly successful. First, APRM should greatly narrow the scope of its reviews if it is to deliver competent assessments. Second NEPAD should devote significant resources to allow civil society in the reviewed country to do assessments of their own, and to critique the APRM assessment.

Growth, Inequality and Poverty: Some Hard Questions, January 2004

Kanbur, Ravi

This commentary poses a series of progressively harder questions in the economic analysis of growth, inequality and poverty. Starting with relatively straightforward analysis of the relationship between growth and inequality, the first level of hard questions come when we ask what policies and institutions are causally related to equitable growth. Some progress is being made here by the economics literature, but

relatively little is known about the second level, harder questions—how a society comes to acquire "good" policies and institutions, and what exactly it is that we are buying into when we accept the number one Millennium Development Goal of the United Nations—halving the incidence of income poverty by the year 2015.

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 in *Agricultural Economics*

Urban-Rural Inequality in Africa, July 2003

Sahn, David E. and David C. Stifel

In *Journal of African Economies* 12(4):564-597, 2003

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 and find that living standards in rural areas lag far behind those in urban areas. Then we examine the relative and absolute rates of change for urban and rural areas, and find no overall evidence of declining differences in the gaps between urban and rural living standards. 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. *Presented at WIDER (World Institute for Development Economics Research) Conference on Spatial Inequality in Africa, University of Oxford, September 21-22, 2002.*

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.

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.

Conference papers from

African Development and Poverty Reduction: The Macro-Micro Linkage

A Conference sponsored by Development Policy Research Unit and Trade and Industrial Policy Strategies in association with Cornell University

13 - 15 October 2004

Changes in HIV/AIDS knowledge and testing behavior in Africa: How much and for whom?

Peter Glick and David E. Sahn

Are wealthier nations healthier nations? A panel data approach to the determination of human development in Africa.

Issidor Noumba

How responsive is capital formation to its user cost? An exploration of corporate tax effects.

Stephen F. Koch and Albert de Wet

Exporting from manufacturing firms in Sub-Saharan Africa: Micro evidence for macro outcomes.

Neil Rankin, Måns Söderbom and Francis Teal

Financial Intermediation and Access to Finance in African Countries South of the Sahara.

Neren Rau

Foreign aid and population growth: evidence from Africa.

Leonid Azarnert

Implications of Genetically Modified Food Technology Policies for Sub-Saharan Africa.

Kym Anderson and Lee Ann Jackson

Youth labour markets in Africa.

Cecil Mlatshni and Murray Leibbrandt

Infrastructure privatisation and poverty reduction in Africa.

Afeikhena Jerome

Estimating utility consistent poverty lines.
Channing Arndt and Kenneth Simler

Multilateral Organisations: Instruments for Donors' Foreign Policy?
Espen Villanger

Agricultural Sector Investment and the Role of Public-Private Partnership.
David J Spielman

Estimating utility consistent poverty lines.
Channing Arndt and Kenneth Simler

Agricultural policy, technology and food security in the African maize sector.
Göran Djurfeldt and Rolf Larsson

Ghana

Robust Multidimensional Spatial Poverty Comparisons in Ghana, Madagascar, and Uganda, June 2004
Duclos, Jean-Yves, David E. Sahn, and Stephen D. Younger

We investigate spatial poverty comparisons in three African countries using multidimensional indicators of well-being. The work is analogous to the univariate stochastic dominance literature in that we seek poverty orderings that are robust to the choice of multidimensional poverty lines and indices. In addition, we wish to ensure that our comparisons are robust to aggregation procedures for multiple welfare variables. 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, the log of household expenditures per capita and children's height-for-age z-scores, using data from the 1988 Ghana Living Standards Survey, the 1993 Enquête Permanente auprès des Ménages in Madagascar, and the 1999 National Household Survey in Uganda. Bivariate poverty comparisons are at odds with univariate comparisons in several interesting ways. Most importantly, we cannot always conclude that poverty is lower in urban areas from one region compared to rural areas in another, even though univariate comparisons based on household expenditures per capita almost always lead to that conclusion.

Challenges Facing Potential Investors in the Pineapple Industry in Ghana, February 2004

Yeboah, Godfred

The project involved studying the economics of pineapple production and marketing in Ghana. This was undertaken as part of two studies: “The Farmapine Model: A Cooperative Marketing Strategy and Market Based Development Approach.” and “Profitability and Risk Analysis: The Case of Ghana’s Pineapple Exports.” The project falls under SAGA’s general objectives and in particular under the thematic area of ‘risks, vulnerability and poverty dynamics’. The study also has policy implications especially in terms of poverty alleviation and sustainable economic development.

Final Report for SAGA Competitive Research Grants Program

Conference Papers from the ISSER-University of Ghana-Cornell University

International Conference on GHANA AT THE HALF CENTURY

July 18-20, 2004, Accra, Ghana

Banking Competition and Efficiency in Ghana, January 2003

Thierry Buchs and Johan Mathisen

The Evolution of Welfare in Ghana: A Rural-Urban Perspective, July 2004

Louis Boakye-Yiadom

Export Performance and Investment Behaviour of Firms in Ghana, June 2004

Daniel Bruce Sarpong and Susanna Wolf

Maternal Literacy and Numeracy Skills and Child Health in Ghana, January 2004

Niels-Hugo Blunch

Poverty Reduction Strategies in a Budget-Constrained Economy: The Case of Ghana, February 2003

Maurizio Bussolo and Jeffery I. Round

Effects of Exchange Rate Volatility and Changes in Macroeconomic Fundamentals on Economic Growth in Ghana, July 2004

Stephen Kyereme

A General Equilibrium Analysis of the Impact of Inward FDI on Ghana: The Role of Complementary Policies, July 2004

Lawrence Arbenser

Financial Sector Liberalization on the Labour Market in Ghana, April 2003

Augustine Fritz Gockel and Nora Amu

Production Changes in Ghana Cocoa Farming Households Under Market Reforms, October 2003

Francis Teal and Marcella Vigneri

Household Asset Choice Among the Rural Poor in Ghana, January 2004

Ernest Aryeetey

Adult Literacy Programmes in Ghana: An Evaluation, June 2004

Niels-Hugo Blunch and Claus C. Pörtner

Terms and Access to Credit: Perceptions of SME/Entrepreneurs in Ghana, July 2004

Kwadwo Ansah Ofei

Real Exchange Rate Response to Capital Inflows: A Dynamic Analysis for Growth, July 2004

