

# **ANNUAL REPORT 2006**

## **Project SN-3 IPRA**

### **Participatory Research Approaches**

Cali, Colombia

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# 1. Project Description and Logical Framework

## Project Description

**Goal:** To increase the relevance of R&D outputs and enhance community empowerment, with emphasis on gender equity, through developing and applying participatory research methods, tools, skills and organizational principles to improve capacity for innovation in resource-poor rural economies.

**Objective:** Community-managed participatory research methodologies for organizational, institutional, and technological innovation in agriculture, co-developed, tested and widely disseminated, to benefit resource-poor farmers, with emphasis on ethnic minorities and women.

**Important Assumptions:** Institutional, economic, and political stability; Participatory research approaches remain a priority in the CG; Donors allocate sufficient resources to participatory research approaches.

**Beneficiaries and End Users:** This work will benefit small-scale resource-poor farmers, processors, traders and consumers in rural areas, especially in fragile environments. IPRA has a strong focus on supporting rural women and the poor to build their capacity to generate, access and use technological innovation, market opportunities and better manage their resources, to their own advantage. Research and development service providers will receive more accurate and timely feedback from users about acceptability of technology and market options. Research and development systems and policy-makers will benefit from methods for conducting participatory research and linking local demands with service providers.

**Collaborators:** *In Latin America:* **México:** Universidad Autónoma de Chapingo; Colegio de Pos Graduados, Campus, Córdoba; Grupo para Promover la Educación y el Desarrollo Sustentable, GRUPEDSAC; Unión de Organizaciones de Sierra Juárez, UNOSJO S.C. **Guatemala:** Instituto de Nutrición de Centro América y Panamá, INCAP; Fundación para el Desarrollo y Mejoramiento de la Mujer Indígena, FUNDEMI; **República Dominicana:** Centro para el Desarrollo Agropecuario y Forestal, CEDAF; Centro de Investigación y Mejoramiento de la Producción Animal, CIMPA; Programa para la Agricultura Sostenible, PASAR; **Haití:** Centro de Salud y de Desarrollo Integral, CSDI. **Ecuador:** Instituto Nacional de Investigaciones Agropecuarias (INIAP)-Programa FAO; **Brasil:** Servicio de Tecnología Alternativa, SERTA; Asociación de Desarrollo Sustentable y Solidario de la Región Sisalera, APAEB. **Perú:** Centro Internacional de la Papa, CIP; Instituto Nacional de Investigaciones Agropecuarias; INIA; Papa Andina; Programa para el Fortalecimiento de las capacidades Regionales en Monitoreo y Evaluación del IFAD, PREVAL. **Bolivia:** Ministerio para el Desarrollo Agropecuario y Medio Ambiente, MDRAMA U. Mayor de San Simón (UMSS), Fundación PROINPA, Sistema Boliviano de

Tecnología Agropecuaria (SIBTA), FDTA-Valles, FDTA-Altiplano, FDTA-Chaco, FDTA-Trópico Húmedo Centro de Investigación Agrícola Tropical (CIAT), Servicio de Desarrollo Agropecuario de Tarija (SEDAJ), Coordinadora de Integración de Organizaciones Económicas Campesinas (CIOEC), Programa de Desarrollo Integral Interdisciplinario (PRODII), Centro de Apoyo al Desarrollo (CAD); **Colombia:** Corporación Colombiana de Investigación Agropecuaria (CORPOICA), Corporación para el Fomento de los Comités de Investigación Agrícola Local, CORFOCIAL; Programa para Biotecnología Agrícola, Corporación PBA, Unidades Municipales de Asistencia Técnica UMATAS.

**In Africa:** **Uganda:** National Agricultural Research Organization (NARO), Africare; National Agricultural Advisory Services (NAADS); African Highlands Initiative (AHI); Africa2000 Network, Vision for Rural Development Initiative (VIRUDI); Local government; INSPIRE Consortium; Network of Farmer Field Schools (FFS); Makerere University **Malawi:** Department of Agricultural Research Services (DARS); Ministry of Agriculture (Agricultural Development Divisions); Plan Malawi; Land o Lakes. **Tanzania:** District Agricultural and Livestock Department Office (DALDO), Traditional Irrigation and Environment Protection Programme (TIP), World Vision - Sanya Agricultural Development Programme, Usambara Lische Trust. **Kenya:** Kenya Agricultural Research Institute; Community Against Desertification (CMAD); Maendeleo Agricultural Trust Fund (MATF) of Farm Africa; Kenyatta University. **DR Congo:** Institut National de Research et Etudes Agronomiques (INERA); Innovative Resources Management (IRM). **Mozambique:** Instituto de Investigacao Agricultura Mozambique (IIAM), Institut des Sciences Agronomiques du Rwanda (ISAR), Rwanda. Zimbabwe; University of Zimbabwe **Austria:** BOKU, University of Natural Resources and Applied Life Sciences.

