

**Broadening Access and Strengthening  
Input Market Systems  
(BASIS)  
Collaborative Research Support Program  
(CRSP)**

**Phase II: Proposal  
(Revised)**

Submitted to

**United States Agency for International Development (USAID)**

Submitted by

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**April 2001**

## **READERS' GUIDE TO THIS PROPOSAL**

This proposal is organized into three parts. “Part One: Program Overview” is a self-contained summary of the overall BASIS CRSP program, covering managerial issues, research agenda and projects, and the policy outreach and communication strategy. “Part Two: Principal Research Projects” provides for the interested reader additional detail on each of the five principal research projects, including intellectual background, fieldwork methodology, and local collaboration and policy impact plans. “Part Three: Operational Guide” details the proposed management plan, procedures, and budget.

Annexes A and B add important details on such items as BASIS CRSP Phase I achievements, impacts, and lessons learned. Annex C concerns the external evaluations of Phase I. Annex D contains the curriculum vitae of key Phase II participants. Annex E shows letters of institutional support. Annex F contains Phase I add-ons, outputs, training, and financial reports.

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## Acronyms

<b>BASIS</b>	Broadening Access and Strengthening Input Market Systems
<b>BOD</b>	Board of Directors
<b>CASE</b>	Center for Social and Economic Research, the Kyrgyz Republic
<b>CGIAR</b>	Consultative Group on International Agricultural Research
<b>CRSP</b>	Collaborative Research Support Program
<b>DLA</b>	Department of Land Affairs, South Africa
<b>EEP</b>	External Evaluation Panel
<b>IDR</b>	Institute of Development Research
<b>IGAD</b>	Inter-Governmental Authority on Development
<b>IRIS</b>	Institutional Reform and the Informal Sector, University of Maryland
<b>LRCF</b>	Land Reform Credit Facility
<b>ME</b>	Management Entity
<b>MOU</b>	Memorandum of understanding
<b>NGO</b>	non-governmental organization
<b>OSSREA</b>	Organization for Social Science Research in Eastern and Southern Africa
<b>PI</b>	Principal investigator
<b>TC</b>	Technical Committee
<b>USAID</b>	United States Agency for International Development
<b>USDA</b>	United States Department of Agriculture

**Part One:**  
**PROGRAM OVERVIEW**

# 1. HELPING ACHIEVE BROADLY BASED AND SUSTAINABLE GROWTH: BASIS CRSP GOAL AND VISION

## 1.1 GOAL AND VISION

The *goal* of the Broadening Access and Strengthening Input Market Systems Collaborative Research Support Program (BASIS CRSP) is to improve the quality of life for the rural poor in the developing world through research that leads to innovative and informed policy that will facilitate broadly based and sustainable economic growth. The *vision* of BASIS CRSP is that broadly based and sustainable growth of the rural economy requires affirmative efforts to rectify market imperfections and make markets work for all. Missing and imperfect rural factor markets underlie food insecurity, rural poverty, and unsustainable growth. These missing or imperfect markets constrain the ability of rural households to access, accumulate, and effectively utilize the resources needed for their livelihood.

Chronic hunger and malnutrition are problems faced by many people around the world. Despite adequate world food supplies, ever-greater numbers of people lack the income to purchase enough food for themselves and their families. In many instances, poverty and low asset levels result from unequal access to critical factors of production such as land, water, labor, and finance, as well as to services, information, and market opportunities. As a result, the poor often have no option other than to pursue unproductive asset accumulation strategies, storing their meager savings in forms that yield low or negative rates of return and that constrain productivity and responsiveness to income-generating opportunities. Asset levels and exchanges through factor markets can play an important role in household and individual strategies to cope with drought, economic downturns, and political uncertainty, or to enable responses to economic opportunities that emerge. For many poor-resource households, non-farm employment opportunities are crucial as they provide both a survival strategy and an accumulation mechanism for channeling investments into agriculture. Since 1996, BASIS CRSP has been laying the foundation for understanding the linkages among resource access/allocation and the ways that households and individuals manage assets to cope with uncertainty or to respond to opportunity.

Where markets are missing or incomplete or where they exclude particular groups from productive factors or instruments for risk management, then non-market or “informal” institutions often are largely responsible for regulating resource allocation and management (land rentals, sharecropping, rotating credit and savings associations, family or kinship-based allocation). Yet these informal institutions may also constrain innovation, block growth, and foster social inequality. Formal institutions (property rights definition and enforcement, contract design and enforcement, appropriate legal and regulatory frameworks) often can lead to more efficient and equitable performance of land, water, labor, and financial market and non-market allocations; however, they too may produce negative outcomes where such institutions are subject to ineffective or corrupt bureaucracies. Informal and formal institutions critically influence the processes through which households and individuals gain access to, exercise rights over, and use factors of production, and BASIS CRSP seeks to better understand the



consequences of market liberalization and other policy reforms in relation to the workings of informal and formal institutional infrastructure, and to identify desirable patterns of institutional innovation.

Linkages among gender differentiation, food security, and resource use are complex and location-specific. Women may face more constrained access to land or financial services but intra-household or inter-household income pooling might offset these differences. Also, restricted access to one market according to gender may distort resource allocation in other markets; e.g., restricted access to land or wage employment may push women into less remunerative petty trading. By paying close attention to intra-household allocation and broader gendered patterns, BASIS can improve the ability to predict outcomes of gender-targeted reforms that seek to improve the welfare of women and other members of the household.

Equal and efficient access to factor markets also can assist in protecting the environment by giving individuals a stake in maintaining the future productivity of their resources. Low-productivity agriculture forces extension of crop cultivation, reduction of fallow in the farming system, encroachment onto fragile lands, and the downward spiral in agricultural productivity. In some cases, socially disadvantaged populations disenfranchised from resources and economic opportunity are forced to overuse the natural resource bases to sustain livelihoods. In other cases, unequal rights and/or undemocratic regimes and corrupt bureaucracies lead to over-exploitation of resources by commercial companies and elites. BASIS CRSP assists policymakers in finding solutions to environmental degradation and resource scarcity through redistributive programs and policy reforms aimed at improving the efficiency and sustainability of scarce land, water, and financial capital resources.

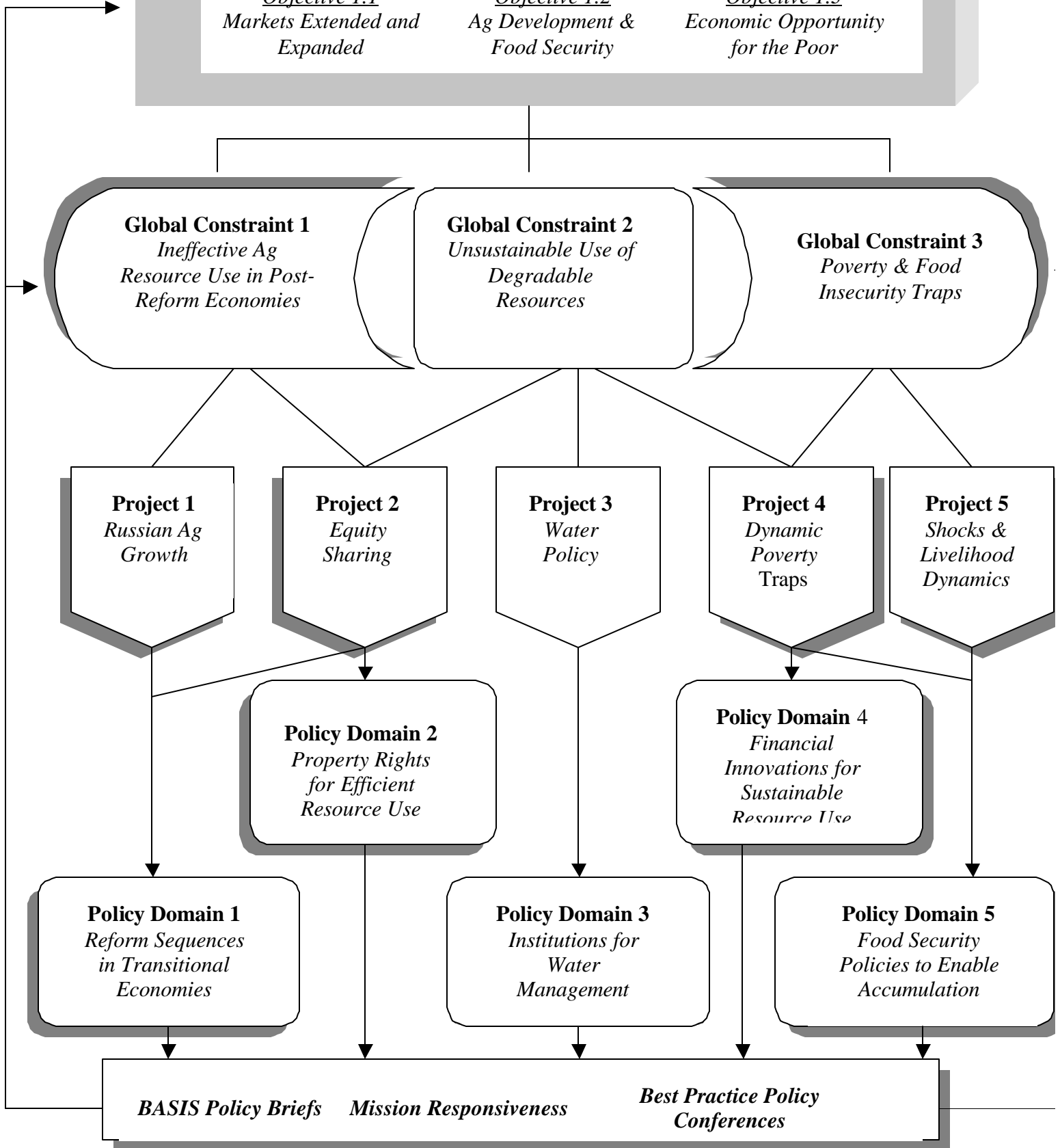
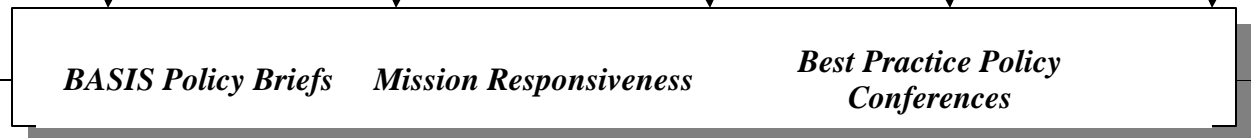
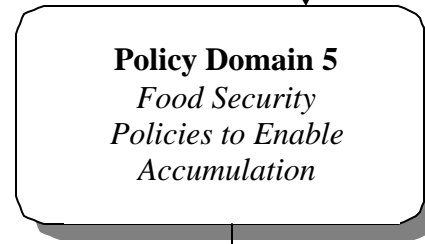
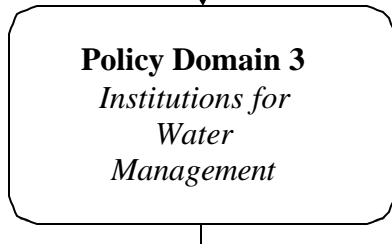
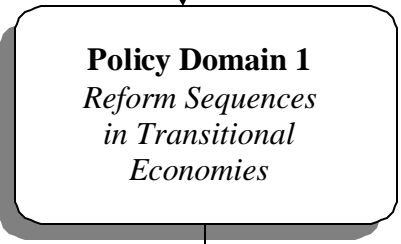
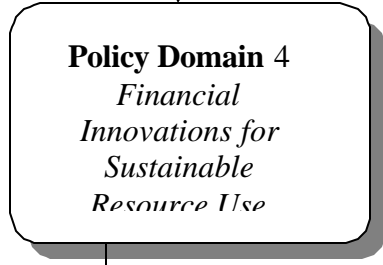
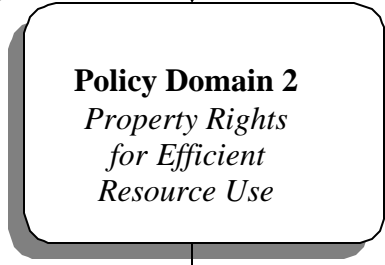
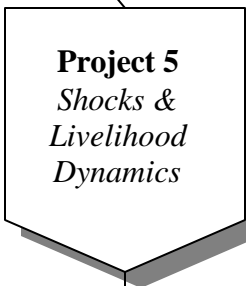
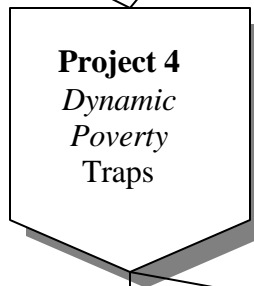
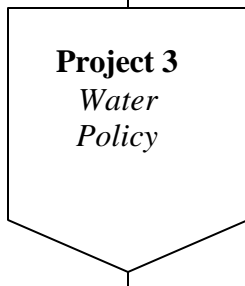
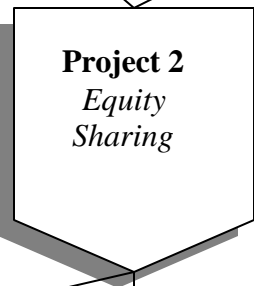
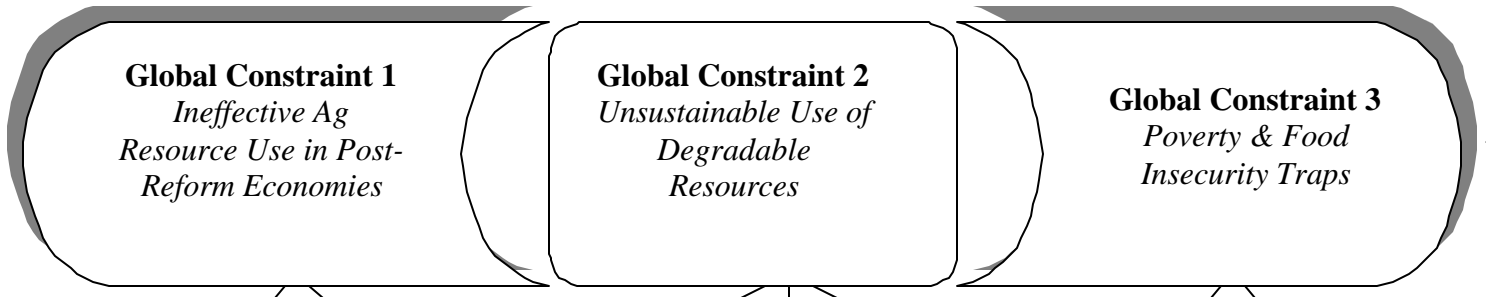
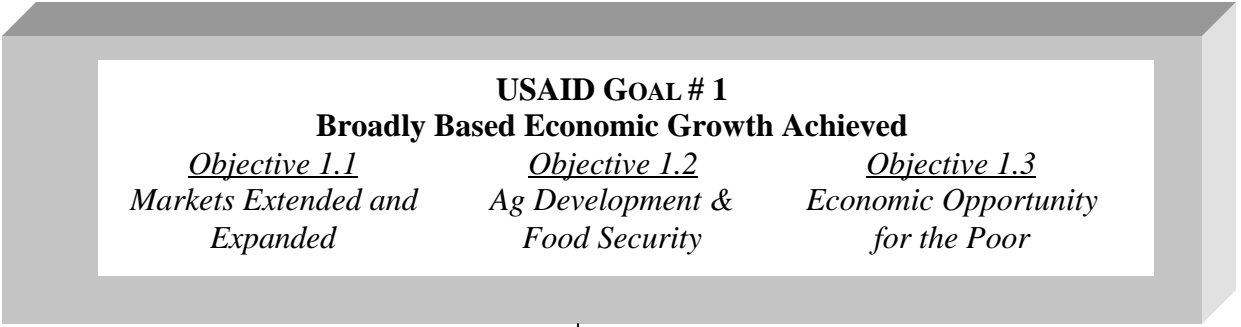
In short, the BASIS CRSP goal is a rural economy where economic growth and transformation are broadly based and sustainable. The BASIS CRSP vision is that this goal can be realized through a well-designed economic policy that is equitable and makes markets work for all.

## **1.2 HELPING USAID ATTAIN ITS STRATEGIC OBJECTIVES**

*Achieving Broad Based Growth* is AID's Goal 1 ([www.usaid.gov](http://www.usaid.gov)). USAID has targeted three objectives that must be achieved to attain this goal:

1. *Critical Private Markets Extended and Expanded*
2. *Agricultural Development and Food Security*
3. *Improved Equity and Economic Opportunity for the Poor*

The chart on the next table summarizes how BASIS II will assist USAID in the achievement of these objectives. Subsequent sections of this proposal detail each component of the chart.



As shown in the chart, a set of global constraints *rooted in imperfect factor markets* block the achievement of these objectives. To generate the knowledge needed to resolve these constraints BASIS II will carry out five principal research projects (Section 2 below describes these constraints and the way the specific research projects will help relax them). Using the knowledge generated, each of these projects will speak to several policy domains. A variety of communication devices will be used to disseminate the policy lessons learned, including *BASIS Policy Briefs, Lessons Learned Policy Conferences*, and direct contact with USAID missions and other relevant policy makers. As explained in Section 3, this array of communication devices has been designed to assure that BASIS has an effective and credible voice with each of the audiences that shapes either the overall direction, design or implementation of development policies needed to attain the USAID broad based growth objectives.

### **1.3 HISTORY AND ACHIEVEMENTS OF BASIS CRSP**

For many years, the development community has understood the importance of improved access to land, water, labor, and financial markets for broader economic growth, resource conservation, and food availability. In 1996, the United States Agency for International Development (USAID) launched a bid process to establish BASIS CRSP, which would examine the interactions and inter-relationships of land, water, labor, and financial factor markets and the impacts of policy or policy reform in helping improve access to and efficiency of factor markets in multiple regions around the world. The new project was to combine the strengths of the following three former Cooperative Agreements with USAID into one project:

- ACCESS II: Access to land, water, and other natural resources, led by the Land Tenure Center, University of Wisconsin–Madison;
- FIRM: Financial Resources Management project, led by the Rural Finance Program, the Ohio State University;
- SARSA II: Systems Approaches to Regional income and Sustainable resource Assistance, led by the Institute of Development Anthropology.

BASIS CRSP was competitively awarded to the University of Wisconsin–Madison in September 1996, with the Land Tenure Center serving as the Management Entity. In the first year of operation, researchers undertook reconnaissance missions to identify regional needs, priorities, and strategies, and to establish potential research sites, themes, program goals, strategies, and regional management structures. From the beginning, collaboration has been important at all levels, from the design of projects to their implementation and analysis of findings.

#### **1.3.1 Key research findings**

BASIS Phase I began with four research priorities:

- targeting and sequencing market liberalization and development;
- market organization and support under privatization and agrarian reform;
- natural resource management, environmental protection, and common property;
- water rights and social conflict.

Initially, research projects were established in Central America, the Horn of Africa, and Southern Africa. Each of these regional projects was initiated by a workshop that brought together regional researchers and organizations to identify pressing local policy problems related to the research priorities above. From these workshops grew a series of research projects. When funding was added to BASIS CRSP, more projects were initiated and new researchers were brought in through a competitive grants program and other mechanisms. The regional scope also expanded as new projects emerged in Central Asia and Russia. (Annex A shows Phase I projects by region.)

The following key research findings (described in detail in Annex A) emerged from the comprehensive research program of Phase I and helped initiate policy dialogue in several countries. Phase I findings also helped frame global research priorities for Phase II.

- Missing or imperfect factor markets and tenure insecurity contribute to poverty and constrain the ability of the poor to gain access to land, labor, and financial capital;
- Innovations in the way markets are organized can help broaden market access for the poor who are disenfranchised from markets by tenure insecurity, high transactions costs, and market segmentation;
- Diversifying farm earnings with off-farm income is one key to unlocking sustainable rural livelihoods;
- Accumulation of physical, social, and human capital is another key to securing rural livelihoods and protecting the poor against climatic and economic shocks;
- Economies undergoing privatization are constrained by organizational inefficiencies in the design of emerging farm enterprises as well as by problems of missing factor markets;
- Achieving sustainable use of water resources emerged as a major policy issue in all regions, but the solutions—market or non-market—remain under debate or are untested;
- High transactions costs continue to drive a wedge between the integration of factor and product markets, resulting in low market integration;
- Divisions must be bridged between resource, agriculture, health, and nutrition specialists so that improved policies can be implemented and coherent development responses can be initiated.

### **1.3.2 Global impacts**

Phase I research findings helped in understanding complex realities and created a sharper picture of the constraints to broadly based and sustainable growth. The following are examples of achievements in Phase I.

***Economic Planning: El Salvador***—through discussions with El Salvador’s Minister of Economy, BASIS researchers outlined ways to help alleviate rural poverty and contributed to the *Plan de Nación*, a major pluralistic exercise to build a national strategy. According to Mary Ott, former chief of the Economic Growth Office at USAID/El Salvador, BASIS research on dynamics of poverty and the biennial national survey provides important information for the mission’s 5-year economic plan.

**Financial Initiatives: El Salvador**—through research on financial market segmentation, BASIS offered strategies to help broaden access by the rural poor to microfinance. In August 2000, El Salvador's President unveiled a project to reorganize the *Banco de Fomento Agropecuario* to provide credit to rural farmers and support new lending technologies.

**Outreach: El Salvador**—presented findings to more than 300 policymakers, researchers, and practitioners at *The Influence of Labor, Financial, and Land Markets on Rural Poverty*, a 1999 seminar in San Salvador. Discussion confirmed how rigid and shallow land markets contributed to agricultural stagnation and the absence of a vigorous response to trade liberalization.

**Capacity Building and Policy Engagement: Russia**—engaging Russian and US researchers and policymakers in dialogue about Russia's agricultural policy and market reform at conferences in Russia and at the University of Maryland, 1999-2001. The USAID mission supports these policy efforts, and the United States Department of Agriculture (USDA) includes BASIS in the agenda of the Russian/US bi-national commission.

**Facilitate Market Development: Eastern Europe and Former Soviet Union**—enabled 11 representatives from 7 transition countries to work with US scientists and donor representatives on generating national and regional statistics on the degree to which marketable titles have been distributed to private owners and legally registered.

**Farm Competitiveness: Kyrgyz Republic**—monitored and evaluated net farm returns by farm type during land reform. Kyrgyz officials use BASIS results for public education, training, and policy.

**Applied Research: Horn of Africa**—helping promote interregional trade and economic stability by informing African, US, and international policymakers about positive effects crossborder trade of livestock and grain has on food security. In November 2000, it was announced that a common certification system for animal health soon will allow free movement of livestock across Ethiopian, Kenyan, and Somalian borders.

**Synthesis and Training: Horn of Africa**—organized an international symposium in Ethiopia of 57 participants from 6 African countries and the United States to enhance policy, health, and nutrition linkages among agricultural policy and nutrition scientists and practitioners. Karl Schwartz, USAID Ethiopia Program Officer, said the symposium helped integrate nutrition into the mission's country strategy.

**Institutional Reforms: Tanzania**—documented inequalities in access to water and offered policy options that reflect the need for increased stakeholder participation in local and regional policy formulation, particularly by women.

**Land Distribution Strategy: Namibia**—collected and assembled data for use in a geographical information system that allows Government to see ownership patterns so that land can be more efficiently acquired for distribution purposes.

**Finance Reform: South Africa**—led the way in exploring how to help historically disadvantaged farmers and farm workers access private sector loans to finance land and equity-sharing projects. BASIS researchers helped in developing the 1999 Land Reform Credit Facility, which draws private sector finance and human capital into commercially viable land reform projects. The loan target of R15 million in the first year was reached after just 8 months.

**Land Reform: Zimbabwe**—participated in a 1998 multi-donor effort to help Zimbabwe design its land reform and resettlement program, aimed at broadening access by the poor to land and water resources.

**Poverty Strategy: South Africa**—sponsored research on poverty in South Africa and reported policy recommendations to the Deputy President and nine cabinet ministers.

**Engaging researchers, policymakers, and non-governmental organizations (NGOs) in dialogue through workshops and conferences**—conducted 11 key policy workshops during 1999-2001, including:

- *Community Participation in Irrigation*, 10-11 August 2000, Dar es Salam, Tanzania. Engaged 15 villagers, 15 staff from the Irrigation Section, 15 officials from the Ministry of Water, Ministry of Community Development, Cooperative Department, and local government offices, and 15 representatives from NGOs, training institutions and donors.
- *The Influence of Labor, Financial, and Land Markets on Rural Poverty*, 12 August 1999, San Salvador, El Salvador. Presented research findings to more than 300 policymakers, researchers and practitioners.
- *Agricultural Policy, Resource Access and Human Nutrition*, 3-5 November 1999, Addis Ababa, Ethiopia. Brought together more than 50 participants from teaching and research institutions, regional networks, government, NGOs and donor agencies in eastern and southern Africa.
- *Land Privatization Experiences in Eastern Europe and Russia*, 21-23 August 2000, Minsk, Russia. Enabled 11 representatives from 7 transitional countries to work with US scientists and donor representatives on generating statistics on the degree to which marketable titles have been distributed to private owners and legally registered.
- Two country workshops, 23 March 2000 and 24 July 2000, Bamako, Mali. Attended by 38 and 35 individuals respectively from NGOs, international organizations, government agencies, and others. Outlined research results on the contributions of non-agricultural and secondary agricultural activities to the economic well-being of a rural agricultural zone in Western Mali.

**Training**—supported 32 students during the period 1997-2001, 10 female students and 22 male students. Twenty-two students were from the host-countries in which BASIS works, with 15 working toward a Ph.D., 10 toward a Master's degree, 4 toward a Bachelor's degree, and 2 were post-docs. During this period, 15 students completed their degrees.

**Collaborative Partnerships**—established formal partnerships with 28 institutions (14 US institutions and 14 international institutions). More than 20 other institutions have been involved in BASIS research and training programs.

## **1.4 PHASE II DESIGN AND MANAGEMENT**

In order to build most effectively upon Phase I, BASIS Phase II will be structured around research projects administered under a decentralized management model. These projects emerged from a rigorous and competitive process that selected the best proposals submitted in response to a call for work on the priority themes that had emerged from Phase I research. The

Phase II structure gives the principal investigators (PIs) from these projects (along with the BASIS Director and USAID representative) joint ownership over *BASIS Policy Conferences*—a new series of conferences that will be a locus of synthetic activity under Phase II as it will cut across regions and specific projects to draw out the global policy implications of BASIS research. While Phase II will be more decentralized managerially, it will be more centralized and proactive in creating and communicating policy synthesis.

These new program design elements emerged from an effort to streamline BASIS management consistent with core funding realities while enhancing the capacity to deliver and synthesize high-quality, policy-relevant research. The design of this new structure began in November 1999, with the “Strategy for Program Renewal,” which outlined the process and timeline for renewal activities. Further steps to implement Phase II included:

- Vision Statement and Global Priorities E-Conference, December 1999
- Day of Reflection with USAID, January 2000
- Renewal Committee meeting, February 2000
- External Evaluation Panel international evaluation, January-June 2000
- Administrative Management Review, conducted by USAID, May 2000

An important part of these discussions was the financial reality of Phase I and the likelihood that core funding would hover near the \$1 million per year mark. Under Phase I, funding of \$1.8 million per year was anticipated, with half coming from the CRSP core funding and the remainder from add-ons. It was assumed that the add-ons would (1) materialize at the anticipated levels, (2) support global activities, and (3) be fungible with core funds. None of these assumptions were correct. A number of USAID missions and bureaus supported BASIS research, but the total amount of add-ons was less than 50% of what was anticipated. The add-ons were country or region specific and, most of the time, required BASIS researchers to add components to the existing work rather than support core projects and activities. Additionally, a great deal of time spent on the part of the researchers and the ME pursuing leads, writing proposals, and negotiating potential add-ons with varied levels of payoffs.

With concurrence from USAID, it was decided that Phase II should work within the parameters of its core funding. While add-on funding can and will be pursued (see 9.6), the program described in this proposal can be carried out on the basis of the expected core funds of \$1.25 million per year. Consistent with that funding level, Phase II initially will support five primary research projects, each of which will have a three-year duration and receive approximately \$200,000 per year in core funds.

These projects (see Part Two for their details) were selected from responses to a call for proposals issued in May 2000. A team of five experts evaluated each proposal according to its: technical merit, integration into policy debate, collaboration and capacity building activities, and broader applicability and potential for synthesis. The result is a research program characterized by:

- top-rated proposals designed to address focused themes;
- world-class researchers working with BASIS CRSP;
- synthesis activities that have been proactively designed as a team effort;

- detailed proposals supporting each project and describing timelines and policy outputs;
- participation of collaborating institutions that is broad and diverse;
- less time each year spent negotiating project budgets;
- add-ons, as they materialize, that will deepen and/or expand research activities;
- management costs that are kept to a minimum due to fewer transactions costs.

Phase II begins with five research projects, yet can support two additional global research activities. The program has the potential to include even more projects as add-ons materialize. Management expenses are kept to a minimum allowing a larger percentage of resources to be focused on the research activities and policy discussions. With a commitment to engaging key policymakers, BASIS CRSP will ensure that its findings and recommendations meet the needs of USAID, regional policymakers, host country nationals, and benefit the development community.

The following table summarizes important changes in BASIS CRSP.

### Changes from BASIS Phase I to Phase II

Phase I	Phase II
Solicited research activities	Competitively awarded research activities
Competitive grants program	
Consortium for Applied Research on Market Access	Contracting Institutions
Centralized management structure	Decentralized management structure
Expectation of add-ons accounting for 50% of funding	Add-ons will not be assumed
Synthesis program reactive	Synthesis program proactive
Program designed on \$9 million, including add-ons	Program designed on \$6.25 million, not including add-ons
Management groups include: Technical Committee, External Evaluation Panel, and Board of Directors	Management groups include: Technical Committee and External Evaluation Panel
Policy dialogue decentralized	Policy dialogue centralized

## 1.5 STRATEGIC THINKING AND MISSION RESPONSIVENESS

As a long-term research activity, BASIS has the opportunity and obligation to inform the strategic direction of USAID’s approach to development. One innovation of BASIS II will be to speak directly to Global Bureau and the headquarters staff of other development agencies that are responsible for establishing strategic policy direction. The *Best Practices Policy Conferences* will focus on specific BASIS policy domains and will synthetically draw together the policy lessons learned from the BASIS research projects.

At the same time that they contribute to strategic thinking, the BASIS research projects will generate insights in a number of policy domains that are relevant to the immediate programmatic considerations of USAID Missions and others. As detailed in Sections 3.1 and 3.5, BASIS II



will carry out a communication strategy with USAID Missions that is both proactive and responsive. BASIS proactive communication with USAID Missions will take two tracks. First, each research project, with backstopping from the BASIS Management Entity (ME) and the AID Cognizant Technical Officer (CTO) will maintain consistent communication and contact with the AID Missions in the countries where they carry out research. Significant progress has already been made in establishing such contacts and garnering Mission knowledge and ownership of the BASIS research program (see Section 3.1).

The second track of proactive BASIS communication with USAID Missions will be built around the *BASIS Policy Briefs* that will bring into high relief the lessons learned by each project and best practices for policies in their domain. The BASIS CTO and ME, along with the project principal investigators, will use these *BASIS Policy Briefs* in their communications with AID Missions in countries where research is being carried out as well as in other areas where the lessons learned seem most pertinent.

Finally, BASIS II will respond to USAID Mission requests for assistance with an outreach program that will extend the results of BASIS research in its policy domain areas. BASIS will also use its networks and contacts to help Missions identify researchers able and interested in working on longer term research projects that might grow out of initial contacts between BASIS and the Mission, and will facilitate contact between Missions and the BASIS IQC when Missions need the sort of short term assistance that the IQC is designed to provision.

## **1.6 INSIGHTS ON HIV/AIDS**

HIV/AIDS and its disastrous social and economic consequences are widespread in several of the regions where BASIS II research will be carried out. Ethiopia and Kenya are among the 15 worst hit countries in Sub-Saharan Africa. South Africa is struggling with a pandemic of almost unimaginable proportions. While leadership in the latter country bears a grave responsibility for this pandemic based on its highly visible efforts to dissociate the spread of AIDS from the HIV virus, it was not incorrect to link the spread of AIDS with poverty and powerlessness.

While not specifically designed to address HIV/AIDS, BASIS II research projects in hard hits areas will offer insights relevant to efforts to understand and combat this disease along several dimensions. First, it will underwrite a sharper understanding of the crisis in more remote rural areas. For example, in Ethiopia (South Wollo Zone) and Kenya (Samburu/Baringo District), BASIS II research on shocks and livelihood dynamics will collect data on household-level research on household expenditures and demography that will show the prevalence and impacts of HIV/AIDS. Repeat visits to a sample of households will pick up information on changes in household composition (births/deaths/prolonged absences), major health-related expenditures and illnesses, and income earning strategies. While the South Wollo, Ethiopia research site is relatively isolated from markets and rural-urban interactions are minimal, the Kenya site has fairly good access to markets and migration to urban areas is common. Since urban areas have the highest concentration of HIV/AIDS victims, we would expect that the effects would be greater in the Kenyan than in the Ethiopian research site. Unusual numbers of deaths and illnesses among the most affected population group (males/females between the ages of 20 to 40 years) in our research samples would possibly point to a high prevalence of HIV/AIDS and force us to think carefully about the impacts on asset accumulation and use, income earning strategies, labor markets, and the ability to cope with and recover from climatic and economic ‘shocks.’

In addition to this ability to document the spread and consequences of HIV/AIDS, BASIS research will inform anti-poverty policies that can assist in efforts to arrest the epidemic. Like efforts to promote family planning, success in reducing HIV rates will depend upon women having access to better education when they are young and greater economic resources and security when they are older. For example, in the case of the Southern Africa where BASIS will carry out research on water management institutions, water for productive purposes is an essential component for raising women's living standards and for increasing their economic security. One of the most difficult issues in Zimbabwe and parts of Malawi is women's rights to land. This project will explore the tenurial security of women in wetlands and their use of streambanks. In the latter case, these are technically illegal in Zimbabwe and Malawi even though they are essential for women's and household food security. The project will explore possibilities for policy change that would decriminalize land use and improving women's access and security to such land. Finally, this project will also focus on empowering women, making them more effective advocates in the economic sphere in ways that will carry over to other realms of their lives.