Oliver Morrissey, Tim Lloyd and Maxwell Opoku-Afari

Survival and Success Among African Manufacturing Firms, February 2004

Alan Harding, Måns Söderbom and Francis Teal

Economic Growth in Ghana: 1960-2000, July 2004

Ernest Aryeetey and Augustine K. Fosu

Selective Poverty Reduction in a Slow Growth Environment: Ghana in the 1990s, September 2003

Harold Coulombe and Andy McKay

Poverty Reduction Efforts in Ghana: The Skill Development Option, July 2004

George Botchie and William Ahadzie

Does Devaluation Improve Trade Balance of Ghana?, July 2004

Frank W. Agbola

Decentralization and Poverty Reduction, July 2004

Felix A. Asante and Joseph R. A. Ayee

Rural and Micro Finance Regulating in Ghana: Implications for Development and Performance of the Industry, July 2004

William F. Steel and David O. Andah

A Small Macroeconometric Model of Trade and Inflation in Ghana, July 2004

Samuel Donyina Ameyaw and Philip Abradu-Otoo

Technical Efficiency in Ghanaian Secondary Education, June 2004

Kwabena Gyimah-Brempong and Elizabeth N. Appiah

From Independence to Economic Reform: Rural Poverty in Ghana from 1967-1997, July 2004

Markus Goldstein and Rikhil Bhavnani

Health Care Provision and Self Medication in Ghana, March 2004

G. J. M. van den Boom, N. N. N. Nsowah-Nuamah and G. B. Overbosch

Does Inflation in Ghana Hit the Poor Harder?, July 2004

Andy McKay and Nii K. Sowa

Low Savings in Ghana: Does Policy Matter?, July 2004

Peter Quartey and Theresa Blankson

Policy Dynamics, Trends in Domestic Fish Production and Implications for Food Security in Ghana, July 2004

A. Wayo Seini, V. K. Nyanteng and A. Asantewah Ahene

Budget Implementation and Poverty Reduction in Ghana, July 2004

Antholy Tsekpo and Charles D. Jebuni

Mitigating the Impact of HIV II, July 2004

John K. Anarfi and Ernest N. Appiah

Conference paper from

African Development and Poverty Reduction: The Macro-Micro Linkage

A Conference sponsored by Development Policy Research Unit and Trade and Industrial Policy Strategies in association with Cornell University

13 - 15 October 2004

Prospects and Challenges of Agricultural Technology Market Linkage under Liberalization in Ghana: Evidence from a micro-data

Tsegaye Yilma Dessalegn, Ernst Berg and Thomas Berger

Kenya

Welfare Dynamics in Rural Kenya and Madagascar, September 2004.

Christopher B. Barrett, Paswel Phiri Marenaya, John G. McPeak, Bart Minten, Festus M. Murithi, Willis Oluoch-Kosura, Frank Place, Jean Claude Randrianarisoa, Jhon Rasambainarivo and Justine Wangila,

This paper documents how income and asset patterns in rural areas of Kenya and Madagascar follow patterns consistent with the notion of a poverty trap. Nonlinear asset

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Food Aid Targeting, Shocks and Private Transfers Among East African Pastoralists, May 2004

Erin Lentz and Christopher B. Barrett

This paper uses high frequency panel data among Ethiopian and Kenyan pastoralists to test the efficacy of food aid targeting under three different targeting modalities, food aid's responsiveness to different types of shocks, and its relationship to private transfers. We find that, in this region, self-targeting food-for-work or indicator-targeted free food distribution more effectively reach the poor than does food aid distributed according to community-based targeting. Food aid flows do not respond significantly to either covariate, community-level income or asset shocks. Rather, food aid flows appear to respond mainly to more readily observable rainfall measures. Finally, food aid does not appear to affect private transfers in any meaningful way, either by crowding out private gifts to recipient households nor by stimulating increased gifts by food aid recipients.

Smallholder Identities and Social Networks: The Challenge of Improving Productivity and Welfare, April 2004

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. Forthcoming in *The Social Economics of Poverty: Identities, Groups, Communities and Networks*, Christopher B. Barrett, editor, London: Routledge, 2005.

Mixing Qualitative and Quantitative Methods of Analyzing Poverty Dynamics, March 2004

Barrett, Christopher B.

This paper outlines my current thinking and recent experience in mixing qualitative and quantitative methods of data collection and analysis so as to gain a firmer and more useful understanding of poverty dynamics, especially in rural Kenya. We first explore the very real differences between qualitative and quantitative poverty analysis methods, differences that make them useful complements. Then we debunk a few myths about

differences that do not really exist. Finally, I discuss key lessons learned from four multi-year research projects in Kenya that have tried to implement mixed qualitative and quantitative research methods with a range of researchers from animal science, anthropology, economics, geography, range science, sociology and soil science.

Poverty Traps and Safety Nets, December 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 in *Poverty, Inequality and Development: Essays in Honor of Erik Thorbecke*, Alain de Janvry and Ravi Kanbur, eds., Norwell, MA: Kluwer Academic Publishers, 2004

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.

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 apply the method to livestock markets in northern Kenya, a setting of dramatic price

volatility where price stabilization is a live policy issue. In this particular application, 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.

Forthcoming in *Food Policy*

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.

*From the KIPPRA-CORNELL SAGA Workshop on
QUALITATIVE AND QUANTITATIVE METHODS FOR POVERTY ANALYSIS
March 11, 2004, Nairobi, Kenya*

Quantitative Poverty Analysis, March 2004
Germano Mwabu

Bridging the Qualitative-Quantitative Methods of Poverty Analysis, March 2004
Enos H.N. Njeru

Mixing Qualitative and Quantitative Methods of Analyzing Poverty Dynamics
Christopher B. Barrett

Poverty In Kenya: A Review of Quantitative and Qualitative Studies
Kulundua D. Manda,

Researching Poverty in Rural Kenya: A Sustainable Livelihoods Framework Approach to Measuring the Impact of Agricultural Technologies on Poverty
Mary Omosa,

The Role of Livestock in Pathways out of Poverty: Approach and Findings from Western Kenya
Patti Kristjanson, Nelson Mango, Maren Radey and Wilson Nindo

Poverty Mapping: The Case of Kenya
Anthony K.M. Kilele and Godfrey K. Ndeng'e

Social Aspects of Dynamic Poverty Traps: Cases from, Vihiga, Baringo and Marsabit Districts, Kenya
Nelson Mango, Josephat Cheng'ole, Gatarwa Kariuki and Wesley Ongadi