Regional Networks in Africa: East and Central Africa Program Agricultural Policy Analysis (ECAPAPA), Eastern and Central Africa Bean Research Network and Africa Highlands Initiative (AHI) of the Association for Strengthening Agricultural Research in East and Central Africa (ASARECA); Southern Africa Bean Research Network, African Soil Fertility Network (AFNeT), Pan African Bean Research Alliance (PABRA)

### **Explanation of any Project changes (with respect to previous MTPs):**

We reworked our log-frame this year to reflect the fact that the project has adopted an innovation systems' perspective and to reflect the global nature of our work. IPRA's focus in Africa is expanding rapidly, with a new emphasis on 'Enabling Rural Innovation' which is a more integrated approach than our initial focus on researching and developing community-managed participatory approaches. While we continue with this focus, we are now researching and developing participatory approaches that strengthen other parts of rural innovation systems, for example through fostering institutional learning, and change, social capital and linking farmers to markets. In addition, the change in

our log-frame reflects that our earlier public goods (e.g. Local Agricultural Research Committees (CIALS) have been adopted by a large network of organizations and this presents new opportunities. We are also focusing on developing a sustained national capacity for “managing innovation” by linking with institutions of higher learning to catalyze and support local innovation processes. Our overall focus continues to be to develop approaches that strengthen the interaction between rural communities and the wider innovation systems in which they are embedded.

## **Research strategy**

Since the late 1980s, CIAT has developed and promoted a wide variety of approaches and methodologies for participatory research and development. These participatory approaches emerged in response to low rates of adoption of CIAT’s bean and cassava varieties in Latin America in the 1980ties, and as CIAT expanded its role in Africa in the 1990ties , evolved as a strategy for demand-led technology development focused on strengthening local systems of innovation by the introduction of a range of participatory research methodologies.

We carry out two types of research: action research and comparative applied research. Action research is undertaken with partners to test and evaluate the feasibility and outcomes of applying our methodologies and approaches within ongoing development processes or projects. Applied comparative research aims to determine how the application of a participatory methodology or tool in different institutional settings and development contexts is correlated with certain key variables, such as social capital or gender equity, and influences specific outcomes, such as the types of technology developed. Our first research objective can be stated thus:

To conduct action research that enable rural innovation systems to work better for the poor by developing participatory approaches, methodologies, and tools to:

- Enhance farmers’ decision-making and capacity to innovate, experiment, better manage their resources and improve their organizational capacity;
- Strengthen learning and sharing mechanisms within communities and between R&D organizations and their clients, in particular the end-users of technology;
- Make technology design and delivery systems more relevant to the needs of small-scale poor farmers (increase their relevance, effectiveness and impacts to benefit the poor)

At the same time we conduct applied, comparative research or meta-analysis of results obtained using our methodologies across projects that represent different institutional settings and development contexts. Our second research objective is:

To understand how different types of interventions using participatory approaches affect the drivers of change in rural innovation systems.

Our research strategy emphasizes the incorporation of client-oriented participatory research methods into very early stages of technology design, aimed at addressing the full chain of interactions, from resources to production systems, to markets and policies. The participation of all stakeholders, alongside scientists in a jointly managed process of investigation and learning based in action-research is a central feature of this research for development. An important test of the usefulness of this research is the extent to which research products and knowledge are generated by partners who use IPRA's approaches and methods to address local priorities and research needs. To develop International Public Goods (IPGs) this project conducts research that responds to problems and opportunities that have national, regional and global relevance and generates research products, principally in the form of methodologies that have demonstrated application beyond the multiple, local situations in which the methods are co-developed with partners. This research draws on social analysis to develop methodologies that have contributed to making agricultural technology design and development more relevant to the needs of small-scale poor farmers, and to increasing the relevance, effectiveness and impacts of biological research.

## Research Highlights

### OUTPUT 1

Methodologies for strengthening farmers' organizations and rural innovation systems<sup>1</sup>, developed and disseminated

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#### **1. Participatory Photography: A Qualitative Approach for Obtaining Insights into Group Dynamics and Social Capital.**

**Gotschi, E., Sanginga, P., Freyer, B., Delve, R.J. 2006.**

**(Paper presented at the International Institute for Qualitative Methods (IIQM) Conference on Advances in Qualitative Methods Brisbane, Australia)**

Participatory methods and visual tools are increasingly popular as alternative qualitative approaches for enriching and complementing quantitative survey approaches for understanding livelihoods, and/or assessing and documenting impacts of development projects. However, the use of visual tools for analysing and documenting social processes are still in their infancy. Following a transdisciplinary approach by putting cameras into the hands of people power relations between the researcher, the researched and between the researched are being changed. This poster reports on the use of participatory photography to gain new insights into rural livelihoods, group dynamics, and social capital distribution within agriculture-based farmer groups in Búzi district, Mozambique. The process consisted of three cycles of photography with three farmer groups (11-35 members each), and involved asking them to take pictures to analyze critically and collectively their group membership, required investments, problems they face, coping strategies and benefits from being in the group. Together as a group and in individual sessions farmers explained their choice of picture and its interpretation of what it means to them.