## **1.7 CONTINUING BENEFITS TO THE U.S.**

As was the case with Phase I, Phase II will result in tangible benefits not only in the regions of the world where its research projects take place, but also in the United States. Unlike crop-oriented CRSPs, the benefits of BASIS to the US cannot be enumerated in terms of new varieties, cultivation techniques or germplasma. However, the fact that these benefits are more diffuse does not make them any less significant.

In assisting USAID's goal of broad based economic growth, BASIS will be contributing to the more stable and equitable world valued by the US. BASIS II projects are appropriately focused on some of the most intractable economic growth problems in the contemporary world. The continuing poor performance of agriculture in Russia (and in other areas of Eastern Europe and the former Soviet Union) is a drag on economic growth and income security in that region. The research on poverty traps and livelihood dynamics in Eastern Africa and Central America focuses on populations that so far seemed to have been bypassed by benefits of market liberalization and economic growth. Lifting the constraints that trap these people and making markets work for them so that they can use time as any ally in their efforts to improve their lives and those of their children is a key goal of BASIS II.

As has already been well documented, broad based economic growth returns not only global stability to the US, it also brings new trading opportunities. In the case of US agricultural trade, the so-called food-feed nexus offers expanded export opportunities as income grows and diets improve and increase in complexity as incomes grow. In addition, while less well documented, non-agricultural exports are poised to take-off and grow as broadly growth increases rural income and the demand for labor-saving equipment as the agricultural labor force diminishes.

In addition to these benefits, BASIS II will also serve as a knowledge center for agencies, NGOs and researchers who struggle with problems of chronic poverty and resource access in the US. Specific examples where linkages between BASIS research and such groups are already in place include:

1. *North American Program of the Land Tenure Center*  
While best known for its work on Latin America and Africa, the LTC has recently opened a North American Land Tenure Program. Communication about lessons learned internationally by BASIS researchers is already underway under the aegis of this program.
2. *Institute for Research on Poverty*  
Housed at the University of Wisconsin, this institute has been at the forefront of the US war on poverty since the 1960s. Like BASIS, the Poverty Institute is now coming to focus on asset-based approaches to poverty. Preliminary discussions have been held to establish linkages between the two programs (including joint events) in order to facilitate the transmission of lessons learned internationally to US domestic policy.
3. *OXFAM-America*  
This well-respected NGO recently opened a US program focused on poor rural communities in the US. From efforts to promote cooperative marketing and agro-processing in Georgia to efforts to use micro-finance tools as a way to enable broadly based growth, OXFAM-America is struggling with the same issues that are central to the BASIS research agenda. The incoming BASIS director, who sits on the Board of Directors for OXFAM, has already begun to insert lessons learned from BASIS' international research into OXFAM's US program.

Finally, BASIS II will continue the following three types of benefits that typified our efforts under BASIS I:

1. *Training students and young professionals in social science research methods.*  
Each CRSP helps build capacity and provide training for young researchers. BASIS CRSP has demonstrated its commitment to training US and host-country students by promoting education, training, and information exchange through its collaborative research and development activities. During Phase I, 32 students were involved in research through degree, non-degree, and applied research training.
2. *Enhancing the involvement of women in factor market research.*  
Gender issues are incorporated into the structure and research of BASIS CRSP. Gender is a crosscutting research theme in the projects, and women play a strong role in managing and implementing the program. In Phase I, out of a total of 109 collaborating researchers, 31 (28%) are women. Out of a total of 28 members of administrative groups (Management Entity, Technical Committee, Board of Directors, and External Evaluation Panel), 11 (39%) are women; the Chairs of the Technical Committee and External Evaluation Panel are women.
3. *BASIS CRSP findings disseminated world-wide.*  
BASIS CRSP, through its publications and outreach, as well as through professional journals and conferences, reaches a broad domestic and international audience. The BASIS CRSP website receives over 200 hits per month; well over 100 outputs have been posted, with many of these also being published in journals and in the paper series of host-country organizations.

## 2. TARGETING GLOBAL CONSTRAINTS: BASIS CRSP RESEARCH AGENDA AND POLICY DOMAINS

*Broadly based and sustainable growth of the rural economy:* the vision of BASIS is clear. In a world of full and complete markets, individuals and households could mobilize the resources, finance, and insurance needed to assure productive and sustainable livelihoods. Households with little else but abundant labor could obtain the matching resources needed to obtain a return on their labor. Food-insecure households could find the bridge-financing needed for a long-term perspective regarding environmental stewardship, and they could invest in maintaining the ecologically fragile resources on which they rely. Poor households could steadily accumulate human capital and other assets over time if they had insurance to cope with income fluctuations that otherwise interrupt and even render infeasible savings and accumulation strategies.

In the world as it exists, however, rural factor markets often are missing or imperfect, leaving non-market institutions and rules to broker resource allocation and access. Rarely are idealized patterns of full and complete markets fulfilled. Moreover, women and men tend to be differentially disadvantaged by the institutions and markets of resource access. Abundant evidence indicates that households are not sites of benevolent redistribution that smooth out differential resource access of women and men. Nor do households necessarily attend in equal measure to the interests and well-being of all members, and the costs of imperfect factor markets are likely to rest most heavily on women.

Imperfections in factor markets and other institutions that broker resource allocation result in three constraints that globally impede broadly based and sustainable growth. The Phase II research agenda targets these global constraints with carefully selected projects designed not merely to understand the nature of the constraints but to deliver innovative and creative policy solutions that will remove, relax, or sidestep them. (See Part Two for details about each project's goals, design, and policy impact.) Each project focuses on a regional context where the constraints have particular salience, but the projects also seek lessons and policy innovations that will inform efforts to overcome the constraints in other regions of the world.

The following table shows the global constraints with the projects that will address them. The remainder of this section details how the Phase II research agenda, through the five carefully selected projects, will address the global constraints to broadly based and sustainable growth. The section closes by drawing together the five policy domains to which these projects will contribute insight, lessons learned and best practice.

## Global constraints to broadly based and sustainable growth

<u>Global constraint</u>	<u>BASIS CRSP project</u>
<b>1. Constraints to Effective Agricultural Resource Use in Post-Reform Economies</b>	<i>Input Market Constraints on Economic Growth in Russian Agriculture (see Part Two, section 4)</i>
	<i>Institutional Innovations to Improve the Viability of Equity Sharing Under Privatization and Farm Restructuring in Central Asia and Southern Africa (section 5)</i>
<b>2. Constraints to Coordinated, Sustainable Use of Environmentally Sensitive Resources</b>	<i>Institutional Dimensions of Water Policy Reform in Southern Africa: Addressing Critical Water-Land Intersections (section 6)</i>
	<i>Rural Markets, Natural Capital, and Dynamic Poverty Traps in East Africa (section 7)</i>
<b>3. Constraints that Trap Poor Households in Cycles of Food Insecurity, Economic Shocks, and Unproductive Accumulation</b>	<i>Assets, Cycles, and Livelihoods: Addressing Poverty and Food Insecurity in the Horn of Africa and Central America (section 8)</i>

As shown in this table, some projects address more than one constraint. *BASIS Lessons Learned Policy Conferences* will provide regular opportunities for capturing commonalities and innovations among the projects, beginning the process of synthesizing approaches to policy action.

### 2.1 CONSTRAINTS TO EFFECTIVE AGRICULTURAL RESOURCE USE IN POST-REFORM ECONOMIES

A number of commentators have noted that globalization caused the homogenization of economic policy across heterogeneous regions. In addressing agriculture and rural economies, global policy and institutional reform efforts share two primary components: (1) creation or reinforcement of family-farm agriculture through the appropriate definition and assignment of full, secure, and marketable private property rights over productive resources, and (2) price liberalization so that domestic producer prices reflect international scarcity values.

The hypothesis is that, together, these components can create the conditions for broadly-based, poverty-reducing economic growth. Reform strategies that target private, family-farm agriculture intend not only to secure investment and other incentives but also to permit low wealth agents to exploit their “latent economic competitiveness” (Carter and Zegarra 2000). Similarly, price liberalization should be good for growth in the aggregate as well as good for low-wealth households that are relatively well-endowed with the factors needed to produce export agricultural commodities (see de Janvry and Sadoulet 1993). Examples of this reform logic are

found around the world, from the privatization of former collective farms in the former Soviet Union, to the reform of communal tenure in sub-Saharan Africa, to the promotion of secure property rights and land markets in Central America, Mexico and China, to the formation of market-assisted or negotiated land reform strategies in Brazil, the Philippines, and southern Africa.

Despite the internal coherence of this policy reform model, its empirical record is mixed. Growth sometimes has been sluggish in response to the stimuli of this reform package, sometimes rapid but exclusive of the poor (see Carter, Barham, and Mesbah 1996), and sometimes unevenly spread across subsectors of the agricultural economy (see Barrett 1997). BASIS and other researchers have begun to find keys to the puzzle of this mixed and often disappointing record of rural economic reform. Carter and Olinto (2000) show that continuing wealth biases in financial markets can be sufficient to blunt the growth and equity effects of property rights reform in Latin America. Phase I research (see Annex A) found that thin and imperfect financial markets limited the effectiveness of reform programs in Uzbekistan, the Kyrgyz Republic, and Russia. In short, policy and institutional reform can be fundamentally thwarted by rigid adherence to the above two components of policy, and innovative thinking is needed.

In many regions, we have begun to understand how factor market constraints stunt and misshape economic growth, and the challenge is to consolidate and use this knowledge to move toward microeconomically coherent policy reform models. In other regions, however, the requisite knowledge base still does not exist. Especially in Eastern Europe and the former Soviet Union, research based on aggregate statistics reveals poor post-reform performance. However, detailed farm and market-level studies have yet to be undertaken that would identify the specific constraints underlying disappointing macroeconomic records.

Efforts to use market mechanisms to unlock the competitive potential of smallholders has at times worked well (as in Brazil) and at times not at all (as in South Africa) (Deininger 1999). In these latter cases, where new, market-oriented systems of allocation and exchange are developing slowly, other mechanisms must be found that will work more effectively if poor people in rural areas are to be able to make productive use of their land resources. Where it has not been feasible to privatize land, infrastructure, or movable assets to individual owners, beneficiaries sometimes find themselves co-owning resources, often in diverse groups that lack the constitutional rules and organizational arrangements needed to curtail free-riding and encourage investment by the co-owners and outside financiers.

In an effort to enable effective asset use for low wealth households and unlock the potential for a win-win policy reform that promotes both economic growth and social equity, Phase II will carry out two specific research projects addressing the first global constraint.

*Input Market Constraints on Economic Growth in Russian Agriculture* (section 4) will produce reliable information on the progress, performance, and constraints to reform in the former Soviet Union. The project will investigate policy-related barriers to factor markets, emerging forms of land markets, coping strategies under constrained and disorganized farm credit and public financing systems, and constraints on efficient allocation and mobility of farm labor.

*Institutional Innovations to Improve the Viability of Equity Sharing Under Privatization and Farm Restructuring in Central Asia and Southern Africa* (section 5), builds on established knowledge about the constraints that limit effective resource use by smallholders. It begins the

search for innovative policy reform models that will meet both growth and income distribution goals.

Together, these projects enable Phase II to make important contributions to addressing the constraints to effective agricultural resource use in post-reform economies.

## **2.2 CONSTRAINTS TO COORDINATED, SUSTAINABLE USE OF ENVIRONMENTALLY SENSITIVE RESOURCES**

The same factor market and resource allocation constraints that inhibit the productive use of agricultural resources also may constrain the use of environmentally sensitive resources. Additionally, in post-reform environments, there are two challenges that confront the sustainability of environmentally sensitive resources. The first emanates from the fact that sustaining the productivity of degradable resources may require significant investment and trading off current well-being for future well-being. The second results from the fact that one individual's use or misuse of the resource will directly affect other users who depend on the same resource. Prior work has shown that coordinated and sustainable use of these resources can be difficult where there exist imperfect factor markets and other institutions that shape resource allocation.

The first problem is captured by the title of Charles Perrings' (1989) paper, "The Optimal Path to Extinction." When access to capital is weak, investment in resource-conserving projects comes at the cost of reduced current consumption. For households living near the margin of subsistence, this cost can be very high indeed, especially in the wake of shocks that cut into already low real income levels. Drawing down on the available stock of natural capital is a rational response by households in this circumstance, yet it helps create the "optimal path to extinction" of the natural resource base.

Two Phase II projects will research the constraint that can cause such environmentally corrosive behavior. *Institutional Innovations to Improve the Viability of Equity Sharing Under Privatization and Farm Restructuring* (section 5) will explore a novel institutional approach (equity sharing) designed to enhance the financial market access of land reform beneficiaries. This project will explore the degree to which this institutional innovation permits low wealth individuals to allocate and maintain their natural resource base in more sustainable ways.

*Rural Markets, Natural Capital and Dynamic Poverty Traps in East Africa* (section 7) will explore the hypothesis that missing financial markets contribute to a poverty trap that makes it extremely difficult for poor households to accumulate productive assets and improve their livelihood over time. Once caught in this trap, these households may find they have little choice but to deplete soils and otherwise draw down the natural resource base in non-sustainable ways. These decisions make the situation of these households more precarious. If this circuit of poverty and resource degradation is corroborated by the research, then BASIS CRSP will be able to provide profound policy impacts for ensuring the sustainability of the resource base.

The second challenge to sustainable resource use results from the fact that many natural resources (e.g., watersheds or river basins) are "externality-laden," meaning that one individual's use or misuse of the resource directly affects other users who depend on the same resource. Where such "externalities" exist, factor markets and local institutions of resource allocation may fail to adequately coordinate the interests of multiple resource users.

One outcome is that the management of natural resources may become subject to institutional dissonance or incoherence. The contemporary policy discourse around development centers on two narratives: one of economic efficiency and one of democratic participation. *Institutional Dimensions of Water Policy Reform in Southern Africa: Addressing Critical Water-Land Intersections* (section 6) notes that policy toward river basin management is subject to institutional impulses for both economic efficiency and democratic participation. The former is found in the tendency to rely on user fees to regulate natural resource use and extraction, while the latter finds its expression in river basin catchment councils whose membership is structured to reflect the full range of users who depend on the river. When natural resource externalities are large, and where economic inequality among users is large, the result can be institutional stalemate and a natural resource base that is neither maintained nor adequately regulated. The challenge is to better understand the sources of institutional dissonance and to innovate alternative management institutions that can assure sustainability of the natural resource base while remaining faithful to democratic participation and inclusion.

### **2.3 CONSTRAINTS THAT TRAP POOR HOUSEHOLDS IN CYCLES OF FOOD INSECURITY, ECONOMIC SHOCKS, AND UNPRODUCTIVE ACCUMULATION**

Inspired by the seminal work of Nobel laureate Amartya Sen, an increasingly sophisticated body of work sees poverty at any point in time as the interaction between the assets (or “entitlements”) that poor people have and the constraints that limit their productive use of those assets. As discussed above, imperfect factor markets stand as one kind of constraint that plays an important role in the production of poverty.

If people are poor at any point in time because of the assets they possess or constraints they face to the use of those assets, then time gives them an additional degree of freedom to build up additional assets they need or to work their way around constraints to the effective use of those assets (e.g., through the accumulation of self-finance capacity to make up for imperfect financial markets, as in the Carter and Zimmerman [2000] analysis). However, time is not only an arena of new opportunity. It is also the space in which negative shocks occur that push people further behind. The impact of time on poverty depends on these two interacting effects, as well as on people’s strategic choices given their awareness of time as both opportunity and vulnerability.

Empirically, an increasing number of longitudinal or panel studies of living standards have become available to study the evolution of poverty over time (e.g., Grootaert, Kanbur and Oh 1997; Carter and May 2000). From these studies and from Phase I work in the Horn of Africa, it has become increasingly clear that there are persistently or chronically poor people. For these people caught in “poverty traps” the passage of time offers no relief. A key challenge facing Phase II—and rural development policy itself—is to understand when and under what circumstances time and markets can be converted to allies in the fight against persistent poverty. It is one thing to make markets work better for the less well-off in the short term. It is even more powerful to make markets work so that people can use time to enhance their assets, capabilities, and food security.

A still largely theoretical economics literature on poverty traps (e.g., Banerjee and Newman 1993; Mookherjee and Ray 2000; and, Zimmerman and Carter 1998) provides important clues



about when such traps will exist. First, this literature makes clear that factor market imperfections in the form of missing financial markets are the key necessary condition for poverty traps to exist. Second, this literature indicates that these imperfect factor markets can create poverty traps when one of two conditions exists:

- there are large fixed costs associated with the potentially productive investments that poor people could undertake, or,
- risk and subsistence constraints come together to render infeasible self-financed strategies of investment and accumulation.

Phase II will support projects designed to understand the poverty traps that emerge under each of these two circumstances. This understanding will in turn be used to devise and prioritize policies that will relax the constraints that create poverty traps and transform time into an ally for poor and food insecure families.

*Rural Markets, Natural Capital, and Dynamic Poverty Traps in East Africa* (section 7) will confront the issue of how missing financial markets and the fixed costs of investment (or asset indivisibility) create poverty traps. As detailed in section 7, this project is motivated by the observation that the investment opportunities that offer poor people the opportunity to improve their livelihoods and well-being over time are themselves subject to significant fixed costs. (Investment in livestock, for example, must be greater than a critical minimum size before a reasonable rate of return can be obtained.) While these investment opportunities are “bankable” in the sense that the expected rate of return would more than justify the investment, the lack of financial markets to help poor people reach the critical minimum investment size means that poor people become stuck in unremunerative savings and investment strategies that at best reproduce their poverty and at worst place them on a precarious path to extinction, as discussed in section 2.2 above. The project will use a quasi-experimental design to explore the existence and severity of these poverty traps across several economic and agroecological environments.

*Risk, Assets Cycles, and Livelihoods: Addressing Poverty and Food Insecurity in the Horn of Africa and Central America* (section 8) will focus on the role of shocks in creating poverty traps. When households face a shared shock (e.g., a drought), the prices of productive assets will tend to move with household income so that when income is low, asset prices are also low. In this circumstance, it is very hard for a household to cope with shocks by drawing down on stocks of the productive assets. Households that did would find themselves “buying high” and “selling low” in the asset market. For poor people who are exposed to subsistence risk, their only viable strategy may be to build up buffer stocks even though the rates of return on such stocks can be very low or even negative, as in the case of grain stores. Poverty is thus reproduced over time by low wealth and by low realized returns on wealth. As when there are large fixed costs to investment, the result of missing financial markets may be poverty traps.

To explore who gets caught in risk-induced poverty traps, the project will draw on prior BASIS-sponsored work in Ethiopia and Honduras. This earlier work bequeathed quantitative household panel data sets that document both shocks and patterns of asset accumulation and deaccumulation over time periods in which households have suffered severe climatic shocks. Matching these quantitative data with careful qualitative exploration of the household cycles of shocks and accumulation will lead to a unique understanding of the role of risk keeping poor households poor in the face of imperfect factor markets.

Together, these projects on poverty traps promise insight on the types of households and individuals for whom the rural economy works least well and why. While it is too early to identify what the appropriate policy response might be, the payoffs are high in terms of better aid and policy to reach the most vulnerable. In addition, if long-term poverty cycles and vulnerability can be interrupted, aid itself can be freed from the what Barrett and Carter (2000) call the “aid trap” in which ever scarce foreign aid dollars become increasingly dedicated to crisis relief rather than addressing the structural causes that create vulnerability to crisis.

## 2.4 BASIS Policy Domains

As illustrated by the figure in section 1.2, each of the five BASIS II principal research projects will speak to the *BASIS Policy Domains*:

1. *Reform Sequences in Transitional Economies*
2. *Property Rights for Productive Land Use*
3. *Institutions for Water Management*
4. *Financial Innovations to Enable Sustainable Resource Use*
5. *Food Security Policies to Enable Asset Accumulation by the Poor*

Each of these domains identifies an area of policy where BASIS research will be able to provide guidance about best policy practice. As part of the planning year process, each BASIS II research project is preparing a *BASIS Policy Brief* that will articulate its underlying research program and the policy domains to which it will speak.

One of the exciting features of BASIS II is that its projects are at distinct stages of the research-policy process. The Equity Sharing Schemes and Water Management projects are already evaluating new policies and institutions that have been formulated to deal with recognized constraints that block the realization of broadly based and sustainable growth. The Input Market Constraints to Russian Agricultural Growth project is at an earlier stage where the domain of policy levers is clear, but their interactions and sequencing are not yet well understood. Before speaking authoritatively to the design of reform sequences appropriate for transitional economies, this project must first solve the puzzle of why policy reform has misfired in Russia. Finally, the Asset Shocks and Livelihoods and Dynamic Poverty Traps projects are at the cutting edge of identifying new domains of policy based on their findings regarding constraints that stubbornly block the creation of viable economic opportunities for the poor.

BASIS II will thus offer a diversified portfolio of policy relevant research that both informs and enhances existing directions of development policy but also blazes new paths for development policy in the face of global constraints to broad based economic growth. It is this mix of creativity and innovation that will ultimately make BASIS II valuable to USAID in ways that shorter term technical assistance work cannot be.

## References

Banerjee, Abijhat, and Andrew Newman. 1993. “Occupational Choice and the Process of Development.” *Journal of Political Economy* 101(2): 274-98.

- Barrett, Christopher B. 1997. "Food Marketing Liberalization and Trader Entry: Evidence from Madagascar." *World Development* 25(5): 763-777.
- Barrett, Christopher, and M. Carter. 2000. "Can't Get Ahead for Falling Behind: New Directions for Development Policy to Escape Poverty and Relief Traps." *BASIS Policy Brief 2*. Madison: Land Tenure Center, University of Wisconsin.
- Carter, Michael, Bradford Barham and Dina Mesbah. 1996. "Agro-Export Booms and the Rural Poor in Chile, Guatemala and Paraguay." *Latin American Research Review* 31(1): 33-65.
- Carter, Michael, and Julian May. forthcoming. "One Kind of Freedom: Poverty Dynamics in Post-Apartheid South Africa." *World Development*.
- Carter, Michael R., and Pedro Olinto. 2001. "Getting Institutions Right for Whom? Credit Constraints and the Impact of Property Rights on the Quantity and Composition of Investment." *University of Wisconsin Agricultural Economics Staff Paper 333 (revised)*.
- Carter, Michael R., and Eduardo Zegarra. 2000. "Land Markets and the Persistence of Rural Poverty in Latin America: Post-Liberalization Policy Options." In *Rural Poverty in Latin America: Analytics, New Empirical Evidence and Policy*, edited by A. Valdes and R. Lopez. MacMillan Press.
- Carter, Michael, and Fred Zimmerman. 2000. "The Dynamic Costs and Persistence of Asset Inequality in An Agrarian Economy." *Journal of Development Economics* 63(2): 265-302.
- Deininger, K. 1999. "Making Negotiated Land Reform Work: Initial Experience from Colombia, Brazil and South Africa" *World Development* 27(4): 651-72.
- de Janvry, A., and E. Sadoulet. 1993. "Relinking Agrarian Growth with Poverty Reduction." In *Including the Poor*, edited by Michael Lipton and Jacques van der Gaag. Johns Hopkins.
- Grootaert, C., R. Kanbur, and G.T. Oh. 1997. "The Dynamics of Welfare Gains and Losses: An African Case Study." *Journal of Development Studies* 33(5): 635-57.
- Mookherjee, Dilip, and Debraj Ray. 2000. "Contractual Structure and Wealth Accumulation." Working paper. Boston University.
- Perrings, C. 1989. "An Optimal Path to Extinction? Poverty and Resource Degradation in the Open Agrarian Economy." *Journal of Development Economics* 30: 1-24.
- Zimmerman, Fred, and Michael Carter. 2001. "Asset Smoothing, Consumption Smoothing and the Reproduction of Inequality under Risk and Subsistence Constraints." *University of Wisconsin Agricultural and Applied Economics Staff Paper 402 (revised)*.

### 3. FROM RESEARCH TO POLICY: BASIS COMMUNICATION, RESPONSIVENESS AND IMPACT INDICATORS

As a policy-oriented research program, BASIS CRSP will not only generate cutting edge research to inform and guide best practice development policy, it will also devise proactive communication strategies for reaching those responsible for development policy. It will also maintain the commitment and ability to respond to the needs of AID missions and others in our areas of policy competence.

BASIS' proactive communication strategy is conceived around four groups or target audiences that are responsible for setting the overall tone of development policy and, or responsible for designing and implementing policies in particular contexts. These groups are:

- *AID Missions*, both inside and outside the countries where research is taking place;
- *Host Country Policymaking Communities*;
- *International Policymaking Community*, including USAID/Global, the World Bank, the Food and Agriculture Organization, United Nations, regional development banks, and other donors; and,
- *Academic Communities*.

Speaking effectively and persuasively to each of these audiences requires somewhat distinct media and methods. The Policy Communication Matrix below summarizes the communication strategy. The audiences that BASIS addresses are shown as the rows of the matrix. Next to the audiences are the instruments used to speak to each. (Note that some instruments will speak to multiple audiences.) The three global constraints addressed by BASIS are shown as columns, and beneath each constraint are the Phase II research projects, with most of the projects cutting across more than one constraint. Similarly, several of the communication events (*e.g.*, the *BASIS Lessons Learned Policy Conferences*) cut across and unify the research areas. The matrix is designed only to show the dimensions of the BASIS proactive communication strategy. Subsequent sections will fill in the needed detail.

After laying out our proactive strategy for speaking to each of these audiences (sections 3.1-3.4), section 3.5 outlines our plans for responding to AID mission requests. Section 3.6 presents the BASIS Impact Indicators and Evaluation strategy.

## Policy communication matrix

		<b>1. Constraints to Effective Agricultural Resource Use</b>		<b>2. Constraints to Sustainable Use of Natural Resources</b>		<b>3. Constraints to Food Security and Accumulation</b>	
		<b>Input Market Constraints on Economic Growth in Russian Agriculture</b>	<b>Equity Sharing Under Privatization and Farm Restructuring in Central Asia and Southern Africa</b>	<b>Institutional Dimensions of Water Policy Reform in Southern Africa</b>	<b>Rural Markets, Natural Capital, and Dynamic Poverty Traps in East Africa</b>	<b>Assets, Cycles, and Livelihoods in the Horn of Africa and Central America</b>	
<b>Host country policymakers</b>	<b>Research collaborators</b>	Higher School of Economics, Institute for the Economy in Transition, Moscow State University	Lima Rural Development Foundation CASE-the Kyrgyz Republic University of Natal Institute of Natural Resources	University of Malawi Centre for Applied Social Sciences, University of Zimbabwe	FOFIFA, Madagascar ICRAF, Kenya Kenya Agricultural Research Institute	OSSREA Institute of Development Research Fundación para el Desarrollo Rural	
	<b>Action groups for policy</b>	Institute for the Economy in Transition, Ministry of Agriculture, Institute of World Economy and International Relations, Institute of Agrarian Problems and Information	Department of Land Affairs, Ingonyama Trust, Ithala bank, Ministry of Agriculture and Water Resources, Rural Advisory Development Services	Zimbabwe National Water Authority, Catchment Councils, Waternet, IWMI, PLAAS, Agr itex, river basin councils	Madagascar: FOFIFA, [INSTAT], PACT Kenya: Arid Lands Resource Management Program, Ag. Research Institute, Tegemeo	Global Livestock CRSP, IFRPI/ILRI, IGAD, ECA, OAU, GHAI, Amhara Regional govt., Ethiopian Dept. of Agriculture	
<b>AID Missions</b>	<b>BASIS Policy Briefs</b>	Causes of Russian agricultural problems since 1991 Have market liberalization policies failed in Russian agriculture? Ownership of Russia's agricultural land: legal and economic challenges Russia's collective farms: what has happened to them and consequences	Equity sharing schemes Best Institutional practices Guidelines for implementing equity-sharing projects Land redistribution in KwaZulu-Natal 1997-2002	Policy Lessons Learned from Water Reform in Zimbabwe, Malawi, and South Africa	Policy Options to Repair Missing markets that Underlie Poverty Traps, and Soil Degradation in East Africa	Food Security Policy to Enable Coping with Shocks and Asset Loss in High Risk Areas	
<b>International Policy</b>	<b>BASIS Lessons Learned Policy Conferences</b>	Property Rights Policy for Productive Land Use		Policies to Foster Efficient and Democratic Management of Water Resources	Financial and Food Security Policies to Enable Asset Accumulation by the Rural Poor		
		Policy Reform Sequences to Realize Russia's Agricultural Potential.	Policies to Make Sustainable Resource Use Feasible				
<b>Academic community</b>	<b>Training</b>	Training enumerators Training two graduate students Training community members serving as directors and office bearers. Training for the agricultural support services community Kyrgyz study tour to South Africa to observe equity sharing schemes and share findings	Training enumerators Training two graduate students Training community members serving as directors and office bearers. Training for the agricultural support services community Kyrgyz study tour to South Africa to observe equity sharing schemes and share findings	Workshop: "Engineering principles for social scientists working with water engineers." Training social science graduate students in Zimbabwe, Malawi, and South Africa	10 student years of degree training support for Kenyan and Malagasy students Annual support for post-doc Training session on bio-economic modeling techniques	3 years of graduate assistantship support for African and American students; and 2 years of thesis research support for African students.	



### **3.1 PROACTIVE COMMUNICATION WITH USAID MISSIONS**

BASIS proactive communication with USAID Missions will take two tracks. First, each research project, with backstopping from the BASIS Management Entity (ME) and the AID Cognizant Technical Officer (CTO) will maintain consistent communication and contact with the AID Missions in the countries where they carry out research. The expectation of such activity was clearly stated in the RFP used to solicit the BASIS projects, and each project was graded on this and other relevant criteria. As the next sub-section documents, each BASIS principal research project sports individuals with significant experience interacting with AID Missions. In addition, as that sub-section documents, significant progress has already been made in establishing such contacts and garnering Mission knowledge and ownership of the BASIS research program.

The second track of proactive BASIS communication will be built around the key policy themes that characterize each project. As explained above, each BASIS principal research project is designed to alleviate the global constraints to broadly-based and sustainable growth discussed in section 2. Associated with each project is an agenda of targeted policies that are designed to relax those global constraints. As explained in section 3.1.2, short *BASIS Policy Briefs* will bring into high relief the lessons learned and best practices for these policies. The BASIS CTO and ME, along with the project principal investigators, will use these *BASIS Policy Briefs* in their communications with AID Missions in countries where research is being carried out as well as in other areas where the lessons learned seem most pertinent.

#### **3.1.1 BASIS Communication with AID Missions in Countries where Research is Carried Out**

BASIS Phase II project investigators have extraordinary experience working with the AID Missions in the countries where they will carry out their research. This sub-section will discuss each project and its evolving relationships with these Missions.

##### ***Input Market Constraints on Economic Growth in Russian Agriculture***

The long-term collaborative research program has been developed in two phases. Phase II will commence this year on a solid foundation of work completed under Phase I. Phase I began in 1999 with BASIS participation in the Golitsino I Conference. This conference was funded by USAID Moscow, organized by Co-Principal Investigator Eugenia Serova, with papers presented by Co-Principal Investigator Bruce Gardner and others. A second conference is being organized for July 2001. Russian and American collaborators will present original papers that will be published in formal proceedings. From the beginning of Phase I, there has been very close coordination with and cooperation from the US government. First, Dr. Christian Foster, USDA FAS and Chairman of the Joint Commission Committee on Trade and Investment in Agriculture has been actively engaged as a proponent and advisor to the project. BASIS Russia is listed as an active part of the Joint Commission's program of engagement on agricultural issues.

Second, there has been close coordination and active support for this project from USAID Washington and Moscow. Peter Thatcher, Senior Economist in ENI participated in the July

2000 planning meetings at the University of Maryland IRIS Center. Tom McAndrews and Marina Abakumova have been actively engaged in arranging and attending meetings in Moscow. During the Dec 2000 visit by Gardner and Blue, Deputy USAID Director George Deiken participated in meetings with the US Ambassador.

Throughout this phase, USAID CTO Lena Heron has been actively involved in the planning process. The result of all these relationships is a keen sense of the emerging policy agenda in Russia and the need for the BASIS program to speak to that agenda, as well as to engage Russian and US policy makers from the outset. Indeed, the research team on both the Russian and American sides is made up of people who excel not only as researchers, but as people intimately acquainted with the requirements of the policy process and with the needs of USAID.

#### *Equity Sharing under Privatization and Farm Restructuring in Central Asia and South Africa*

The full proposal for this project (available from the BASIS office) details the fit between this project's objectives and the strategic objectives for the USAID Missions in Kyrgyzstan and South Africa. Summarizing briefly here, in South Africa, the research project would support the mission's objectives of increasing effective partnership among government, NGOs and the private sector under the goal of *Building Democracy*. It would also support the Mission's Strategic Objective 3, improving the capacity of key government and NGOs to formulate, evaluate and implement economic policies to promote economic growth and equity, and its Strategic Objective 4, increased access to financial markets for the historically disadvantaged.

In Kyrgyzstan, the research would support mission goals to deepen financial markets and develop appropriate legal infrastructure for commercial activities, particularly Strategic Objective 2 (accelerated development of private enterprises) and Strategic Objective 3 (more competitive private financial markets) under the mission's Economic Transition strategic objective, and Strategic Objective 1 under the mission's Democratic Transition strategic objective.

Project investigators have already been in extensive contact with the AID Missions in Almaty and Pretoria. Malcolm Childress and Mike Roth of the project met with Tracy Atwood and Kevin Jones in the Almaty mission, while Mike Lyne has discussed the South Africa portion of the project with the South Africa Mission in Pretoria. The South Africa mission has to date been a hard sell for all the CRSPs, mainly because agriculture does not rank high in their list of priorities. In Kyrgyzstan, the USAID Mission welcomed the BASIS II project and viewed it as highly complementary to their private enterprise development activities, in particular their small and medium enterprise development project which was starting in late 2000. While the small and medium enterprise project will work to train agribusiness personnel in general areas like accounting and planning, it will not work with individual firms and will not be able to offer detailed lessons about enterprise-level pathways to obtaining new investments. The USAID Mission invited coordination between the small and medium enterprise development project and the BASIS II research.