Indices and Manifestations of Poverty: Informing anti-poverty Policy Choices
Willis Oluoch-Kosura, Paswel Phiri Marenya, Frank Place and Christopher B. Barrett

Madagascar

Determinants of HIV Knowledge and Behavior in Madagascar: An Analysis Using DHS Data, October 2004
Glick, Peter, Josée Randriamamonjy, and David E. Sahn

Madagascar has a low prevalence of HIV/AIDS, just 0.3 percent. However, Madagascar is also characterized by an ideal set of conditions for the rapid spread of HIV: limited access to health and social services, the presence of high illiteracy, low condom use, widespread poverty, and high rates of sexually transmitted infections. Therefore, efforts to contain the HIV spread require a better understanding of socioeconomic determinants of HIV/AIDS knowledge and sexual behavior. To estimate the determinants of HIV/AIDS knowledge and sexual behavior among adolescent women we explore whether the respondents have an awareness of HIV/AIDS prevention strategies, the extent of misconceptions about AIDS transmission, and whether an individual uses a condom. Education is among the variables found to be associated most consistently with differential probability of having knowledge about HIV/AIDS prevention and condom use. Such finding likely reflects that education enhances the ability to understand information on HIV/AIDS. Moreover, HIV prevention taught in schools has a direct effect on HIV/AIDS awareness. Wealth and greater exposure to mass media measured by regularly listening to radio is also associated with higher level of knowledge and condom use. Studies on the socioeconomic correlates of HIV/AIDS awareness and sexual behavior often end with a call for more investigation on the role of community networks and other unobservable factors in spreading knowledge. The inclusion of cluster fixed effects and community controls in our estimation of HIV/AIDS knowledge allows testing the robustness of the parameter estimates of our key household and individual level

variables. Such inclusion also would have allowed testing the difference between the parameters in rural and urban areas if community level data were available for both areas.

Welfare Dynamics in Rural Kenya and Madagascar, September 2004.

Christopher B. Barrett, Paswel Phiri Marenja, John G. McPeak, Bart Minten, Festus M. Murithi, Willis Oluoch-Kosura, Frank Place, Jean Claude Randrianarisoa, Jhon Rasambainarivo and Justine Wangila,

This paper documents how income and asset patterns in rural areas of Kenya and Madagascar follow patterns consistent with the notion of a poverty trap. Nonlinear asset and welfare dynamics create critical thresholds, points at which safety nets become especially important to guard against shocks that could make people permanently poor and to induce rural people to manage risk without severely compromising expected income growth.

The Demand for Primary Schooling in Madagascar: Price, Quality, and the Choice Between Public and Private Providers, July 2004

Glick, Peter, and David E. Sahn

We estimate a discrete choice model of primary schooling and simulate policy alternatives for rural Madagascar. Poor households are substantially more price-responsive than wealthy ones, implying that fee increases for public schools will have negative effects on equity in education. Among quality factors, multigrade teaching (several classes being taught simultaneously by one teacher) has a strongly negative impact on public school enrollments. Simulations indicate that providing teachers to reduce by half the number of multigrade classes in public schools would lead to modest improvements in overall enrollments, would be feasible in terms of costs, and would disproportionately benefit poor children. In contrast, consolidation of primary schools combined with quality improvement would be ineffective because of the negative effect of distance to school. Other simulations point to limits to a strategy of public support for private school expansion as a means of significantly increasing enrollment rates or education quality; such an expansion may also reduce overall education equity.

Robust Multidimensional Spatial Poverty Comparisons in Ghana, Madagascar, and Uganda, June 2004

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

We investigate spatial poverty comparisons in three African countries using multidimensional indicators of well-being. The work is analogous to the univariate stochastic dominance literature in that we seek poverty orderings that are robust to the choice of multidimensional poverty lines and indices. In addition, we wish to ensure that our comparisons are robust to aggregation procedures for multiple welfare variables. 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, the log of household expenditures per capita and children's height-for-age z-scores, using data from the 1988 Ghana Living Standards Survey, the 1993 Enquête Permanente auprès des Ménages in Madagascar, and the 1999 National Household Survey in Uganda. Bivariate poverty comparisons are at odds with univariate comparisons in several interesting ways. Most importantly, we cannot always conclude that poverty is lower in urban areas from one region compared to rural areas in another, even though univariate comparisons based on household expenditures per capita almost always lead to that conclusion.

Smallholder Identities and Social Networks: The Challenge of Improving Productivity and Welfare, April 2004

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Public Service Provision, User Fees, and Political Turmoil, January 2004

Fafchamps, Marcel and Bart Minten

Following an electoral dispute, the central highlands of the island of Madagascar were subjected to an economic blockade during the first half of 2002. After the blockade ended in June 2002, user fees for health services and school fees were progressively eliminated. This paper examines the provision of schooling and health services to rural areas of Madagascar before, during, and after the blockade. We find that public services were more resilient to the blockade than initially anticipated, but that health services were more affected than schools. The removal of user fees had a large significant effect on public services that is distinct from the end of the blockade and the increase in school book provision.

Better Technology, Better Plots or Better Farmers? Identifying Changes In Productivity and Risk Among Malagasy Rice Farmers, January 2004

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

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. 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 functions. Results from Madagascar show that the new system of rice intensification (SRI) is indeed a superior technology. Although about half of the observed productivity gains appear due to farmer characteristics rather than SRI itself, the technology generates estimated average output gains of more than 84 percent. The increased estimated yield risk associated with SRI would nonetheless make it unattractive to many farmers within the standard range of relative risk aversion.

Forthcoming in *American Journal of Agricultural Economics* 86(4):869-888 (November).

The Complex Dynamics of Smallholder Technology Adoption: The Case of SRI in Madagascar, June 2003

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 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.