ANALYSIS		
Focus of Analysis	Research Questions	Relevance to Research on Social Capital in Farmer Groups
Process	Who takes pictures during training? Who keeps camera for group? Who takes pictures? Who interprets/talks about pictures?	Power distribution within the group: participation in the process Inclusion versus exclusion of members Questions of possible conflicts
Content	What type of pictures? What is represented in the pictures?	Visualizing the context: people (family, group, community...), agriculture (crops, livestock, ...), infrastructure (house, market, road, ...)
Farmers' interpretation of the pictures Presentation to community /NGO/other groups	What is the story of the pictures?	Interpretation of pictures in group and by individuals Meaning and impact of group on livelihoods, group activities, benefits, investments and conflicts, collaboration, dealing with problems and conflicts, relations within the group: group leaders vs. members-only, men vs. women, elder vs. younger members
Assessment of differences	Is there a difference in taking and interpreting pictures for different gender groups?	Differences in perception of importance of group for gender, wealth category, education level, age, position within the group

**Table 1: Various Levels of Analysis**

Analysis included four levels: (1) Process: Who takes what pictures and who in the group takes care of/uses the cameras? (2) Content: What is represented by the pictures? (3) Farmers interpretation of the pictures: individual/group discussions with the researcher and sharing insights within the larger community/NGO/policy makers. And (4) assessment of differences in taking and interpreting pictures based on social differentiations (e.g. gender, wealth category, education level, age, position within the group).

The study critically assesses the pros and cons of participatory photography and its effectiveness as a research tool for deepening insights into rural livelihoods, group dynamics, social capital distribution, and to what extent the integration of participatory camera into broader studies (e.g. surveys, semi-structured interviews, observation) allows new insights for the researcher.



## 2. Investments and Benefits of Social Capital within Farmers' Groups: Public Good or Competitive Advantage?

Gotschi, E., Freyer, B., Delve, R.J. Sanginga, P. 2006.

Paper presented at the International Sociology Association conferences, Durban, South Africa

The use of farmers' groups has been a popular strategy for rural development projects in sub-Saharan Africa. Development organisations argue that working with farmers' groups rather than individuals is more effective and efficient as the group approach strengthens farmers' capacities to articulate their needs, access information, technologies, better markets and other resources that otherwise are out of their reach. Further, the group is an effective way to restructure social relations after civil war and profound transformations, thus creating social capital. However, within this framework, it is not clear whether the group approach produces public goods or creates competitive advantage amongst farmers. Using empirical data from a sample of 20 agricultural-based groups, and 160 farmers in Mozambique, this paper analyses investments into, and benefits from social capital and participation in groups.

Table 1: Correlations of Social Capital Indicators with selected socio-economic variables

	<i>Gender</i>	<i>Age</i>	<i>Position</i>	<i>Hhsize</i>	<i>Education</i>
<b>Exposure to group</b>					
Time member	0,112	-0,128	-0,058	-0,032	0,126
<b>Altruist orientation</b>					
Labour	0,065	0,070	-0,016	-0,092	-0,050
Money	0,047	0,041	0,079	0,120	0,073
<b>General Trust</b>					
Trustco Kendall	0,071	0,043	0,074	-0,068	-0,031
Gamma	0,123	0,054	0,131	-0,087	-0,040
<b>Investments</b>					
Partmeet	-0,034	-0,107	0,031	-0,031	-0,017
Contrib	0,075	0,027	-0,079	0,089	-0,086
Helpother	0,188 **	0,023	0,138 *	0,114	0,190 **
<b>Benefits</b>					
Numcred	0,321 ***	-0,070	0,142 *	0,001	0,183 **
Numhelp	0,278 ***	-0,080	0,148 *	0,072	0,280 ***
Numacces	0,160 *	0,007	0,174 **	0,076	0,114
Numinfo	0,173 **	-0,059	0,026	0,124	0,208 ***
Numvisit	0,127	-0,106	0,111	0,076	0,224 ***
Machamba	0,379 ***	0,145 *	0,051	0,130	0,111
Prodval	0,138 *	-0,006	0,156 **	-0,047	0,062