#### *Institutional Dimensions of Water Policy Reform in Southern Africa*

This project's research under BASIS II addresses interests of the USAID Missions in Malawi and Zimbabwe. Both missions have incorporated community based natural resource management



programs into their portfolios. They also focus on governance and citizen's participation issues that rest at the core of the proposed research.

In January 2001, the BASIS Southern Africa researchers, Francis T. Gonese, Wapulumuka Mulwafu and Geoffrey Chavula visited the USAID Mission in Lilongwe, and held discussions with Al Smith (Director of the Program Development and Analysis Office) about the BASIS research in Malawi. The discussion included a presentation of the Water Policy Reform project's main objectives and some preliminary results of BASIS research in the Lake Chilwa catchment area and particularly along the Likangala River. Smith agreed with the research findings concerning water quality problems, and encouraged the research team to take up this matter with policy makers in the country. He recommended that the team undertake further studies of water quality for comparative purposes. Smith also indicated that the USAID Mission might consider funding some aspects of the research in future, and suggested that the BASIS Project should submit a Plan of Action to be considered for inclusion in the USAID's Annual Program Statement.

In Zimbabwe, water issues will come to have an increasing importance due to the "fast track land 'program'" which jeopardizes existing irrigation systems on designated farms. The loss of large paying water users resulting from the land reform program will make decentralization and water reform more difficult. In Malawi, in the near term, management of water resources is to be incorporated into the new decentralized local government structures at the District Level. In the long run, the new water policy calls for the establishment of basin authorities similar to those found elsewhere in the region. In Malawi and Zimbabwe, ecological boundaries of catchments are to substitute for older administrative and political boundaries.

The project will invite USAID representatives to our workshops under BASIS 1 as well as update them concerning BASIS II workplans after the team's meeting at the end of July 2001. The proposed BASIS II research with its focus on decentralization, community based management and land reform, can address a missing dimension in the missions' portfolio on natural resource management, as neither program to date has a well developed focus on water resources. We will meet with the relevant personnel in the missions on a regular basis, provide them with copies of or working papers and policy briefs and invite them to attend our workshops. We will suggest mechanisms to enhance access to the critical resource of water as well to examine how decentralization processes are proceeding with respect to water.

### *Rural Markets, Natural Capital and Dynamic Poverty Traps in East Africa*

This project has already established close contacts with USAID/Antananarivo, including meetings in December and March by Ithaca-based project staff with mission staff and a March workshop with the mission Deputy Director, USAID staff and various project contractors. At mission suggestion, this project is collaborating directly with a related project (PAGE, implemented by IRG Ltd. as the local contractor) on valuing natural resources in agriculture. PAGE will include the BASIS research sites in its upcoming watershed studies so as to enrich PAGE's analysis and the PAGE project manager (Phil DeCosse) has been invited to join the BASIS team meeting in Embu, Kenya, in June.

Project staff also met with USAID/Kenya and REDSO/Nairobi staff in November to discuss the project and explore how best to make it of direct use to mission activities, and will have further

meetings there in May and June. Both country missions and REDSO identify sustainable agricultural intensification, rural poverty alleviation and natural resource conservation as objectives and have been trying to build economic analysis capacity in national institutions through the sorts of short courses, degree training, and policy workshops that the project will be offering. Continued communication and hopefully collaboration with this Mission will continue as the project develops.

### *Asset Cycles and Livelihoods in the Horn of Africa and Central America*

This project's proposal of addressing the linkages among asset cycles, factor markets, food insecurity, and poverty in our project dovetails with the AID's Greater Horn of Africa Initiative on Food Security and Conflict Resolution (GHAI) Strategic Objective 1 (SO1) to strengthen African capacity to enhance regional food security. It acknowledges "a major reason for this is the level of poverty and low levels of productivity in the region. Increasing food security requires not only increases in agricultural production but also in the income with which people can access food and improved health and nutritional status." (see USAID/GHAI statement on [www.usaid.gov](http://www.usaid.gov)). The GHAI initiative also recognizes the significance of collaborating with, and building the capacity of, national and regional organizations, such as IDR and OSSREA.

Beyond these strategic complementarities, the South Wollo portion of the proposed research program already has strong linkages with the AID REDSO Office, Nairobi (which has been a key office in the GHAI strategy) and continues to maintain these ties. In 1998-2000 the BASIS South Wollo program received approximately \$150,000 from REDSO to support its community and household research on the links between food insecurity, poverty, and factor market (land and labor) distortions. A series of community assessments were carried out and reports published, and with an additional funding of about \$75,000 the BASIS Horn program and OSSREA organized and sponsored a regional workshop on Nutrition and Agricultural Policy in Addis Ababa, Ethiopia (November 1999). In addition to presenting the findings of the South Wollo research, the workshop also included contributions from researchers in several other countries of eastern Africa. The main contact persons at REDSO have been John Dunlap and Brian d'Silva (now at the Office of Sustainable Development, Africa Bureau, AID, Washington), and more recently Diana Putman and Ned Greeley. The BASIS research program in the Horn anticipates maintaining collaborative linkages with the AID REDSO office and will continue to share research and policy findings with them and to invite them to workshops and seminars.

This proposal on 'Assets, Cycles, and Livelihoods' also complements USAID program objectives for Ethiopia, the primary country for this research project (i.e., the South Wollo site is the key research site for the project). An important objective of the program in Ethiopia is "Enhanced household food security (USAID/ETHIOPIA Results Review (R2), March 2000)," which is a key aspect of our project's research. In addition, the USAID/Ethiopia Mission has targeted the Amhara Region, the administrative area where South Wollo is located, as one of their main geographic areas of interest. By working with zonal and regional levels and disseminating our research and policy findings to Amhara officials through workshops, publications and outreach, the project will facilitate policy dialogue between USAID and the Amhara Region.

Already the South Wollo research program has received approximately \$100,000 from USAID/Ethiopia to support case study research on resource tenure and non-farm activities as

they relate to enhanced food security and incomes. Our research program is one of the CRSPs that USAID has indicated for continued support in the next two years, and USAID officials continue to participate in our seminars and workshops. The key individuals are Kurt Rocheman, Agricultural Officer at USAID/Ethiopia and Tadelles Gebresellasie of the Agriculture Office, USAID/Ethiopia. Different representatives of USAID/Ethiopia have attended four BASIS workshops to date and members of the South Wollo research program have on five different occasions given informal ‘updates’ and presentations at USAID/Ethiopia. The Amhara Regional Government’s recent ‘five year plan’ has among its top priorities increased regional food security, improved access to credit by rural populations, and growth in rural employment. The proposed research will complement these objectives and be in a position to assist regional and zonal policy makers in understanding the constraints to improved food security and income growth. In Ethiopia the project will continue to work with the Zonal and Regional Departments of Economic Planning and Development, and the Food Security Programme of the Department of Agriculture.

The ‘Assets, Cycles, and Livelihoods’ project also has proposed a research site in Kenya and communications already have been initiated with Meg Brown, the Agriculture and Private Sector Officer, USAID/Kenya about the ways in which the program could complement USAID’s program. Coincidentally, Ms. Brown was the AID Agricultural Officer in Ethiopia when BASIS first began to work there and is knowledgeable about and supportive of the work that we have been doing in South Wollo. The Kenyan site is in a food insecure, pastoral zone and USAID/Kenya has shown recent interest in rural development in Kenya’s pastoral areas. We anticipate keeping USAID/Kenya aware of our work in Kenya and to invite them to meetings and workshops.

### **3.1.2 Communicating Lessons Learned and Best Practice in the BASIS Policy Domains**

BASIS II will continue and slightly modify the practice of issuing *BASIS Briefs*. *BASIS Briefs* are short, accessible documents that summarize research activities or findings, identifying important topics and policy implications, and/or suggesting directions for research or policy formulation. For examples of *BASIS Briefs* produced during Phase I, see <http://www.wisc.edu/lrc/bas-puba.html#brief>.

In Phase II, this series will continue as *BASIS Policy Briefs*. Projects will prepare briefs that specifically focus on best policy practice in the project’s specific policy domains. The BASIS ME will assure that the briefs remain practitioner oriented and accessible. The *BASIS Policy Briefs* will be printed and disseminated as well as posted on the BASIS website and can be useful in directing readers to more comprehensive research reports and data.

The *BASIS Policy Briefs* will also serve as a prime instrument of communication with AID Missions, both in the countries where BASIS works as well as in other countries. *BASIS Policy Briefs* will thus serve to widely communicate the results of BASIS research. They will also serve as a calling card that will inform missions of the contributions that BASIS can make to their programming efforts. The BASIS director and its CTO will be responsible for this broader dissemination of BASIS research.

## 3.2 COMMUNICATION WITH HOST COUNTRY POLICYMAKING COMMUNITIES

As a fully collaborative research program in which each principal research project has both a host country principal investigator (PI) and a US-based PI, one of the strengths of BASIS is the depth of its connections with host country researchers. BASIS collaborating researchers and their institutions are a key component of the BASIS communication strategy. Part Two details the collaborative relationships each BASIS Phase II project has with host country scholars, highlighting the institutional capacity and voice each team brings to the task of engaging the host country policymaking community. The matrix above summarizes those relationships. Organizations shown in the matrix are closely involved in their respective national policy debates and are considered “action groups.” Taking advantage of their collaborative relationships, BASIS projects will organize the *BASIS Policy Conferences*, and the action groups will be key policymaking participants in these events.

*BASIS Briefs* are another method by which each research team will communicate with host-country policymakers. By summarizing research activities or findings, identifying important topics and policy implications, and/or suggesting directions for research or policy formulation, *BASIS Briefs* can begin to translate BASIS CRSP research findings into policy. They will be printed and disseminated as well as posted on the BASIS website and can be useful in directing readers to more comprehensive research reports and data. For examples of *BASIS Briefs* produced during Phase I, see <<http://www.wisc.edu/lrc/bas-puba.html#brief>>.

## 3.3 COMMUNICATION WITH THE INTERNATIONAL POLICYMAKING COMMUNITY

Williamson (1990) coined the term “Washington Consensus” to refer to the major participants in the development debate and their shared set of propositions about what makes good development. While the content of the propositions has been disputed (Williamson [1994] revised his own list, Stiglitz [1998] wrote about the “post-Washington Consensus,” and Birdsall et al. [1999] proposed an alternative “Latin Consensus”), there can be no doubt that Williamson identified an important (epistemic) community whose thinking profoundly influences development policy across the globe. Because BASIS’s ability to directly influence local policy is limited to the countries where it has research programs, it must also find a way to influence national and international policymaking bodies.

While the term ‘Washington Consensus’ seems to imply a sort of regimented thinking that does not accurately describe the complexity and nuance of policy debate within AID, the World Bank and other development agencies, it does implicitly identify an important community of international development policy makers whose understandings help shape the tenor and direction of development policy making. Building on its thematic strengths and the reputations of its researchers, BASIS will speak directly to this International Policymaking Community through *BASIS Lessons Learned Policy Conferences*. Each conference will focus on one of the global constraints that structure the BASIS research agenda. By drawing on participants from the various BASIS projects, these conferences will serve as a primary vehicle by which cross-regional synthesis and learning will take place. The BASIS Director, guided by the BASIS

Technical Committee and USAID, will take the lead in designing these conferences, which will be organized in three stages:

### ***Stage 1: Synthesis of Lessons Learned***

Researchers will be commissioned to prepare policy-oriented analyses on the topic of interest. An editor or small editorial team will be selected and charged with preparing a synthetic essay on the policy lessons learned on each topic, as well as demanding that the each commissioned author maintain a policy focus. A first meeting will be held at which the commissioned authors will present their drafts to a relatively narrow circle.

### ***Stage 2: Global Electronic Discussion of Lessons Learned Policy Paper***

Based on the findings of stage 1, the editors will draft a lessons learned paper. Working with AID, the World Bank, local development banks, etc., a global electronic conference will be held in which reactions to the Lessons Learned Policy Paper will be solicited. Prior experience with a collaborative AID-World Bank lessons learned conference on land policy shows that such electronic for a can provide valuable input and reaction from a broad variety of participants from across the globe.

### ***Stage 3: Final Lessons Learned Policy Conference***

Based on reactions from the first two stages, papers will then be revised and presented to a public forum (held in Washington, DC or similarly appropriate place) to which members of the International Policymaking Community will be invited. These *BASIS Lessons Learned Policy Conferences* will be scheduled to coincide with Centers Week in Washington, DC to allow the greatest number of participants to attend. Joint sponsorship for the events will be developed with the World Bank, local development banks, and other such organizations. The end result will be a book or a special issue of a general readership journal such as *World Development*. The matrix above lists possible topics for the *BASIS Policy Conferences*, topics that offer the potential of drawing together and synthesizing both new and old (*i.e.*, BASIS Phase I) BASIS research.

BASIS's International Policymaking Community communication strategy will pursue opportunities to address important policy issues within its domain as they arise. (For example, BASIS is currently working with USAID and the World Bank on a major conference to discuss best practices in the area of land policy.) BASIS can serve USAID by engaging its expertise in new and important policy issues as they arise, and the BASIS budget sets aside funds so that it can participate in (and occasionally initiate) these opportunities.

## **3.4 COMMUNICATION WITH ACADEMIC COMMUNITIES**

Persuasive communication with the academic community is perhaps the most indirect way of influencing the policy debate; however, its influence over the medium term should not be overlooked (Cooper and Packard 1997). Persuasive communication with this group is the best guarantee of research that is both high quality and capable of supporting generalization. It is also, ultimately, a *sine qua non* of credible communication with the international policymaking community.

As professionals in their own fields, BASIS researchers contribute to the academic literature through peer-reviewed journals, books, and papers presented at their professional conferences. PIs participating in Phase II have published more than 200 books, chapters, and journal articles in the past 10 years. In part, Phase II projects were selected because of their PIs record of producing collaborative publications with host country researchers. BASIS research will appear not only in top international journals but also in local and regional journals so that BASIS can continue its contribution to strengthening the academic communities in countries where it works.

The academic community is important in the policy process in that researchers at academic institutions produce much of the research on which good policy is based, ensuring that standards for quality research and sound analysis are maintained. Academic publications and presentations can be an important tool for policymakers in forming policy in their country or region, and much of BASIS research will reach policymakers through the readily accessible *BASIS Briefs*. BASIS findings, both in the longer, more academic outputs as well as in the shorter, policy-oriented outputs, are made available to a large audience of researchers and policymakers who use it either in future research or in policy formulation.

Outputs from *BASIS Policy Conferences* will serve as one conduit to the academic community. In addition, every BASIS research project carries with it the expectation that its scholars will publish in disciplinary and multi-disciplinary academic journals. Also, BASIS contributes to the academic community by training new researchers and, sometimes, policymakers. The final row in the policy communication matrix above summarizes training activities of each project.

### **3.5 MISSION RESPONSIVENESS**

As already discussed, each BASIS project has associated with it a specific policy domain. These policy domains will be the foundation upon which both the *BASIS Briefs* and the *Best Practice Policy Conferences* will be built. These domains will also help articulate the areas in which BASIS can respond to AID Missions that request assistance in identifying problems and thinking through policy options and prospects.

As part of its normal activities, BASIS Phase II will support an outreach program that will:

1. Extend the results of research in these domain areas to AID Missions that request such help;
2. Maintain a pool of resources to fund the visit of relevant project personnel to the relevant AID Mission in order to carry out this outreach function;
3. Use its networks and contacts to help Missions identify researchers able and interested in working on longer term research projects that might grow out of initial contacts between BASIS and the Mission.
4. For shorter terms Mission needs, BASIS will help facilitate contract between Missions and the BASIS IQC.

As detailed in Section 10 below, the BASIS budget will maintain an annual pool of \$10,000 to \$20,000 to carry out this work (see the USAID outreach line item in the budget sheets presented in section 10).

### 3.6 IMPACT INDICATORS AND EVALUATION

BASIS is a policy-oriented research program. As shown by the successes of BASIS Phase I, the impacts of such research can be substantial. For example, the BASIS Phase I work in El Salvador shows that BASIS research can not only bring new information to bear on a problem, it can also heighten national attention on particular issues, actively engage the government and other actors into a dialogue about the issues, and suggest lessons learned to help guide the creation of policies designed to alleviate identified problems (see Section 1.2 above and Appendix A.2 for further details on the impacts of this and other Phase I projects).

As this prior experience makes clear, BASIS' impacts will not always be of the form taken by the technology or crop-oriented CRSPs, nor can they necessarily be measured in the same way. Each of the BASIS II projects targets one or two of the policy domains described earlier. However, standing between the policy relevant lessons learned by the BASIS projects and the actual people who will benefit from them are a number of policy actors who make the choices that will ultimately determine whether BASIS research is able to touch the lives of those it intends to help. Unlike a new seed variety or cultivation practice that can be directly adopted by its intended end user beneficiaries, BASIS research is subject to a layer of policy intermediation.

These observations do not of course invalidate the importance of impact indicators. They do, however, suggest that in the presence of policy intermediation, indicators need to be keyed on the quantity and quality of interactions with the policy intermediaries. There are thus six steps in the BASIS impact and evaluation strategy:

1. *Research Relevant to the BASIS Global Constraints and Policy Domains*
2. *Communication with Policy Intermediaries and Actors*
  - a. *AID Missions*
  - b. *Host Country Policy Making Communities*
  - c. *International Policy Making Community*
  - d. *Academic Communities*
3. *Policy Changes*
4. *In-Country Beneficiaries of Policy Changes*
5. *US Benefits from Policy Change*
6. *Demonstration Effect Policy Spillovers to Other Countries and Regions*

Steps 1 and 2 have already been discussed in detail in Sections 2 and 3, respectively. While the quality of the work done in steps 1 and 2 will influence success at steps 3-4 (as the Salvador experience demonstrates), even high quality work at these initial steps will not always succeed at the later stages. At its first technical committee meeting, BASIS II will adopt a set of concrete indicators keyed to step 2 in the BASIS impact process. These indicators will then be used by BASIS and its External Evaluation Committee to measure the impact of the proposed research.

Finally, in addition to this impact and evaluation strategy that is applicable to all BASIS II projects, two projects contain components of action research. The Southern Africa Water Project is designed to enhance and monitor the participation of poorer and marginalized population in the management of water resources. This project will monitor:

1. The degree to which marginalized or poorer populations are able to represent their views to the development levels of water management including: Catchment Councils, Subcatchment Councils and Third Tier Institutions (Water User Board, Ward Water Development Associations). The project will assess the degree to which they present and articulate their views through continued participation in the new institutions of water management. A slightly different tack in Malawi where water views will be presented at District Meetings rather than in specific water-related institutions.
2. The degree to which the new institutions of water management act on the concerns of disadvantaged groups will be monitored and counted in the three different catchments.
3. The degree to which those engaged in water supply and sanitation begin to participate in the new water institutions. To date there has been a large gap between Water and Sanitation Committees and Borehole Committees and the new institutions. We will seek to influence their greater participation in these new institutions.

The South Africa- Kyrgyzstan Equity Sharing project is ultimately designed to affect the design of land reform programs, the delivery of credit to the poor, and how rights pertaining to land, water, property and profits are clarified and strengthened in land related legislation, and in the regulations that govern implementation. However, as explained in Section 5 below, this project will in South Africa participate in the design and implementation of pilot, equity sharing scheme programs. This will give the opportunity to directly monitor the impact of the program on the incomes and patterns of resource use by beneficiary households. As with the other research programs, appropriate direct impact indicators for this activity will be finalized at the first technical committee meeting.

## References

- Birdsall, Nancy, C. Graham, and R. Sabot. 1998. "Virtuous Circles in Latin America's Second Stage Reforms." In *Beyond Tradeoffs: Market Reforms and Equitable Growth in Latin America*, edited by Birdsall, Graham, and Sabot. Washington, DC: Brookings.
- Cooper, F. and R. Packard, eds. 1997. *International Development and the Social Sciences: Essays on the History and Politics of Knowledge*. Berkeley: University of California Press.
- Stiglitz, J. 1998. "More Instruments and Broader Goals: Moving Toward the Post-Washington Consensus." WIDER Annual Lecture (WIDER Helsinki Finland).
- Williamson, John. 1990. *Latin American Adjustment: How Much has Happened?* Washington DC: Institute for International Economics.
- \_\_\_\_\_. 1998. "The Emergent Development Policy Consensus." In *Development at a Crossroads*, edited by M. Carter, J. Cason, and F. Zimmerman. Madison: Global Studies Program.



**Part Two:**  
**PRINCIPAL RESEARCH**  
**PROJECTS**

## 4. INPUT MARKET CONSTRAINTS ON ECONOMIC GROWTH IN RUSSIAN AGRICULTURE

**Contracting Institution:** IRIS Center of the University Research Corporation, International, University of Maryland

**PIs:** Bruce Gardner, Department of Agricultural and Resource Economics, University of Maryland; Eugenia Serova, Higher School of Economics, Institute for Economy in Transition

**Co-PIs:** Dmitri Rylko, Institute of World Economy, Russian Academy of Sciences; Natalya Shaigaida, Institute of Agrarian Problems and Information; V. Uzun, All-Russia Institute of Agrarian Problems; Olga Yastrebova, Netherlands Economic Institute and Moscow State University; Richard Blue and Leonid Polischuk, IRIS Center, University of Maryland; Gregory Brock, Georgia Southern University; Bob Jolly, Iowa State University; Zvi Lerman, World Bank and Hebrew University; Bill Liefert, Economic Research Service, USDA; Leonard Rolfes, Rural Development Institute.

**Collaborating Institutions:** Higher School of Economics, Institute for Economy in Transition, Moscow State University

### 4.1 PROBLEM STATEMENT AND CURRENT KNOWLEDGE

Nowhere do the global constraints to effective agricultural resource use targeted by Phase II loom larger than in Russia. Since 1991, Russian agriculture has faced problems and policy dilemmas as grave as any confronting a developed country's agricultural sector in peacetime. Liberalization of food commodity prices, in January 1992, introduced market uncertainties at the same time that government support to agriculture declined from an estimated 11% of GDP in 1992 to 1% of GDP in 1997 (Amelina 2000). *Kolkhoz* and *sovkhos* (both referred to hereafter as "collective farms") were reorganized, subsidized inputs were not reliably available, provision for pensioners and others on farms was sharply cut back, and private farming was introduced. All these changes occurred differently in different regions, and the pace of change varied greatly among them. The goal of market-oriented reform was a central motivation, but this goal was not fully shared by many people in agriculture and in government. Restructuring of former collective farms has not proceeded very far in many areas, and after an initial spurt the growth of private farming has been slow.

Nine years later, the results remain disappointing. Despite food price liberalization, barriers to marketing agricultural output are still present in many regions, and access to modern inputs is very limited almost everywhere. Agricultural output remains about one-third below the pre-reform levels of 1989-91. Incomes of workers employed in agriculture remain depressed. Yet significant changes have occurred, and market responses can be observed in the period since the ruble devaluation that accompanied the financial crisis of 1998 (Serova 2000). Output increases have been noted on household subsidiary plots, which have been enlarged and play an important role, especially where former collective farms are weakest. New arrangements are springing up in which input suppliers or other businesses related to agriculture are establishing vertically integrated or other contractual arrangements with agricultural producers. These arrangements are managing to supply much-needed fertilizer, chemical, and energy inputs in ways more promising

than the barter arrangements that have characterized the dealings of many former collective farms and the ad hoc and unpriced ways in which owner-employees of these farms often acquire inputs for their own farming enterprises on private plots. Despite the lack of fully developed landownership rights, rental transactions under which new operators may acquire the use of increased acreage are increasing and are beginning to be economically important.

In the years since 1991, despite the general interest and concern of many observers, there have been few systematic research efforts to survey, analyze, and make recommendations on the economic development of Russian agriculture. Because of the early liberalization of food commodity prices, and the comprehensive efforts of Russian statistical agencies to collect and publish prices of goods sold in state stores and city markets, several econometric studies of liberalized food market functioning have been published (e.g., Berkowitz, DeJong, and Husted, 1998; Goodwin, Grennes, and McCurdy, 1999; Gardner and Brooks, 1994). These studies indicate how difficult it is to draw conclusions about the extent, effectiveness, and consequences of even quite well documented and widely implemented reforms—so that even to this day there remains substantial disagreement about how far Russia has gone in establishing a functioning market economy in retail food commodities (particularly with respect to the importance of regional barriers to trade and arbitrage between markets).

With respect to factor markets, the informational and statistical base is less well developed. Indeed much of the anecdotal evidence pertains to barter transactions (e.g., a farm trading wheat for fuel with an energy company as counterpart) that suggest a lack of functioning factor markets. Nonetheless there have been formal surveys (along with informal yet well-informed organized interviewing efforts) that provide a substantial informational base. Much of this information is available to (and in several cases created by) the Russian collaborators in this project.

To focus our inquiry, we will address our efforts to explaining why agricultural output and farm incomes have fallen so steeply since 1991. Identification of the causes will provide a much-needed objective basis for assessment of policy alternatives. Consider the following hypotheses.

1. Agriculture's problems are the result of low product prices relative to input costs. If farm output could command more input services, the current structure of Russian farming, both new private farms and the "joint stock companies" created from former collective farms, could survive and perhaps even flourish.
2. Agriculture's problems are the result of incompleteness of the reforms. The assets of collective farms, most notably farmland, have not been distributed to members as private property that can form the nucleus of family farming, and liberalization of product and factor markets has been largely a sham. Thus the collective farm structure remains frozen in place, even though largely non-functioning, and incentives for individuals to take productive action on their own are lacking (beyond their household plots).
3. Agriculture's problems are the result of trying to change too much, too soon. Reforms have pulled the rug out from under former collective farms by withdrawing governmental support through input supply and drastically reducing the guaranteed market for products that was provided through deliveries to the State.
4. Agriculture's problems are a result of weaknesses in the rest of the economy. It isn't just that inputs cost too much relative to output, more fundamentally inputs aren't being made

available in sufficient quantity and quality at costs that could be covered by any reasonable prices (e.g., full world prices). There is too much labor on farms to be remuneratively employed in agriculture because of the lack of nonfarm employment opportunities.

While there is likely to be an element of truth in each of these hypotheses, they get greatly varying acceptance from different people. Many Russian traditionalists, notably in the Ministry of Agriculture, give a lot of credence to some combination of #1 and #3. They believe there is little that is fundamentally wrong with the large collective farms as they exist, and that pushing reforms such as distributing land to individuals will only create economic units too small to be economically viable. On the other hand, proponents of the “Washington Consensus,” epitomized by the World Bank, are likely to embrace hypothesis #2.

## 4.2 PROJECT DESIGN AND METHODOLOGY

The overall approach will be to develop findings of three kinds: facts, analysis, and policy implications.

**Facts:** Data bearing on the situation as outlined above are spotty. The accuracy of practically all such data has been disputed. Our first area of effort will be steps to improve our quantitative knowledge of the facts in Russian agriculture overall, and on a regional and commodity-specific basis. However, Russia is vast and our capabilities and budget require focusing on a few subjects and regions. Details will be worked out beginning with a meeting with Russian collaborators 12-15 December 2000. A prior meeting with all Russian and U.S. collaborators, in July 2000 at the IRIS Center at the University of Maryland, College Park, arrived at the following priorities.

First, we will quantify the emergence of new forms of contracting and economic organization of farming, with emphasis on efforts by farmers to deal with factor market constraints in purchased inputs, credit, and how independently operating farms interact with existing former collective farms as sources of raw material and inputs, and linkages with output outlets. This work will draw upon the USAID-sponsored Program to Revitalize Agriculture through Regional Investment (PRARI) in its initial stages. Case studies and industry surveys will be conducted in a few selected locations. Data will be collected for factor payments and product receipts, quantities of inputs and outputs involved (for evaluation of barter transactions), and such details as can be obtained about contractual provisions. Methodology for work in this area has been developed by Rylko (1999). There will not be an attempt to obtain fully representative samples; rather there will be oversampling of new private farming arrangements, some of which have already been contacted, and comparisons with former collective farms and small independent private farms in the same area.

Second, we will quantify the extent and significance of entrance barriers to agrifood markets. The subject has been investigated under the European Union’s technical assistance program for the Commonwealth of Independent States (EU-TACIS) project on Economic Federalism, but much work remains to be done. The research will focus on selected regions (to be coordinated with the farm-level surveys mentioned earlier) where barriers to trade and to entry of new firms in input supply will be assessed.

Third, using secondary data, the project will utilize Goskomstat statistics to trace a macro picture for Russia of the allocation of resources that has followed the redistribution of some resources

away from former collective farms. This includes flows of subsidies and other payments to farms, and taxes upon them, by all levels of government.

Fourth, the project will survey information available on transfers of land shares, the use of “normative” prices in taxation and transfers, and quantities of land involved in various types of arrangements. The Land Committee of the Russian Federation can provide relevant information, but for details it is necessary to go to Land Committees of *raions* that have undertaken pilot programs in land transfer. We will also collect information from regional governments and localities on legal and regulatory obstacles to land transfer, leasing, and use of land as collateral.

Fifth, to leverage our limited budget, we intend to collaborate to the extent possible with the ongoing efforts of other researchers, notably the USAID-sponsored Russia Longitudinal Monitoring Survey, based at the University of North Carolina, Chapel Hill, under which 8 surveys have been conducted in areas of Russia. These surveys focus on health and economic welfare, and can provide useful household-level data for farm families.

Sixth, despite obstacles to labor mobility, the Russian agricultural labor force is estimated to have shrunk by about 10 percent since 1991. We will develop information on the number of workers on farms of different types, their employment activities (on and off the farm), and wage and nonwage remuneration, and on reports that some farms have incurred serious shortages of certain categories of technically skilled workers, which has limited their capacity to adopt new technology. We will make extensive use of national and regional secondary data on population in rural areas and on farms of different sizes, including both workers and dependents (children and the retired or disabled persons), and their economic status as compared to urban residents in these areas and nationwide.

**Analysis:** The scientific centerpiece of the research will be an effort to bring data developed as described above to bear on the hypotheses about causal factors in post-reform economic developments in Russian agriculture. Our U.S. co-PIs have considerable experience using secondary data available in Russia, and some limited survey data, in the investigation of basic analytical issues, notably production functions, factor productivity and production costs on different types of farms. Each of the U.S. investigators will be pairing with one or more of the Russian investigators, who have less grounding in modern economic theory and econometric methods, in drawing conclusions from the data that the Russian investigators will be responsible for assembling.

The first round of analytical work will assess the consequences of observed differences across farms, regions, and over time in product prices, input availability, and other constraints discussed earlier, upon output and productivity of farming. Data on the extent of land transactions and transfers will be linked, statistically where possible, to data on the performance of agriculture. We will statistically associate land leasing arrangements, size of cultivated crop area, and productivity measures for types of farms, and as an aggregate for areas where land leasing is more prevalent as compared to areas where policies are more restrictive.

Second, using factor supply and demand models widely applied in the literature, we will examine whether the outflow of agricultural labor by region is correlated with the difference between the wages paid to agricultural and nonagricultural workers. A key empirical challenge will be measuring the *real wage* of agricultural workers, which can include monetary payments, in-kind payment of agricultural output, and the social-welfare services collective farms provide (health, education, housing, and entertainment). We will also test the hypothesis that because of

continued surplus labor on collective farms, the farms pay their workers a *real wage* higher than the value of their marginal product. We will then determine how far any gap between wages and the value of marginal product of labor goes to explain the current unprofitability widely reported for former collective farms, as well as measured efficiency and other farm performance indicators. On a related matter we will attempt to determine whether that part of the real wage consisting of social-welfare services is the dominant element in the gap, and therefore the dominant explanatory variable with respect to the identified performance indicators. This will test the commonly made assertion that collective farms suffer strongly from the burden of providing for their workers' social welfare needs. The work that the Economic Research Service, USDA has done in estimating agricultural production functions by region will be at the heart of this research, as the production functions allow estimation of labor's marginal product (Sedik, Trueblood, Arnade 1999).

Third, we will empirically estimate the effects of farm productivity, control over land, labor market conditions, and other variables on measures of economic well-being of rural people. For example, to what extent have off-farm employment opportunities or on-farm non-agricultural activities on former collective farms enabled people to improve or maintain their standard of living even when agriculture remains stagnant and unprofitable?

**Policy Implications:** Our general thrust will be not to make policy recommendations directly, but to make as clear and convincing statements as possible about the consequences of policy options. Which constraints in factor markets is it essential to remedy if productivity or incomes are to grow, and which constraints can be overcome by indirect means? (For example, can contracting with agroprocessing firms provide a viable way around the limitations of credit that result from the lack of private property in land for use as loan collateral?) The idea is to provide data-based evidence on what is at stake in productivity, investment in agriculture, and rural well-being in various reform or anti-reform policies being proposed.

### 4.3 RESEARCH COLLABORATION AND POLICY IMPACT

We plan to quantify the gains in productivity, output growth, and farm income that could be attained through improved input market performance. The main policy consequence of identifying the least substitutable inputs is that priority should be given to tackling deficiencies and impediments in markets for these inputs. Findings on regional input market integration will allow estimation of welfare losses to constraints on factor movement and trade, and so to quantify the benefits that can be obtained through removal of these barriers.

We have assembled a preeminent team of Russian and US scholars that cover the range of expertise needed in economic theory, empirical methods, policy analysis, and on-the-ground familiarity with the situation and policy options facing Russia today. The Russian Senior PI has a unique breadth and depth of experience in carrying out and coordinating research on Russian agriculture, and a proven track record of effectiveness in getting projects done and the results heard in the policy process. Russian co-PIs are from institutions that are the leading agricultural economics research centers in Russia. US involvement includes leading researchers on Russian agriculture from the Economic Research Service of USDA; from the Rural Development Institute, a key institution in the study of farmland issues in Russia; and experts with wide experience in the analysis of Russian commodity markets, labor markets, government finance, and the conduct of farm level surveys in the former USSR.

A year after the Golitsyno II conference, to be held in spring 2001 as a conclusion to Phase I activities in Russia, we will convene a conference at which Russian policymakers, researchers, and other interested parties would have an opportunity to review our survey research plans and test-case results from the first year of the project's activities. In later years, as descriptive and analytical results emerge, working papers will be widely circulated to interested parties and posted on a website at a participating Russian and U.S. institutions (in Russian and English as applicable).