The Distribution of Social Services in Madagascar, 1993-99, December 2002

Glick, Peter and Mamisoa Razakamanantsoa

While a number of benefit incidence studies of public expenditures have been carried out for African countries, there are very few studies that look at how the incidence of such expenditures has been changing over time. We use three rounds of nation-wide household surveys to analyze the distribution of public expenditures on education and health services in Madagascar over the decade of the 90s, a period of little economic growth but significant changes in social sector organization and budgets. Education and health services for the most part are found to be distributed more equally than household expenditures: therefore they serve to redistribute welfare from the rich to the poor. By stricter standards of progressivity, however, public services do poorly. Few services other than primary schooling accrue disproportionately to the poor in absolute terms. When we

further adjust for differences in the numbers of potential beneficiaries in different expenditure quintiles (e.g., school-age children in the case of education), none of the education or health benefits considered appear to target the poor while several target the non-poor. We also find significant disparities in the use of services between rural and urban areas, and by province. On the other hand, for both education and health services, no notable gender differences exist in coverage. With regard to changes over the decade, primary enrollments rose sharply and also become significantly more progressive; since the country experienced little or no growth in household incomes during the period, this apparently reflects supply rather than demand side factors. The improvement in equity in public schooling occurred in part because the enrollment growth was in effect regionally targeted: it occurred only in rural areas, which are poorer.

Water Pricing, the New Water Law, and the Poor: An Estimation of Demand for Improved Water Services in Madagascar, December 2002

Minten, Bart, Rami Razafindralambo, Zaza Randriamiarana, and Bruce Larson

Generalized cost recovery is one of the basic principles of the new Water Law that has recently been adopted by the Malagasy government. However, the effect of this change in policy is still poorly understood. Based on contingent valuation surveys in an urban and a rural area in southern Madagascar, this study analyzes the effect of changes in prices for water services. The results suggest that a minimum size of 90 households in a village is necessary to reach full cost recovery for well construction. Given that this is significantly above the current size of villages in the survey area, full cost recovery seems therefore impossible and subsidies are necessary to increase access to improved water services. Cost recovery for maintenance is relatively easier to achieve. In urban areas, water use practices and willingness to pay for water services depend highly on household income. To better serve the poor, it is therefore suggested that rich households, who rely on private taps, cross-subsidize poor households as a significant number of households is unwilling or unable to pay for water from a public tap. Given that public taps make up a small part of the total consumption of the national water company JIRAMA, lower income from public taps are shown to have only a marginal effect on its total income. However, as experiences in other countries as well as in Madagascar have shown, a fee on public taps is necessary as water for free leads to spoilage, does not give any incentive for the distributor to expand networks, and might therefore be a bad policy for the poor overall.

Conference paper from

African Development and Poverty Reduction: The Macro-Micro Linkage

A Conference sponsored by Development Policy Research Unit and Trade and Industrial Policy Strategies in association with Cornell University

13 - 15 October 2004

Export processing zone expansion in an African country: What are the labour market and gender impacts?

Peter Glick and Francois Roubard

South Africa

The volume, *Poverty and Policy in the post-Apartheid South Africa*, edited by Haroon Borhat of DPRU and Ravi Kanbur of Cornell University, will take stock of the first post-Apartheid decade, to assess the evolution of poverty, inequality, human needs and unemployment, and to relate this evolution to the policy stances and interventions of the first governments elected freely by all South Africans. It will include papers from presentations at the major conference on African development shown below. See Attachment 2 for a proposed table of contents.

Conference papers from

African Development and Poverty Reduction: The Macro-Micro Linkage

A Conference sponsored by Development Policy Research Unit and Trade and Industrial Policy Strategies in association with Cornell University

13 - 15 October 2004

Inequality in South Africa: Nature, Causes and Responses
Stephen Gelb

Impact of HIV/AIDS on saving behaviour in South Africa
Sandra Freire

Financial Services and the informal economy
Cally Ardington and Murray Leibbrandt

The post-apartheid South African labour market
Morné Oosthuizen and Haroon Borhat

Labour force withdrawal of the elderly in South Africa
David Lam, Murray Leibbrandt and Vimal Ranchhod

Macro-Micro linkages in trade: Does trade liberalization lead to improved productivity in South African manufacturing firms
Imraan Valodia and Myriam Velia

Labour migration and households: a reconsideration of the effects of the social pension on labour supply in South Africa
Dorrit Posel, James Fairburn and Frances Lund

Two million net new jobs: A reconsideration of the rise in employment in South Africa, 1995 2003
Daniela Casale, Colette Muller and Dorrit Posel

Have Minimum Wages Benefited South Africa's Domestic Service Workers?
Tom Hertz

Well-Being poverty versus income poverty and capabilities poverty in South Africa?
Geeta Kingdon and John Knight

South African Trade Reform since Democracy
Rashad Cassim and Dirk van Seventer

The mystery of South Africa's ghost workers in 1996: measurement and mismeasurement in the manufacturing census, population census and October Household Surveys
Martin Wittenberg

Geography as Destiny: Considering the spatial dimensions of poverty and deprivation in South Africa
Ronelle Burger, Servaas van der Berg, Sarel van der Walt and Derek Yu

The dynamics of job search and the microfoundations of unemployment: Evidence from Duncan village
David Fryer

Trade liberalisation and factor returns in South Africa, 1988-2002
Lawrence Edwards and Duncan Pieterse

Community, comparisons and subjective well-being in a divided society
Geeta Kingdon and John Knight

The economy-wide impacts of the labour intensification of infrastructure expenditure
Anna McCord and Dirk van Seventer

Capital Flight from South Africa, 1980 to 2000
Seeraj Mohammed and Kade Finnoff

Have labour market outcomes affected household structure in South Africa? A preliminary descriptive analysis of households
Farah Pirouz

Trade liberalisation and regional integration in SADC: policy synergies assessed in an industrial organisation framework
Martine Visser and Trudi Hartzenberg

Industrial Strategy and local economic development: manufacturing policy and technological capabilities in Ekurhuleni
Thandi Phele, Simon Roberts and Ian Steuart

Uganda

Robust Multidimensional Spatial Poverty Comparisons in Ghana, Madagascar, and Uganda, June 2004

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

We investigate spatial poverty comparisons in three African countries using multidimensional indicators of well-being. The work is analogous to the univariate stochastic dominance literature in that we seek poverty orderings that are robust to the choice of multidimensional poverty lines and indices. In addition, we wish to ensure that our comparisons are robust to aggregation procedures for multiple welfare variables. 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, the log of household expenditures per capita and children's height-for-age z-scores, using data from the 1988 Ghana Living Standards Survey, the 1993 Enquête Permanente auprès des Ménages in Madagascar, and the 1999 National Household Survey in Uganda. Bivariate poverty comparisons are at odds with univariate comparisons in several interesting ways. Most importantly, we cannot always conclude that poverty is lower in urban areas from one region compared to rural areas in another, even though univariate comparisons based on household expenditures per capita almost always lead to that conclusion.

