

Annual Work Plan Fiscal Year 2009-2010

I. Research Project Title: Understanding the impact of idiosyncratic shocks on farm productivity and household asset building and protection in Ghana, Ethiopia and Bangladesh

II. Collaborating Institutions and Researchers

Cornell University (Ithaca, NY): Dr. Chris Barrett (principal investigator), Dr. Felix Naschold, Mr. Thomas Walker, Mr. Asare Twum-Barima

Addis Ababa University, Department of Economics (Addis Ababa, Ethiopia): Dr. Tassew Woldehanna

Data Analysis and Technical Assistance, Ltd. (Dhaka, Bangladesh): Mr. Zahidul Hassan
Institute of Statistical, Social and Economic Research, University of Ghana (Accra, Ghana): Dr. Ernest Aryeetey (co-principal investigator), Dr. Robert Osei

International Food Policy Research Institute (Washington, DC): Dr. Agnes Quisumbing (co-principal investigator), Dr. Akhter Ahmed, Dr. John Hoddinott

III. Dates covered by work plan

This work plan covers the period from October 1, 2009 to September 30, 2010.

IV. Support

Core AMA CRSP with matching funds from Cornell University (approximately \$50,000) and leveraged supplemental funding to IFPRI from CAPRI (\$62,500).

The National Science Foundation has provided Cornell approximately \$30,000 in additional funding to conduct a randomized experiment in Ghana among our survey households.

IFPRI has obtained additional funding (approximately \$500,000) from the UK Economic and Social Research Council (ESRC) to analyze the long-term impact of anti-poverty interventions, using the same Bangladeshi data set. IFPRI has also received \$15,000 from FAO to write a paper on men's and women's asset trajectories as a background paper for the State of Food and Agriculture 2010.

IFPRI has just completed another round of the Ethiopian Rural Household Survey, funded by a donor consortium in the amount of \$200,000. IFPRI received a grant from the Swiss Development Corporation to explore policy responses to the food price crisis, about \$70,000 of which is being used to fund examination of gendered impacts of the crisis in Ethiopia. IFPRI has also received core funds from the risk management strategic initiative (\$118,000), which will be used to fund additional analysis in Ethiopia.

V. Program Overview

Idiosyncratic risk appears to dominate covariate risk in rural incomes in Africa and Asia, indicating the potential contribution of improved local risk management of idiosyncratic risk to household asset accumulation, productivity growth and poverty reduction in developing countries. Understanding better how households differentially experience

idiosyncratic risk and what mediating structures minimize the adverse dynamic effects of such risk is therefore of considerable importance for sustaining broad based economic growth and designing effective poverty reduction strategies, not just in the three project countries, but more broadly, throughout the developing world.

The project focuses on the impact of idiosyncratic risk on the dynamics of household well-being, asset accumulation and productivity. Ex ante, who trades off expected asset and productivity growth for reduced exposure to idiosyncratic risk? Ex post, what determines the impact of idiosyncratic shocks (e.g., due to illness, theft) on households? What formal and informal institutions mediate those experiences? The research aims to clarify what existing mechanisms help households through episodes of adverse idiosyncratic shocks, to what extent different mechanisms (self-insurance, social networks, formal programs through groups or contractual and quasi-contractual arrangements), individually and cumulatively, are able to insure households against risk, what gaps in coverage exist, and how different interventions affect insurance against idiosyncratic risk and its dynamic effects on rural households' asset holdings, productivity and well-being.

In contrast to most existing empirical work, this holistic approach to studying household insurance mechanisms can provide information to policymakers about gaps in insurance coverage, about who is truly vulnerable, and what factors help mend the holes in the social safety net. We aim to establish whether some households are systematically better insured by some mechanisms than are other households, and whether asset stocks and insurance coverage co-evolve over time, reinforcing each other.

These are especially topical issues in the three project countries. In Bangladesh, long-term poverty is often caused by idiosyncratic shocks in the form of illness and injury. In Ethiopia, illness ranks as the greatest risk to long-term household welfare. Serious undernutrition of adults may trap a household in poverty as low nutritional status is highly correlated with subsequent low growth in consumption. In Ghana, idiosyncratic risk associated with illness, injury, theft and farm shocks are widespread and key determinants of current incomes. Preliminary findings suggest that socially excluded groups, such as new migrants and young farmers who don't belong to major clans, are least able to cope with such risks because they have minimal social networks to manage idiosyncratic risk through interhousehold transfers. Shocks appear to have persistent effects on their asset dynamics but not on those of better-connected and better-off neighbors. In each country there are different primary mechanisms which can help households recover from individual shocks: loans from NGOs in Bangladesh, burial societies in Ethiopia, and funeral societies and farming and church-related organizations in Ghana. We aim to enrich understanding of the role such institutions play and the dynamic gains from these idiosyncratic risk management mechanisms.