In addition to published materials, we will conduct two public events and periodic government briefings in each of years 2 and 3 (and onward should the project be extended). One public event will be addressed primarily to social science professionals in Russia (both Russians and foreigners working or visiting Russia). The idea would be to keep the research community abreast of our ideas and progress and to obtain ongoing feedback on research and policy ideas. The other public event would be aimed at a wider public: press, government officials, agribusiness leaders. Here we would tentatively discuss the policy implications of our work, and address some broader economic and policy issues related to the work. Again, the idea is not only to get our results out but also to obtain feedback from interested parties. The periodic government briefings would depend on who is interested and what we have to say. Plans for such briefings would be developed in consultation with USAID, the Russian government, and others who may be interested such as some regional governments in areas where we are working. The form, frequency, and distributional mechanisms for briefing notes and longer policy-related publications are not specified here. The intention is to adapt these to the demands perceived by policymakers and USAID.

## References

- Amelina, Maria. 2000. "What Turns Kolkhoz Into a Firm? Regional Policies and the Elasticity of the Budget Constraint." Mimeo, World Bank, 32 pp.
- Berkowitz, D., D.N. DeJong, and S. Husted. 1998. "Quantifying Price Liberalization in Russia." *Journal of Comparative Economics* 26: 735-60.
- Gardner, B.L., and K. Brooks. 1994. "Food Prices and Market Liberalization in Russia." *American Journal of Agricultural Economics* 76: 641-46.
- Goodwin, B.K., T.J. Grennes, and C. McCurdy. 1999. "Spatial Price Dynamics and Integration in Russian Food Markets."
- Rylko, D. 1999. "Operators Farming in Russia." IMEMI, Moscow, mimeo.
- Sedik, David, Michael Trueblood, and Carlos Arnade. 1999. "Corporate Farm Performance in Russia, 1991-1995: An Efficiency Analysis." *Journal of Comparative Economics*, 27,3:514-533.
- Serova, E.V. 1999. "The Impact of Privatization and Farm Restructuring on Russian Agriculture." In *Golitsyno Workshop Proceedings*, Agrifood Economy Analytical Centre, Institute for Economy in Transition, Moscow.
- Serova, E.V. 2000. "Russia: The State of the Art in Agri-food Sector in 1999." Mimeo.

# 5. INSTITUTIONAL INNOVATIONS TO IMPROVE THE VIABILITY OF EQUITY SHARING UNDER PRIVATIZATION AND FARM RESTRUCTURING IN CENTRAL ASIA AND SOUTHERN AFRICA

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**Collaborating Institutions:** CASE, Institute of Natural Resources, Lima Rural Development Foundation, Rural Development Institute

## 5.1 PROBLEM STATEMENT AND CURRENT KNOWLEDGE

Central Asia and Southern Africa are undergoing political and economic transitions, the former from state and collective farm ownership to private groups and individuals, and the latter to redress the apartheid and colonial heritage of a racially biased and unequal landownership. Despite their different histories and policy contexts, a core problem is shared: poor people in rural areas are unable to make productive use of their land resources. In these two regions (as in so many other regions of the world), progress toward growth and income distribution goals appear to be retarded by the global constraints to effective agricultural resource use that Phase II will target. This problem is most acute where it has not been feasible to privatize land, infrastructure or movable assets to individual owners. Instead beneficiaries in many cases find themselves co-owning resources in diverse groups that lack the constitutional rules and organizational arrangements needed to effect decisive management, curtail free-riding, and encourage investment by the co-owners and outside financiers. Remedying these problems will not only improve but also relax the constraints to the sustainable use of environmentally sensitive resources.

**KwaZulu-Natal:** Land reform in South Africa has fallen far short of the goals set by the first democratically elected government in 1994 (Deininger et al 1999). In the province of KwaZulu-Natal where farmland transactions have been monitored since 1997, less than 0.5% of the commercial farmland owned by whites has transferred to historically disadvantaged owners each year despite the presence of an active land market and the availability of government grants to purchase land on a willing buyer-willing seller basis. The slow pace of land reform has been attributed to two obstacles. First, it is difficult to partition large commercial farms into smaller, more affordable units owing to legal constraints and the high cost of sub-division (Graham 2000, Simms 1997). Second, prospective farmers lack capital and are unable to finance land with mortgage loans due to cash flow problems caused by high nominal interest rates and low returns



to land (Nieuwoudt and Vink 1995; Lyne, Zille, and Graham 2000). Consequently, most of the disadvantaged people who have managed to acquire farmland have done so by pooling their meager resources and purchasing farms collectively, a trend that is expected to continue even if interest rates decline and legislation restricting sub-division is repealed. This poses a major challenge to policymakers as the farms acquired by groups of land reform beneficiaries risk becoming open access resources characterized by unsustainable stocking rates, failure to maintain shared infrastructure, and lack of investment to maintain or increase agricultural productivity (Hornby 1996; Lima 1998; Lyne and Graham 2000, Roth and Haase 1999).

These adverse outcomes signal institutional failure. A notable exception is the success of several equity-sharing schemes in the Western Cape province, which have redistributed commercial farmland and wealth while improving agricultural performance (Eckert, Hamman, and Lombard 1996; Kirsten, Van Rooyen, and Ngqangweni 1996; Hamman and Ewert 1998). These are company operations in which financial equity is shared between the previous owner and historically disadvantaged farm-workers, benefits and voting rights are proportional to individual shareholdings (to prevent free-riding), and companies must comply with legal requirements that promote financial transparency and accountability.

Private sector response to equity-sharing projects has been fueled by recent changes in government policy. In 1996, the South African Department of Land Affairs (DLA) made its land grant available to farm workers to finance equity in land-based enterprises. Then in 1999, the DLA launched its Land Reform Credit Facility (LRCF) with the aim of drawing private sector finance and human capital into commercially viable land reform projects. This Facility offers loans with deferred or graduated repayment schedules to reputable banks and venture capitalists who finance, on similar terms, equity-sharing projects and land purchased by aspiring farmers.

Together, government land grants and the LRCF could play a significant role in redistributing commercial farms to disadvantaged farmers and farm workers in South Africa. However, the real challenge lies outside the commercial farming sector in the homelands where most of the rural poor are concentrated and high quality resources are poorly utilized. Land that is well suited to high value irrigation and ecotourism projects has not been developed because resources are shared by communities who face the same institutional and finance problems confronting land reform beneficiaries (DOA 2000; Wynne and Lyne 1995).

**The Kyrgyz Republic:** During the Soviet era, almost all agricultural assets were state or quasi-state property. Rapid privatization of state assets in the Kyrgyz Republic's agricultural sector since 1992 has created a large group of new agricultural enterprises whose common characteristic is shared ownership by groups of member-owners. Three broad classes of newly privatized entities have emerged from privatization: agricultural production enterprises, agricultural service enterprises, and water user associations. Seventy percent of arable land, and almost all agricultural machinery and agricultural services (transport, chemicals, food processing) are owned and managed by privatization beneficiaries who have become shareholders in the new enterprises.

The agricultural sector, years after reforms were implemented, remains in crisis. The trading system of the command economy has disappeared, but new, market-oriented systems are developing slowly. Assets received by new member-owners are aging and require repairs or replacement. Capital to repair and replace equipment, buildings and livestock is extremely costly through the formal financial sector, itself fragile. Leadership positions often have little accountability to worker-members and transparent decision-making is frequently lacking.

Anecdotal evidence points to problems of asset-stripping by irresponsible leaders in some cases, and government interference in others. The legal framework governing shared ownership is untested or remains open to interpretation. New investment is scarce and outside investors have not been inclined to invest in newly formed enterprises.

Recent discussions of post-Soviet agriculture have focused on the decapitalization of collectively managed enterprises; current arrangements create incentives to defer or forego replacement of equipment (Caskie 2000). In the Kyrgyz Republic, co-owners are caught in a risk trap; they are unwilling to accept the substantial risks of restructuring given liquidity constraints, unevenly distributed agricultural skills, scarcity of input supply and processing services, and difficulties with marketing, but are unable to maintain asset levels on the unstructured farms (Childress 1999). Even though a fast-growing sector of small, independent farms that have broken off from the collectives, they remain dependent on service entities operated by shareholders, and most are members of a service cooperative or water-user association. This means that even for the smallholder sector privatization constrained by indivisible assets or costly asset restructuring is forcing the issue of creating corporate forms in agriculture capable of managing shared assets.

As shared ownership arrangements continue to evolve in the Kyrgyz Republic, additional changes are likely to be called for in the legal framework. Women's property rights are particularly problematic because tradition makes it harder for women to exercise their new legal rights over property. While women generally have legal and *de facto* access to land and other farm assets, their rights derive from membership in a household. However, when a woman lives outside a male-headed household, these rights are sometimes lost. In certain instances, particularly when families break up, both customary and written law may leave women vulnerable to losing all claims on jointly shared property (Giovarelli 2000).

For the Kyrgyz Republic to consolidate economic growth, corporate governance mechanisms are required that protect shareholders equity, encourage members to contribute to the enterprise, and integrate farm production with the agribusiness sector. Without resolution of these organizational problems, horizontal and vertical linkages are difficult to develop. Yet in the absence of these linkages, equity sharing enterprises are unlikely to be able to offer shareholders good reasons to support the enterprise with their own equity and labor. Unlike Southern Africa, where an external financier may be a candidate to serve as an equity partner, no similar entity stands out in the Kyrgyz Republic. Other sources of long term finance will thus need to be explored (e.g. vertical integration with processors, foreign partnerships, credit schemes, and debt for equity exchanges).

## **5.2 PROJECT DESIGN AND METHODOLOGY**

Both research sites—KwaZulu Natal in South Africa and the Kyrgyz Republic—have a number of similar characteristics that combine usefully in a research program:

- collective or group ownership and management of land and water resources and fixed capital improvements is emerging as a prevalent model in both transitions;
- because of subdivision constraints (southern Africa), debt overhang and farm size constraints (the Kyrgyz Republic) and financial market failures (both regions), there is need for strategies that improve the access of groups/communities to physical and environmental resources; and,

- a combination of constraints—moral hazard, missing institutional framework, free-riding, lumpy inputs, and organizational inefficiencies—limit the ability of groups to access financial resources or to make the investments needed to maintain or increase farm investment.

There are also important differences that affect the research design. First, South Africa is further ahead in its thinking on the policy framework generally, and in particular on laws and regulations governing group enterprises. Second, South Africa has a more robust market in land and financial capital, which combined with a more well-developed policy framework, gives it more degrees of freedom in setting policy interventions. Third, the Kyrgyz Republic lags behind South Africa in institutional capacity to design reforms and assist beneficiaries in their implementation. Because of these differences, the Kyrgyz program will be slower in developing and strategies will be needed that help bridge the gap in knowledge and experience between the two sites.

This research program proposes to:

1. identify institutional and finance problems that constrain equity-sharing schemes created under privatization and land reform programs in the Kyrgyz Republic and southern Africa;
2. based on the constraints identified, determine a set of “best practices” for broadening and deepening beneficiaries’ access to resources, and encouraging their productive use, through the study of successful equity-sharing schemes;
3. apply these best practices to the design or redesign of a limited number of new or experimental equity-sharing schemes;
4. determine how these organizational and institutional innovations, combined with greater land and financial market integration, can improve their economic and environmental performance.

The research program will be action-oriented with a primary focus on identifying constraints and “acting out” solutions by processes of experimentation and interaction (Johnston and Clark 1982, pp.23-28). The research design in the figure below will help guide enterprise selection in the two regions for each of two types of enterprises: groups engaged in agricultural production and marketing, and groups engaged in the management of environmentally sensitive resources (ecotourism projects in South Africa, irrigation projects in the Kyrgyz Republic).

<b>Research design: Equity Sharing Enterprises project</b>			
		<b>Macro or meso policy environment: missing or imperfect factor markets</b>	
		Policy constrained for growth	Policy conducive for growth
<b>Organizational and institutional arrangements</b>	<b>Constraining growth:</b> Large beneficiary group Non transferable shareholdings No external capital Weak accountability	(I) Kyrgyz Republic N=3	(II) South Africa N=3
	<b>Promoting growth:</b> Small beneficiary group Transferable shareholdings External capital Strong accountability	(III) Kyrgyz Republic N=3	(IV) South Africa N=3

The viability of farm enterprises is determined by differences in the macro or meso policy environment that affect incentives and legal certainty (cells I and III vs. II and IV), and by differences in organizational and institutional arrangements (cells I and II vs. III and IV). Quadrant (I) is the worst case scenario, i.e. poor policy environment and ill-designed organizational structure governing the operation of enterprises. Quadrant (IV) is the best case scenario—positive policy environment and well-designed organizational structures. Even though South Africa is further ahead on its policy framework governing group enterprises and has a more robust market in land and financial capital, one can nevertheless observe some enterprises with good performance (best practices) and others with poor performance. The Kyrgyz Republic has a more poorly developed policy framework and factor markets. However, even within this more restrictive policy environment, it is anticipated that enterprises with relatively good and poor organizational arrangements can be identified that affect enterprise performance.

Research within each region is anticipated to proceed through four stages, with the Kyrgyz research proceeding at a slower rate (to be determined) due to differences cited above.

**Stage I, Identification of Constraints and Best Practices.** A limited number ( $n \leq 12$ ) of group enterprises will be selected for case study from the two sub-groups (6 each). In practice, it might not be possible to draw 3 case studies from each cell (it is doubtful for example that there are six ecotourism projects involving community stakeholders in South Africa). In-depth interviews using a structured, open-ended questionnaire will be held to explore economic, financial, and institutional reasons for enterprise performance. Particular attention will be paid to institutional arrangements and how they impact on internal rules, practices, management, compliance, incentives, and access to finance. How these arrangements affect women's access to resources will be emphasized. The analysis will aim to identify combinations of institutional arrangements that impact positively on performance (measured in terms of financial health, outreach and empowerment). These "best practices" will then be used to design and implement new enterprises and business plans under Stage II.

**Stage II, Facilitation of Pilot Equity-Sharing Models.** During the second year of the project, one group enterprise from each sub-group will be selected for further facilitation. Either one firm would be drawn from category I, or an entirely new enterprise from outside the sample will be chosen for facilitation (e.g. in South Africa, the new projects will be in KwaZulu Natal while the case studies will largely focus on the Western Cape). Depending on the factors deemed important for determining success, beneficiaries will be identified, organizational arrangements decided upon, constitutions written, business plans designed, entities registered, and financing secured. These activities will be carried out by facilitators and fieldworkers knowledgeable in the best practices (via workshop training provided by researchers) and the legal framework. Indicators of performance will be established for each enterprise, and a baseline survey administered to a sample of 40 beneficiaries within each enterprise to monitor impacts.

Researchers will advise on the types of organizational reforms to be implemented; responsibility for implementing the reforms will lie with participating NGO and government bodies. For example, in South Africa, projects will not be implemented in KwaZulu-Natal unless a Project Identification Report demonstrating full acceptance by community members, tribal authorities and financiers has been approved by the DLA. Otherwise, government will not award grants to members of a community (to purchase equity in the project). This precedent will also help to discourage private financiers from persisting with joint ventures that skew benefits in favor of tribal authorities or companies (tourism ventures for example) rather than land reform beneficiaries or community members.

**Stage III, Monitoring of Pilot Enterprise Performance.** The third year will be used to monitor the performance criteria on projects established under Stage II, monitor beneficiary perceptions and benefits by paneling the respondents sampled in Stage II, and examine modifications made in the business and implementation plans to correct problems and address unforeseen constraints.

**Monitoring Agrarian Structure and Farmland Transactions.** Apart from monitoring beneficiaries of restructured enterprises in Stages II and III, the project will continue to support two longitudinal surveys initiated under BASIS Phase I: The Annual Census of Farmland Transactions in KwaZulu-Natal, and the Farm Performance Survey in the Kyrgyz Republic. The Annual Census of Farmland Transactions tracks the number of historically disadvantaged people who gain access to land, in what form (individual, corporate, group), and the financing instrument used (grant, cash, mortgage loan) for KwaZulu Natal. The Farm Performance Survey funded by BASIS and the British Know-How project in FY2000 consists of a national random sample of 468 farms, stratified by rayon, oblast and farm type. Like the Annual Census, the time series will make it possible to measure changes in farm structure and land transactions over time.

### **5.3 RESEARCH COLLABORATION AND POLICY IMPACT**

Outputs for South Africa include: *BASIS Briefs* on best institutional practices, facilitation of equity-sharing schemes on communal land, and comparing the quantity and quality of farmland transferred to disadvantaged men, women and groups by different modes of land redistribution; Southern Africa workshop presenting results to policymakers, financiers and relevant NGOs; manual summarizing the best practices, guidelines for implementing equity share projects on communal land, and study results; report on land transfers in KwaZulu-Natal from 1997-2002; and two papers submitted to journals dealing with the case studies and pilot projects respectively.

Outputs for the Kyrgyz Republic include: report on successful approaches to management of equity-sharing enterprises; training materials (slides, graphics, fact sheets) and seminars presented for agricultural enterprises and the agricultural support services community; analysis of the establishment and transfer of property rights to and from women in a written report and module in training materials; policy report of use to governmental decision makers and donors; a handbook of best practices; and legal and regulatory recommendations.

In South Africa, the reports and manual will be disseminated to key personnel at the DLA, the Ingonyama Trust Board (which administers communal land in KwaZulu-Natal), the LRCF, the Environmental Justice Networking Forum (EJNF) and their 250 participating organizations, Ithala Bank and other financiers (either directly or via the Council of South African Banks). In the Kyrgyz Republic, the project will use the contact network and agricultural newspaper of the Ministry of Agriculture and Water Resources/Rural Advisory Development Service to diffuse the material to the approximately 400 local councils in the country.

The project will include NGO partners and networks. In South Africa, design of the pilot equity sharing projects will involve Ithala and the LRCF as financiers. Likewise, the Ingonyama Trust Board will play a central role in the design stage because it is legally responsible for brokering and administering long-term leases over communal land. The DLA will assist in selecting the pilot projects as it must approve a "Project Identification Report" before grants can be awarded to beneficiary households to purchase equity in the joint venture. Lima's researcher and facilitators will help to adapt the mix of "best institutional practices" to suit local conditions and will be responsible for implementing them. In the Kyrgyz Republic, the research will involve personnel from the Ministry of Agriculture and Water Resources (MAWR) in analytical roles, working with both the case study and survey data. The preparation of "best practice" materials and training programs for their use will be developed jointly between the project and the MAWR's Republican Center for Land and Agrarian Reform, and the affiliated Rural Advisory Development Service. The MAWR will also assist in the selection of case studies and pilot enterprises, and assist with identifying sources of investment. MAWR will manage the farm survey data gathering and data processing. The project will endeavor to engage government and the private sector as participants in the program to both help focus the research toward national priorities and assist in policy formulation.

## References

- Caskie, P. 2000. "Back to Basics: Household Food Production in Russia." *Journal of Agricultural Economics*. 51 (2): 196-209.
- Childress, M. 1999. "Policy Brief: Land and Agrarian Reform and Farm Performance in Chui Oblast, Kyrgyz Republic." Processed. SAC/DFID Land and Agrarian Project.
- Deininger, K, Naidoo, I, May, J, Roberts, B & van Zyl, J. 1999. "Implementing 'market-friendly' land redistribution in South Africa: Lessons from the first five years." Unpublished World Bank working paper.
- DOA. 2000. "Institutional arrangements for sustainable production on capital intensive projects in Ingonyama areas with specific reference to the Mooi and Tugela valleys." Unpublished report prepared for the KwaZulu-Natal Department of Agriculture, South West Region, Hilton.

- Eckert, J.B., J.N. Hamman, and J.P. Lombard. 1996. "Perceiving the Future: Empowering Farm Workers through Equity Sharing." *Development Southern Africa* 13(5): 693-712.
- Giovarelli, Renée. 2000. "Women's Rights to Land in the Kyrgyz Republic." Presented at Workshop, Bishkek, Kyrgyz Republic, June. (With Chinara Aidarbekova, Jennifer Duncan, Kathryn Rasmussen, and Anara Tabyshalieva).
- Graham, A.W. 2000. Land redistribution in KwaZulu-Natal: An analysis of farmland transactions recorded in 1997 and 1998. Unpublished MSc(Agric) thesis, Agricultural Economics, School of Agricultural Sciences and Agribusiness, University of Natal, Pietermaritzburg.
- Graham, A.W., and M.C. Lyne. 1999. "Land Redistribution in KwaZulu-Natal: An Analysis and Comparison of Farmland Transactions in 1997 and 1998." *Agrekon* 138(4): 516-525.
- Hamman, J, and J. Ewert. 1998. "A Historical Irony in the Making? State, Private Sector and Land Reform in the South African Wine Industry." Unpublished paper presented at the South African Sugar Association Conference, Johannesburg.
- Hornby, A.D. 1996. *An Analysis of the Development Constraints on a Micro-Institution in the KwaZulu-Natal Land Reform Pilot Programme*. Unpublished Master's thesis submitted to the Centre for Social and Developmental Studies, Faculty of Humanities, University of Natal, Durban.
- Johnston, B.F., and W.C. Clark. 1982. *Redesigning Rural Development: A Strategic Perspective*. Baltimore: Johns Hopkins University Press.
- Kirsten, JF, Van Rooyen, J & Ngqangweni, S. (1996). Progress with different land reform options in South Africa. *Agrekon*, 35(4):218-23.
- Lima. 1998. "Options for Government's Settlement/Land Acquisition Grant." Unpublished report prepared for the National Land Committee, Johannesburg.
- Lyne, M.C., and D.H. Graham. 2000. "The Impact of Land Redistribution on Tenure Security and Agricultural Performance in KwaZulu-Natal." Submitted to *World Development*.
- Lyne, M.C., P. Zille, and D.H. Graham. 2000. "Financing the market-based redistribution of land to disadvantaged farmers and farm workers in South Africa: Recent performance of the Land Reform Credit Facility." Unpublished mini-symposium paper presented at the XXIV Congress of the International Association of Agricultural Economists, Berlin.
- Nieuwoudt, W.L. and N. Vink. 1995. "Financing of land purchase by small-scale farmers." *Development Southern Africa* 12(4): 509-17.
- Roth, Michael, and Dwight Haase. 1999. "Land Tenure Security and Agricultural Performance in Southern Africa." Paper prepared for the Johannesburg World Congress on Land Use and the Sustainable Development of Natural Resources (submitted for publication).
- Simms, P. 1997. "Land redistribution in South Africa—some practical lessons." In *Proceedings of the 11th International Farm Management Congress, Vol. 1*, edited by L. Bauer. International Farm Management Association and The Canadian Farm Business Management Council, Olds, Alberta, Canada.
- Wynne, A.D., and M.C. Lyne. 1995. "Communities, Institutions and Natural Resources: An Assessment of Case Studies from KwaZulu-Natal." *Development Southern Africa* 12(5): 649-667.

# 6. INSTITUTIONAL DIMENSIONS OF WATER POLICY REFORM IN SOUTHERN AFRICA: ADDRESSING CRITICAL WATER-LAND INTERSECTIONS

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## 6.1 PROBLEM AND CURRENT KNOWLEDGE

One of the Phase II goals is to relax global constraints to coordinated and sustainable use of environmentally sensitive resources. These constraints are especially pronounced in southern Africa as the following three examples illustrate.

### *Three brief examples of water issues*

*—In Guruve District Zimbabwe, there are several large-scale farmers who had a dam constructed and they each have water rights (soon to become permits) to certain quantities of water. One farm has been designated by government for resettlement. What happens to the water rights of that farm now that it is to be settled by at least thirty new households? Will they be able to sustain the farm's irrigation system? Will these reforms genuinely benefit poorer households and women? In what ways can the [Centre for Applied Social Science] team serve as a resource for these resettled farmers?*

*—Along the Likangala River in Malawi there is an irrigation scheme, formerly government subsidised, which is now to become self-supporting. The scheme is also to be rehabilitated. The Malawi government proposes to charge for water in its water reform proposals. Will the members of the scheme be able to make the transition? What happens to the women members of the scheme with privatization?*

*—In Mhondoro Communal Land in Zimbabwe residents have had many boreholes and wells dug on their homesteads to irrigate tobacco seedlings, which are then replanted in the fields. Women do not have rights to the land and do not benefit equally from the sale of their crops. Will these households also be willing to pay for the obvious commercial use of their groundwater as they are supposed to under Zimbabwean law? Will this example provide general lessons about the shift from domestic to productive water and*



*how women and men negotiate this shift? How will these water users be represented in the new institutions of water management?*

Cosgrove and Rijsberman (2000: 3) remark that “the real revolution in water resource management will come when stakeholders have the power to manage their own resources.” The challenge remains to devise and implement the mechanisms that will institutionalise and make effective that power in the face of imperfect factor markets.

This project will take place in the context of water reforms that comprise new laws and legal instruments and new management structures for Malawi’s, South Africa’s and Zimbabwe’s water resources. There are two major development narratives driving the process of water reform. The first emphasises stakeholder participation and democracy. The second seeks to establish economic efficiency and rationality in water use. In South Africa and Zimbabwe where water management had been in the hands of technical experts and large scale commercial farmers (almost all white), it is now to be changed to larger and more representative units. The three countries are at different points in this process, with South Africa and Zimbabwe implementing new legislation and institutions and Malawi with draft policy and legislation said to be nearing completion. Zimbabwe, for example, has been divided into seven large catchment areas, each managed by a Catchment Council. These are ecologically based administrative units with no relationship to other existing political and administrative entities. This permits institutional innovation on the one hand (stakeholder participation) and potential difficulties with already existent institutions (for example Rural District Councils in Zimbabwe) on the other. Ensuring equitable access to water is an overarching goal in South Africa and Zimbabwe with highly developed irrigation systems and large-scale farming sectors. Part of the answer to this has been the creation of new stakeholder and participatory systems, which are seen as creating genuine representation of all water users in water management.

The second central goal of the new water management system is to use water efficiently and economically. To accomplish this, new principles are being introduced including focusing on productive uses of water, users pay and polluters pay. In this context, how will the desire to incorporate market principles in water utilization be done in Zimbabwe and Malawi, and how will they be modified in South Africa to incorporate new and poorer users in rural areas? How are the three nations grappling with water pricing issues and how will this affect access to water so central to agricultural productivity and success?

Land reform proceeds independently of water reform. There is a long administrative and political history that leads to this division. The overarching goal of land reform in all three countries is to reduce the differences in farm size and land holding between the large-scale sector (the estate sector in Malawi) and communal or customary areas. Greater equity and equality of access are the underlying goals. These goals are usually framed in terms of race and not of gender. In Malawi estates are owned primarily by black Malawians and the land issue is framed in terms of full utilization of land. Thus, the modalities of land reform are quite different in each country due to the importance of the agricultural sector on the one hand and the land tenure systems on the other. In South Africa, forced resettlement of blacks into homelands by the apartheid government continued through the 1970s, resulting in a situation today where approximately 60,000 white-owned farms occupy 86% of rural land (South Africa 1997). The estimated 14 million people of the former homelands occupy only one sixth of that under white ownership. In Zimbabwe, too, land distribution is unequal. Currently, resettlement schemes occupy 9.1% and communal areas 41.8% of the total land area (CFU 2000). Much of the remaining cultivable land, including the

best land, is occupied by the large-scale commercial farms, most of which are owned by whites, though some are owned by blacks and by multinational corporations. In both South Africa and Zimbabwe, women's access to land has been particularly restricted due to customary laws and the recognition of those discriminatory practices by the state. While South Africa has moved to make women legal equals to men, little has been accomplished in this regard in Zimbabwe. The matrilineal kinship and matrilocal residential systems in a large part of Malawi moderate, though do not eliminate unequal rights between men and women. Land management in the communal or Black African areas in the three nations, unlike water, remains vested in state authorities. There is a disjuncture in how these two key resources are managed while from a smallholder perspective access to water is often key to agricultural success.

Both the current BASIS-funded research and other research on water resource management now show that the interactions of water and land are multiple and pervasive. While each resource can be examined in its own right, this research examines critical arenas where access to both land and water resources would be enhanced by linking them. We will identify opportunities in formal and informal institutions for improving co-ordination of these resources. While the highly publicized land invasions in Zimbabwe have reinforced the focus on land reform, in the long term the nexus between the land and water reform strategies and process is likely to be most decisive to human and environmental well being not only in Southern Africa but also in other regions of the world dependent on agricultural production and scarce resources. Most experts have concluded that the rate of expansion of irrigated land is the important determinant of water stress.

Thus in the two development narratives of economic efficiency and participation there is a difference between having land in communal areas remain state owned and managed while water is being increasingly decentralized. We predict that land management too will become increasingly decentralized but with a different institutional structure since land rights are so closely connected to traditional authorities, political power and identity. We will consider the strengths and weaknesses of the new water management institutions to examine how and in what ways they can interface with existing or emergent land management institutions. Smallholders in all three countries are inextricably meshed in national markets. How this affects emergent markets in land and water as reforms are implemented bears close scrutiny.

## **6.2 PROJECT DESIGN AND METHODOLOGY**

The proposed research will focus on particular issues and sites to enable a close investigation and analysis of these interactions in order to identify (a) points at which a lack of co-ordination in policy initiatives is detrimental to broadening access and encouraging productive use of water resources; (b) ways in which such negative effects can be removed; (c) specific legal, policy and administrative elements that will work with rather than against water-land interactions.

Throughout, the primary focus will be on the modes of allocation, the use of water and the effectiveness of the new water management institutions in the course of water policy reform. Land reform per se is not our focus, but attention to land issues will follow where allocative mechanisms for land directly affect access to and use of water. This is flagged below in the indicative research questions by bracketing land. Key issues to be studied are:

***(a) Institutional and policy harmonization***

- Which institutional forms and arrangements are most conducive to increasing access to water and land? Does Malawi's present reliance on newly formed local government institutions (District Assemblies) for management of water (and land) resources result in better sequencing and integration of the reform processes than the strategy of establishing separate institutions (Catchment Councils) being pursued by Zimbabwe and South Africa?
- Which elements in the new reform policies appear to be successful in reducing inequities, promoting productivity and sustainability, and which do not? What changes can be proposed to improve their success?
- In what ways can reform policies and implementation strategies be co-ordinated and sequenced to improve access to, and synergies between, these factors of production? What are the appropriate speed and sequencing of these two reforms?
- How do market liberalization, decentralization and other policy reforms affect policies and the working of water (and land) management institutions? For example, what are the impacts of the reliance on market mechanisms and users pay principles in Zimbabwe's water reform? Given that fees paid by large-scale commercial farmers for water are central to funding the new water reform institutions, what effects will land reform have on the viability of water reform? How will reforms proceed in light of the significant civil service retrenchment and public-sector budget reductions in Malawi and Zimbabwe?

***(B) Impacts of informal institutions and social relations***

- Does the introduction of new formal institutions disturb or strengthen existing informal institutional arrangements in managing water (and land) resources? If so, what are the impacts of these changes on access to resources by previously marginalized populations? In particular, how will women's informal or customary use rights to water (and land) be affected by the reform process?
- How do established social relations and informal institutions affect the functioning of formal water (and land) institutions and policies? For example, in Zimbabwe, water reform has converted previously formally recognized organizations, such as River Boards run by large-scale commercial farmers, into informal ones. Will these actors continue to exercise power and influence on the Catchment and Sub-Catchment Councils? How will the land reform affect their influence in water reform? In Malawi, access to valuable stream bank gardens is governed by local custom, but increasing demand is threatening the access of some people. Are the architects of the reforms aware of these existing rights and practices and how are they affected by new water policies, including new irrigation initiatives?
- In Malawi and Zimbabwe, prevailing gender relations discourage women's participation in formal institutions. Research to date suggests that this is the case in newly formed institutions such as Catchment and Sub-Catchment Councils as well as in older ones. When women are selected to serve, their voices are often muted or marginalized in formal deliberations. While men believe that they can represent women's interests, women themselves often disagree. We will examine possible mechanisms to protect women's interests and claims and to see if it is possible to guarantee their right to decision-making. We will work with women's NGOs in this effort.

We have selected two types of field research settings: wetlands (riverbanks and seasonally wet lowlands) areas and irrigated agriculture. The settings also are critical for raising the productivity of agriculture and resource use and for ensuring sustainable use of resources, which are significant goals in many other countries as well. Promoting small-scale irrigation in the context of the principle of users pay will be quite different from the previous models of governments' pay. The increasing use of key wetlands for subsistence and income purposes have both positive and negative elements. As land reform moves ahead in South Africa and Zimbabwe, the number of redistribution and resettlement schemes will grow rapidly in number, and these schemes also are expected to be sites of increased agricultural productivity as recipients gain access to water permits and infrastructure. Women farmers will be a focus of attention in all settings because of their growing market involvement and their long-standing dependence on informal or customary rights to land.

In addition to the significance of these research settings themselves in agricultural and rural development policies, they reveal the intersection of water and land. In selecting them as the main focus for field-based research, therefore, we expect to provide (a) specific information on how allocative mechanisms influence access to and use of these valuable resources, (b) documentation of the inter-linkages between water and land as these affect access and use, and (c) analysis of ways in which new policies and institutions of water and land reform interact to affect users' access to resources.

The studies will take place in areas where the research teams have established good relations with local people and have a good basic knowledge of resource use. This will allow a more rapid and more intensive investigation of the issues listed above. The areas are already undergoing or are targeted for land reform as well as water policy reform.

In Zimbabwe, the research will focus on a resettlement area established in the 1980s (Hoyuyu in the Mazowe Catchment), on a scheme established in the 1990s in the Sanyati Catchment near the small city of Chegutu, and in the Manyame Catchment on recently designated land with relatively large privately owned dams with substantial water rights. These sites will permit us to explore how water development proceeded in the early phases of the resettlement program, in its second period during the 1990s and the latest period of large-scale occupations and designations. It also permits us to focus on water and land deliberations in three different Catchment Councils to track how resettlement authorities and water management institutions cope with these major changes. We will also conduct research on the use of wetlands in each of these areas since dry season hand irrigation is carried out by the majority of women in these catchments.