An Investigation into the Relationship Between Household Welfare and Social Capital in Eastern Uganda, February 2004

Hu, Chia-Hsin and Ben Jones

This paper studies the relationship between social capital and household welfare. Social capital is taken to mean, very simply, 'durable social networks'. The relationship is investigated using survey work conducted in two villages in eastern Uganda. The surveys gathered information on the quality and extent of people's participation in local organizations, as well as household welfare. To organize the analysis of the data the paper utilizes econometric tools designed for investigating the relationship between dimensions of organizational social capital and household welfare. At the same time, the paper recognizes some of the limitations inherent in relying on econometric work to analyze this relationship. As such, the econometric analysis is limited in examining only social capital as expressed through household participation in village level organizations. Our results show that "organizational social capital", as we have termed it, has only a small effect on household welfare. That said, we also draw on anthropological work conducted in the two survey villages, and from ethnographic material we argue that social capital, as expressed in less institutionalized social networks, has a significant affect on household welfare. In others words, it is the social capital that resides in such networks as

personalized relationships, peer groups, or brokerage positions between development projects and the village that has a strongly determinate effect on household. Organizational social capital, which is the type of social capital "captured" in village level survey work, does not help us explain the most significant part of the relationship social capital and household welfare.
Final Report for SAGA Competitive Research Grants Program

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.

Conference papers from
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Infant mortality in Uganda: determinants, trends and the millennium development goals.
Sarah Ssewanyana and Stephen Younger

The Missing Links Uganda's Economic Reforms and Pro-Poor Growth
Robert Kappel, Jann Lay and Susan Steiner

Credit demand and credit rationing in the informal financial sector in Uganda.
Nathan Okurut, Andrie Schoombee and Servaas van der Berg,

West Africa

Progression through School and Academic Performance in Senegal: Descriptive Survey Results, July 2004
Christelle Dumas, Peter Glick, Sylvie Lambert, David Sahn, and Leopold Sarr

This report provides a preliminary descriptive analysis of some of the data from The Progression through School and Academic Performance in Senegal Study. This project is based around a nation-wide household survey with a special focus on schooling, complimented by academic and life skills tests and additional surveys of local schools and communities. The topics covered in this report focus on the household survey and test score data and include: enrollment rates; school attainment; grade repetition; dropouts and progression to secondary school; academic and life skills test scores; and perceptions about education and schooling.

Access to Schooling and Employment in Cameroon: New Inequalities and Opportunities, April 2004

Eloundou-Enyegue, Parfait M., Ngoube Maurice, Okene Richard, V.P Onguene, Serge Bahoken, Joseph Tamukong, Moses Mbangwana, Joseph Essindi Evina, and Caroline Mongue Djongoue

This report is about recent trends in education and access to employment in Cameroon. It focuses on five questions about (1) current levels of schooling, (2) recent trends in enrolment, (3) recent trends in schooling inequalities, (4) access to employment, and (5) risks and opportunities to improve education and employment outcomes. Based on these analyses, the report discusses several challenges and opportunities in improving education and employment outcomes.

Intertemporal Female Labor Force Behavior in a Developing Country: What Can We Learn from a Limited Panel? March 2004

Glick, Peter and David E. Sahn

We analyze intertemporal labor market behavior of women in urban Guinea, West Africa using two distinct methodologies applicable to a short (two-year) panel. A multi-period multinomial logit model with random effects provides evidence of unobserved individual heterogeneity as a factor strongly affecting labor market sector choices over time. Results from simpler single period models that condition on prior sector choices are consistent with either heterogeneity or state dependence. Both approaches perform equally well in predicting individual labor market behavior conditional on past choices. In terms of observable characteristics, the estimates confirm the heterogeneous structure of the urban labor market: informal and formal employment appear to differ significantly in terms of skill requirements, compatibility with child care, and costs of entry.

Forthcoming in *Labour Economics*

The Impact of Family Literacy on the Earnings of Illiterates: Evidence from Senegal, January 2004

Sarr, Leopold R.

This 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. Using the concept of proximate and isolated illiterates recently developed by K. Basu and J. Foster, I apply an intra-household model of literacy to a Senegalese household dataset. The estimates obtained from different selection bias models provide 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. It also appears that rural workers and female illiterates tend to participate more in the labor market than their urban and male counterparts. On the other hand, an urban illiterate worker who lives in a household where at least one member is literate is expected to earn a wage that is about 88% higher than that of an isolated illiterate urban worker whereas the earnings of an illiterate female worker are on average 33% higher than the ones of another illiterate female worker whose family's ratio of literate to illiterate members is one point lower. This suggests that policies targeting isolated illiterate households, in both rural and urban zones as well as illiterate women — who appear to be better recipients of external literacy benefits — within households, are likely to mitigate their vulnerability and thus to reduce the incidence of illiteracy and poverty.

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Growth and redistribution effects of poverty changes in Cameroon

Francis Baye

Macroeconomic growth, sectorial quality of growth and poverty in developing countries: measure and application to Burkina Faso

Boccanfuso Dorothée and Tambi Samuel Kabore

The conjuncture of poverty microsimulation linked to a macroeconomic forecasting model: A case study in Senegal

Thierry Latreille

Other Countries

Rural Livelihoods and Collective Action in Joint Forest Management in Zambia,

February 2004

Bwalya, Samuel M.

This study examines rural livelihoods and collective action in Joint Forest Management (JFM) in six local forest communities in three of the nine provinces of Zambia. The role of forests and woodlands resources to rural livelihood strategies and rural income is

examined and the determinants of collective action are identified and discussed. Our analysis of rural livelihood strategies suggests that both agriculture and forests are important sources of rural livelihoods and contributors to rural income. However, although average income from agriculture is relatively smaller than income from forest products there are more people earning income from the former than from the latter. We also find that although women appear to be more dependent on forests and woodlands for subsistence, it is rather the men who more dependent on forests for commercial income. With respect to the determinants of collective action in local forest management, results from this study suggest that household income and income inequality across households, scarcity of forest products, organizational and social capital, and individual prior experience with collective action programs promote collective action whereas market integration and proximity to urban markets (which some form of regional heterogeneity) weakens cooperation. It was also evident that programs which support both agricultural development and forest conservation will have the greatest impact on local behavior, poverty reduction and long-term local forest management in the study area.