Significance levels: \*\*\* < 0,01 %, \*\* < 0,05 %, \* < 0,1 %;

Results revealed that participation in farmer groups leads to a diversification of social relations, increased likelihood of accessing external resources, information and services as well as mobilizing internal resources for collective goods. Farmers' groups provide greater opportunities to access public goods with a number of benefits extended to non group members. However, results demonstrate that some benefits of social capital are not equally distributed, and in some cases create competitive advantage, more than public goods. There are significant differences based on gender, position within groups and educational levels. Usually, male members or group leaders are in a better position to make use of these social resources to their advantage. There are also differences within gender groups: older and less educated women were found to derive less benefits from social capital compared to younger and educated women. The paper suggests areas for further research and development interventions to strengthen the public good nature of social capital and farmers' groups.

### **3. Investing in and benefiting from social capital: some insights into farmer groups and engendered imbalances in rural Mozambique**

**Gotschi, E., Freyer, B., Delve, R.J. and Sanginga, P. (submitted to Agriculture and Human Values)**

Farmer groups are a popular strategy for rural development projects to work with farmers in an organized way in sub-Saharan Africa. Group processes strengthen farmers' capacities to articulate their needs, access information, technologies and markets. that are often out of their reach. This study investigated who is investing into the group and how benefits of social capital are distributed amongst members and the broader community. Empirical results from analysis of farmers groups in rural Mozambique showed that farmer groups provides three types of goods: public goods, club goods, and private goods. Being in a group leads to a diversification of social relations, increased likelihood of accessing external resources, as well as mobilizing internal resources for collective action. Not all of these goods are equally distributed as there are significant differences based on gender, position within groups and educational levels. Though results suggested that group position is not significant in determining the ability of members to invest in and benefit from social capital, disaggregating this further by gender and position reveals that men are still more likely to obtain credit independent of position and that women leaders are more likely to obtain help and access information when they are leaders than members of the group. This demonstrates that women in leadership positions can overcome some gender barriers that they experience as members only.

#### Comparison of relationship between Gender and social capital

	Gender I (1=female, 2=male)	Gender II (1=female leaders, 2=male non-leaders)
Variable	T Value	T Value

Exposure to group		
# of years being member	1,759 *	1,679 *
Altruist orientation		
Labor	-0,815	-0,870
Money	-0,596	0,269
Investments (last month)		
Participation meetings	in0,432	1,067
Contribution to work	1,195	-0,368
Helping others	-2,402 **	-0,552
Benefits		
Obtaining Credit	-4,257 ***	-2,64 **
Obtaining Help	-3,640 ***	-1,649
Sources of Access	-2,041 **	0,283
Sources of Information	of-2,205 **	-1,519
Being visited	-1,611	-0,281

Significance levels: \*\*\* < 0,001, \*\* < 0,05, \* < 0,1

The ability to create social relations that benefit individuals is likely to be concentrated in the hands of younger, male individuals who are more likely to be educated and in leadership positions. Group benefits need prior investments of individuals who are allocating time and efforts into participating in group activities. Imbalances between investments and benefits from social capital will also be discussed. Even though the results show that there are no significant differences between group members in terms of investments into social capital, the extent of private goods that are generated by the group are not equally distributed amongst group members. Social capital is more easily accumulated by educated, younger male group members which reflects access to education and cultural social status.

Gender has been identified as a key variable to determine a members ability to generate supportive relations and benefit from social capital.

#### 4. Learning with Innovation Histories

**Boru Douthwaite, Alok Sikka, Rasheed Sulaiman, John Best and John Gaunt**

Constructing an “innovation history” is a method for recording and reflecting on an innovation process. People who have been involved in the innovation jointly construct a detailed written account based on their recollections and on available documents. The process of preparing this history stimulates discussion, reflection

and learning amongst all those involved. Others can also learn, either by studying an individual case or by comparing experiences. Future planning can build on the lessons learned, prepare a shared vision and act as a mechanism for change.

Designed and first tried out by the International Centre for Tropical Agriculture, this method uses two techniques that can be used as group exercises: (a) the “innovation timeline”, which lists the key events in the history of the innovation; and (b) the “actor network analysis”, which identifies the key links between all those involved in the innovation process. This article describes an experience where this method was used as part of a workshop aiming to learn from various cases. The “innovations” studied were unusual partnering arrangements among different organisations.

### **A joint analysis**

Working in partnership is now recognised as a successful strategy for improving livelihoods of the rural poor, as it allows for two or more organisations to make the most of each other’s strong points. However, the formation of effective partnerships can be a challenge. Organisational cultures may reflect the strengths which one member brings to a partnership but may also fail to value the strengths of another partner.