In Malawi, field-based research will concentrate on the Chilwa Basin, expanding from the small area covered in the BASIS Phase I research. The new focus will be on (a) the use of wetlands which include the extremely important stream bank gardens and also an increasing trend to converting seasonally flooded land from grazing use to cultivation; and (b) a sample of irrigation schemes, including some that have become moribund over the past decade for reasons that have not been documented, some that continue to be well managed, and new or rehabilitated schemes established as part of the current agenda of the Ministry of Agriculture and Irrigation.

### 6.3 RESEARCH COLLABORATION AND POLICY IMPACT

Zimbabwe and Malawi have relatively few social scientists with backgrounds in the social, economic and political dimensions of water management. The project will build expertise by identifying a graduate student for training in each of the countries. Capacity building will also be carried out through workshops, short-term training, and by promoting a network of field-based researchers focusing on institutional and policy analysis of water reform and management in the region. This project will produce findings of relevance to a wide range of stakeholders, including policymakers and program implementers in government, non-governmental and donor organizations, women's lobby and other activist groups as well as academic audiences.

To facilitate access to the results of our research, we plan the following:

1. Produce brief, concise summaries of the key research findings which communicate the range and importance of the conclusions to different targeted stakeholder groups using appropriate dissemination pathways and media.
2. Publish and present research findings in scholarly venues such as conferences, workshops working paper series, and journals.
3. Post the materials produced from activities 1 & 2 above on key internet sites such as the BASIS Policy Briefs, African Water Page (<http://www.africanwater.org>) and Waternet ([waternet@africaonline.co.zw](mailto:waternet@africaonline.co.zw)).
4. Invite key policymakers and other actors to attend sessions at annual BASIS planning workshops.
5. Present findings at workshops sponsored by other organizations associated with the land and water reforms in the three countries, and in the region.
6. Pursue contacts made in Phase I with agencies engaged in advising policymakers on water management such as IWMI (Pretoria, South Africa) and DANIDA Chilwa Wetlands Project (Malawi).

### References

- Commercial Farmers' Union (CFU), Zimbabwe. 2000. "Facts on Land and the Present Situation." Harare, Zimbabwe: Mimeo
- Cosgrove, William J., and Frank R. Rijsberman. 2000. *World Water Vision: Making Water Everybody's Business*. London: Earthscan Publications.
- South Africa, Government of. 1997. "The Land Affairs White Paper."  
<[http://www.polity.org.za/govdocs/white\\_papers/landwp.html](http://www.polity.org.za/govdocs/white_papers/landwp.html)>

# 7. RURAL MARKETS, NATURAL CAPITAL, AND DYNAMIC POVERTY TRAPS IN EAST AFRICA

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**Collaborating Institutions:** FOFIFA, Madagascar; International Centre for Research in Agroforestry, Kenya; Kenya Agricultural Research Institute, Kenya

## 7.1 PROBLEM AND CURRENT KNOWLEDGE

Phase II has prioritized the global constraints that can trap poor households in a never-ending cycle of food insecurity, economic vulnerability, and unproductive accumulation. Of the one-fifth of the world's population that lives on less than a dollar a day, most live in rural areas, work in agriculture, and depend disproportionately on the natural resource base, i.e., natural capital. Recent empirical studies using longitudinal data find that a disturbingly large share of these people suffer chronic rather than transitory poverty (Grootaert, Kanbur, and Oh 1997; Carter and May 2000). They appear trapped in a state of perpetual food insecurity and vulnerability due to poor asset endowments and factor market failures, especially for capital, that preclude their efficient investment in or use of productive assets. Moreover, those caught in a poverty trap have strong incentives to deplete natural capital in order to sustain human capital (Perrings 1989). Such degradation only aggravates pre-existing structural poverty traps, making their escape ever less likely. Finding the keys to unlocking the constraints that create these poverty traps will contribute to BASIS's goal of removing the constraints to sustainable natural resource use.

At the root of such self-perpetuating poverty traps lie imperfect capital and other markets. Prior research in northern Kenya, for example, shows that missing capital markets and poor marketing infrastructure lead to volatile livestock prices with prices collapsing just when people most need to sell animals to meet their own needs (Bailey et al. 1999, Barrett et al. 2000). Consequently, pastoralists are unable to use markets to deal with the vagaries of weather and other shocks. Instead they turn entirely to destructive, self-insurance strategies in which herd size is limited only by the biology of reproduction and mortality; marketing and transfers play little role in dampening shocks to pastoral wealth (Fafchamps 1998, McPeak 1999, Lybbert et al. 2000, McPeak 2000). And yet because of the fixed costs of maintaining and reaping returns from a livestock herd, families who fall below a threshold of four or five cattle per capita, become unable to support themselves on the range with animal products. They have little choice but to sedentarize near towns, where they take up cultivation and concentrate their remaining animals' grazing, often leading to localized range degradation and further stress (McPeak 1999). In short, they and other unfortunate families become trapped in a downward spiral of poverty and resource degradation (Lybbert et al. 2000, McPeak and Barrett forthcoming).

This northern Kenyan example is, unfortunately, far from unique. Nearly two-fifths of the world's agricultural land is seriously degraded and the figure is highest and growing in the poorest areas of Central America and Sub-Saharan Africa (World Bank 2000, World Resources Institute 2000). This project's focus on poverty traps and their agroecological consequences and etiology thus squarely addresses two of the global constraints emphasized by the broader BASIS CRSP, those that "Trap Poor Households in Cycles of Food Insecurity, Economic Shocks and Unproductive Accumulation" and those that impede "Coordinated and Sustainable Use of Environmentally Sensitive Resources."

Based on the emerging theoretical and empirical literature (Rosenzweig and Wolpin 1993, Rosenzweig and Binswanger 1993, Dercon 1998, Zimmerman and Carter 1999, Barrett et al. 2000, Holden and Shiferaw 2000, McPeak and Barrett forthcoming) and our own empirical observations, we hypothesize that poverty traps arise and persist in rural East Africa because of four interrelated features of the agroeconomic system.

1. High return production strategies (e.g., livestock) entail significant fixed costs that generate increasing returns to scale over some region (i.e., a minimum efficient scale of production beyond the means of the poor lacking adequate financing).
2. Poor market access creates significant fixed costs to market participation. This gives larger producers net price advantages by creating a positive relationship between sales volume and net revenues per unit of output sold and a negative relationship between purchase volume and net cost per unit of input bought. Such effects can induce poorer producers in areas of weak market access to opt out of markets in favor of low-return self-sufficiency, further contributing to factor market thinness.
3. Poorer households lacking access to capital to finance productive investments may be unable to undertake lumpy investments, regardless of their expected returns
4. Risk and subsistence constraints discourage long-term investment for asset accumulation and productivity growth among poorer, more risk averse households.

The first objective of the project is to test those hypotheses empirically. In a world without fixed costs, increasing returns to scale, or liquidity constraints, no one is predisposed to remain poor. Indeed, the classic convergence hypothesis arises: the poor should grow faster than the rich, converging on a common income level in time. In such a world, smallholders would borrow against future earnings to invest in natural capital, thereby improving agricultural labor productivity, per capita rural incomes, and food security. In fact, however, poor communications and transport infrastructure, insecure claims to land and livestock, and weak or nonexistent contract monitoring and enforcement institutions result in factor market failures in rural areas of the low-income world.

These incomplete markets combined with scale-dependent returns due to underlying agroecosystem biology produce a positive correlation between *ex ante* wealth and the expected returns to assets (Bardhan, Bowles, Gintis 1998), due in part to scale economies, in part to wealthier households' superior capacity to overcome financial entry barriers to remunerative livelihood strategies, and in part to variation in the effective cost of factors of production and the price of marketed output. These factors commonly make non-labor, non-land inputs relatively expensive for poorer households, who then rationally substitute land and labor for non-land

factors, often through soil nutrient mining or a shift to more marginal land, with the consequence of lower labor productivity and heightened food insecurity.

The dynamic aggravation of the problem through the drawing down of natural capital thus results from a threshold effect. Farmers caught in a poverty trap are unable to accumulate productive capital and are more likely to exit farming, or to be forced to farm the periphery on ever more marginal land. Farmers above the threshold can maintain, even improve their soil quality, and ultimately their economic outcomes. A similar effect results from factor and product market failures. If the effective cost of investment in soil quality is higher for poorer farmers, the yield of these investments is lower and so they may invest less. Similarly, if the fixed costs of reaching market make net earnings per unit sold significantly lower for low volume producers, yields on output-augmenting investments are lower. Missing markets and minimum efficient scales of investment or production thus may rationally limit some smallholders' investment in improved natural resource management techniques and in productive natural assets such as livestock or trees that improve soil quality. The second core objective of the project is thus to explore how the existence of poverty traps condition natural resource conservation, particularly soil quality dynamics that centrally affect agricultural and labor productivity and food security.

The first and second project objectives together feed into the project's third, more practical, final objective: to identify and document effective policies, technologies and programs to combat dynamic poverty traps in this setting. The feedback effects between poverty traps and farmer investment in natural capital suggest opportunities for "win-win" innovations, as has perhaps occurred through the recent introduction of smaller size NPK packets in the liberalized inorganic fertilizer market. This project will be able to address explicitly very current questions, such as whether and how to restock farmers' herds after a major drought, how best to stimulate adoption by the poor—who are typically late or non-adopters—of improved fallows that seem well suited to smallholder integrated maize-livestock systems or of intensified rice systems that generate demonstrably increased yields. Appropriate public investments by governments and donors depend upon the source of the poverty trap(s) among the target subpopulation(s) of interest. By focusing explicitly on the source of poverty traps, this project can help identify interventions that have proved effective or that are likely to prove effective but have not yet been tried.

## **7.2 PROJECT DESIGN AND METHODOLOGY**

Our project will explore poverty traps and associated resource degradation through policy-oriented empirical analysis and simulation modeling of integrated agroecosystem dynamics and heterogeneous smallholder behavior. Since poverty traps originate due both to costly market access and to minimum efficient scale of production due to the underlying biology in the presence of incomplete capital markets, we propose a research design that captures variation in these two dimensions. We will exploit existing field work by our team to construct interdisciplinary panel data from sites in Kenya and Madagascar covering each cell of a design matrix reflecting better or worse market access on one axis and a drier or wetter agroecology on the other.

The technology of maintaining land quality differs by agroecology, market conditions, and sociopolitical structures. High potential areas such as sites in the "better, wetter" cell of the figure below have sufficient water to sustain livestock and high-value trees year round. Wealthier farmers enjoy positive soil nutrient balances. They accumulate natural capital by exploiting the complementarities that arise from integrating livestock, agroforestry and crop production.



Livestock provide valuable manure, traction and transport, and crop residues provides high quality feed. High-resource-endowment farms are liquid and able to hire labor, purchase fertilizer and manure, acquire and maintain livestock, and adopt improved production technologies, building up land quality and wealth, gradually leading to diversification into high-return non-farm activities (Barrett et al. 2000). To the extent that smaller farmers have access to capital markets, they can borrow to overcome liquidity constraints to achieve some of these gains.

**Research sites: Rural Markets, Natural Capital, and Dynamic Poverty Traps project**

		Agroecological conditions	
		Drier	Wetter
Market access	Better	North central Kenya (Baringo)	central highlands Kenya (Embu) central highlands Madagascar (Vakinankaratra)
	Worse	Northern Kenya (Marsabit)	western Kenya (Siaya/Vihinga) southern highlands Madagascar (Fianarantsoa)

To the extent, however, that poorer farmers are shut out of capital markets (and no site in our research plan, or anywhere in Africa, for that matter, has truly well-functioning capital markets) poorer farmers get caught in poverty traps that lead them to deaccumulate natural capital, reinforcing the productivity differences that distinguish different wealth classes of farmers (Shepherd and Soule 1998). For them, investment in land quality becomes a byproduct of smallholders’ choice of livelihoods strategies and production technologies rather than a co-determined choice variable. Choices regarding the use of fallows and of integrating livestock are especially important to the conservation of natural capital on which future agricultural labor productivity depends. When factor market constraints impede adoption of fallows or integration of livestock providing manure and traction, smallholders commonly follow the paths of extensification onto fragile forest or rangeland margins or of mining soils through excessive cultivation through neglect as they invest their time in off-farm employment (Shepherd and Soule 1998, Reardon et al. 1999). This, of course, is the resource degradation poverty trap. Our research plan is to uncover how the severity of the trap changes as we consider sites that are worse in different ways—either with a poorer agroecology, a poorer market structure, or both.

In areas of weaker market access, the bottom row of the figure, a variety of factors including binding liquidity constraints, significant fixed transactions costs to market participation, which also induces widespread absence of trade in manure and fertilizer, considerable price volatility, insecure property rights, and the nontrivial risk of theft make it especially difficult for smaller farmers to acquire and maintain livestock or high-value trees and to sustain soil fertility (Dercon 1998, Holden and Shiferaw 2000). For example, the steady loss of livestock over the past decade has been associated with declining crop productivity and increasing rural food insecurity among poor smallholders in the southern highlands of Madagascar (Dorosh et al. 1998, Freudenberger and Freudenberger 2000). But such effects are not ubiquitous in areas of weak market access. Wealthier households likely also possess a scale advantage in these settings, albeit not because the underlying biology necessarily favors integrated production systems, as in favorable agroecologies, but because significant fixed costs to market participation lower average unit

costs of purchased inputs and raise average unit receipts for outputs for farmers with larger transactions volumes.

The experience of drier areas including those in the first column of the above figure is somewhat different. Limited water supply makes sedentarization based on integrated crop-livestock production a higher risk proposition, as discussed in the introduction to this section. So where crop-livestock integration in higher potential areas typically signals wealth, in lower potential areas with poor market access it more commonly signals stress (Nathan et al. 1996, Smith et al. 2000).

We expect our empirical analysis and subsequent simulations to find that poverty traps and especially resource degradation poverty traps capture more smallholders farther up the income/wealth distribution, and evolve more quickly, as we move down the diagonal in the figure from “better, wetter” cell to “worse, drier” cell. The off-diagonal cells help to distinguish the differential effects of biological versus market constraints. For instance, tree products (coffee, tea, macadamia and avocado) may smooth income flows in wetter areas even when factor market access is poor. Similarly, nonfarm diversification opportunities and workably competitive livestock markets may facilitate income maintenance even in drylands with good market access.

We will use our simulation models to explore the effects of various policy, product and technology innovations on the extent of rural poverty traps and their impact on smallholder resource degradation patterns. For example, the introduction of smaller sized fertilizer packages (as small as 500g, as compared to the former minimum 50 kg sacks) has made the purchase of inorganic soil amendments more accessible to liquidity-constrained smallholders (Freeman 2000), and the introduction of low-cost improved fallows in Kenya (Place et al. 2000) have both helped attenuate the poverty-resource degradation link. Simulation models of the sort we will develop can help identify other prospective innovations that could help reduce poverty traps, mitigate their dynamic effects through resource degradation, or both.

In summary, returns to agrarian capital (land, livestock, and trees) and the asset accumulation strategies that underpin poverty dynamics in eastern Africa depend fundamentally on both the natural and market environments. Incomplete rural markets tend to foster greater dependence on agriculture and thus increased importance of investments in preserving productive agricultural assets. But the appropriate asset(s) in which to invest, land quality, livestock, or high-value trees, depends both on the underlying agroecology and on markets access.

The project’s research efforts will be structured in three overlapping phases: (1) field data collection, (2) econometric work to estimate reduced form behavioral/policy functions, and (3) integrated simulation modeling.

### **7.3 RESEARCH COLLABORATION AND POLICY IMPACT**

National and local governments, NGOs, the Consultative Groups on International Agricultural Research (CGIARs), and international donors are struggling to establish how best to rehabilitate degraded lands and induce sustainable intensification in settings such as the sites in which we propose to work. We perceive significant demand for careful empirical analysis of the dynamic links between factor market failures, poverty traps and agroecological dynamics, followed up by simulation modeling that enables virtual experimentation with alternative policies. At present, there are few if any analytical tools capable of tackling some complex questions in a convincing

manner. In addition to more technical publications intended for an audience of international researchers, this project will produce a sequence of BASIS Briefs, beginning with one entitled “Missing markets, poverty traps, and soils degradation in East Africa” that lays out the conceptual foundation of this work.

In addition to addressing directly questions of pressing policy importance, the project will involve considerable training of host country researchers to build up regional policy analysis capacity. We plan for Ph.D. training of East African researchers at Cornell, a Kenyan post-doctoral researcher based at Cornell, and a two-week training workshop at Cornell for a researcher each from FOFIFA and the Kenya Agricultural Research Institute on the household and village-level bioeconomic modeling techniques that underpin the simulation modeling in year three of the project. We also plan annual briefing workshops with policymakers in both Kenya and Madagascar in years two and three, once the project has some preliminary results and recommendations to report. The policymaker audiences in Madagascar with which we are already in contact and plan to invite to these briefing workshops include FOFIFA (the national agricultural research institute), INSTAT (the national institute of statistics), the Economic Research Policy Group run by PACT, the local USAID mission and its Landscapes Development Initiative and PAGE projects, the local World Bank mission, the local economic press (Midi, JURECO, etc.), the Ministry of Agriculture, and the National Secretariat for Autopromotion and Development. In Kenya, our policymaker network includes the Arid Lands Resource Management Program in the Office of the President, the Ministry of Planning and National Development, the Ministry of Agriculture, the Kenya Agricultural Research Institute, the Tegemeo Policy Research Institute, USAID’s country and Regional Economic Development Services Office (REDSO) missions, the World Bank, and NGOs such as FARM Africa, Kenya Rural Enterprise Program. Regional groups such as ASARECA, the consortium of national agricultural research and extension services in eastern and central Africa, its agricultural policy analysis arm, ECAPAPA, and IGAD (Inter-Governmental Authority on Development) will likewise be invited to participate actively in the workshops so as to extend findings broadly in the region.

In addition of direct dissemination of project research findings to policymakers through BASIS Briefs and annual workshops in years two and three, we will also hold community meetings in each survey site to disseminate and discuss emerging project findings with respondents and their communities so as to enable project participants direct, early access to the analysis of data collected with and from them.

It is important to situate this project within the broader African Food Security and Natural Resource Management program Cornell is about to launch with substantial funding from the Rockefeller Foundation. That program’s objective is to develop African university and government research capacity through Ph.D. training of multinational teams of scientists organized around a common problem cutting across multiple disciplines, and collaborative research between established scholars at Cornell and in Africa. The project fits squarely within the African Food Security and Natural Resource Management’s initial focus on integrated soil nutrient management in east and southern Africa, and therefore can not only be able to leverage training and travel funding from that program, but would also benefit directly from regular interaction with a broader network of major international donors and of African policymakers and scholars.

This research is aimed at generating practical solutions to pressing problems as well as at improving understanding of how missing markets and the underlying biology of African agroecologies lead to dynamic poverty traps and what policy instruments might most effectively enable vulnerable subpopulations to climb out of those traps. These topics are of more general interest throughout the low-income world, and our regular interactions with the World Bank, USAID, CGIARs, the Rockefeller Foundation, and other donors will enhance our capacity to introduce the findings from this project into relevant global policy discussions. For example, the Rockefeller Foundation is presently considering a major initiative on integrated nutrient management in Sub-Saharan Africa aimed at targeting food insecurity in that region in a manner analogous to its recently concluded and enormously successful rice biotechnology program in Asia. Several CGIARs, including International Centre for Research in Agroforestry (ICRAF), International Food Policy Research Institute (IFPRI), International Institute for Land Reclamation and Improvement (ILRI), and Centro Internacional de la Papa (CIP) (International Potato Center) are now or imminently pursuing major research programs integrating poverty, food security, and natural resource dynamics in East Africa. So this project speaks directly to broader research networks' emerging interests.

## References

- Bailey, D., C.B. Barrett, P.D. Little, and F. Chabari. 1999. "Livestock Markets and Risk Management Among East African Pastoralists: A Review and Research Agenda," Global Livestock CRSP Pastoral Risk Management Project Technical Report 03/99, July.
- Bardhan, P., S. Bowles, and H. Gintis. 1998. "Wealth Inequality, Wealth Constraints and Economic Performance." *Handbook of Income Distribution, Volume 1*. Amsterdam: Elsevier.
- Barrett, C.B., M. Bezuneh, D.C. Clay, and T. Reardon. 2000. "Heterogeneous Constraints, Incentives and Income Diversification Strategies in Rural Africa." Project report to USAID BASIS CRSP, August.
- Carter, M.R., and J. May. 1999. "Poverty, Livelihood and Class in Rural South Africa." *World Development* 27(1): 1-20.
- Dercon, S. 1998. "Wealth, Risk and Activity Choice: Cattle in Western Tanzania." *Journal of Development Economics* 55(1): 1-42.
- Dorosh, Paul, Steven Haggblade, Harivelo Rajemison, Bodo Ralantoarilolona, and Kenneth Simler. 1998. *Structure et Facteurs Déterminants de la Pauvreté à Madagascar*. Antananarivo: INSTAT.
- Fafchamps, M. 1998. "The Tragedy of the Commons, Livestock Cycles and Sustainability." *Journal of African Economies* 7(3): 384-423.
- Freeman, A. 2000. "Identifying opportunities for integrated nutrient management strategies in the semi-arid areas of eastern Africa." In *The Adoption of Natural Resource Management Practices: Improving Sustainable Agricultural Production in Sub-Saharan Africa*, edited by C.B. Barrett, F. Place, and A.A. Aboud. Wallingford, UK: CAB International.
- Freudenberger, Mark S. and Karen S. Freudenberger. 2000. "Contradictions in Agricultural Intensification and Improved Natural Resource Management: Issues in the Fianarantsoa Forest Corridor of Madagascar," In *The Adoption of Natural Resource Management*

- Practices: Improving Sustainable Agricultural Production in Sub-Saharan Africa*, edited by C.B. Barrett, F. Place, and A.A. Aboud. Wallingford, UK: CAB International.
- Grootaert, C., R. Kanbur, and G.T. Oh. 1997. "The Dynamics of Welfare Gains and Losses: An African Case Study." *Journal of Development Studies* 33(5): 635-57.
- Holden, S., and B. Shiferaw. 2000. "Poverty and Land Degradation: Peasants' Willingness to Pay to Sustain Land Productivity." In *The Adoption of Natural Resource Management Practices: Improving Sustainable Agricultural Production in Sub-Saharan Africa*, edited by C.B. Barrett, F. Place, and A.A. Aboud. Wallingford, UK: CAB International.
- Lybbert, T.J., C.B. Barrett, S. Desta, and D. L. Coppock. 2000. "Pastoral Risk and Wealth-Differentiated Herd Accumulation Patterns in Southern Ethiopia." Selected paper at the *American Agricultural Economics Association* annual meeting, Tampa, FL.
- McPeak, J.G. 1999. *Herd Growth on Shared Rangeland: Herd Management and Land-Use Decisions in Northern Kenya*. Ph.D. dissertation, University of Wisconsin–Madison.
- McPeak, J.G. 2000. "Confronting the Risk of Asset Loss: Livestock Exchange in Northern Kenya." Mimeo.
- McPeak, J.G., and C.B. Barrett. Forthcoming. "Differential Risk Exposure and Stochastic Poverty Traps Among East African Pastoralists." *American Journal of Agricultural Economics* in press.
- Perrings, C. 1989. "An optimal Path to Extinction? Poverty and Resource Degradation in the Open Agrarian Economy." *Journal of Development Economics* 30: 1-24.
- Place, F., S. Franzel, J. DeWolf, R. Rommelse, F. Kwesiga, A. Niang, and B. Jama. 2000. "Agroforestry for Soil Fertility Replenishment: Evidence on Adoption Processes in Kenya and Zambia" In *The Adoption of Natural Resource Management Practices: Improving Sustainable Agricultural Production in Sub-Saharan Africa*, edited by C.B. Barrett, F. Place, and A.A. Aboud. Wallingford, UK: CAB International.
- Reardon, T., C.B. Barrett, V. Kelly, and K. Savadogo. 1999. "Policy Reforms and Sustainable Agricultural Intensification in Africa." *Development Policy Review* 17(4): 293-313.
- Rosenzweig, M., and H. Binswanger. 1993. "Wealth, Weather, Risk and the Composition and Profitability of Agricultural Investments." *Economic Journal* 103(416): 56-78.
- Rosenzweig, M., and K. Wolpin. 1993. "Credit Market Constraints, Consumption Smoothing and the Accumulation of Durable Production Assets in Low-Income Countries: Investments in Bullocks in India." *Journal of Political Economy* 223-244.
- Shepherd, K.D. and M.J. Soule. 1998. "Soil Fertility Management in West Kenya: Dynamic Simulation of Productivity, Profitability and Sustainability at Different Resource Endowment Levels." *Agriculture, Ecosystems and Environment* 71.
- World Bank. 2000. *World Development Report 2000/2001*. Draft.
- World Resources Institute. 2000. *World Resources 2000-2001, People and Ecosystems: The Fraying Web of Life*. Draft.
- Zimmerman, F., and M.R. Carter. 1999. "Asset Smoothing, Consumption Smoothing and the Reproduction of Inequality Under Risk and Subsistence Constraints." Mimeo.

# 8. ASSETS, CYCLES, AND LIVELIHOODS: ADDRESSING FOOD INSECURITY IN THE HORN OF AFRICA AND CENTRAL AMERICA

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**Collaborating Institutions:** Organization for Social Science Research in Eastern and Southern Africa, University of Wisconsin, Institute of Development Research, Fundación para el Desarrollo Rural

## 8.1 PROBLEM STATEMENT AND CURRENT KNOWLEDGE

External shocks—droughts in the Horn of Africa and hurricanes in Central America—have devastating effects on the lives and livelihoods of rural people. For some people, the passage of time permits recovery. Subsequent years of good rainfall and agricultural productivity can be sufficient to reverse trends of asset depletion and allow recovery from climatic and other disasters. For others, neither time nor markets offer the prospect of recovery. They become trapped in downward cycles of poverty, food insecurity, and asset depletion. For these people, shocks have devastating long-term as well as short-term effects on their livelihoods.

Understanding the constraints that turn shocks into poverty traps is the primary goal of this project. Devising policies based on that understanding will move Phase II forward in its effort to relax the global constraints that underlie the dynamic reproduction of poverty in a world of imperfect and missing factor markets.

Nowhere is this scenario of poverty traps more prevalent than in the dry regions of the Horn of Africa. Empirical observations in South Wollo, Ethiopia under drought resulted in a preliminary model of the process of asset accumulation and de-accumulation in response to environmental and market conditions (see Roth 1999). In good times, households accumulate assets, which are then depleted in bad times, but not all households are able to do so equally. There is considerable heterogeneity in responses depending on socioeconomic status, gender, and so on. Well-off households achieve higher asset holdings (livestock, cash, and equipment) due to their ability to fully respond to economic opportunity, to purchase de-valued assets from poorer households, and to keep their assets and products off a devalued market. Chronically poor households, in turn, find their accumulation constrained by an inefficient asset mix (e.g., abundant land but insufficient labor; or excess labor but inadequate human capital to engage in off-farm employment); declining values for their meager assets as markets for these goods also collapse; declining wages for their labor while costs of borrowing increase; and declining access to social networks and support institutions during periods of massive de-accumulation.

Once economic opportunity emerges in the re-accumulation phase, it is again the ability of households to mobilize productive resources that will determine the rate at which they return to productive livelihoods and wealth accumulation. Are households thus constrained to a continued trap of vulnerability and poverty or, at best, a very gradual path of asset accumulation where gains in wealth are long and slow in coming? Or can policy interventions be instituted to broadly accelerate wealth accumulation and to improve access to productive resources?

This model—with its vision of the role played by factor markets and asset price swings—will be used to help frame research into poverty traps and food insecurity cycles in both the Horn of Africa and Central America. While prior social science research has recognized that the local effects of these downfalls are not evenly distributed among households and that local responses are highly differentiated by wealth, gender, and socioeconomic status, it has failed to assess how cycles of accumulation and de-accumulation are dampened or exacerbated by factor markets and policy interventions affecting land, labor and financial capital. Without an understanding of how factor markets relate to cycles of poverty and asset depletion, policy interventions tend to be largely restricted to targeted, short-term efforts (e.g., food aid relief and highly subsidized credit schemes) that neglect development and sustainability.

Applied research, including activities carried out under Phase I of the BASIS CRSP (see Palomo, Gonzalez-Vega, and de Morera 2000; Carter and May 1999), increasingly demonstrates the key role that assets play in mitigating the adverse effects of climatic shocks and economic restructuring. The economics literature often looks at the insurance role of assets, with particular attention to how they operate to smooth consumption in the absence of functioning markets (see Udry 1994; Fafchamps 1992; Platteau 1991). Anthropologists and sociologists have tended to use a broader definition of assets that emphasizes the critical role that social relations and networks ('social capital') play in periods of economic instability (see Berry 1989, 1993; Little 1992a; Haugerud 1993). The two approaches are not incompatible since social networks serve an important role in resource allocation and risk management, and in that sense can be treated as an economic asset. Anthropologists have shown how gender-based associations (Clark 1994; Goheen 1996), kinship groups (Stone, Stone, and Netting 1995), and age-based organizations (Little 1992b; Little et al., forthcoming) are assets that allow farmers to weather periods of climatic and economic turbulence.

Understanding the complex social and economic processes that determine who can and cannot weather shocks requires a research design that can capture the cycles of shocks and accumulation. The work detailed below has such a research opportunity. With an ultimate goal of innovating policy measures that can relax the constraints that underlie shock-induced poverty traps, the research proposed here will comparatively explore shocks and their management in both the Horn of Africa and Central America.

## **8.2 PROJECT DESIGN AND METHODOLOGY**

This research will build on studies of asset cycles, shocks, and poverty in three innovative ways. Previous research has tended to focus on micro-level behavior related to grain and livestock adjustments in coping with risk (Fafchamps, Udry, and Czukas 1998; Dercon 1998; and Dercon and Krishnan 1996). When factor markets are considered, the emphasis has been on use and consequences of access, and not the institutions that mediate access to resources. By privileging the household in their analysis, most research misses the important extra-household and

community mechanisms that allow farmers and herders to cope with uncertain physical and socioeconomic environments. How can resource access and asset use be better managed to bring about higher levels of food security and income growth in impoverished rural regions, particularly for the poor and socially disadvantaged?

There has also been a tendency for studies to emphasize on-farm opportunities, ignoring the important effects of non-farm activities and employment in coping with climatic shocks. How in highly risky environments are non-farm labor and income strategies used to help dampen asset swings, stabilize incomes, and enable agricultural investment in rural areas?

With a few notable exceptions (Udry 1994), most studies try to capture asset changes under intra-seasonal variation, ignoring inter-annual or multi-year swings that are most debilitating for the poor and impoverished. What policy initiatives and program interventions can break these cycles of asset depletion, low incomes, and food insecurity to enable households and individuals to achieve pathways of higher and more stable incomes and wealth accumulation?

The objective of the research is to improve understanding of the ways in which asset cycles affect and are affected by factor markets and related policy interventions. The proposed research highlights the theme of “shocks” to better assess the dynamics of these cycles under stress and to focus on the harsh (“normal”) realities that confront some of the world’s poorest populations. The goal is to identify policy instruments that will improve household access to land, labor, and capital and the functioning of factor markets, thus allowing impoverished households to escape the debilitating cycles of poverty, asset depletion, and food insecurity.

The proposed research will comprise three key components: (1) continuation of a rural household study and additional research on the social dimensions of shock cycles in north-central Ethiopia (South Wollo and Oromiya Zones of the Amhara Region); (2) analysis of existing data sets in at least one other high-risk area of the Horn of Africa; and (3) analysis of existing panel data on rural households in Honduras that cut across the period of Hurricane Mitch’s devastation and reveal information on coping strategies and cycles of asset deaccumulation and accumulation. The multiple research sites provide opportunities for comparative analysis of different policy frameworks on poverty and food security in two important world regions of strategic importance to USAID and poverty-oriented research. By using comparative sites, the project will observe:

- how asset use strategies and livelihoods vary under different market regimes,
- the role non-farm income plays in resistance to and recovery from climate and economic shocks,
- how social capital and networks are mobilized to substitute for markets and how they can play significant short and medium-term roles in coping and recovery strategies,
- gender and class differences across varied cultural and risk environments, and,
- the interaction between factor market policies and poverty reduction and food security.

Selection of research sites was informed by differences in factor market depth or development (see Table 1). The research sites in Ethiopia have the weakest (“thinnest”) factor markets with undeveloped labor and credit markets and a highly constrained land market. While Honduras is one of the poorest countries in the Western Hemisphere, compared to Ethiopia Honduran households have relatively good access to factor markets and are able to pursue relatively



complex mixes of farm and non-farm activities. The secondary site in the Horn of Africa will be representative of a case where market development lies somewhere between these two extremes.

### Research sites: Assets, Cycles, and Livelihoods project

Site <sup>a</sup>	Factor market depth <sup>b</sup>	Food security index <sup>c</sup>
So. Wollo/Oromiya, Ethiopia	Poor	Poor-to-fair
2 <sup>nd</sup> Horn Research Site	Poor-to-fair	Fair
Central American Site	Fair-to-good	Fair-to-good

<sup>a</sup> All sites have been vulnerable to natural disasters (droughts and floods) and widespread poverty during the past two decades.

<sup>b</sup> This is a crude relative indicator since all the research sites have relatively poor factor market integration.

<sup>c</sup> This also is a relative indicator, with Ethiopia being the only site where chronic famine and food aid is prevalent.

The research sites also can be distinguished along a food security index, which closely relates to income levels and market depth or ‘thickness.’ Ethiopia is among the poorest nations in the world and among the world’s largest per capita recipients of food aid; and South Wollo area is among the poorest and most food insecure regions in Ethiopia. Household food security is clearly an economic entitlement issue, as the work of Sen and others have shown, but food insecurity also is a reason why poor households have to deplete meager asset holdings during crises. The comparative research permits assessments in areas where poverty and market failure can mean famines and where the outcomes are not as desperate.

**Ethiopia.** In June 2000, the BASIS research team began implementing a household survey to 448 households across four different research sites in Amhara province (South Wollo and Oromiya) Ethiopia to study the cyclical relationship between assets, livelihoods and food security. The four study sites represent different agroecological zones, levels of drought (shock) vulnerability, and proximity to markets. Two instruments are administered to each household during the course of the year: (1) Household Demography and Inventory Questionnaire, and (2) Repeat Production, Income and Expenditures Questionnaire. The first round of data collection captured households in the throes of a devastating drought.