Final Report for SAGA Competitive Research Grants Program

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Analysis of farmers' preferences for development intervention programs: A case study of subsistence farmers from Eastern Ethiopian Highlands

Wagayehu Bekele

Modelling pro-poor agricultural growth strategies in Malawi: lessons for policy and analysis

Andrew Dorward and Jamie Morrison

Institutional framework, interest rate policy and the Nigerian manufacturing sub-sector

Babasanmi Babatope-Obasa and Michael Adebayo Adebisi

The Global Market Place: How far can Nigeria go with the present non-oil product mix?

Rosemary N. Okoh

Genocide and land scarcity: Can Rwandan rural households manage?

Marijke Verpoorten and Lode Berlage

Swaziland: In the pursuit of economic liberalization and growth. How poverty is reproduced at the micro-level under changing labour market regimes?

Gabriel Tati

Economic Growth without Poverty Reduction: Identifying the Missing Links in Tanzania during Economic Reform

Anders Danielson

Small Business Entrepreneurship in Dar es salaam –Tanzania: Exploring Problems and Prospects for Future Development

Rashid M. Mfaume and Wilhelm Leonard

Alleviating rural poverty through efficient small holders farming systems in Ethiopia: Relevance of macro policies with ground realities

DK Grover and Anteneh Temesgen

The Road to Pro-Poor Growth in Zambia.

James Thurlow and Peter Wobst

The Demand for Education for Orphans in Zimbabwe

Craig Gundersen, Thomas Kelly and Kyle Jemison

VII. WEBSITE

The SAGA website (<http://www.saga.cornell.edu>) provides for global communication of information about the program—its research themes and technical assistance objectives, its personnel and partners. It disseminates research results as downloadable working papers and conference papers, announces upcoming conferences and workshops and describes previous ones, including links to presentations. The website offers links to the research proposal and progress reports as well.

We are currently working to update and redesign the website to offer a more comprehensive view of the SAGA program in a more accessible approach to the viewer. We are including the SAGA logo (as seen on the cover of this report) on each page, along with logos to USAID, Cornell and CAU, all presented prominently in the page top banner, with links. We retain the sidebar navigation links, rearranged in order, in a graphic display, with text links at the page bottom. We think we have maintained an original goal of creating an easily and rapidly downloadable and viewable site, through simple and efficient construction.

With respect to website content, we've added additional details about the research areas. Our working papers section, renamed publications, now includes both working papers and conference papers, as well as links to articles now published in refereed journals. We are seeking permissions to publish abstracts from these published articles, as well as include the abstracts for all conference papers. Our publications are listed chronologically, from most recent to earliest; we are now offering a few alternative views of this listing—by research theme, by geographical focus, and by author. These

views can be reached through a link at the beginning of the Publications page. For the technical assistance and conference pages, we are updating the content of these pages to make them more comprehensive in listing all SAGA events.

A separate website for the SAGA Competitive Grants program is maintained at CAU. We are updating the link on our own site's navigation bar to connect to a transition page within our own site, consistent with our site's design, that provides a brief overview and links to the CAU site from that page, rather than linking directly from the navigation bar.

We began collection of data quantifying web usage on May 28, 2003. In this report, we update the website statistics for 2004.

The number of "hits" measured in the first 11 months of 2004 is 83,298 (A "hit" is a single action of the web server – a visitor requesting a web page, for example, that includes 2 images, will be recorded as 3 hits). This averages approximately 7,573 hits per month in 2004, and reflects increased visitation of the site over 2003 when monthly average was 4,403 hits.

The measurement of hits commonly reported by website counters does not, by definition, actually reflect how many web pages are being viewed; it is useful for a general measure of activity and for comparison purposes. The number of visits actually made to the site in 2004 is 17,844, with 7,745 of these counted as unique, their subsequent visits within the reporting period being excluded from the total. This averages to 704 unique visitors per month.

Working papers and conference papers are available for download as PDF documents, as are versions of the research proposal, progress reports, conference programs, and the SAGA brochure. The total number of files downloaded January-November 2004 was 29,012, of which 24,354 were publications. This indicates that SAGA publications are being downloaded approximately 2,214 times, on average, each month by visitors to the website.

VIII. QUESTIONNAIRES

To monitor the SAGA program, questionnaires were sent to clients/users. Follow-up requests were sent 3 weeks later to those who did not respond to the initial inquiry.

1. USAID Missions: 10 USAID Mission personnel were sent a questionnaire concerning their awareness of the SAGA research and technical assistance, the consistency of the SAGA research with Mission interests and priorities, and the responsiveness of the SAGA team to Mission requests. We have received four completed questionnaires. Their responses to all the questions were largely in strong agreement (49.2%) or agreement (39.0%); there were

11.9% responses that the respondents did not know. There were no disagreements.

2. Research Collaborators: SISERA personnel were contacted regarding interest in SAGA research and collaborations, and quality and relevance of research. Two of 8 respondents have returned the questionnaire. Their responses to 12 questions were largely in strong agreement (70.8%) or agreement (25.0%).
3. Stakeholders: 35 individuals were sent a questionnaire to evaluate their awareness of the SAGA research effort, the relevance of the research questions and output, and the impacts on policy. 14 completed the questionnaire: the overall responses to this questionnaire were agreeable: 44.4% of the answers indicated strong agreement and 34.6% were in agreement.
4. Questionnaires were sent to attendees of three workshops: “Ghana at the Half Century (ISSER/Cornell)” (172 attendees); “Qualitative and Quantitative Methods of Poverty Analysis (KIPPR/Cornell)” (36 attendees); and “African Development and Poverty Reduction: The Macro-Micro Linkage (DPRU/TIPS/Cornell) (186 attendees). The questionnaires had several questions about the meetings— how well organized was the meeting, how informative and relevant to the participant’s interests, and whether attendance was expected to lead to long-term skill enhancement or enhancement of research/output. At total of 76 questionnaires were completed. Twenty-nine (38.2%) strongly agreed that their attendance at the workshop had enhanced their understanding of the meeting topic; 42 (55.3%) agreed with this statement. The only question that elicited much disagreement was one asking whether the workshop provided enough time for hands-on learning. Twenty-six percent of the respondents disagreed, desiring more time spent with instructors.
5. Small Grants Recipients: The recipients of SAGA small grants (20) were sent questionnaires inquiring about the nature of the recipient’s experience with the SISERA institution, the quality of the collaboration, and possibility for future collaboration. To date, 11 of these individuals have responded. These recipients reported very positively: 51.9% of the responses indicated strong agreement; 36.4% of the responses showed agreement.
6. Host Institutions: A questionnaire for each recipient of a small grant was submitted to the host institution. Directors of the institutions were asked to evaluate the recipient’s performance, whether administrative arrangements were satisfactory, and their interest level in future participation in the program. Twelve institutions were contacted who have hosted the 20 recipients. We have received 4 evaluations thus far.