The Natural Resource Management (NRM) directorate of the Indian Council for Agricultural Research and the Natural Resource Systems Programme of the British Department for International Development have both supported research projects that have tried new partnership arrangements, with some good results. Both saw the possibilities of highlighting the lessons learnt by such projects with a four-day workshop, where participants could also explore ways to promote good partnering practices. Similarly interested was the World Bank-funded National Agricultural Innovation Project, which from 2006 will set up associations of different types of organisations to work in partnership to promote rural development throughout the country.

The workshop was held in November 2005 in New Delhi. Its objectives were to identify: (a) the benefits of working in partnership; (b) the enabling and constraining factors; and (c) the policy and research management strategies required to foster partnerships. The workshop set out to achieve these objectives through a joint analysis of four NRM projects, all of which were selected for their innovative partnering arrangements. The group of organisations involved included NGOs, international organisations such as CIMMYT, IRRI, the Aga Khan Rural Support Project, as well as farmer federations, input providers and governmental organisations.

The four projects were analyzed using a slight adaptation of the “innovation history” approach - the full version of the approach involves two workshops and writing a description of the innovation history. One adaptation, due to time and budget constraints, was to drop the first workshop and to ask all participants to prepare their timelines and network maps beforehand. One of the authors also interviewed policy makers and senior research managers, looking for their opinions in relation to partnerships in the context of NRM research and development. A second adaptation was to have a policy panel discussion as part of the workshop: eight senior and mid-level policy makers were invited to react to the workshop’s findings and their policy implications. Participants analyzed the projects in the first two days. They then became the resource people on the third day, when other colleagues joined in to help the group prepare for the panel on day 4.

### **What actually happened?**

The first phase of the workshop brought together representatives from each of the organisations involved in the case studies (some 25 participants in all). The plan for the first day was to split the participants into their four respective groups to develop a single combined timeline for each case study in the morning, and similar combined actor network matrices in the afternoon. This generated more debate than expected, as the participants in each group discussed their differing views of what happened. The first group, for instance, learnt a lot by exchanging opinions regarding the importance of leadership, while the second group identified the importance of being flexible with budgets. Many partnership lessons could be drawn out from this discussion, although it was not possible to finish the actor network matrix exercise. The lessons were then grouped under four headings:

- (a) time: significant time is required to build relationships (between 3 and 6 years); policy makers, donors, and others do not realise that it takes time to build trust between colleagues;
- (b) flexibility: working in new partnerships creates potential for research and flexibility to respond to demands; it is necessary to allow for mid-term corrections (e.g. all case study projects did this); project management must be flexible; flexibility must be built into project documents; government institutions are restricted by guidelines and so are not flexible;
- (c) leadership: importance of champions (strong leadership) to push for flexibility; and
- (d) conflict: recognition that conflicts are inevitable and that methods are needed to sort them out and maintain communication.

We began day two by splitting the participants into two groups, with each group made up of people from all four case studies. We presented each group with the list of lessons learnt from day one and then asked each group to: (a) give more details, add to, or question the lessons and the headings assigned to them; (b) identify evidence from each of the case studies; and, (c) identify benefits of

working in partnership and how to measure these benefits. One group ended up working on the first two points, while the second group concentrated on the last one. This was all presented during the third day, when the group was joined by other NRM researchers and development professionals. After a general discussion, all participants were asked to write on a card the policy question they would most like to put to a senior policy maker. The facilitators grouped the questions into categories and presented them. Participants were asked to look at these questions, and prepare for the panel discussion, which took place during the last day. The panel, formed by four senior and mid-level policy makers, was asked to comment on the changes needed to the existing systems to make the forming of partnerships easier, to nurture existing partnerships, and to enable the scaling up of partnerships.

### **Results, feedback and evaluation**

Adoption of the “innovation history” method proved useful. We were able to present clear conclusions, such as those referring to:

- complementarity and comparative advantage: the strongest partnerships are those that explicitly recognise and build upon the strengths of the partners;
- building relationships with farmers: successful partnerships depend on the integration of communities in the planning and implementation of partnership activities;
- leadership: successful partnerships are characterised by having vibrant and dynamic leaders, but they usually embrace the principle of decentralised decision-making;
- public-private partnerships: building formal and informal relationships among key public and private stakeholders can help agricultural research organisations achieve the objectives of agricultural research partnerships; and
- transparency: successful partnerships are characterised by openness in planning, decision-making and financial management.

These conclusions were reflected in the policy brief and in the resource materials for working in partnerships which were presented as a final product of the workshop.