The first survey instrument was used to establish a baseline for all households in the sample and to assess their access to extra-household institutions and networks. The second survey instrument is used to capture changes in assets, production, and non-farm income and expenditures since the previous survey round. This sampling frame offers a number of unique contributions relative to previous studies. First, data recall on roughly a quarterly basis is anticipated to improve data recall and reliability. Second, while baseline data are collected jointly for the household head and spouse, data on resource access, income and expenditures, often considered highly sensitive by respondents, are collected in privacy from the agent responsible for the economic activity. Finally, the data allow summing up of asset changes and economic activity for discrete periods of the year enabling interseasonal analysis of asset cycles and food security at a gender disaggregated level within the household. The 1999 community assessments complement this by providing data on village institutions, social structure, and extra-household networks.

Data collected from the survey will establish key relationships between climate shocks, resource constraints, incomes, and asset accumulation. Geographic Information System (GIS) tools will

map key socioeconomic indicators on spatial data gathered under the Phase I activity in Ethiopia, where household, community, and market center locations have been geo-referenced. The use of GIS in this study will allow us to explore the importance of locational factors in understanding household responses to 'shocks, market opportunities, and favorable environmental conditions, and to spatially represent areas of vulnerability and risk (see Shin 1999).

Continuing both the rural household survey and community assessments work in South Wollo and Oromiya will enable us to document changes in food security and poverty, and asset changes since the 1999/2000 famine. The research would also build on the first household survey and rich ethnographic accounts (see the community assessments, Castro et al. 1999; Amare et al. 2000) conducted at the time of a famine.

**Second Horn of Africa Research Site.** If possible, it is important that the project incorporate at last one other research site in the Horn, where factor market conditions are more robust than in Ethiopia. It had originally been proposed that the project build on an existing database in the Sudan, where one of the PIs (Abdel Ghaffar) has been working since the 1970s, but at this point it does not seem likely that US policy will permit a research site in The Sudan. Cognizant of this possibility the project had designated a 'back up site' in Kenya, where criteria for inclusion were similar. One of the PIs (Little) currently is a Co-PI on a Global Livestock CRSP study of pastoral risk management that has collected comparable data sets in northern Kenya, and where Little has conducted research since 1980. The appropriate sites that have been identified are in Baringo and Samburu Districts, Kenya, both areas where non-farm activities are significant. It is proposed that secondary data be utilized and that additional fieldwork in years 2 and 3 be limited to community assessments of social capital. A final decision on a second site in the Horn will be made during the current planning year.

**Honduras.** During Phase I, BASIS along with the World Bank and the Honduras Food Security Program of the European Community funded a multi-country project titled "Land Market Liberalization and the Land Access of the Rural Poor in Central America" (see Olinto et al. 1998). During the planning phase of this project, Hurricane Mitch struck Honduras with terrible devastation. Similar to the Horn of Africa, low-levels of education and remunerative wage employment, thin credit markets, high market transactions costs, and environmental degradation are critical constraints in rural Honduras. It remains a critical and yet unanswered question to know the degree to which rural Honduran households have been able to recover from this tragedy versus how many have become stuck in a poverty-vulnerability trap.

While the original focus of the Land Market Liberalization Project concerned the impact of agricultural liberalization on rural livelihoods, the survey that will be finally fielded to 1000 Honduran households in January-February, 2001 incorporates a number of features that will make for a very informative comparison with the Horn of Africa research. First, the survey incorporates numerous questions designed to gauge the impact of Hurricane Mitch on the households. Second, it also includes questions about the specific market and non-market-based coping strategies that households have employed. Third, it is very careful to solicit the information needed to judge the adequacy of households' access to formal financial markets. Fourth, it undertakes an exhaustive survey of households' social networks and 'social capital.' Fifth, 60% of the households in the survey were interviewed in the mid-1990s, making it possible to trace the full cycle of asset accumulation and deaccumulation of these households. Sixth and finally, all surveyed households will respond to a retrospective accumulation

questionnaire module that is designed to give the same sort intertemporal asset cycle information that has been painstakingly collected in Ethiopia.

Basic analysis of the Honduras data is foreseen under the Land Market Liberalization Project. Incorporation of this project will permit two novel pieces of analysis to be undertaken. The first is a thorough statistical analysis of shocks, asset cycles and livelihoods. The second is a stage of qualitative field work designed to begin with the statistical insights, but then delve more deeply into them in the way that only qualitative fieldwork can. Fieldwork protocols from the South Wollo project will be used to design this second phase of the Honduras work.

Most importantly, including Honduras will add an important comparative element to this project. The Horn, with its weak rural labor and credit markets, normally has responded to shocks with massive injections of food aid. This project will benefit from understanding how a relatively wealthier region (Central America), with stronger factor markets, higher per capita incomes, and different social and political dimensions, responds to shocks. What are the differences between the two regions in the kinds of policy and program initiatives to facilitate asset re-accumulation; what differences are there in the roles that factor markets play in ‘buttressing’ against the worst effects of these ‘shocks;’ and what differences between the regions in social capital that might explain local coping and recovery responses to these shocks? These are the kinds of questions that might inform a comparative research program and contribute to theories about the causes of poverty and poverty traps, as well as develop policies to help alleviate these problems.

Like any comparative research program, comparability in data sets and methods will be critical. During the current planning year we will establish criteria for collaboration to insure that a minimum core of data and methods are comparable across the different sites. A meeting will be held in Ethiopia with researchers from the Horn and Central America that will discuss compatibility of the different databases, potential for synthesis writing and analysis, and field research methods. It is expected that the minimum data will cover asset and income use, access to social networks and social capital, and uses of factor inputs, and will be collected so that responses can be differentiated by gender and other key variables. The meeting in Ethiopia and subsequent discussions during the year will determine the scope and mechanics of collaboration.

### **8.3 RESEARCH COLLABORATION AND POLICY IMPACT**

The project will build local capacity in the Horn region through MA and Ph.D. training activities for African graduate students, by supporting local publication series, and by supporting participation in international meetings and writing projects by national and regional collaborators. One-year grants for field research and thesis write up will be provided to two African graduate students, while three years of graduate student assistantships will be provided at one of the BASIS institutions. In total five years of graduate student support will be provided through assistantships and field grants, with the bulk of them going to African graduate students. On-site training sessions in research design and methods will be provided to graduate students as a part of the research program in the different regions.

International development agencies recognize the unique problems of poverty, food insecurity, and low levels of assets in the Horn of Africa. Our approach of addressing the linkages among asset cycles, factor markets, food insecurity, and poverty is consistent with the USAID Greater Horn of Africa Initiative (GHAI) program to strengthen African capacity to enhance regional

food security. The project complements USAID program objectives for Ethiopia, which includes enhanced household food security and an emphasis on the Amhara Region. The USAID/Ethiopia Mission has targeted the Amhara Region, where South Wollo and Oromiya zones are located, as one of its geographic areas of concentration. The project will facilitate policy dialogue between USAID and Amhara regional officials through seminars and workshops.

In the past year the United Nations designated the Horn of Africa as a global priority area because of its on-going conflicts and long-term food security problems. UN Secretary General, Kofi Anan, recently formed a UN task force, headed by the Executive Director (Catherine Bertini) of the World Food Programme (WFP), to develop an accelerated program to alleviate poverty, food security, and social conflict in the region. In September 2000 the Task Force visited north-central Ethiopia to assess the food situation in drought stricken zones, like South Wollo, and to report back to the UN on development and emergency needs (United Nations 2000). The research elaborated here will be of direct relevance to this new initiative and the project plans to communicate its findings to this UN group, whose directive probably will be assumed by the Food and Agriculture Organization and United Nations Development Programme. In addition, the project complements ongoing work of other international agencies (such as the World Bank and IGAD) focused on poverty alleviation in the Horn of Africa and elsewhere.

Collaboration with other research groups and practitioners will build capacity to work on problems of economic shocks and poverty. Partnerships will be sought with IFPRI and the Centre for the Study of African Economies, Oxford University, who are engaged in longitudinal studies of poverty, assets, and food security in Ethiopia (see Fafchamps and Quisumbing 2000), and with Save the Children-UK, the major NGO working on food security in the Horn generally and Ethiopia specifically. Collaboration with these groups will contribute to the capacity of our local partners to carry out policy-oriented analyses of poverty and factor markets in the region, and help establish a network of local and international researchers and institutions focused on poverty, factor markets, and food insecurity.

In terms of local policy, the Amhara Regional Government's recent "five year plan" has among its top priorities increased regional food security, improved access to credit by rural populations, and growth in rural employment. The proposed research will complement these objectives and be in a position to assist regional and zonal policymakers in understanding the constraints to improved food security and income growth. In Ethiopia the project will continue to work with the Zonal and Regional Departments of Economic Planning and Development, and the Food Security Programme of the Department of Agriculture. The Institute of Development Research (IDR)/BASIS team will host a seminar in Bar Dar, Amhara Region at the end of year 2 where policymakers, donor and NGO personnel, and researchers will meet to discuss research findings and policy options. Sudanese and Ethiopia policymakers will also be invited to the regional workshop to be held at the Organization for Social Science Research in Eastern and Southern Africa (OSSREA), Addis Ababa, Ethiopia in year 2. Through policy briefs, seminars, and IDR's existing networks and dissemination activities in the region, the research project will have an opportunity to inform policies related to factor markets and food security in the Amhara Region.

At a regional level policymakers in the Horn will be informed of the project's research findings through collaboration in the field, seminars, OSSREA and IDR networking activities, and policy briefs. Regional collaborators will engage policymakers in the research program, organizing and hosting meetings between Horn and Central America researchers to determine the scope of collaboration, organizing and hosting a final inter-regional workshop involving researchers from

Ethiopia and elsewhere in the Horn of Africa, and supporting through a website dissemination of information and publications on the research program. IGAD's current food security program has direct relevance to this project and also will be a key audience for the research program. Other international groups that have regional development programs of relevance to this project are the OAU (Organization of African Unity) and the ECA (Economic Commission for Africa); the latter has participated in previous BASIS workshops in the region. Both organizations have programs focused on poverty alleviation and are concerned with the social and economic causes of poverty in the area.

In Honduras, the series of national workshops that are planned to disseminate the findings on market liberalization will be used to insert the project's findings on asset cycles and livelihoods. The Honduran collaborating institution, Fundación para el Desarrollo Rural, has long prioritized a role for itself as a moderating voice in the sometimes fractious debate over rural policy in Honduras. Finally, the broader Land Market Project's linkage with the European Community's Food Security Program offers another avenue of entry into local policy debate.

The research program will emphasize dissemination of results through (1) publications, reports, and online materials targeted at academics and policymakers; and (2) seminars and workshops. Research findings will be published in interdisciplinary journals (e.g. *Development and Change*, *World Development* and *Journal of Development Studies*), disciplinary journals (e.g., *Human Organization* and *Journal of Development Economics*), regional (e.g., OSSREA's *Eastern Africa Social Science Research Review*), national journals (IDR's *Ethiopia Journal of Development Research*), and in policy briefs available through the BASIS website and in hard copy. It also is expected that an edited volume will be produced after year 3 and will be published for distribution both in Africa and the USA.

## References

- Amare, Yared, Yigremew Adal, Degafa Tolossa, Peter Castro, and Peter D. Little. 2000. Food Security and Resource Access: A Final Report on the Community Assessments in South Wollo and Oromiya Zones of Amhara Region, Ethiopia. Madison, WI and Addis Ababa, Ethiopia: BASIS/IDR Research Program (<http://www.wisc.edu/lrc/basis>).
- Berry, Sara. 1989. "Social Institutions and Access to Resources in African Agriculture." *Africa* 59(1): 41-55.
- \_\_\_\_\_. 1993. "No Condition is Permanent: the Social Dynamics of Agrarian Change in Sub-Saharan Africa." Madison: University of Wisconsin Press.
- Carter, Michael and Julian May. 1999. One Kind of Freedom: Poverty Dynamics in Post-Apartheid South Africa. Research Paper, BASIS CRSP, Madison, WI (<http://www.wisc.edu/lrc/basis>).
- Castro, Alfonso Peter, Yared Amare, Yigremew Adal, Degafa Tolossal, and Demeke Deboch. 1999. Community Assessments in South Wollo: Kebele Profiles, Parts I, II, and III. BASIS, Madison, WI/Institute for Development Research (IDR), Addis Ababa University, Addis Ababa, Ethiopia (<http://www.wisc.edu/lrc/basis>).
- Clark, Gracia. 1994, "Onions are My Husband: Survival and Accumulation Among West African Market Women." University of Chicago Press.

- Dercon, Stefan. 1998. "Wealth, Risk and Activity Choice: Cattle in Western Tanzania." *Journal of Development Studies* 55: 1-42.
- Dercon, Stefan and Pramila Krishnan. 1996. "Income Portfolios in Rural Ethiopia and Tanzania: Choices and Constraints." *Journal of Development Studies* 32: 850-875.
- Fafchamps, M. 1992. "Solidarity Networks in Preindustrial Societies: Rational Peasants with a Moral Economy." *Economic Development and Cultural Change* 41: 147-174.
- Fafchamps, M., Udry, C., and K. Czukas. 1998. "Drought and Savings in West Africa: Are Livestock a Buffer Stock?" *Journal of Development Economics* 55: 273-305.
- Fafchamps, Marcel and Agnes R. Quisumbing. 2000. Control and Ownership of Assets within Rural Ethiopian Households. Working Paper Series #27, Centre for the Study of African Economies, Oxford University, England.
- Goheen, Miriam. 1996. *Men Own the Fields, Women Own the Crops: Gender and Power in the Cameroon Grasslands*. Madison, WI: University of Wisconsin Press.
- Haugerud, Angelique. 1993. *The Culture of Politics in Modern Kenya*. Cambridge: Cambridge University Press.
- Little, Peter D. 1992a. "Traders, Brokers, and Market 'Crisis' in Southern Somalia." *Africa* 62(1): 94-124.
- \_\_\_\_\_. 1992b. "The Elusive Granary: Herder, Farmer, and State in Northern Kenya." Cambridge: Cambridge University Press.
- Little, Peter D., K. Smith, B.A. Cellarius, D.L. Coppock, and C.B. Barrett . Forthcoming, "Avoiding Disaster: Diversification and risk management among East African herders." *Development and Change*.
- Olinto, Pedro, Maria D. Correia, Klaus Deininger, Bran Barham, Michael Carter, Alain de Janvry, Elizabeth Katz, and Elisabeth Sadoulet. 1998. "Land Market Liberalization and the Land Access of the Rural Poor: Lessons from Recent Reforms in Central America." Unpublished paper.
- Palomo, A. L. de, C. Gonzalez-Vega, and A.A. de Morera. 2000. "Household Integration to the Market as a Determinant of Rural Incomes in El Salvador." Paper submitted to the 2000 Annual Latin America and Caribbean Economic Association, Rio de Janeiro, October 12-14 2000.
- Platteau, J. P. 1991. "Traditional Systems of Social Security and Hunger Insurance: Some Lessons from the Evidence Pertaining to Third World Village Societies." In *Social Security in Developing Countries*, edited by E. Ahmad, J. Dreze, J. Hills, and A. Sen. Oxford, UK: Clarendon
- Roth, Michael. 1999. "Resource Access and Asset Management to Mitigate Food Insecurity: Methodology for Longitudinal Household and Community Studies." Unpublished paper, BASIS/Ethiopia Research Program, Addis Ababa, Ethiopia.
- Shin, Michael. 1999. "Using a GIS within the BASIS Research Program in Ethiopia." BASIS Publication (available at: [www.wisc.edu/lrc/basis](http://www.wisc.edu/lrc/basis))
- Stone, M. P., G.D. Stone, and R.M. Netting. 1995. "The Sexual Division of Labor in Kofyar Agriculture." *American Ethnologist* 22(1):165-186.

Udry, C. 1994. "Risk and Insurance in a Rural Credit Market: An Empirical Investigation of Northern Nigeria." *Review of Economic Studies* 61(3): 495-526.

United Nations. 2000. Ms. Catherine Bertini, UN Special Envoy of the Secretary-General on the Drought in the Horn of Africa: Findings and Recommendations of the Mission to Kenya and Ethiopia between 17-23 September 2000. Rome: UN/World Food Programme.

# **Part Three:**

# **OPERATIONAL GUIDE**



## **9. BASIS CRSP MANAGEMENT PLAN**

The BASIS CRSP management structure supports research progress, promotes collaboration and networking, and ensures fulfillment of USAID contracting requirements. The 1998 CRSP Guidelines provide guidance regarding a CRSP's management structure, and BASIS used this reference and the experience of Phase I to create a model that provides efficient and effective service in accordance with the expected budget.

### **9.1 MANAGEMENT OVERVIEW**

The Management Entity (ME) during Phase II will be housed in the Department of Agricultural and Applied Economics, University of Wisconsin–Madison and will be accountable to USAID for BASIS CRSP programmatically and fiscally. In order to provide PIs with greater ownership and autonomy, to foster synthesis activities, and to meet budgetary expectations, Phase II PIs and their Contracting Institutions will handle many of the administrative tasks that were centralized within the ME in Phase I. Generally, these activities include subcontracting and communications tasks that will be more streamlined if handled by those managing the intellectual content of the research projects (see 9.3 and 9.4 for specifics).

There are two main contracting mechanisms that govern partnerships within BASIS CRSP. First, general collaborative arrangements between participating institutions are governed by Memoranda of Understanding (MOUs). Second, certain programmatic and fiscal responsibilities are delegated from the ME to Contracting Institutions and from Contracting Institutions to collaborating US and host country institutions through sub-agreements.

#### **9.1.1 Memoranda of Understanding**

The MOU creates the official environment in which researchers can initiate and carry out collaborative research in a host country. The MOU commits no funds directly, but provides the general guidelines for the relationship, which will be formalized with a sub-agreement. The MOU must be signed by a representative from the Contracting Institution, the collaborating institution, and the University of Wisconsin–Madison. The host country government and the USAID Mission in the host country are also invited to sign the MOU. In Phase II, the ME will negotiate MOUs with all US Contracting Institutions and oversee the negotiation of MOUs between the Contracting Institution and its collaborating partners.

#### **9.1.2 Sub-agreements**

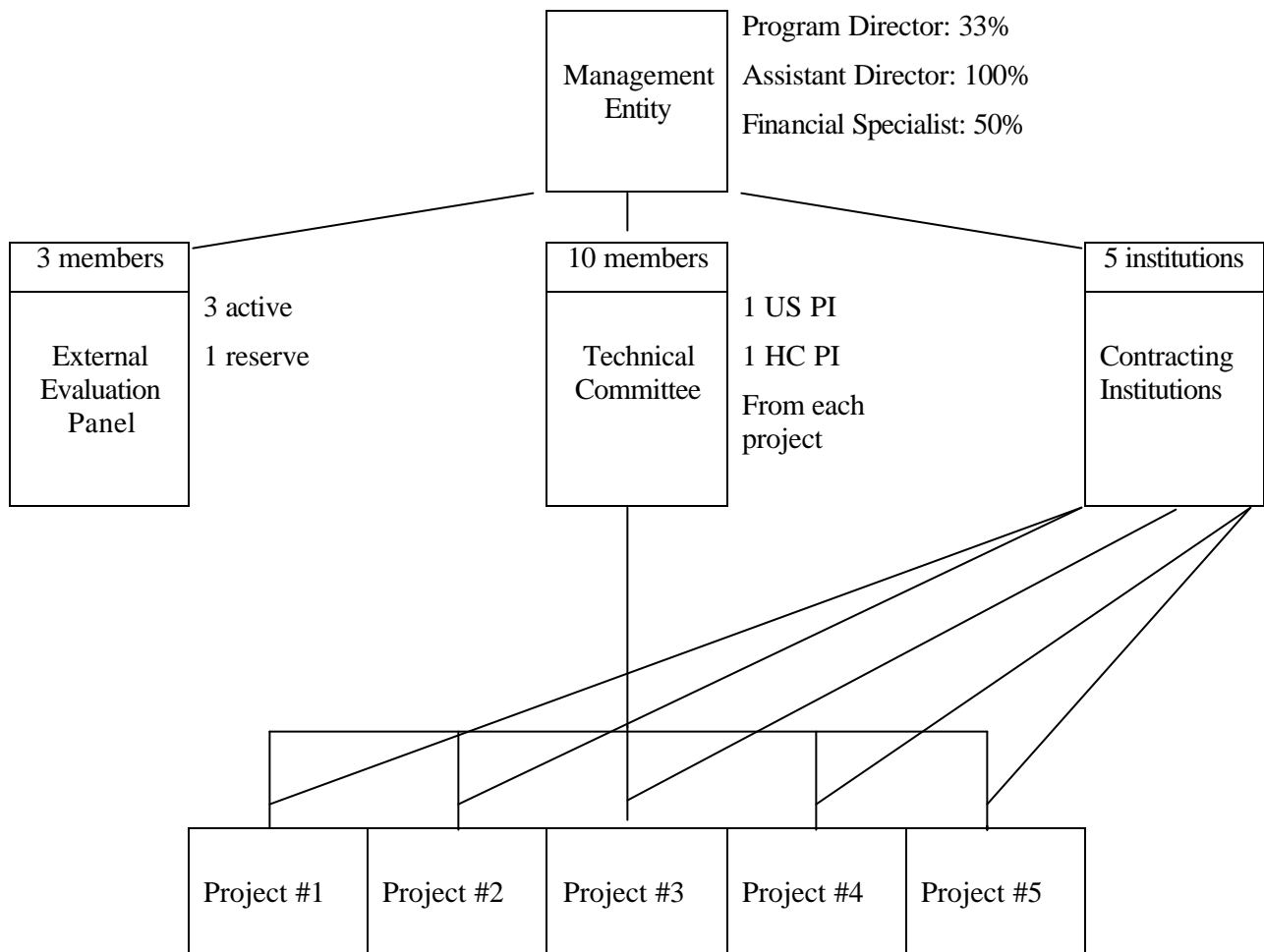
The University of Wisconsin–Madison sub-agreement obligates funds and passes certain authority from the ME to the Contracting Institution. Sub-agreements include a scope of work, the applicable USAID Standard Provisions, cost-sharing regulations, and annual budgets as developed. This sub-agreement is binding upon signature of the appropriate officials at the two institutions.

A sub-agreement between a Contracting Institution and a collaborating institution defines the relationship in the CRSP for the project work. Each Contracting Institution must have an agreement with each host country or US collaborating institution. These agreements describe the

procedures for both the transfer and accounting of CRSP funds to be spent for the purposes described in the project proposal and subsequent annual workplans and budgets. All institutions are required to conform to the rules and regulations of the CRSP as described in the CRSP Guidelines and the Standard Provisions. The Contracting Institution therefore is responsible for the technical and financial reporting for the project, its own reporting, and that of its partner institutions.

The organizational structure of BASIS CRSP and the roles and responsibilities of each groups are described below.

**Phase II management structure  
October 2001-September 2006**



**9.2 MANAGEMENT ENTITY**

The ME retains the overall responsibility for managing the CRSP, reporting to USAID, ensuring progress is made, and communicating the achievements of the CRSP. In Phase II, the ME is responsible for the following activities.

### **9.2.1 Technical leadership**

- provide technical leadership and guidance to all research and training activities;
- Program Director will play a major role in synthesis activities, ensuring research progress and quality, and providing guidance to researchers as needed;
- facilitate synthesis activities, including reviewing research design to ensure that there are links between and among the projects, monitoring the implementation of the research, and supporting a unified communications strategy for disseminating results to appropriate policy communities;
- design and implement the *BASIS Policy Conferences*;
- assure that the overall performance of the CRSP meets program objectives and monitor results and outputs;
- coordinate events calendar, which includes implementing all committee meetings and facilitating all meetings.

### **9.2.2 Financial and contracting management**

- receive and administer USAID funds for the CRSP;
- develop and enter into MOUs and sub-agreements with Contracting Institutions for their respective projects. Assist the Contracting Institutions in developing MOUs with collaborating institutions and provide endorsement of acceptable MOUs;
- coordinate and lead the development of annual budgets and workplans;
- develop a system for effective fiscal management of the program and control and accounting of funds, including matching resources contributed by participating institutions;
- provide leadership in enhancing financial resources other than the core funding, such as support from USAID missions and other add-ons;
- facilitate equipment purchase approval for projects through the USAID Project Officer and the USAID Procurements Office.

### **9.2.3 Reporting/Communications**

- report on the program and represent the CRSP in communications with USAID and internationally;
- account to USAID for all program accomplishments and expenditures, through reporting requirements;
- establish a system to coordinate travel approval and reporting;
- maintain records on all training, workshops, publications, and add-ons;
- represent BASIS in CRSP Council activities;
- facilitate and maintain communications between and among all BASIS CRSP institutions.

***Key personnel for the ME will include:***

Program Director (.33 FTE): The BASIS CRSP Program Director is responsible for all CRSP activities and research. He will play a key role in coordinating project work flows, guaranteeing that timeframes and benchmarks are met, and ensuring effective impacts of BASIS research. He will oversee research, training, contract planning, implementation, reporting, and outreach activities. He will be the primary and official point of contact between BASIS and USAID and between BASIS and the other CRSPs.

**Michael Carter** is nominated as the BASIS CRSP Program Director for Phase II. Professor Carter is a nationally recognized innovator in the field of economics of development. His work has dealt with integrating factor markets and had stressed the interactions among those markets in Latin America, Africa, and Asia. He brings vision and leadership that will ensure that the identified BASIS constraints are addressed and integrated into the global policy dialogue. (See CV in Annex D.)

Assistant Director (1.0 FTE): The BASIS CRSP Assistant Director will manage the administrative, financial, and support functions of the ME. She will work closely with the Program Director to ensure that all reporting and contractual requirements are met and that the CRSP operates smoothly to allow research and training activities to make progress. The Assistant Director will negotiate MOUs and subagreements with the Contracting Institutions and provide support for all partners of the CRSP, oversee budgeting and invoicing procedures, and coordinate meetings and tasks for BASIS CRSP advisory groups. She will be responsible for communicating with all researchers and partner institutions regarding CRSP activities and coordinating quarterly and annual reports of the CRSP.

The BASIS CRSP nominates **Danielle Hartmann** as the Assistant Director. Ms. Hartmann has worked with the BASIS CRSP ME since 1998 and has helped to establish many of the policies and procedures that are currently in place. Her international development and program management skills provide the necessary technical and administrative background to ensure sound implementation of the CRSP. (See CV in Annex D.)

### **9.3 PRINCIPAL INVESTIGATORS**

PIs will play a very important role in Phase II. One PI from the US and one PI from the host country will have the lead responsibility for each project, will be the point of contact with the ME, and will represent the project in programmatic discussions of technical concern. Not only will they lead the research projects, but PIs will be responsible for fulfilling the communication requirements of the CRSP (see section 3). Along with the Director and USAID, PIs will have joint ownership for ensuring that synthesis activities, including the *BASIS Policy Conferences*, are implemented and promoted.

First and foremost, PIs are responsible for implementing the research project as it was proposed to BASIS. PIs must make sure that the research stays on schedule, data is gathered and analyzed appropriately, and quality reports are written for the three main audiences identified (see section 3). They will run each project autonomously, with guidance and interaction from the ME.

PIs will be a main point of contact between the ME and the other project researchers. PIs will be responsible for communicating CRSP reporting requirements, administrative procedures, and

program objectives with the research teams so that everyone has the same expectations for the work to be accomplished.

Ensuring that policy-relevant research is important for BASIS CRSP, PIs will be responsible for meeting the communications requirements of Phase II, by addressing the three audiences identified as important. First, PIs must establish and maintain a dialogue with policymakers in the country or region of the research activity. PIs must determine what the best method of communication will be in the context of the research activity and the political climate in the country. As they will spend time in the country of focus, they must take advantage of this opportunity to reach out to groups in the country who are interested in the research and influential in policy realms.

Secondly, PIs will participate in the BASIS *Policy Conferences*. They will help determine the themes for the conferences, prepare presentations, and establish a network with policymakers at the multi-lateral agencies. PIs will need to be knowledgeable about all BASIS projects and familiar with trends in relation to factor market activity around the world. In conjunction with the *Policy Conferences* and independently, PIs will be responsible for writing *BASIS Briefs*, which will summarize research activities and potential policy implications for a wide audience. The PIs will work with the ME to publish and disseminate the *Briefs*, depending on the audience and focus of the particular piece.

Thirdly, PIs will be responsible for participating in their professional organizations in terms of publishing research activities and results in peer-reviewed journals, presenting papers at national and international professional conferences, and applying rigorous quality standards to their work. BASIS must be duly recognized for its contributions with copies of all outputs sent to the ME.

Finally, PIs will be expected to participate in the BASIS Technical Committee (TC), which will comprise one US and one host country PI from each of the five projects. The TC will meet annually in conjunction with the *Policy Conferences*. The objectives of the TC meeting will be to present results from current research activities, to discuss research progress and synthesis ideas, and to plan research activities for the next year, including policy implications. The researchers will meet following (or prior to) the *Policy Conferences* where they will have the opportunity to present current research activities and policy implications. (See Phase II five-year calendar below for proposed TC meeting schedule in conjunction with the *Policy Conferences*.)

One component of the TC is the review of the annual workplans. Each project must submit a workplan that summarizes the specific activities planned for the coming year. As part of the Request for Proposal process, research teams submitted 3-year proposals on which workplans will be based. Though some changes are inevitable, the majority of the research plans have been drafted and annual workplans will not be an onerous task. All PIs from each project will review the workplans to help assure research progress and standards for quality are achieved, to learn about the other BASIS projects, and to investigate possible areas of synthesis that can be proactively implemented. The TC meeting is an opportunity for the researchers to discuss the substance of their projects and potential synergies that emerge from the linkages among the projects.

BASIS CRSP would like to name the following PIs to the TC in Phase II (see CVs in Annex D).

Phase II project	TC members
<i>Input Market Constraints on Economic Growth in Russian Agriculture</i>	<ul style="list-style-type: none"> <li>• Bruce Gardner, University of Maryland, College Park, IRIS Center of the University Research Corporation, International</li> <li>• Eugenia Serova, Institute for Economies in Transition, Russia</li> </ul>
<i>Institutional Innovations to Improve the Viability of Equity Sharing Under Privatization and Farm Restructuring in Central Asia and Southern Africa</i>	<ul style="list-style-type: none"> <li>• Michael Lyne, University of Natal Pietermaritzburg, South Africa</li> <li>• Michael Roth, Land Tenure Center, University of Wisconsin–Madison</li> </ul>
<i>Institutional Dimensions of Water Policy Reform in Southern Africa: Addressing Critical Water-Land Intersections</i>	<ul style="list-style-type: none"> <li>• Bill Derman, Michigan State University</li> <li>• Wapulumuka Mulwafu, Chancellor College, University of Malawi, Malawi</li> </ul>
<i>Rural Markets, Natural Capital, and Dynamic Poverty Traps in East Africa</i>	<ul style="list-style-type: none"> <li>• Chris Barrett, Cornell University</li> <li>• Festus Murithi, Kenya Agricultural Research Institute, Kenya</li> </ul>
<i>Assets, Cycles, and Livelihoods: Addressing Poverty and Food Insecurity in the Horn of Africa and Central America</i>	<ul style="list-style-type: none"> <li>• Abdel Ghaffar Ahmed, Organization for Social Science Research in Eastern and Southern Africa, Ethiopia</li> <li>• Peter Little, Institute for Development Anthropology and the University of Kentucky</li> </ul>

## 9.4 CONTRACTING INSTITUTIONS

In Phase II, the ME will rely on Contracting Institutions and researchers to play a significant role in managing the individual research projects. US institutions that participated in Phase I, expressed interest in participating in Phase II, and have the administrative and technical capacity to manage large research projects qualified to become Contracting Institutions. Not all Contracting Institutions will be actively engaged in research at any one time, determined by proposal acceptance and financial support. Active Contracting Institutions are those representing the US PIs of the five BASIS II projects selected. All Contracting Institutions, however, are eligible to seek add-on funding to implement projects that support the BASIS mission and objectives (see 9.6 regarding add-ons).

By vesting more responsibility in the Contracting Institutions, rather than the ME, the CRSP should be able to reduce administrative costs, while maintaining communications standards and monitoring and networking capabilities for the individual projects. Contracting Institutions are responsible for the following activities.

- receive and administer a BASIS CRSP research project, assigned by the Sub-Agreement from the ME;
- negotiate and enter into MOUs with all project research partners, in accordance with BASIS CRSP guidelines;
- negotiate and enter into sub-agreements with all project research partners, in accordance with BASIS CRSP and USAID guidelines;

- implement the research project in coordination with US, host country, and multilateral institutions (as appropriate) and as described in the approved project proposal and workplan;
- account to the ME for all program accomplishments and expenditures, by complying with reporting requirements;
- develop a system of effective fiscal management of the project and financial reporting of the project to the ME, providing assistance and guidance to partner institutions as needed;
- ensure that the 25% matching requirement is met by the project and its affiliated institutions;
- ensure compliance with US travel regulations and report monthly to the ME regarding international travel for the project;
- facilitate and maintain regular communications with all project institutions and the ME;
- act as the liaison between the ME and all project staff;
- ensure that researchers comply with DHHS Human Subject regulations.

### **Contracting Institutions for Phase II**

#### **Active**

- Cornell University
- Institute for Development Anthropology
- Michigan State University
- University of Maryland-College Park, IRIS Center of the U. Research Corporation, International
- University of Wisconsin–Madison, Land Tenure Center

#### **Inactive**

- Harvard University
- International Food Policy Research Institute
- Rural Development Institute
- The Ohio State University

## **9.5 EXTERNAL EVALUATION PANEL**

The External Evaluation Panel (EEP) evaluates and makes recommendations on the status, funding, progress, plans, and prospects of the CRSP. The EEP jointly serves USAID and the CRSP and should play a strong role in analyzing the balance of a CRSP, assessing the relevance of each project to program goals. It should also evaluate the performance and productivity of each institution on each project annually and assess the appropriateness of projected resource allocations.