Three of the four evaluations agreed that this was a positive experience (two strongly agreed), and the other one neither agreed nor disagreed.

APPENDIX

Daily Graphic, Tuesday, July 20, 2004

President emphasises knowledge in development process

Story: Daniel Nkrumah

THE President, Mr John Agyekum Kufuor, has stated that the country's strategy for future economic growth and development will hinge on improving on the knowledge base of the country.

He said quality in education would be provided with the delivery of enhanced social service.

These were contained in a speech read on his behalf at the opening of an international conference in Accra yesterday.

The three-day conference, organised by the Institute of Statistical, Social and Economic Research (ISSER) and the Cornell University, is being attended by 60 academicians from several countries.

One of the highlights of the conference will be the launch of the Economy of Ghana Network (EGN), which will serve as the focal point for people interested in good economic management to submit suggestions on the way forward.

President Kufuor said it was crucial that people deepened their knowledge in order to apply creativity and competitiveness in the production of goods and services and apply science and technology to production, fabrication and trade.

The President asserted that a well-educated citizenry was crucial to the adoption of sound democratic principles in social interaction locally and on the world stage.

"To achieve this objective, we must encourage behavioural change, not only for individuals but for the nation as a whole," he said.

The Chairman of the Council of State, Professor Alex Kwabong, who chaired the opening session, described the conference as very crucial, since it would provide the opportunity to "take stock of where we have come from, where we are and where we want to go".

Professor Ravi Kambur of the Cornell University observed that in almost 50 years of Ghana's independence, the essential objective for economic policy makers had not changed.

He said the thrust of the nation's economic policy was how to achieve a rapidly improving standard of living, particularly for the worst off.

He argued that globally, the economic environment had changed and posed challenges to such a policy.

A Senior Research Associate of the Overseas Development Institute, Professor Tony Killick, cautioned that maintaining the rate of progress of the recent past would leave Ghana classified as a low-income country for many years to come.

That, he said, would mean that almost all or most of the millennium development targets would be missed.

On his part, the Vice-Chancellor of the University of Ghana, Professor Kwadwo Asenso Okyere, said the oscillation of the performance of the economy was unhealthy and called on researchers to come up with recommendations for sustained growth.

He said the attainment of the completion point of the Heavily Indebted Poor Countries (HIPC) initiative should provide the platform for sustained development.

ATTACHMENT 2: Proposed Table of Contents for:

Poverty and Policy in the post-Apartheid South Africa

Chapter Number	Title	Author(s)	Contact email	Status/Comment
1	Poverty and Policy in post- <i>Apartheid</i> South Africa: An Overview	Haroon Borhat and Ravi Kanbur	hbhorat@commerce.uct.ac.za sk145@cornell.edu	Will be prepared once all the chapters are in.
2	Poverty and Inequality Shifts in SA: 1995-2000	Berk Ozler	bozler@worldbank.org	Paper received. Will have to get permission from WBER to reprint.
3	Measuring recent changes in South African inequality and poverty using 1996 and 2001 census data	Murray Leibbrandt, Laura Poswell, Pranushka Naidoo, Matthew Welch and Ingrid Woolard	mleibbra@commerce.uct.ac.za iwoolard@hsrc.ac.za moosthui@commerce.uct.ac.za lposwell@commerce.uct.ac.za	Received
4	Evolution of the labor market using the 1995 and 2002 LFS/OHS	Haroon Borhat and Morne Oosthuizen	hbhorat@commerce.uct.ac.za	Received.
5	Does City Structure Cause Unemployment: The Case of Cape Town	Harris Selod and Sandrine Rospabe	hselod@libertysurf.fr	Received.
6	Inflation and the Poor	Haroon Borhat and Morne Oosthuizen	hbhorat@commerce.uct.ac.za moosthui@commerce.uct.ac.za	Paper ready. Reserve Bank first want to release study, and then will give us permission to publish it.
7	Public Spending And The Poor Since The Transition To Democracy	Servaas van der Berg	svdb@akad.sun.ac.za	Received
8	The impact of tariff liberalization post-1994	Lawrence Edwards	ledwards@commerce.uct.ac.za	Paper ready. Forum 2004 paper, need to approach Lawrence.
9	Crime and Poverty	Berk Ozler	bozler@worldbank.org	Paper received. Will need permission from JDE to reprint.
10	Persistent Poverty, Asset Accumulation and Shocks in South Africa: Evidence from KwaZulu-Natal	Julian May	mayj@nu.ac.za	Received
11	From Chimera to Prospect: Towards and Understanding of the South African Growth Absence	Johannes Feddercke	jfedderk@commerce.uct.ac.za	Received
12	Internal Migration and Household Poverty Since 1994	Dori Posel and Daniela Casale	posel@nu.ac.za casaled@nu.ac.za	Received
13	Half measures: The ANC's unemployment and poverty reduction targets	Charles Meth	meth@nu.ac.za	Received

ATTACHMENT 3: Tentative Agenda for SAGA/EPRC research conference

Poverty in Uganda: Trends, Dimensions, and Policy

Date to be determined
The Economic Policy Research Centre

Agenda

8:30-9:00	Registration
9:00-9:30	<i>Welcome and Opening Remarks</i> John Okidi, Director, EPRC
9:30-11:00	<i>Prospects for Pro-Poor Growth in Uganda</i> John Okidi and Sarah Ssewanyana
	<i>Vulnerability and Poverty Dynamics in Uganda</i> Ibrahim Kasirye
11:00-11:30	<i>Coffee</i>
11:30-13:00	<i>Tax Incidence in Uganda: Changes in the 1990s</i> Margaret Banga
	<i>Gender Equity and the Impacts of Public Water Provision in Uganda</i> Peter Glick and Stephen D. Younger
13:00-14:00	<i>Lunch</i>
14:00-15:30	<i>Children's Health and Nutritional Status in Uganda</i> Godfrey Bahigwa and Stephen D. Younger
	<i>Infant Mortality in Uganda: Determinants, Trends, and the MDGs</i> Sarah Ssewanyana and Stephen D. Younger
15:30-16:00	<i>Coffee</i>
16:00-18:00	<i>Roundtable: Moving Forward on Poverty Research in Uganda</i> Simon Appleton, John Okidi, Margaret Kakande, Richard Ssewakiryanga Others?