The project directly addresses AMA CRSP research priorities 1 ("managing risk and vulnerability to enhance asset protection and accumulation") and 3 ("asset building for growth and poverty reduction") given our project's emphasis on how risk mediates asset accumulation. It will also contribute directly to knowledge supporting USAID's strategic objectives in each project country, in particular those related to expanded economic opportunities created through equitable economic growth, and a healthier and more productive population. We also anticipate significant degree and non-degree training of research professionals and practitioner partners over the life of the project.

VI. Annual Work Plan

A. Integration of Activities with Long-Term Project Plan

The 2009-10 work plan revolves around four types of activities - data collection, data analysis, stakeholder consultation and training – that are each instrumental to the longer term objectives of the project. The four activity types are summarized by fiscal quarter in the table below.

Data collection:

Bangladesh: Data collection completed in the 2007-2008 fiscal year.

Ethiopia: Data collection was completed late in the 2008-2009 fiscal year. Data processing will be completed by the end of the second quarter of the 2009-10 year.

Ghana: Data collection commenced in January 2009, focusing on generating the fourth round of a panel data set initiated by Christopher Udry and Markus Goldstein (rounds 1 and 2) and Jacqueline Vanderpuye-Orgle (round 3). Walker is overseeing the data collection with Ernest Aryeetey and Robert Osei at ISSER. The program is on schedule and will conclude in by the end of calendar year 2009.

Data analysis:

Bangladesh: Data analysis for Bangladesh in 2009-2010 will focus on differences in men's and women's asset trajectories in response to shocks. This was not part of the original proposal, but is being funded by FAO.

Ethiopia: We will undertake work on two papers. The first will assess how the existence of networks attenuated the impact of idiosyncratic shocks on the evolution of household welfare. The second will assess the long term impacts of idiosyncratic shocks on poverty and asset accumulation.

Ghana: We will complete the analysis of poverty and asset dynamics in the existing three waves of the data in the first quarter of the 2009-2010 fiscal year. We will begin preliminary analysis of new, fourth-round data during the second quarter. In the second half of the year we will start our econometric analysis of full panel data, including analyzing poverty and asset dynamics under idiosyncratic risk; and the roles of risk, social networks and farmers' input and crop choices in managing risk and its effects on welfare and productivity dynamics.

B. Specific Activities

2009-10 Project Work Plan by Fiscal Quarter

	First Quarter (Oct 1 – Dec 31, 2009)	Second Quarter (Jan 1 – March 31, 2010)	Third Quarter (April 1 – June 30, 2010)	Fourth Quarter (July 1 – September 30, 2010)
Data Collection	<p>Bangladesh: Survey completed in 2007-2008 fiscal year</p> <p>Ethiopia: Survey completed in 2008-2009 fiscal year. Data processing to be undertaken.</p> <p>Ghana: Data collection and processing.</p>	<p>Ethiopia: Data processing to be completed</p> <p>Ghana: Data processing to be completed.</p>		
Data Analysis	<p>Bangladesh: analysis of men’s and women’s asset trajectories (co-funded by IFPRI and FAO)</p> <p>Ethiopia: Assess the long term impacts of idiosyncratic shocks on poverty and asset accumulation. Assess the attenuating effect of networks on the impact of idiosyncratic shocks on household welfare.</p> <p>Ghana: analysis of poverty and asset dynamics in existing three waves</p>	<p>Bangladesh: Completion and revision of analysis of men’s and women’s asset trajectories</p> <p>Ethiopia: Assess the long term impacts of idiosyncratic shocks on poverty and asset accumulation. Assess the attenuating effect of networks on the impact of idiosyncratic shocks on household welfare.</p> <p>Ghana: Preliminary analysis of new data; analysis of poverty and asset dynamics in existing three waves.</p>	<p>Ethiopia: Assess the long term impacts of idiosyncratic shocks on poverty and asset accumulation. Assess the attenuating effect of networks on the impact of idiosyncratic shocks on household welfare.</p> <p>Ghana: Econometric analysis of new data: analyze poverty and asset dynamics; study risk, social networks and farming behavior.</p>	<p>Ethiopia: Assess the long term impacts of idiosyncratic shocks on poverty and asset accumulation. Assess the attenuating effect of networks on the impact of idiosyncratic shocks on household welfare.</p> <p>Ghana: Econometric analysis of collected data: analyze poverty and asset dynamics; study risk, social networks and farming behavior.</p>

	First Quarter (Oct 1 – Dec 31, 2009)	Second Quarter (Jan 1 – March 31, 2010)	Third Quarter (April 1 – June 30, 2010)	Fourth Quarter (July 1 – September 30, 2010)
Outreach	<p>Bangladesh: Workshops and media outreach presenting results of impact of collective action on asset building (funded by CAPRI and DfID-ESRC) in Dhaka</p> <p>Ethiopia: Workshop presentation of preliminary results of attenuating effect of networks on the impact of idiosyncratic shocks on household welfare.</p> <p>Ghana: village meetings at end of each round.</p>			Ghana: possible national and survey community stakeholders meetings to brief back study results.
Training	<p>Ethiopia: Completion of capacity strengthening and training activities</p> <p>Cornell: Ph.D. (Walker) Post-Doctoral (Naschold) Masters (Twum-Barima)</p>	<p>Cornell: Ph.D. (Walker) Post-Doctoral (Naschold) Masters (Twum-Barima)</p>	<p>Cornell: Ph.D. (Walker) Post-Doctoral (Naschold) Masters (Twum-Barima)</p>	<p>Cornell: Ph.D. (Walker) Post-Doctoral (Naschold) Masters (Twum-Barima)</p>

Outreach:

We continue to use our existing, extensive contacts with communities, different levels of government, and donors to stimulate discussion and bring attention to the goals, findings and possible range of policy lessons to be learned from this research project.