The objective views and expertise of this external group is necessary to balance the sometimes conflicting but natural institutional biases that may exist in a CRSP. It is important that the ME make full use of the EEP and its recommendations. Panel members should be invited to attend important meetings of the CRSP in order to keep abreast of progress and be familiar with problems and issues. Evaluations will include periodic site visits to each university and each participating country, particularly prime country sites. These visits can be divided up among the members, permitting at least two members to work together on each site visit.

The EEP must play a strong role in judging the balance of the BASIS CRSP and the relevance of each project to the program goals. It should evaluate the performance and the productivity of each institution on each project and assess the appropriateness of projected resource allocation.

CRSP Guidelines state that the panel will consist of an adequate number of scientists to represent the major disciplines of the CRSP. When specific evaluations require expertise on a minor discipline not represented on the EEP, the Chair may request the assistance of an external consultant from the ME. CRSP Guidelines recommend a five-year term for the initial panel, with staggered rotations possible thereafter. In Phase II, the size of the EEP will be kept small.

- The BASIS CRSP EEP will comprise three active members and one reserve member;
- The ME will keep all members (active and reserve) fully informed of BASIS activities;
- The active members will be invited to attend the BASIS CRSP TC meeting in conjunction with the Policy Conference;
- Active members are expected to commit their time to the normal functions of the EEP and to attend meetings as required;
- Reserve members will be asked to fill in for active members when needed or as advised by the EEP chair, subject to funding availability.

EEP members may switch among the active and reserve categories as circumstances dictate.

While EEP members (active and reserve) must be committed to serving on the EEP, time conflicts are inevitable. The above model seeks to establish a flexible structure that would accommodate sabbaticals, job changes, international travel, and resignations without decimating the EEP's effectiveness or critical mass.

In addition to review at the end of year 1, work for the EEP in the 3rd year of Phase II will be more time intensive, involving regional site visits. It is anticipated that the EEP chair in dealing with time and scheduling conflicts may wish to have additional flexibility to call upon reserve members in order to complete the work on schedule. As the design of Phase II differs from Phase I, this intensive review in year 3 is designed to assist with determining possible extensions for individual projects, possible restructuring of BASIS CRSP in the final two years, and possible topics for future synthesis activities previously unidentified. (See Phase II five-year calendar for proposed EEP review and meeting schedule.)

## **EEP members**

### **Active**

- David Abler, Pennsylvania State University, Department of Agricultural Economics and Rural Sociology
- Elizabeth Dunn, University of Missouri-Columbia, Department of Agricultural Economics
- Jean Kearns, The Consortium for International Development

### **Reserve**

- Allen Featherstone, Kansas State University, Department of Agricultural Economics



## 9.6 PROGRAM EVALUATION

The evaluation of research and policy impact is an important component of the BASIS CRSP. This process will be incorporated into the overall program through input from the research teams, the Management Entity, USAID, and the External Evaluation Panel. Projects will be designed to measure the on-going impact on policy dialogue, potential policy implementation, and the prospective impact the results could have on individuals in the context of the country in which the research is taking place.

The program impacts will support USAID and US strategic objectives, as described in the USAID Strategic Objectives document and through the priorities set forth in the Title XII Amendment: Famine Prevention and Freedom from Hunger Improvement Act 2000. Specifically, these objectives include the enhancement of food availability, economic and agricultural growth, the sustainable use of natural resources, trade expansion, and improved human health. The avenues that BASIS will employ to achieve these results will be research, training, capacity building, and policy dialogue. Anticipated outcome will be identified for each project and each site.

A major responsibility of the EEP and the Management Entity will be on-going assessment of each project. Though a specific process and specific indicators will be development in the first year of Phase II, some preliminary guidelines have been suggested. Progress toward the established indicators will be monitored throughout the research activity and project modifications will be made as needed, rather than waiting until the end of the project. Workplans, outputs, policy outreach, and participation in the BASIS Global program will assist the EEP in providing feedback to the research teams, USAID, and the Management Entity, and in making improvements to the program.

The group with the primary task of evaluating the BASIS CRSP projects will be the External Evaluation Panel. The program review will happen primarily at the Annual Meeting, where all of the researchers will present their work and discuss plans for the coming year. In year 3, the EEP will travel to each of the project sites to meet with researchers, donors, and impact organization members to further evaluate the research program and its progress. This process will allow greater interaction between the researchers and the EEP than has happened in the past as well as conserve resources by allowing multiple activities to take place at one time, at one meeting. The EEP will base its evaluation and recommendations on annual work plans, annual reports, outputs of the research programs (publications, training, financial status, and outreach activities), discussions with the researchers, and the indicators that are determined to measure progress toward global objectives.

The BASIS CRSP will also have an Administrative Management Review conducted by USAID during the 5-year phase. This review will concentrate on the management of the CRSP including the policies and procedures with respect to the administration of the program as a whole. The review will assist the CRSP in making further improvements in the program and addressing the needs of USAID and in thinking about future activities of the CRSP.

Input from the EEP evaluations will assist the Management Entity and USAID in determining the most beneficial path to pursue in transitioning from years 3 to 4. Based on these evaluations, USAID input on thematic and regional priorities, and progress expected from the initial projects, BASIS intends to issue a second RFP for research to be implemented in Years 4 and 5 of this

agreement period. The RFP will be developed in a consensus fashion similar to the RFP for the beginning of Phase II. The process included contributions from USAID, researchers, contracting institutions, and the EEP. The progress made in the first three years of Phase II will be considered and areas that were not included in the first 3 years could be added at this time.

This mid-program evaluation allows BASIS to address additional themes, such as exploring research topics on modern agricultural input markets, or factor markets that received only minor attention in the first three years, such as financial (credit) markets. Additionally, this refocusing will allow BASIS to move its research priorities into other geographic regions that were not highlighted by the original 5 projects selected, such as South East Asia. By forming a consensus based on EEP evaluations, USAID input, and Management Entity involvement, a strategy for addressing new research areas will be developed to ensure that the BASIS will be as productive and resourceful as possible.

## **9.7 PROGRAM STRATEGY AND POLICY**

Based on current funding expectations of \$1.25 million and the 20% ceiling on management costs, BASIS II will need to reduce management costs. With other budget items at a minimum, the choice was to eliminate one of these groups. Of the three advisory groups operating in BASIS I – Technical Committee (TC), Board of Directors (BOD) and External Evaluation Panel (EEP) – the decision was made to operate without the BOD. The TC and the EEP offer the greatest value added for their cost and participation.

In preparation for BASIS II, the ME has prepared a policy manual to be shared with all researchers and partner institutions to streamline operating procedures and to better clarify roles and responsibilities. By combining these changes with three-year proposals and budgets approved in advance, greater focus on technical substance rather than administrative issues should be achievable.

The loss of the BOD will potentially make BASIS vulnerable to unforeseen policy issues that will arise in the future. Under BASIS I, the BASIS management office from time to time faced difficult management decisions on strategic planning, adding and terminating partners, expanding or deleting programs with changes in the CRSP earmark, indicator and results monitoring, and budgetary responses to changing USAID priorities. Many of these issues have been resolved prior to the beginning of Phase II. Other, creative solutions and resources may be tapped to address concerns as they arise. The researchers on the TC, the EEP, USAID, and the representatives from the Contracting Institutions can be approached (virtually) on an ad-hoc basis to offer advice, guidance, and suggestions depending on the issue at hand. This has been a very effective and efficient tool that has been used in the past and can continue to be employed.

## **9.8 POLICY GUIDELINES FOR ADD-ON CONTRIBUTIONS**

### **9.8.1 Background**

In contrast to the other CRSPs, the BASIS Phase I Cooperative Agreement provided core funds to cover only half of the BASIS' projected \$9 million 5-year budget. The remainder was anticipated to come from add-on grants from USAID missions and regional bureaus that BASIS

was responsible for obtaining. Over the course of Phase I, these add-ons actually contributed between \$400,000 and \$700,000 annually to research and outreach programs of the BASIS CRSP, 20% of which was budgeted to support ME activities.

In addition to economizing on USAID's core commitment to BASIS, the requirement that BASIS obtain add-on funding was intended to encourage greater partnership between USAID Global Bureau, regional offices and missions along with partners in the NGO and private sector in implementing programs. While these were laudable goals, they unintentionally resulted in the expenditure of a great deal of BASIS time and resources seeking add-ons that did not always materialize.

In an effort to enhance the research planning, coherence and productivity of BASIS, USAID has for Phase II put BASIS on an equal footing with the other CRSPs by removing the requirement that BASIS obtain add-ons to complete its budget. Core funding for BASIS over Phase II will remain at approximately the same levels as provided during Phase I. USAID still encourages BASIS (and all CRSPs) to accept add-ons as they can add depth and support for the program, and BASIS will still welcome the opportunity for add-ons that complement and extend its research program. BASIS will work with USAID to identify potential activities that would assist USAID missions with meeting their strategic objectives and fit well with BASIS goals and objectives. As with other cooperative agreements, BASIS and USAID will work together to facilitate add-ons where appropriate and where administratively feasible.

For USAID missions and individual researchers within the BASIS network of partners, add-ons will continue to offer financial and administrative advantages. Because add-ons can be processed as an administrative transfer to the BASIS Cooperative Agreement, competitive bidding for the add-on work is not necessary, nor does USAID have to formulate a new contract. Substantively and administratively incorporating an add-on grant within the BASIS program does entail some administrative and other costs that must be built into the budget for the add-on program. Details are given below.

### **9.8.2 Policy for accepting add-ons**

During Phase II, BASIS will accept add-on projects and funds that will strengthen and expand its research program. Researchers from all BASIS Contracting Institutions, both active and inactive, are eligible to seek and receive add-ons through the BASIS CRSP.

PIs of Phase II projects are required to establish relationships with the USAID Missions and regional policymakers in the country/region where their research activity will take place. A PI is encouraged to brief the Mission on the project and to discuss potential linkages with the strategic objectives for the region. If a PI negotiates an add-on to extend his or her project or to add a related component that is consistent with the programmatic objectives of BASIS, it can be accepted through the existing BASIS CRSP Cooperative Agreement. Add-ons negotiated by other members of the BASIS research network (i.e., those who are not PIs of the primary BASIS projects) are similarly encouraged.

In addition to communicating directly with USAID missions, another way in which BASIS may receive add-ons is through USAID regional bureaus or Global Bureau, with the assistance and through negotiations of the USAID Program Officer. BASIS will disseminate information on offers and opportunities for add-ons that it receives from USAID Global Bureau or other parts of

USAID to the Contracting Institution representatives to solicit interest. Interested researchers from Contracting Institutions will prepare and submit a proposal to respond to the add-on offer.

Individuals seeking add-on projects should submit their research proposal and budget to the BASIS ME. The BASIS management office will review the project in financial terms (see below). In addition, the BASIS program director, USAID, and one other member of the TC will review the project in substantive terms, and give suggestions for strengthening the project and enhancing its ability to contribute to the overall BASIS research synthesis. The add-on activity must be designed as a stand alone activity, which may be independent from other BASIS research or may support a component of ongoing activities. The PI for the add-on activity and his/her institution will be responsible for all activities associated with the add-on, including preparing proposals, communicating with the donor, writing technical reports, and submitting invoices. The add-on activity must comply with all policies of the CRSP, including the reporting calendar for the core activities of the BASIS CRSP (October-September). Outputs generated from the add-on activity must reference the BASIS CRSP and copies must be submitted to BASIS.

### **9.8.3 Administering and financing add-ons**

Add-ons are encouraged and will be accepted for research activities that complement the overall programmatic emphasis of BASIS. Full incorporation of add-on activities and investigators into the BASIS research program is highly desirable. Because BASIS operates on a fairly slender management budget, add-on projects must specifically budget for the additional expenses associated with attending BASIS *Policy Conferences*, publishing in the *BASIS Briefs* series, and otherwise fully participating in the intellectual life of BASIS. BASIS will also incorporate reporting on the add-on activity into its main annual report. The budget for add-on projects must also make provision for the modest (approximately \$6500) subcontracting charge that BASIS will experience to process the add-on grant.

It is expected that in most cases these administrative and other costs will not amount to more than 10% of the total add-on, if the researchers already have an existing project under BASIS and up to 20% if the researchers are new. The BASIS management office will work with investigators to determine specific costs for their projects, which must be included in the add-on budget.

The ME would like to request that add-on activities and budgets are exempt from the matching obligations of the CRSP.

## Phase II five-year calendar

	<b>FY02</b>	<b>FY03</b>	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>
<b>Oct</b>	CA Begins (Oct 1, 2001) Workplans and Budget approved FY902 Finalize MOUs	<i>TC Meeting</i> <i>EEP Meeting</i> <b>Preliminary meeting for Policy Conference #1</b>	<i>TC Meeting</i> <b>Preliminary meeting for Policy Conference #2</b> <i>EEP site visits, throughout year, as schedule is appropriate</i>	<i>TC Meeting</i> <i>EEP Meeting</i> <b>Preliminary meeting for Policy Conference #3</b> <b>Policy Conference #1</b>	<i>TC Meeting</i> <b>Preliminary meeting for Policy Conference #4</b> <b>Policy Conference #3</b>
<b>Nov</b>		Submit Annual Report to USAID Activity Report FY02 Impact Analysis (R4) Annual Workplan FY03	Submit Annual Report to USAID Activity Report FY03 Impact Analysis (R4) Annual Workplan FY04	Submit Annual Report to USAID Activity Report FY04 Impact Analysis (R4) Annual Workplan FY05	Submit Annual Report to USAID Activity Report FY05 Impact Analysis (R4) Annual Workplan FY06
<b>Dec</b>	Quarterly Financial Report	Quarterly Financial Report	Quarterly Financial Report	Quarterly Financial Report	Quarterly Financial Report
<b>Jan</b>			<b>Issue RFP for Research Activities for years 4 and 5</b>		
<b>Feb</b>					
<b>mar</b>	Quarterly Financial Report	Quarterly Financial Report	Quarterly Financial Report	Quarterly Financial Report	Quarterly Financial Report
<b>Apr</b>			<i>EEP site visits</i>		
<b>may</b>					
<b>June</b>	Quarterly Financial Report	Quarterly Financial Report	Quarterly Financial Report <i>EEP site visits</i>	Quarterly Financial Report <b>Policy Conference #2</b>	Quarterly Financial Report Policy Conference #4
<b>July</b>					
<b>Aug</b>			<i>EEP site visits</i>		
<b>Sept</b>	Quarterly Financial Report Workplans due	Quarterly Financial Report Workplans due	Quarterly Financial Report Workplans due	Quarterly Financial Report Workplans due	Quarterly Financial Report

# 10. BASIS CRSP BUDGET

## 10.1 BUDGET JUSTIFICATION

The BASIS CRSP employed the following guidelines in preparing the five-year budget to the renewal proposal:

- assumed a \$1.25million core budget annually;
- generally, 80% of the budget was applied to technical and research programs, with the remaining 20% used for the management of the CRSP.
- the Department of Agricultural and Applied Economics, a component of the University of Wisconsin–Madison, College of Agriculture and Life Sciences, will manage BASIS CRSP.

### 10.1.1 Personnel

Michael Carter will provide the overall direction for the CRSP. Danielle Hartmann will work on coordination and administration. Carole Karstsen, the Financial Specialist, will continue to work on BASIS activities in Phase II. Students may be hired to help support the administrative work load. A 5% increase has been included in salary figures for each year beginning in year 2. It is anticipated the Danielle Hartmann will leave the project after the second year and a new Assistant Director will be hired, with some cost savings associated.

BASIS staff members are employees of the University of Wisconsin–Madison. Salary and fringe benefit levels are determined by the University personnel policies and are based on each person's profession, title, education, and experience. For the 2000-2001 fiscal year, the fringe benefits rates negotiated by the University of Wisconsin–Madison are 32.5% for faculty and academic staff, 44.5% for classified staff, and 13.5% for project assistants (students). Fringe benefits include coverage for health and life insurance, retirement benefits, worker's compensation, social security, vacation, and sick leave.

### 10.1.2 Travel

There is a limited travel budget within the ME to allow the Program Director and other staff to participate in CRSP-related activities that take place outside of Madison. Primarily, this budget item includes funding to support travel to meet with USAID officials in Washington, DC, to attend CRSP Council meetings, and to potentially visit with representatives of Contracting Institutions, if necessary. The international travel budget will allow the Director to visit the research sites to provide consultation or information as necessary. In year 3, the Director or staff member of the ME can travel along with the EEP when they conduct their site visit evaluations.

### 10.1.3 Publications

The ME will have a small budget for preparing and publishing *BASIS Briefs* and for maintaining the BASIS website. These amounts may cover costs of publishing and allow the ME to hire a

freelance editor and buy into the Department of Agricultural and Applied Economics' web support staff time to assist with these endeavors.

#### **10.1.4 Management committee**

As stated in the management section of the proposal, the BASIS CRSP will have two management groups, the EEP, and the TC. The TC expenses are budgeted in the Conference and Workshops section and therefore the EEP is the only management group that has a separate budget under the ME. The EEP will meet every other year, to conduct its evaluation. The group will meet at the end of year 1, or possibly the beginning of year 2, once the research projects have gotten off the ground. Then the EEP will meet again in year 3 to conduct the international site visits. The site visits are planned in year 3 because this is the final year of the initial 3-year projects. Then, the EEP will meet again in year 5. The EEP will meet in conjunction with the TC meetings and/or the *Policy Conferences* in order to interact with the researchers and help to evaluate both written material and policy interactions. In addition to travel expenses, the EEP will be provided with a small honorarium for their participation in the CRSP.

#### **10.1.5 Other direct costs**

The ME has budgeted for communications, publications, supplies, and mailing expenses. These are general operational expenses of the ME to allow the office to perform its required management and coordination tasks. In year 1, the ME has budgeted for the purchase of 1 desktop computer, as the Department of Agricultural and Applied Economics will be increasing its staffing to support the ME, additional computer resources will be needed.

#### **10.1.6 Indirect cost recovery**

As of November 7, 2000, the Federal negotiated indirect cost rate for off-campus activities at the University of Wisconsin–Madison is 26%. The applicable indirect cost rate is applied against all budget items except equipment, alterations and renovations, sub-agreement costs in excess of \$25,000 per agreement, equipment and space rental costs, and patient care costs.

As the ME intends to enter into 5 sub-agreements in the first year of the program, one per project or Contracting Institution, the indirect costs on the first \$25,000 have been incorporated into the budget. In addition, in year 4, BASIS proposes to implement 2 new projects, on which the sub-agreement indirect cost fees will also be charged. Subsequent annual project budgets will be exempt from the indirect cost recovery charge however, as the sub-agreements will be in excess of \$25,000. All other budget items will be charged indirect cost recovery per University of Wisconsin–Madison regulations.

Indirect cost recovery is also charged within each project budget by individual institutions. Please refer to indicative project budgets for exact charges.

#### **10.1.7 Conferences and workshops**

As noted throughout the proposal, BASIS proposes to implement *Lessons Learned Policy Conferences*, the dates of which are suggested in the table below. In order to stretch resources, BASIS will hold the *Lessons Learned Policy Conferences* in conjunction with the TC meetings, so that travel expenses can be limited.

In year 2 onward, a post-doc/editor will be hired to assist with the synthesis component of the BASIS CRSP, especially in preparation for the *Lessons Learned Policy Conferences*. In years 2 and 3, these conferences will be coordinated by the ME using time and resources of existing personnel. In years 4 and 5, when the size of the conference is estimated to grow, a Conference Administrator will be hired to assist with logistics, planning, travel, and other arrangements.

Travel is budgeted for each TC member to meet once per year and for invited speakers to participate. Publications expenses, in terms of *BASIS Policy Briefs* and general materials for the meetings, will also be required.

As described in section 3.3, each *Lessons Learned Policy Conference* will actually consist of three meetings, a preliminary team meeting, a virtual electronic conference to globally discuss the synthetic lessons learned policy paper; and, a final conference oriented toward the International Policymaking Community. The preliminary meeting will be held in conjunction with the TC meeting. It will provide an opportunity for the researchers and invited speakers to present their draft papers in a small group, receive feedback from their peers, ensure that the topics are focused on the theme and address policy implications, and for the Program Director and Editor to begin to formulate ideas regarding the synthesis of the contributions and findings. Following that meeting, the editors will draft a synthetic lessons learned policy essay and share it through a global electronic conference.

The *Lessons Learned Policy Conference* will then be the formal presentation of the papers and will provide the opportunity to discuss with a broader audience the implications of the findings for policy and for other regional contexts. Policymakers from international, host-country, US, and multi-lateral agencies will be invited to attend and participate in the *Lessons Learned Policy Conferences*.

Many attendees may be able to cost share their expenses to participate. When a conference is held in Washington, DC, many attendees will not need to travel a great distance. For potential attendees from farther away, the BASIS CRSP has budgeted for their attendance.

With the larger conference, associated logistical expenses have also increased, including facilities expenses, publications, communications, and supplies.



<b>Schedule for <i>BASIS Lessons Learned Policy Conferences</i></b>					
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>LLPC #1: Food Security &amp; Asset Accumulation Policy</b>		<i>Preliminary meeting</i>	<i>Global Electronic Discussion</i>	<b>Policy Conference</b>	
<b>LLPC #2: Property Rights Policy for Productive Land Use</b>			<i>Preliminary meeting  Global Electronic Discussion</i>	<b>Policy Conference</b>	
<b>LLPC #3: Ag Policy Reform Sequences for Transition Economies</b>				<i>Preliminary meeting Global Electronic Discussion</i>	<b>Policy Conference</b>
<b>LLPC #4: Policies for Efficient &amp; Democratic Management of Natural Resources</b>					<i>Preliminary meeting Global Electronic Discussion</i> <b>Policy Conference</b>

The topics listed are tentative. BASIS will work with USAID and the TC to finalize the topics, while also reserving financial resources to respond to and participate in other areas that are unforeseen at the moment. This flexibility will be important as the changing dynamics in the developing world can be dramatic.

The *Lessons Learned Policy Conferences* schedule has more conferences in the later years for a number of reasons. First, the research projects will provide the majority of the substance for the conferences. The results from the projects will be more revealing and significant as the research progresses. Secondly, the majority of the BASIS budget will be used to support research and local policy initiatives during the first three year of the program. In years 4 and 5, there is greater financial flexibility to organize, promote, and participate in the conference.

### **10.1.8 Research projects**

Each of the initial 3-year research projects has provided an indicative budget as a preliminary guide. These budgets are attached. It was estimated that each project would have approximately \$200,000 per year as a budget target. A summary page is provided.

The BASIS CRSP is building its program around three-year projects in Phase II for a number of reasons. First, BASIS wanted to establish distinct beginning and ending dates for each BASIS project, supported by a proposal and annual workplan. Second, BASIS wanted to have as broad a scope and breadth as possible with the funding level anticipated. Third, BASIS wanted to streamline the management of the projects compared with Phase I, so that more energy and resources could be focused on the results and impacts of the research rather than on administration. Fourth, the CRSP wanted to ensure that the researchers had time to address synthesis and policy implications in a substantive manner.

The three-year cycle allows BASIS to achieve all of these goals. The five research projects selected have specific goals and anticipated impacts in the three-years of their project. The research teams will be able to meet the expectations of the CRSP in terms of research implementation, policy dialogue, and deliverables. Though there was discussion of staggering the start dates of the projects or having projects of multiple lengths (2,3,4, or 5 year projects), the administration is made more complicated and synthesis becomes much more difficult with this alternative structure.

With three-year projects, BASIS will be able to issue an additional Request for Proposals in year 3 to implement 2 or 3 new projects in years 4 and 5. This will allow BASIS to address additional themes, apply research activities to different regions, situations, and contexts, and approach the constraints from different perspectives. If a couple of the initial five projects have made significant contributions to the field of factor markets and would benefit from extending their projects an additional two years, this is also possible. This structure will allow BASIS to support 7 projects and hold 4 *Policy Conferences* over a period of 5 years.

With the assistance of the EEP and USAID, the BASIS ME would determine which initial projects may be extended for years 4 and 5. USAID would also participate in determining the process and selection criteria for any potential new project to be implemented in years 4 and 5. The budget, for purposes of clarity, illustrates the continuation of 2 initial projects and the implementation of 2 new projects.

### **10.1.9 USAID Outreach Program**

All BASIS researchers have made and will continue to make efforts to reach out to the USAID Missions in the countries in which they will be conducting research (see section 3.1 above). In many of the countries these relationships have been established and the researchers have received support from the Missions. Even if the BASIS research is not part of the specific strategic objectives of the country, it will be useful in meeting other development goals that cannot be prioritized at this time. Throughout the life of the research projects, BASIS researchers will continue to meet with Mission staff to brief them on the progress, the preliminary findings, and the potential policy implications. Mission staff will be invited to workshops and seminars held by the researchers where research and policy are presented. This is an integral part of the BASIS CRSP program and is included as a part of all BASIS research projects.

In addition to this outreach to USAID Missions in countries where BASIS research is active, BASIS would also like to stretch its impact to other areas where BASIS research is not being conducted. One way in which BASIS proposes to do this is through the BASIS *Lessons Learned Policy Conference Series* (discussed in other areas). Another way in which BASIS will reach out

to USAID Missions in areas where BASIS research is not being conducted is by meeting with Mission staff at their request to discuss BASIS research and its implications in the context of that particular country or region (see sections 3.1 and 3.5 above). The BASIS Management Entity has set aside approximately \$15,000/year to support BASIS researcher travel to countries to respond to needs of Missions for information on topics that relate to BASIS goals, objectives, and research streams.

Based on requests received from the BASIS CRSP CTO at USAID, BASIS would coordinate travel for an individual from its network of researchers from its contracting institution partners to meet with Mission staff, matching the expertise of the researcher with the needs of the Mission. These meetings will allow BASIS to present findings from the research that the program is conducting. This will allow BASIS to extend the outreach of the impact beyond the specific countries and context in a global forum. The Mission may decide, after meeting with BASIS researchers, that further study of certain topics in their country is warranted. BASIS researchers, along with the USAID CTO, would be willing to discuss possible avenues for further collaboration in the future and the mechanism (CRSP or IQC) that this collaboration should involve.

#### **10.1.10 Training and Capacity Building**

Each CRSP is designed to assist in building capacity and provide training to young researchers. The BASIS CRSP is committed to making training of both US and host country students a high priority activity that contributes to the overall mission of the CRSP. It is the aim of the BASIS CRSP to promote education, training, and information exchange through collaborative research and development activities.

Training and capacity building are important aspects of all CRSP endeavors. To stretch BASIS resources as broadly as possible, most research teams will implement short-term training on research techniques, methodology, planning and analysis. As resources allow, research projects will provide support for degree training programs, and administrative support staff training.

In the first three years of BASIS II, an average of \$100,000 per year is devoted to degree and non-degree training programs by the 5 research projects (see specific project budgets). The majority of these funds will be used to support capacity building activities in the host country or for host country nationals. We expect that similar support will continue into years 4 and 5, but based on recommendations from the EEP and USAID, this amount may increase.

## 10.2 Phase II Budget proposal

2001-2006

Total Project Funding-\$6,250,000

	Unit	Cost	Count	Year 1	Year 2			
				2001-02	2002-03	2002-03		
				\$1,250,000	\$1,250,000		\$1,250,000	
<b>Management</b>								
US Personnel-Salaries & Fringes								
Director	mo	\$14,625	4	\$58,500	mo	\$15,356	4	\$61,425
Asst. Director	mo	\$5,324	12	\$63,887	mo	\$5,590	12	\$67,082
Finance	mo	\$2,933	6	\$17,598	mo	\$3,080	6	\$18,478
Program Asst (student)	mo				mo	\$661	6	\$3,966
(Add 5% sal increases-beginning FY 2002)								
Travel								
Domestic				\$3,000				\$3,000
International				\$3,500				\$3,500
Publications								
Briefs				\$5,000				\$4,500
Web Site				\$3,500				\$2,500
Management Committee								
EEP								
Travel	ea	\$1,500	3	\$4,500				0
Honoraria	ea	\$1,000	3	\$3,000				0
USAID Outreach				\$20,635				\$10,000
Communications				\$1,500				\$1,261
Printing				\$1,000				\$1,000
Computer, software, supplies				\$3,176				\$1,000
Supplies				\$1,000				\$741
Postage/Shipping				\$1,000				\$500
<b>Management Subtotal</b>				\$190,796				\$178,953
Admin ICR				\$49,607				\$46,528
Project ICR								0
<b>Management Grand Total</b>				\$240,403				\$225,481
<b>Research Activities</b>								
<b>Conferences/Workshops</b>								
Personnel								
Editor					ea	\$5,250	1	\$5,250
Conference Administrator								
Participants								
Travel								
US					ea	\$1,500	6	\$9,000
International					ea	\$4,000	4	\$16,000
Honoraria					ea	\$3,000	3	\$9,000
Facilities								
Communications								\$0
Supplies, photocopying								
Publications								\$2,000
ICR								\$10,725
<b>Research Projects</b>								
Project # 1				\$199,728				\$199,728
Project # 2				\$215,131				\$201,819
Project # 3				\$195,455				\$200,160
Project # 4				\$199,732				\$171,199
Project # 5				\$199,551				\$199,638
Project #6								
Project #7								
<b>Research Subtotal</b>				\$1,009,597				\$1,024,519
<b>Grand Total</b>				\$1,250,000				\$1,250,000

## 10.2 Phase II Budget proposal

2001-2006

Total Project Funding-\$6,250,000

	Unit	Cost	Count	Year 3	Unit	Cost	Count	Year 4
				2003-04				2004-05
				\$1,250,000				\$1,250,000
<b>Management</b>								
US Personnel-Salaries & Fringes								
Director	mo	\$16,124	4	\$64,496	mo	\$16,930	4	\$67,720
Asst. Director	mo	\$3,865	12	\$46,380	mo	\$4,058	12	\$48,696
Finance	mo	\$3,234	6	\$19,402	mo	\$3,395	6	\$20,372
Program Asst (student)	mo	\$694	9	\$6,246	mo	\$729	12	\$8,748
(Add 5% sal increases-beginning FY 2002)								
Travel								
Domestic				\$3,000				\$3,000
International				\$9,000				\$5,000
Publications								
Briefs				\$4,225				\$3,400
Web Site				\$3,000				\$5,000
Management Committee								
EEP								
Travel	ea	\$4,000	5	\$20,000				\$0
Honoraria	ea	\$1,000	3	\$3,000				\$0
USAID Outreach								
				\$10,000				\$15,000
Communications								
				\$1,000				\$1,500
Printing								
				\$1,000				\$1,300
Computer, software, supplies								
				\$1,000				\$1,450
Supplies								
				\$935				\$1,005
Postage/Shipping								
				\$750				\$1,000
<b>Management Subtotal</b>				\$193,434				\$183,191
Admin ICR								
				\$50,293				\$47,630
Project ICR								
				\$0	ea	\$6,500	2	\$13,000
<b>Management Grand Total</b>				\$243,727				\$243,821
<b>Research Activities</b>								
<b>Conferences/Workshops</b>								
Personnel								
Editor	mo	\$5,513	1.0	\$5,513	mo	\$5,788	1.5	\$8,682
Conference Administrator	mo				mo	\$5,000	4	\$20,000
Participants								
Travel								
US	ea	\$1,500	8	\$12,000	ea	\$1,500	90	\$135,000
International	ea	\$4,000	4	\$16,000		\$4,000	20	\$80,000
Honoraria	ea	\$3,000	3	\$9,000	ea	\$3,000	8	\$24,000
Facilities								
				\$500				\$5,000
Communications								
				\$500				\$2,500
Supplies, photocopying								
				\$500				\$2,500
Publications								
				\$2,000				\$5,000
ICR								
				\$11,833.25				\$73,497.37
<b>Research Projects</b>								
Project # 1				\$199,728				\$125,000
Project # 2				\$176,119				\$125,000
Project # 3				\$186,291				
Project # 4				\$187,165				
Project # 5				\$199,625				
Project #6								\$200,000
Project #7								\$200,000
<b>Research Subtotal</b>				\$1,006,274				\$1,006,180
<b>Grand Total</b>				\$1,250,000				\$1,250,000

## 10.2 Phase II Budget proposal

2001-2006

Total Project Funding-\$6,250,000

	Unit	Cost	Count	Year 5 2005-06 \$1,250,000	Cumulative Totals	Match
<b>Management</b>						
US Personnel-Salaries & Fringes						
Director	mo	\$17,777	4	\$71,107	\$323,248	
Asst. Director	mo	\$4,261	12	\$51,132	\$277,177	
Finance	mo	\$3,565	6	\$21,390	\$97,240	
Program Asst (student)	mo	\$765	8	\$6,120	\$25,080	
(Add 5% sal increases-beginning FY 2002)						
Travel						
Domestic				\$3,000	\$15,000	
International				\$5,350	\$26,350	
Publications						
Briefs				\$3,575	\$20,700	
Web Site				\$6,000	\$20,000	
Management Committee						
EEP						
Travel	ea	\$1,000	3	\$3,000	\$27,500	
Honoraria	ea	\$1,000	3	\$3,000	\$9,000	
USAID Outreach						
				\$15,000	\$70,635	
Communications						
				\$1,200	\$6,461	
Printing						
				\$1,000	\$5,300	
Computer, software, supplies						
				\$1,200	\$7,826	
Supplies						
				\$1,000	\$4,681	
Postage/Shipping						
				\$1,000	\$4,250	
<b>Management Subtotal</b>				\$194,074	\$940,448	
Admin ICR						
				\$50,459	\$244,517	
Project ICR						
					\$13,000	
<b>Management Grand Total</b>				\$244,534	\$1,197,965	
<b>Research Activities</b>						
<b>Conferences/Workshops</b>						
Personnel						
Editor	mo	\$6,078	1.5	\$9,116	\$28,561	
Conference Administrator	mo	\$5,000	4	\$20,000	\$40,000	
Participants						
Travel						
US	ea	\$1,500	90	\$135,000	\$291,000	
International		\$4,000	20	\$80,000	\$192,000	
Honoraria	ea	\$3,000	8	\$24,000	\$66,000	
Facilities				\$5,000	\$10,000	
Communications				\$2,000	\$5,000	
Supplies, photocopying				\$2,000	\$5,000	
Publications				\$5,000	\$14,000	
ICR				\$73,350.24	\$169,406	
<b>Research Projects</b>						
Project # 1				\$125,000	\$849,184	\$193,288
Project # 2				\$125,000	\$843,069	\$191,364
Project # 3					\$581,906	\$44,895
Project # 4					\$558,096	\$447,102
Project # 5					\$598,814	\$118,994
Project #6				\$200,000	\$400,000	\$100,000
Project #7				\$200,000	\$400,000	\$100,000
<b>Research Subtotal</b>				\$1,005,467	\$5,052,036	
<b>Grand Total</b>				\$1,250,000	\$6,250,001	\$1,195,643