ATTACHMENT 4: Five Proposals for Community Schools and Distance Learning

COUNTRY	TEAM MEMBERS and INSTITUTIONAL AFFILIATIONS	TOPICS	TYPE OF ACTIVITIES and BUDGET
COTE D'IVOIRE	-Dr. Touré Nahoua CIRES, Université de Cocody -Dr. Kouadio Béné Marcel CIRES, Université de Cocody -Dr. Sobia Camara Aïssata CIRES, Université de Cocody	Education et pauvreté en Côte d'Ivoire	-Research: Nov. 2004-Dece. 2005 -Dissemination Seminar, Oct. 2005 Both \$24,600
	-Dr. Kouassi Yao Directeur Centre d'Education à Distance -Dr. Ange Mahillet Centre Universitaire de Formation Professionnelle (CUFOP), Université de Cocody, -Prof. Mody Bakar Barry, CIRES, Université de Cocody	Utilisation des TICs dans le système éducatif en Côte d'ivoire: Possibilités pour le renforcement des capacités du corps enseignant	-Research: Nov. 2004-Oct. 2005 -National seminar: Oct.-Nov. 2005 Both \$20,000
SOUTH AFRICA	University of Venda for Science and Technology -Prof Agyapong Boateng Gyekye -Ms. Jane Mufamadi -Grace Oloo	A Study of Indigenous Knowledge Systems as a Tool for Sustainable Development in Limpopo Province of South Africa	-Research: \$24,000 -Workshop. \$22,884
	University of South Africa (UNISA) -Philip Higgs -Tumi Holomisa -Tony Mays -Vuysile Msila -Louis van Niekerk	Teacher education through open and distance learning within an African context	-Research: \$17, 900 -Conference: \$22,435
SENEGAL	-Mamadou Mara, Direction de l'Alphabétisation et de l'Education de Base (DAEB) Ministère de la Formation Professionnelle, de l'Alphabétisation et des Langues Nationales - Birahim Bouna Niang, Centre de Recherches Economiques Appliquées, Université Cheikh Anta DIOP -Marieme Lo, Graduate Student, Cornell University	Les écoles communautaires au Sénégal Contribution à la scolarisation universelle, l'éradication de la pauvreté, et la mise en place d'un programme national pour le développement durable	-Research: May2004-May 2005, \$34,883 -Conference in Dakar: June 2005, no budget yet

ATTACHMENT 5: SMALL GRANTS PROGRAM – DELIVERABLES (Intermediate)

<i>NAME</i>	<i>RESEARCH</i>	<i>SISERA INSTITUTE</i>	<i>TRIP REPORT</i>	<i>SEMINAR/ PRESENT- ATION</i>	<i>FINAL REPORT</i>	<i>OTHER/ PAPERS</i>
Bawalya, Samuel Univ. of Rhode Island	Forrest Policy and Administration in Zambia: Economic Instruments for Welfare and Revenue Recovery	INESOR/ Zambia	Y	Y		
Downs, Maxine Univ. 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		Y		
Eloundou, Parfait Cornell Univ.	Access to Schooling and Employment in Cameroon: New Inequalities and Opportunities	CEREG/ Cameroon	Y	Y	Y	Y
Gugerty, Mary Univ. of Washington	The impact of Commitment Mechanisms on Savings for the poor	ESRF/ Tanzania	Y	Y		
Hu, Chia-Hsin George Washington Univ.	A study of the relationship between empowerment and local institutions in two communities, Oledai and Agolithom in rural Uganda	EPRC/Uganda	Y	Y	Y	YX
Karlan, Dean M.I.T./Princeton Univ.	The impact of Microlending on Micro-business and households	NIEP/ South Africa	Y	Y	Y	X
Nyankori, James Clemson Univ.	Determinants of Access to Primary Education in Uganda and Implication for Strategic Intervention	EPRC/ Uganda	Y	Y	Y	Y
Orgle, Jacqueline Cornell Univ.	Risk Management and Social Insurance – A closer look at credit transactions and social networks in Ghana	ISSER/ Ghana				
Yeboah, Godfred Univ. of Kentucky	Challenges Facing Potential Investors In the Pineapple Industry in Ghana	ISSER/ Ghana	Y	Y	Y	

<i>NAME</i>	<i>RESEARCH</i>	<i>SISERA INSTITUTE</i>	<i>TRIP REPORT</i>	<i>SEMINAR/ PRESENT- ATION</i>	<i>FINAL REPORT</i>	<i>OTHER/ PAPERS</i>
Armah, Paul Arkansas State Univ.	Ensuring Food Security in Ghana – The Role of Maize Storage Systems	ISSER/ Ghana				
Gandonou, Jean Marc Univ. of Kentucky	An Economic Evaluation of the Profitability and Adaptability of Precision Agriculture for Cotton Production in Benin	CORCEDO/ Benin	Y	Y		
Kabahenda, Margaret Univ. Of Georgia	Evaluating the Nutritional Status of Ugandan Children	EPRC/Uganda				
Kaliba, Aloyce Univ. of Arkansas	Potential Impact of AGOA on Poverty Alleviation: The case of Tanzania	ESRF/ Tanzania	Y	Y		
Lucas, Linda Eckerd College	The Work of Women in Uganda: Contributions of the Macroeconomy	EPRC/Uganda				
Mude, Andrew Cornell Univ.	A Cross Sectoral Comparative Study of Institutional Arrangement: The Case of the Small holder Tea and Coffee Sub-sector in Kenya	IPAR/ Kenya	Y	Y		
Mulaa, John Univ. of Maryland	Social Capital and Education: The Case of Busia, Western Kenya	IPAR/ Kenya	Y	Y		
Mutambatsere, Emelly Cornell Univ.	Regional Integration of Cereals Markets in Southern Africa: A Case of Wheat, Rice and Maize Trade	BIDPA/ Botswana	Y	Y		
Nwokolo, Benedict Grambling Univ.	The Role of Investment Strategies and E-Commerce in Poorly Accessible Regions of Nigeria as Tools for Economic Uplift	AIAE/ Nigeria	Y	Y		
Sarr, Leopold Cornell Univ.	The Determinants of Schooling Transitions in Senegal	CREA/ Senegal	Y	Y		
Werema, Gilbert Univ. of Georgia	Regional Differences and Food Consumption Behavior	ESRF/ Tanzania				