The workshop was also successful in the eyes of the participants. We asked for feedback and reflected on how the workshop was progressing, through a barometer group meeting after the first day, an after-action review carried out by the facilitators on the third day, and also through an end-of-workshop evaluation. Participants, for example, said they liked the workshop structure, and its flexibility, which they felt led to real participation and a free and honest exchange of ideas. This flexibility was partly a result of on-going discussion amongst the facilitators and key resource people about how the workshop was progressing, and also of the long discussions between the facilitators in planning for the following day.

The policy study carried out before the workshop was useful and created an awareness of the workshop and its outputs amongst the policy makers and senior research managers. The timeline exercise worked well. It stimulated dialogue between case study resource people, in particular those from different organisations, as to which were the significant events, and why. Asking case-study participants to identify the people related to each significant change encouraged them to think about partnerships without necessarily having to construct the actor network maps. Having other researchers join the workshop helped to focus the work of the first two days, and the same can be said of the final panel session. Presenting their findings first, and then analyzing these further in preparation for the policy panel, helped build ownership amongst participants. The interaction with the policy panel itself immediately began the process of communicating the workshop findings to policy-makers.

### **What to change next time?**

The main dissatisfaction voiced by participants was with the facilitation and attendance at the policy panel session. People felt that the discussion could have better addressed the issues identified in the first three days of the workshop. Our expectation was that the panel discussion would help workshop participants learn about policymaking and how to influence it, in order to refine the planned policy briefs and materials. In this respect, the workshop was successful. However, having strongly focused on policy messages and key issues, some participants expected the workshop to lead directly to policy change, and that pathways to that change would be explored. At the same time, some participants were disappointed that some of the more senior members invited to be part of the panel were absent.

Quite a lot of time and effort was spent on preparing individual timelines and actor network matrices before the workshop. The idea was to give a voice to people who could not attend the workshop. Actual preparation of these inputs was patchy, and they created a false expectation that individuals would have an opportunity to present their projects. More time and resources should be allowed for advising on and following up the preparation of these inputs prior to such a workshop.

These difficulties, however, are minor when compared to the overall results. The adaptation of the “innovation history” method to a single workshop was judged by participants and facilitators as something that worked well and is worth repeating. It has the important advantage of being much cheaper and quicker than the full method, while still being able to highlight and share lessons from innovative experiences. As such, it provided space for the representatives of the organisations to track and analyse the institutional changes needed to make the innovations (the partnership arrangements) effective and then to communicate their findings to a wider audience.

## 5. The Impact Pathways Approach: A Practical Application of Program Theory in Research-for-Development

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**John Howell, M&E Specialist, Living Resources, UK**

**Ronald Mackay, Professor Emeritus, Concordia University, Canada**

**Jorge Rubiano, National University of Colombia, Palmira, Colombia**

***DRAFT 1<sup>st</sup> November – Submitted to the Canadian Journal for Program***

### ***Evaluation***

The Challenge Program on Water and Food (CPWF) pursues impacts on food security, poverty alleviation, improved health, and environmental security through the efforts of more than 50 research-for-development projects. These projects involve almost 200 organizations and cover the Limpopo, Nile, Yellow, São Francisco, Indo-Gangetic, Karkheh, Mekong and Volta river basins as well as the Andean System of Basins. An informal Impact Group has been established to develop and pilot an approach that will enhance the developmental impact of CPWF through better impact assessment, provide a framework for monitoring and evaluation, permit stakeholders to derive strategic and programmatic lessons for future initiatives and provide information that can be used to inform public awareness efforts. The approach makes explicit a project's *program theory* by describing its impact pathways in terms of a logic model and network maps. The impact pathways (IP) logic model identifies project outputs, outcomes and milestones and links these in the order they are expected to happen. It goes beyond the normal use of logic models to describe causative theory—how and why project outputs will be adopted (i.e., scaled-out and scaled-up) and achieve eventual impact. The network maps describe the arrangement of partners and stakeholders who will produce the outputs and outcomes shown in the IP logic model. An Impact Pathways narrative combines the logic model and the network maps into a single explanatory account and adds to overall plausibility by explaining the steps in the logic model, who does what, and the key risks and assumptions. The IP approach is based on concepts related to program theory drawn from the field of evaluation, organizational learning, and social network analysis. Conceptually the IP approach works to clarify and improve a project's program theory by making explicit and incorporating project staff's implicit theories about how things happen that guide how they act. Project impact



pathways are quantified as far as is reasonable using a modelling approach that identifies locations in other parts of the world where project outputs could be adopted with the greatest likelihood of success. A second method constructs impact scenarios using an integrated water-food model. The paper explains the steps involved in developing Impact Pathways for the projects involved in the CPWF program.