Bangladesh: All dissemination activities in Bangladesh and travel to Bangladesh in 2009-2010 will be funded by CAPRI and ESRC (Economic and Social Research Council, UK). In October 2010, IFPRI and CAPRI will jointly organize a series of dissemination workshops on gender and collective action, the IFPRI component of which will focus on the role of collective action in building men's and women's assets. These dissemination workshops will include a community dissemination workshop at one of the project's field sites, a workshop with NGOs, and a workshop with policymakers. IFPRI, DATA, and CPRC will also be holding a press briefing to disseminate findings from the results of the long-term impact of anti-poverty interventions analysis. (Preliminary results will be discussed with stakeholders in Bangladesh during a workshop in August).

Ethiopia: In October 2009, we will participate in a workshop where we will present preliminary results on the papers described above.

Ghana: In each of the survey villages, meetings are being held at the end of each round to inform villagers about the survey's progress and thank them for their participation. At the end of the year, the researchers will present a simple report to each village summarizing its economic position and key statistics. We will hold national and community-level stakeholder meetings once the data collected in 2009 have been processed and analyzed. We hope to do this before the end of the 2009-10 year, but it may lapse into the first quarter of 2010-11.

Training:

Bangladesh: No additional training activities planned.

Ethiopia: No additional training activities planned.

Ghana: Walker is currently in Ghana overseeing the field data collection, and will remain there until the end of calendar year 2009. In early 2010 he will return to Cornell to finalize the dataset and conduct analysis. Masters student Asare Twum-Barima (from Ghana) will undergo degree training at Cornell during the academic year 2009-10 and will work with Walker in early 2010 on data cleaning and analysis. Both Walker and Twum-Barima are writing theses based on data collected by this project. Post-doctoral researcher Felix Naschold will develop and improve quantitative methods to model the interaction between idiosyncratic shocks and household welfare dynamics, analyze household welfare dynamics in Ghana and coordinate efforts between all involved research teams. All Cornell students and the post-doctoral researcher will work under the supervision of Chris Barrett.

C. Links to existing projects

This project builds on the recently completed USAID BASIS CRSP project on “Conceptual and Statistical Foundations for the Estimation of Poverty Traps,” which funded work developing concepts and methods being employed in this new effort.

In Bangladesh, the project builds on an ongoing longitudinal study funded by the Chronic Poverty Research Centre, HarvestPlus, the University of Waikato, and the Systemwide Initiative on Collective Action and Property Rights (CAPRI) of the CGIAR. We have obtained additional funding from the Department for International Development-Economic and Social Research Council for analysis of the long-term impact of anti-poverty interventions, based on the same panel data set. We have also obtained funding from FAO to examine gender-specific asset trajectories.

In Ghana the project builds on the USAID SAGA cooperative agreement, which funded closely related policy research and outreach in Ghana and helped ISSER found the highly successful Economy of Ghana Network (<http://www.egnghana.org/>).

D. Relation of research to key findings and indicators used

Key indicators of impact in this project include:

- (1) host country personnel trained, both through degree, post-degree and non-degree programs,
- (2) research publications and associated citations,
- (3) policy briefs written and distributed, for which we can also document numbers and sources of requests for copies,
- (4) documented contact with policymakers, donors, and communities in outreach workshops, and coverage by local media,
- (5) attestation by such stakeholders as to the value of the empirical analysis and capacity building activities undertaken by the project.

E. Anticipated outputs

In this third full project year, we anticipate several outputs, including:

- a) Working papers for Bangladesh on
 - gender-differentiated asset trajectories
 - the impact of programs disseminated through NGOs in building assets
- b) Working papers for Ethiopia on
 - how the existence of networks attenuated the impact of idiosyncratic shocks on the evolution of household welfare
 - the long-term impacts of idiosyncratic shocks on poverty and asset accumulation
- c) Working papers for Ghana on
 - the impact of randomized interventions on poverty, transfers and intrahousehold decision making
 - the determinants of public goods contributions in Ghanaian villages
 - asset and welfare dynamics and idiosyncratic shocks

- household farm input allocations in response to ex ante idiosyncratic risk and ex post shocks
- d) Trip reports from international travelers under the project

Throughout the year the project web site will be updated and new project outputs uploaded.

F. Problems and Issues

No further issues anticipated.

VII. Budget

Modest changes to budget reflecting reallocation of resources between training and travel lines. No change in aggregate costs.