**BASIS CRSP**  
**October 1, 2001- September 30, 2004**  
**PROJECT BUDGET--SUMMARY**

**Project Title: Land, Labor and Purchased Input Market Constraints  
on Economic Growth in Russian Agriculture**  
Principal Investigator: Bruce Gardner

Region(s)/Country(ies): Russia  
Institution: IRIS Center, University of Maryland

**THIS MUST BE FILLED OUT FOR EACH INSTITUTION PARTICIPATING IN THE PROJECT**

BASIS CRSP Core funds								
Budget Category	UNIT	COST		COUNT	YEAR 1	YEAR 2	YEAR 3	TOTAL
		base	loaded					
<b>PERSONNEL</b>								
Salaries								
Bruce Gardner, Senior PI	days	\$471	\$508	15	\$7,627	\$7,627	\$7,627	\$22,881
Richard Blue	days	\$471		5	\$2,354	\$2,354	\$2,354	\$7,062
Leonid Polishchuk	days	\$290	\$400	5	\$2,001	\$2,001	\$2,001	\$6,003
Anthony Lanyi	days	\$402	\$553	2	\$1,106	\$1,106	\$1,106	\$3,319
Charles Cadwell	days	\$471	\$616	2	\$1,232	\$1,232	\$1,232	\$3,697
Zvi Lerman	days	\$471		3	\$1,413	\$1,413	\$1,413	\$4,239
Greg Brock	days	\$300		15	\$4,500	\$4,500	\$4,500	\$13,500
Robert Jolly	days	\$415		15	\$6,225	\$6,225	\$6,225	\$18,675
Eugenia Serova, Russian Senior PI	days	\$400		35	\$14,000	\$14,000	\$14,000	\$42,000
Russian Principal Investigators	days	\$200		110	\$22,000	\$22,000	\$22,000	\$66,000
Researchers, Russian Social								
Scientists (survey work)	days	\$50		200	\$10,000	\$10,000	\$10,000	\$30,000
Graduate Students, Russian	days	\$50		200	\$10,000	\$10,000	\$10,000	\$30,000
Train grad students to do surveys								
(3 days training)	survey	\$600		2	\$1,200	\$1,200	\$1,200	\$3,600
Administrators								
Sarah Bell	days	\$114	\$167	25	\$4,171	\$4,171	\$4,171	\$12,512
Local Project Coordinator	days	\$75		3	\$225	\$225	\$225	\$675
Benefits								
Overseas living allowances								
Subcontracts								
Rural Development Institute					\$7,050	\$7,050	\$7,050	\$21,150
Economic Research Services, USDA					\$8,000	\$8,000	\$8,000	\$24,000
<i>subtotal</i>					<b>\$103,104</b>	<b>\$103,104</b>	<b>\$103,104</b>	<b>\$309,312</b>
<b>TRAVEL</b>								
International Travel								
International Airfares, US-Moscow	trips	\$1,800		3	\$5,400	\$5,400	\$5,400	\$16,200
International per diems, Moscow	days	\$306		18	\$5,508	\$5,508	\$5,508	\$16,524
Visas	visa	\$300		3	\$900	\$900	\$900	\$2,700
Airport Transfers	trip	\$50		6	\$300	\$300	\$300	\$900
Taxis in-country	trip	\$15		18	\$270	\$270	\$270	\$810

Domestic Travel for Local Researchers								
Local travel, Russia (survey of 2 weeks, 3 locations, 2 PIs, 5 Surveyors)	trips	\$200	21	\$4,200	\$4,200	\$4,200	\$12,600	
Domestic per diems	days	\$90	252	\$22,680	\$22,680	\$22,680	\$68,040	
taxis	trips	\$15	42	\$630	\$630	\$630	\$1,890	
<i>subtotal</i>				<b>\$39,888</b>	<b>\$39,888</b>	<b>\$39,888</b>	<b>\$119,664</b>	
<b>TRAINING</b>								
Non-Degree interpretation/translation	seminar	\$600	1	\$600	\$600	\$600	\$1,800	
meeting expenses (informal seminars, 20 Social Scientists)	seminar	\$1,400	1	\$1,400	\$1,400	\$1,400	\$4,200	
Formal 3-day Seminar (end-project)	seminar	\$40,000	0	\$0	\$0	\$0	\$0	
Degree Program								
<i>subtotal</i>				<b>\$2,000</b>	<b>\$2,000</b>	<b>\$2,000</b>	<b>\$6,000</b>	
<b>OTHER DIRECT COSTS</b>								
postage								
communications								
duplication-Written materials for dissemination (quarterly Briefing Notes, 5 papers/year, Final Report), English/Russian	year			\$1,800	\$1,800	\$1,800	\$5,400	
Data Fees	year			\$500	\$500	\$500	\$1,500	
supplies								
computer/supplies								
Equipment (\$5000+)								
<i>subtotal</i>				<b>\$2,300</b>	<b>\$2,300</b>	<b>\$2,300</b>	<b>\$6,900</b>	
<i>subtotal</i>				\$147,292	\$147,292	\$147,292	\$441,876	
<b>Direct Cost Equivalent</b>			13%	\$19,148	\$19,148	\$19,148	\$57,444	
<b>SUBTOTAL DIRECT COSTS</b>				<b>\$166,440</b>	<b>\$166,440</b>	<b>\$166,440</b>	<b>\$499,320</b>	
<b>F&amp;A on Modified Total Direct Costs</b>			20%	\$33,288	\$33,288	\$33,288	\$99,864	
<b>TOTAL</b>				<b>\$199,728</b>	<b>\$199,728</b>	<b>\$199,728</b>	<b>\$599,184</b>	
<b>MATCHING CONTRIBUTIONS-NON FEDERAL</b>								
US Institutional Support								
AREC, UMD - webpage maintenance costs				\$1,753	\$1,753	\$1,753	\$5,259	
RDI, Leonard Rolfes' time				\$1,763	\$1,763	\$1,763	\$5,288	
Indirect Cost Waiver (20% instead of 48%), UMD				\$46,603	\$46,603	\$46,603	\$139,810	
cost difference between actual and capped base rates								
Chas Cadwell, IRIS @ \$557.02 difference/days \$86.22			2	\$172	\$172	\$172	\$517	
Bruce Gardner, UMD @ \$718.90 difference/days \$248.10			15	\$3,722	\$3,722	\$3,722	\$11,165	
Other institutional support								
Leveraged funding								
Private sector support								
<b>TOTAL</b>				<b>\$54,013</b>	<b>\$54,013</b>	<b>\$54,013</b>	<b>\$162,038</b>	
<b>OTHER FEDERAL CONTRIBUTIONS</b>								
ERS, USDA, research support				\$32,000	\$32,000	\$32,000	\$96,000	
<b>TOTAL CONTRIBUTIONS</b>				<b>\$86,013</b>	<b>\$86,013</b>	<b>\$86,013</b>	<b>\$258,038</b>	



BASIS CRSP  
 October 1, 2001- September 30, 2004  
**PROJECT BUDGET--SUMMARY**

**Project Title: Institutional Innovations to Improve the Viability of Equity Sha** Region(s)/Country(ies): Kyrgyzstan, South Africa  
 Principal Investigator (s): Michael Roth, Mike Lyne Institution(s): UW-Madison LTC

BASIS CRSP Core funds							
Budget Category	UNIT	COST	COUNT	YEAR 1	YEAR 2	YEAR 3	TOTAL
<b>PERSONNEL</b>							
Salaries	Month	\$200-\$7,150	130	\$90,489	\$91,305	\$67,349	\$249,143
Benefits	%			\$8,883	\$8,391	\$8,653	\$25,926
Overseas living allowances				\$0	\$0	\$0	\$0
<i>subtotal</i>				<b>\$99,372</b>	<b>\$99,696</b>	<b>\$76,001</b>	<b>\$275,069</b>
<b>TRAVEL</b>							
International Airfares	Trip	\$1,500-\$2,500		\$9,000	\$11,500	\$24,000	\$44,500
International per diems	Day	\$75-\$100	350	\$10,000	\$7,180	\$11,773	\$28,953
Domestic airfares	Trip	\$500-\$700	6	\$1,200	\$500	\$1,900	\$3,600
Domestic per diems	Day	\$25-\$150	150	\$2,950	\$3,450	\$3,450	\$9,850
Field work	Km.	0.24	00-60,000	\$4,800	\$16,800	\$5,800	\$27,400
<i>subtotal</i>				<b>\$27,950</b>	<b>\$39,430</b>	<b>\$46,923</b>	<b>\$114,303</b>
<b>TRAINING</b>							
Non-Degree	Various	\$1,500-\$3,500		\$5,000	\$5,000	\$8,000	\$18,000
Degree Program	Various			\$17,432	\$17,432	\$17,432	\$52,295
<i>subtotal</i>				<b>\$22,432</b>	<b>\$22,432</b>	<b>\$25,432</b>	<b>\$70,295</b>
<b>OTHER DIRECT COSTS</b>							
communications	Lump sum			\$1,800	\$1,830	\$1,861	\$5,491
supplies	Lump sum			\$3,200	\$3,530	\$3,561	\$10,291
computer/supplies	Computer/s	\$2,000/\$100	3	\$6,100	\$100	\$100	\$6,300
Equipment (\$5000+)				\$0	\$0	\$0	\$0
Survey cost and deeds	Lump sum			\$14,700	\$14,700	\$2,200	\$31,600
Admin. fees for 3 subcontracts	Lump sum	\$6,250	3	\$19,500	\$0	\$0	\$19,500
<i>subtotal</i>				<b>\$45,300</b>	<b>\$20,160</b>	<b>\$7,722</b>	<b>\$73,182</b>
<b>SUBTOTAL DIRECT COSTS</b>				<b>\$195,053</b>	<b>\$181,717</b>	<b>\$156,078</b>	<b>\$532,849</b>
<b>INDIRECT COST RECOVERY</b>							
% for each institution							
LTC 26% of Direct Costs				\$17,783	\$17,194	\$18,162	\$53,138
U. of Natal 10% of Salaries				\$980	\$980	\$520	\$2,480
INR 5% of Direct Costs				\$1,315	\$1,928	\$1,360	\$4,603
<b>TOTAL</b>				<b>\$215,131</b>	<b>\$201,819</b>	<b>\$176,119</b>	<b>\$593,069</b>

<b>MATCHING CONTRIBUTIONS-NON FEDERAL</b>				
US Institutional Support	\$36,321	\$37,327	\$38,366	\$112,014
Other institutional support	\$16,700	\$16,700	\$14,700	\$48,100
Leveraged funding				
Private sector support				
<b>TOTAL</b>	<b>\$53,021</b>	<b>\$54,027</b>	<b>\$53,066</b>	<b>\$160,114</b>
<b>OTHER FEDERAL CONTRIBUTIONS</b>				
<b>TOTAL CONTRIBUTIONS</b>	<b>\$53,021</b>	<b>\$54,027</b>	<b>\$53,066</b>	<b>\$160,114</b>

**BASIS CRSP**  
**October 1, 2001- September 30, 2004**  
**PROJECT BUDGET--SUMMARY**

**Project Title: Water Policy Reform in Southern Africa**

Region(s)/Country(ies): Malawi, South Africa, Zimbabwe

Principal Investigator (s): Derman, Ferguson, Gonese, Mulwalu

Institution(s): Michigan State University, Harvard

University, University of Zimbabwe - Centre for Applied Social Sciences, University of Malawi, South African Inst to be identified

BASIS CRSP Core funds							
Budget Category	UNIT	COST	COUNT	YEAR 1	YEAR 2	YEAR 3	TOTAL
<b>PERSONNEL</b>							
Salaries				52710	57760.5	60603.525	171,074
Benefits				0	0	0	-
Overseas living allowances				0	0	0	-
<i>subtotal</i>				52710	57760.5	60603.525	171,074
<b>TRAVEL</b>							
International Airfares				21,500	22,900	23,845	68,245
International per diems				16,000	16,720	17,476	50,196
Domestic airfares				-	-	-	-
Domestic per diems				7,000	7,350	7,718	22,068
<i>subtotal</i>				44,500	46,970	49,039	140,509
<b>TRAINING</b>							
Non-Degree				21000	15000	27000	63,000
Degree Program				0	0	0	-
<i>subtotal</i>				21000	15000	27000	63,000
<b>OTHER DIRECT COSTS</b>							
communications				1,500	1,575	1,654	4,729
Vehicle care & maintenance				15,000	15,500	16,025	46,525
supplies				1,800	1,890	1,985	5,675
computer/supplies				17,400	-	5,800	23,200
Equipment (\$5000+)				-	40,000	-	40,000
<i>subtotal</i>				35,700	58,965	25,463	120,128
<b>SUBTOTAL DIRECT COSTS</b>				<b>153,910</b>	<b>178,696</b>	<b>162,105</b>	494,711
<b>INDIRECT COST</b>				22,045	21,465	24,186	67,695
MSU Indirect Cost on Subcontracts				19,500			19,500
<b>TOTAL</b>				<b>195,455</b>	<b>200,160</b>	<b>186,291</b>	<b>581,906</b>
<b>MATCHING CONTRIBUTIONS-NON FEDERAL</b>							
US Institutional Support				14,241	14,953	15,701	44,895
Other institutional support				-	-	-	-
Leveraged funding				-	-	-	-
Private sector support				-	-	-	-
<b>TOTAL</b>				14,241	14,953	15,701	44,895
<b>OTHER FEDERAL CONTRIBUTIONS</b>							
<b>TOTAL CONTRIBUTIONS</b>				14,241	14,953	15,701	44,895

**NOTE: EACH INSTITUTION MUST ALSO FILL OUT THE PROJECT BUDGET DETAIL FOR THE PROJECT**

BASIS CRSP

October 1, 2001-September 30, 2004

## PROJECT BUDGET-SUMMARY

**Project Title: Rural Markets, Natural Capital and Dynamic Poverty Traps**

Principal Investigator: Christopher Barrett

Region: East Africa/Kenya, Madagascar

Institution(s): Cornell, FOFIFA, KARI, ICRAF

Budget Category	UNIT	COST	COUNT	YEAR 1	YEAR 2	YEAR 3	TOTAL
<b>PERSONNEL</b>							
Salaries				\$49,625	\$33,156	\$33,764	\$116,545
Benefits				\$10,079	\$10,583	\$11,112	\$31,773
Overseas living allowances							
<i>subtotal</i>				\$59,704	\$43,739	\$44,876	\$148,318
<b>TRAVEL</b>							
International Airfares				\$5,700	\$6,380	\$4,200	\$16,280
International per diems				\$13,085	\$11,910	\$5,580	\$30,575
Domestic airfares				\$0	\$0	\$1,500	\$1,500
Domestic per diems				\$10,080	\$1,860	\$2,010	\$13,950
<i>subtotal</i>				\$28,865	\$20,150	\$13,290	\$62,305
<b>TRAINING</b>							
Non-Degree				\$1,164	\$20,716	\$8,570	\$30,450
Degree Program				\$22,899	\$23,586	\$48,587	\$95,072
<i>subtotal</i>				\$24,063	\$44,302	\$57,157	\$125,522
<b>OTHER DIRECT COSTS</b>							
communications/postage				\$3,250	\$4,500	\$6,500	\$14,250
supplies/vehicle use/copies				\$16,250	\$3,000	\$4,000	\$23,250
computer/supplies				\$8,500	\$9,500	\$0	\$18,000
Equipment (\$5000+)							
<i>subtotal</i>				\$28,000	\$17,000	\$10,500	\$55,500
<b>SUBTOTAL DIRECT COSTS</b>				\$140,632	\$125,191	\$125,823	\$391,645
<b>INDIRECT COST RECOVERY</b>							
Cornell				\$51,348	\$40,397	\$58,709	\$150,453
FOFIFA				\$2,424	\$1,877	\$691	\$4,989
ICRAF				\$995	\$1,012	\$597	\$2,604
KARI				\$4,334	\$2,723	\$1,345	\$8,401
<b>TOTAL</b>				<b>\$199,732</b>	<b>\$171,199</b>	<b>\$187,165</b>	<b>\$558,093</b>

### MATCHING CONTRIBUTIONS-NON FEDERAL

US Institutional Support	187184	149118	110800	447102
Other institutional support	0	0	0	0
Leveraged funding	0	0	0	0
Private sector support	0	0	0	0
<b>TOTAL</b>	<b>187184</b>	<b>149118</b>	<b>110800</b>	<b>447102</b>
OTHER FEDERAL CONTRIBUTIONS	33072	33616	25786	92473
<b>TOTAL CONTRIBUTIONS</b>	<b>220256</b>	<b>182733</b>	<b>136586</b>	<b>539575</b>
<b>TOTAL PROJECT BUDGET</b>				<b>\$1,094,054</b>

BASIS CRSP

October 1, 2001- September 30, 2004

**PROJECT BUDGET--Summary****Project Title:****Assets, Cycles, and Livelihoods**

Principal Investigator:

Dr. Peter Little

Region(s)/Country(ies):

Horn of Africa

Dr. Abdel Ghaffar Ahmed

BASIS CRSP Core funds							
Budget Category	UNIT	COST	COUNT	YEAR 1	YEAR 2	YEAR 3	TOTAL
<b>PERSONNEL</b>							
Salaries and Benefits				\$ 41,891	\$ 41,690	\$ 41,812	\$ 125,393
Researchers				\$ 6,000	\$ 6,000	\$ 6,000	\$ 18,000
Central America / Africa Exchange Program				\$ 10,000	\$ 10,000	\$ -	\$ 20,000
Head Enumerators				\$ 1,000	\$ 6,000	\$ 1,000	\$ 8,000
Enumerators				\$ 3,000	\$ 13,000	\$ 1,500	\$ 17,500
Data Entry Clerks				\$ 3,000	\$ -	\$ -	\$ 3,000
Computer Data Entry Consultant				\$ 5,000	\$ 4,000	\$ 6,000	\$ 15,000
Editor				\$ -	\$ -	\$ 3,500	\$ 3,500
Graduate Students				\$ 25,500	\$ 16,500	\$ 16,500	\$ 58,500
Administrators				\$ 8,000	\$ 7,363	\$ 7,475	\$ 22,838
<i>subtotal</i>				\$ 103,391	\$ 104,552	\$ 83,787	\$ 291,730
<b>TRAVEL</b>							
International Airfares				\$ 15,000	\$ 12,000	\$ 18,000	\$ 45,000
International per diems				\$ 12,008	\$ 23,235	\$ 25,235	\$ 60,478
Domestic airfares				\$ 1,200	\$ 1,800	\$ 1,800	\$ 4,800
Domestic per diems				\$ 1,400	\$ 2,100	\$ 2,625	\$ 6,125
Vehicle: spareparts/fuel				\$ 6,000	\$ 9,000	\$ 9,000	\$ 24,000
<i>subtotal</i>				\$ 35,608	\$ 48,135	\$ 56,660	\$ 140,403
<b>TRAINING</b>							
interpretation/translation				\$ -	\$ 2,000	\$ 2,000	\$ 4,000
meeting expenses				\$ 13,000	\$ -	\$ 11,000	\$ 24,000
CA / HA Meetings				\$ 5,000	\$ 5,000	\$ -	\$ 10,000
<i>subtotal</i>				\$ 18,000	\$ 7,000	\$ 13,000	\$ 38,000
<b>OTHER DIRECT COSTS</b>							
postage				\$ 1,000	\$ 1,000	\$ 1,000	\$ 3,000.00
communications				\$ 1,200	\$ 1,200	\$ 1,200	\$ 3,600.00
duplication				\$ 850	\$ 850	\$ 850	\$ 2,550.00
publications				\$ 1,000	\$ -	\$ 5,000	\$ 6,000
supplies				\$ 1,700	\$ 2,700	\$ 2,700	\$ 7,100.00
computer/supplies				\$ 250	\$ 250	\$ 250	\$ 750.00
<i>subtotal</i>				\$ 6,000	\$ 6,000	\$ 11,000	\$ 23,000
<b>SUBTOTAL DIRECT COSTS</b>				\$ 162,999	\$ 165,687	\$ 164,447	\$ 493,133
<b>INDIRECT COST RECOVERY</b>				\$ 36,552	\$ 33,951	\$ 35,178	\$ 105,682
<b>TOTAL</b>				\$ 199,551	\$ 199,638	\$ 199,625	\$ 598,815

<b>MATCHING CONTRIBUTIONS-NON FEDERAL</b>				
US Institutional Support	\$ 29,021	\$ 33,391	\$ 34,982	\$ 97,394
Other institutional support	\$ 7,200	\$ 7,200	\$ 7,200	\$ 21,600
Leveraged funding	\$ -	\$ -	\$ -	\$ -
Private sector support	\$ -	\$ -	\$ -	\$ -
<b>TOTAL</b>	\$ 36,221	\$ 40,591	\$ 42,182	\$ 118,994
<b>OTHER FEDERAL CONTRIBUTIONS</b>				
<b>TOTAL CONTRIBUTIONS</b>	\$ 36,221	\$ 40,591	\$ 42,182	\$ 118,994

## 10.3 PLANNING FOR PHASE II BUDGET EXPANSION

BASIS CRSP is well aware of the constraints that the \$1.25 million/year budget is having on meeting all of the needs and expectations of USAID and the SPARE committee recommendations. Under the \$1.25 million budget scenario, BASIS has limited resources for communications and outreach, extending research topics and regions, and researcher collaboration and interaction. The program would be greatly enhanced with increased funding to at least a \$1.6 million/year budget. The following activities would be added/expanded if more funding were available:

- 1. Add a research project:** If funding were to increase to \$1.6 million/year, BASIS would issue another RFP to add one more research project to the program. BASIS would work with USAID and the EEP to determine the thematic, geographic, and development priority for this project. USAID has encouraged BASIS to explore expanding the scope of its research into modern input markets. This RFP could be one way of achieving that end. Also, the current research projects do not focus strongly on financial (credit) markets or on Central America or South East Asia. The expansion of BASIS research through increased funding would allow BASIS to address these gaps more easily.
- 2. Strengthen Communications Component:** As a CRSP with a strong policy focus, communications are a crucial component to achieving desired impacts. In Phase I, BASIS achieved a great deal through its Annual Report, BASIS Briefs, web site, Inter-CRSP presentations, and research summaries. At the \$1.25 million level, most of these critical outputs would be eliminated or greatly restricted. There would not be the capacity within the Management Entity to produce the outputs as they are currently being produced, either quality or quantity. The researchers would not have the support of the ME communications staff, as they currently do, to assist with editorial work, presentation preparation, and communications of impacts to a broad audience.

At the \$1.6 million level, BASIS would prioritize hiring an editor/webmaster to lead the communications agenda. The editor or communications team would help ensure that the Annual Report is an output that USAID can use to market and to highlight the work of the CRSP, that the BASIS Briefs are targeted and distributed to the policy maker audience as designed, that BASIS conveys its impacts in a useable and accessible format, and the BASIS links its research to policy. In addition, BASIS would more easily be able to participate in inter-CRSP presentations, with the additional staff and resources, through the collection of photographs, the development of the web site, and the creation of presentations and brochures.

- 3. Impact Monitoring and Strategic Planning:** Though impact monitoring and strategic planning are an important aspect to any CRSP, BASIS would only be able to minimally address these issues at a \$1.25 million level. To do these activities well, requires resources to support individuals' time and commitment to the program. Also, CRSPs are complex programs that work in highly diverse situations. It is desirable to have management committee members participate consistently and over a longer period of time so that the progress and development that is made is reviewed through the same lens.

If BASIS funding were to increase to \$1.6 million per year, BASIS would be able to ensure that the EEP met each year to review the CRSP activities, which would allow the members to be further engaged in the research from a project to project and a programmatic standpoint. In addition, it would allow BASIS to enlist the support of a small Board of Directors or Advisors to assist with program planning, policy issues, and leadership concerns rather than discussing these issues on an ad-hoc basis. This small group of advisors would meet once or twice per year to receive updates as to the status of the program and to advise on policy issues that may have arisen. This larger budget would also allow the researcher to meet with each other more frequently which supports the overall collaboration and capacity building initiative of the CRSP, as well as supporting global synthesis.

4. **USAID Outreach:** At the higher budget, BASIS would be able to devote even more time to responding to the needs of USAID Missions both in and out of the regions that BASIS is working. Approximately \$25,000/year would be available to assist BASIS researcher travel to Missions to share information regarding BASIS research results, potential implications in the new context, and possible linkages to policy debates.

The following budget pages outline what the BASIS II budget would look like should funds of the amount of \$1.6 million per year become available.



**BASIS BUDGET PROPOSAL-PHASE II 2001-2006**

Total Project Funding-\$8,000,000

				Year 1 2001-02 \$1,600,000		Year 2 2002-03 \$1,600,000	
	Unit	Cost	Count		Unit	Cost	Count
<b>Management</b>							
US Personnel-Salaries & Fringes							
Director	mo	\$14,625	4	\$58,500	mo	\$15,356	4
Asst. Director	mo	\$5,324	12	\$63,888	mo	\$5,590	12
Finance	mo	\$2,933	6	\$17,598	mo	\$3,080	10
Program Asst	mo	\$661	12	\$7,932	mo	\$694	12
(Add 5% inflation & sal increases-beginning FY 2002)							
Travel							
Domestic				\$3,000			\$3,000
International				\$5,000			\$5,000
Publications							
Editor/Web master	mo	\$4,675	9	\$42,075	mo	\$4,909	9
Briefs				\$3,000			\$5,000
Web Site				\$3,000			\$2,500
Management Committee							
EEP							
Travel	ea	\$1,500	3	\$4,500		\$1,500	3
Honoraria	ea	\$1,000	3	\$3,000		\$1,000	3
BOD	ea	\$1,500	6	\$9,000	ea	\$1,500	6
Communications				\$3,000			\$2,000
Printing				\$2,000			\$2,000
Computer, software, supplies				\$3,851			\$2,000
Supplies				\$3,000			\$2,000
Postage/Shipping				\$2,000			\$1,993
<b>Management Subtotal</b>				<b>\$234,344</b>			<b>\$253,801</b>
Admin ICR				\$60,929			\$65,988
Project ICR							0
<b>Management Grand Total</b>				<b>\$295,273</b>			<b>\$319,789</b>
<b>Research Activities</b>							
USAID Outreach				\$20,000			\$20,000
<b>Conferences/Workshops</b>							
Personnel							
Post-Doc	mo	\$5,000	2	\$10,000	ea	\$5,250	1
Conference Administrator							
Participants							
Travel							
US	ea	\$1,500	8	\$12,000	ea	\$1,500	8
International	ea	\$3,000	6	\$18,000	ea	\$4,000	6
Honoraria	ea	\$3,000	3	\$9,000	ea	\$3,000	5
Facilities				\$2,500			\$2,500
Communications				\$1,000			\$1,000
Supplies, photocopying				\$1,000			\$1,700
Publications				\$2,000			\$4,000
ICR				\$19,630			\$22,217
<b>Research Projects</b>							
Project # 1				\$199,728			\$199,728
Project # 2				\$215,131			\$201,819
Project # 3				\$195,455			\$200,160
Project # 4				\$199,732			\$171,199
Project # 5				\$199,551			\$199,638
Project # 6				\$200,000			\$200,000
Project # 7							
Project # 8							
<b>Research Subtotal</b>				<b>\$1,304,727</b>			<b>\$1,280,211</b>
Grand Total				\$1,600,000			\$1,600,000
Note: 1.5- 2 % inflation rate added in per year for operational expenses beginning FY year 2002							

**BASIS BUDGET PROPOSAL-PHASE II 2001-200**

Total Project Funding-\$8,000,000

	Year 3 2003-04 \$1,600,000				Year 4 2004-05 \$1,600,000			
	Unit	Cost	Count		Unit	Cost	Count	
<b>Management</b>								
US Personnel-Salaries & Fringes								
Director	mo	\$16,124	4	\$64,496	mo	\$16,930	4	\$67,720
Asst. Director	mo	\$3,865	12	\$46,380	mo	\$4,058	12	\$48,696
Finance	mo	\$3,234	10	\$32,336	mo	\$3,395	10	\$33,953
Program Asst	mo	\$729	12	\$6,940	mo	\$729	12	\$8,748
(Add 5% inflation & sal increases-beginning FY 2002)								
Travel								
Domestic				\$3,000				\$3,260
International				\$7,500				\$7,500
Publications								
Editor/Web master	mo	\$5,154.19	9	\$46,388	mo	\$5,411.90	12	\$64,943
Briefs				\$5,000				\$3,400
Web Site				\$5,000				\$5,000
Management Committee								
EEP								
Travel	ea	\$4,000	5	\$20,000	ea	\$1,500	5	\$7,500
Honoraria	ea	\$1,000	3	\$3,000	ea	\$1,000	3	\$3,000
BOD	ea	\$1,500	6	\$9,000	ea	\$1,500	6	\$9,000
Communications				\$1,500				\$2,000
Printing				\$1,000				\$1,425
Computer, software, supplies				\$1,223				\$1,500
Supplies				\$1,000				\$1,000
Postage/Shipping				\$1,400				\$1,000
<b>Management Subtotal</b>				\$255,163				\$269,645
Admin ICR				\$66,342				\$70,108
Project ICR				\$0	ea	\$6,500	2	\$13,000
<b>Management Grand Total</b>				\$321,505				\$352,753
<b>Research Activities</b>								
USAID Outreach								
				\$20,000				\$30,000
<b>Conferences/Workshops</b>								
Personnel								
Post-Doc	mo	\$5,513	1	\$5,513	mo	\$5,788	6	\$34,729
Conference Administrator					mo	\$5,000	4	\$20,000
Participants								
Travel								
US	ea	\$1,500	14	\$21,000	ea	\$1,500	100	\$150,000
International	ea	\$4,000	6	\$24,000		\$4,000	20	\$80,000
Honoraria	ea	\$3,000	8	\$24,000	ea	\$3,000	8	\$24,000
Facilities				\$1,318				\$5,000
Communications				\$1,500				\$3,000
Supplies, photocopying				\$1,500				\$3,230
Publications				\$4,000				\$5,000
ICR				\$26,736				\$92,289
<b>Research Projects</b>								
Project # 1				\$199,728				\$200,000
Project # 2				\$176,119				\$200,000
Project # 3				\$186,291				
Project # 4				\$187,165				
Project # 5				\$199,625				
Project # 6				\$200,000				
Project # 7								\$200,000
Project # 8								\$200,000
<b>Research Subtotal</b>				\$1,278,494				\$1,247,248
<b>Grand Total</b>				\$1,600,000				\$1,600,001
Note: 1.5- 2 % inflation rate added in per year for op beginning FY year 2002								

**BASIS BUDGET PROPOSAL-PHASE II 2001-200**

Total Project Funding-\$8,000,000

	Unit	Cost	Count	Year 5 2005-06 \$1,600,000	Cumulative Totals	Match
<b>Management</b>						
US Personnel-Salaries & Fringes						
Director	mo	\$17,777	4	\$71,108	\$323,248	
Asst. Director	mo	\$4,261	12	\$51,132	\$277,176	
Finance	mo	\$3,565	12	\$42,781	\$157,465	
Program Asst	mo	\$765	12	\$6,120	\$38,069	
(Add 5% inflation & sal increases-beginning FY 200						
Travel						
Domestic				\$3,000	\$15,260	
International				\$6,000	\$31,000	
Publications						
Editor/Web master	mo	\$5,682.49	12	\$68,190	\$265,774	
Briefs				\$4,000	\$20,400	
Web Site				\$5,000	\$20,500	
Management Committee						
EEP						
Travel	ea	\$1,000	3	\$3,000	\$39,500	
Honoraria	ea	\$1,000	3	\$3,000	\$15,000	
BOD	ea	\$1,500	6	\$9,000	\$45,000	
Communications						
Printing				\$1,500	\$7,925	
Computer, software, supplies				\$1,500	\$10,074	
Supplies				\$1,000	\$8,000	
Postage/Shipping				\$1,124	\$7,517	
<b>Management Subtotal</b>				\$279,455	\$1,292,408	
Admin ICR				\$72,658	\$336,026	
Project ICR					\$13,000	
<b>Management Grand Total</b>				\$352,113	\$1,641,434	
<b>Research Activities</b>						
USAID Outreach						
				\$30,000	\$120,000	
<b>Conferences/Workshops</b>						
Personnel						
Post-Doc	mo	\$6,078	6	\$36,465	\$91,956	
Conference Administrator	mo	\$5,000	4	\$20,000	\$40,000	
Participants						
Travel						
US	ea	\$1,500	100	\$150,000	\$345,000	
International		\$4,000	20	\$80,000	\$226,000	
Honoraria	ea	\$3,000	8	\$24,000	\$96,000	
Facilities				\$5,000	\$16,318	
Communications				\$2,500	\$9,000	
Supplies, photocopying				\$2,500	\$9,930	
Publications				\$5,000	\$20,000	
ICR				\$92,421	\$253,293	
<b>Research Projects</b>						
Project # 1				\$200,000	\$999,184	\$293,288
Project # 2				\$200,000	\$993,069	\$291,364
Project # 3					\$581,906	\$44,895
Project # 4					\$558,096	\$447,102
Project # 5					\$598,814	\$118,994
Project # 6					\$600,000	\$150,000
Project # 7				\$200,000	\$400,000	\$100,000
Project # 8				\$200,000	\$400,000	\$100,000
<b>Research Subtotal</b>				\$1,247,886	\$6,238,567	
<b>Grand Total</b>				\$1,599,999	\$7,880,000	\$1,545,643
Note: 1.5- 2 % inflation rate added in per year for op beginning FY year 2002						



# **Annexes to the Technical Proposal**