## **6. Impact pathway evaluation of an integrated *Striga hermonthica* control project in Northern Nigeria**

**Boru Douthwaite <sup>a,\*</sup>, Steffen Schulz <sup>b</sup>, Adetunji S. Olanrewaju <sup>c</sup>,  
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This paper evaluates a project that developed and introduced integrated *Striga* control (ISC) in Northern Nigeria. Adoption of ISC jumped from 44 participating farmers in four pilot areas to more than 500 farmers in 16 villages and hamlets in three seasons. On average, farmers adopted 3.25 different *Striga* control options from a basket of six “best bets”. Resource-poor and -medium farmers were more likely to adopt than resource rich ones. Adopting farmers enjoyed livelihood improvements, largely through selling ISC soybean.

Women in most adopting households benefited through selling food products based on soy- bean. Adoption of ISC can be attributed to four factors: (1) farmer-field-school-type training that explained how the technologies worked; (2) incorporation of at least one technology that gave quick benefits to sustain farmer interest in adopting and learning other components whose effects took longer to become evident; (3) allowance for farmer experimentation and adaptation to local conditions; and, (4) use of a monitoring and evaluation component that identified and incorporated farmer modifications to continually improve the “basket of options”. These principles are likely to be valid for research and extension approaches for similar integrated natural resource management (INRM). Impact pathway evaluation methodology used for the evaluation helped give the project a greater impact focus; helped design and reporting of the evaluation; and, by identifying early adoption pathways, has provided a firm basis for any future ex post impact assessment of ISC in Northern Nigeria. 2006 Published by Elsevier Ltd.

**Keywords:** Impact assessment; Natural resource management (NRM); Integrated pest management (IPM)

## 7. Evaluating and scaling-up integrated *Striga hermonthica* control technologies among farmers in northern Nigeria

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The results are presented of a project to promote integrated *Striga* control (ISC) technologies to farmers in the Guinea savanna of northern Nigeria. Extension agents used a participatory research and extension approach (PREA) to encourage farmers to test and adopt ISC technologies. Over a 2-year period, the performance of the technologies was compared with the common farmers' practice with respect to crop yields, *Striga* seedbank, *Striga* damage and economics, as well as the adoption and adaptation of ISC technologies among lead farmers and others. ISC improved crop productivity on average by 88%. In the farmers' practice, *Striga* seedbank increased by 46% in 2 years, while in plots under ISC it was reduced by a similar percentage. ISC resulted in higher margins than the farmers' practice, but increased labour requirements were found to be a limitation for the expansion of the recommended technologies. Improved seed varieties, however, were rapidly adopted by farmers, but often used at lower plant populations than recommended and in mixed cropping systems. It was estimated that the participation of each extension agent resulted in the transfer of knowledge and seed to an average of 240 farmers. In addition, the PREA had improved community, group, and farmer–extension agent relationships. Ongoing demand by Government and NGOs for training in PREA, extension material and improved seed suggested that scaling-up has continued beyond the lifespan of the project.

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Keywords: On-farm research; *Striga hermonthica*; Seedbank; Crop yields; Economics; PREA; Adoption

## OUTPUT 2

Organizational and institutional mechanisms and policies for using participatory research methodologies in the co-development of technologies, designed and tested, with rural innovation systems, in Latin America and Africa

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### 1. Proyecto para el Fortalecimiento Institucional de los CAISs: Una Alianza Para El Co-Desarrollo Local.

Informe de Progresos

**Carlos A. Quirós T<sup>2</sup>., Odilia Mayorga<sup>3</sup>, Elías Claros Trujillo<sup>4</sup>**

#### Introducción

El CIAT, en una Alianza para el Co-desarrollo con los Centros de Aprendizaje e Intercambio de saberes, CAIS, que apoya la Fundación W.K. Kellogg en América Latina y el Caribe, propone el fortalecimiento institucional participativo de estos mecanismos de desarrollo, bajo un esquema en el que un conjunto de metodologías y tecnologías es validado en una alianza de aprendizaje, aplicado con socios y beneficiarios, documentado en su capacidad para acelerar procesos de innovación tecnológica en las comunidades rurales de escasos recursos y diseminado para beneficio de otros grupos de interés y usuarios potenciales.

El conjunto de metodologías y tecnologías incluye la creación, dentro del ámbito de los CAIS participantes, de (a) unidades de investigación agrícola lideradas por Comités de Investigación Agrícola Local (CIAL) con capacidad para constituirse en agro empresas rurales, (b) procesos de Seguimiento y Evaluación Participativa (S&EP) que empoderen a los actores locales para ejercer el control de las iniciativas de desarrollo y mejorar su capacidad para demandar servicios de asistencia técnica, y (c) una red de información para el servicio de los distintos actores involucrados acompañada de un Sistema de Información Geográfica Local y de un conjunto de tele centros que posibilite el intercambio, búsqueda y uso eficiente de información técnica y agro empresarial en las zonas geográficas del área de influencia del proyecto...

El Proyecto Investigación Participativa con Agricultores, IPRA del CIAT propone el desarrollo de una etapa inicial que permita la construcción colectiva, con los CAISs participantes, de una teoría de la acción que reúna los componentes anteriores, demandados por los representantes de los CAIS y el diseño una estrategia integral de fortalecimiento institucional a la medida de las expectativas de estos socios y de la Fundación W.K.Kellogg, en particular. Proponemos una

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<sup>3</sup> Asistente de Comunicaciones, Proyecto IPRA

<sup>4</sup> Asistente de Investigación, proyecto IPRA

visión en la cual los ejes operativos de esta propuesta son los CAIS participantes, dentro de los cuales se crean las capacidades institucionales que les permitan impulsar la innovación tecnológica en sus áreas de influencia.

## Objetivos

Los objetivos planteados en este proyecto son los siguientes:

- Fortalecer en los CAIS el proceso de generación, desarrollo y difusión de eco-tecnologías.
- Crear en los CAIS participantes, equipos de facilitadores de métodos participativos que atiendan las necesidades de capacitación en el ámbito interno y de sus socios.
- Facilitar y acompañar los procesos de fortalecimiento institucional y adaptación de eco-tecnologías

Para el logro de los objetivos del proyecto se han realizado cuatro actividades, dos de las cuales fueron de diagnóstico y concertación: Tercer Encuentro de CAISs y Taller de Planificación realizado en República Dominicana; mientras las otras dos fueron de ejecución: Primer Taller sobre el Componente Central del Proyecto y Taller de Sostenibilidad.

## Desarrollo

### Progresos hacia el logro de los Objetivos:

#### a) Identificación de demanda

El proyecto fue formulado con base en las demandas y expresión de necesidades de los Directores de los Centros. La Tabla 1. describe los componentes priorizados por los participantes en el tercer encuentro de CAIS y las modalidades de trabajo preferidas por ellos.

**Tabla 1.** Componentes identificados por los representantes de los CAIS y las estrategias de trabajo concertadas

COMPONENTES PRIORIZADOS POR LOS PARTICIPANTES	MODALIDADES DE TRABAJO
1. Componente central: (a) metodología de comités de investigación agrícola local, (b) los sistemas de información geográfica, (c) el mapeo participativo tridimensional, (d) el seguimiento y evaluación participativa, (e) las tecnologías de información y comunicación (con especial referencia a los "tele centros"), (f) el desarrollo de agro-empresas rurales	1.1 Cursos cortos en la sede del CIAT 1.2 Capacitación grupal por temas en la sede de los CAISs. 1.3 Formulación de planes de acción para la aplicación de eco-tecnologías y metodologías. 1.4 Acompañamiento en práctica de campo 1.5 Seguimiento a la aplicación de las eco-tecnologías en campo. 1.6 Encuentros para la síntesis de lecciones aprendidas y mejores prácticas 1.7 Intercambio de información vía Internet.

<p>2. Tecnologías específicas:</p> <p>(a) herramientas de decisión para el manejo de los RN en el ámbito de cuenca tales como el análisis de grupos de interés al nivel de cuenca.</p> <p>(b) la producción artesanal de semillas,</p> <p>(c) el manejo de suelos,</p> <p>(d) el uso de forrajes multipropósito,</p> <p>(e) tecnologías para el manejo de cultivos y</p> <p>(f) maquinaria agrícola para pequeños productores,</p> <p>(g) otros...</p>	<p>2.1 Cursos cortos en una sede que congregue a los interesados en el tema puntual.</p> <p>2.2 Formulación de planes de trabajo</p> <p>2.3 Seguimiento de los logros alcanzados.</p>
<p>3. Fortalecimiento de la capacidad para compartir y acceder a información.</p>	<p>3.1 Facilitación de metodologías y del software necesario para establecer sistemas de información y bases de datos inteligentes.</p> <p>3.2 Facilitación de la metodología para la elaboración de materiales de capacitación.</p>
<p>4. Fortalecimiento de la capacidad institucional para la auto-sostenibilidad en el largo plazo.</p>	<p>4.1 Capacitación para la formulación de proyectos exitosos.</p> <p>4.2 Facilitación del intercambio de estrategias exitosas.</p> <p>4.3 Fortalecimiento del conocimiento endógeno sobre estrategias de financiamiento.</p>

## b) Efectividad de la capacitación en el fortalecimiento de los centros

Con relación a la construcción de capacidades de los Centros para mejorar su desempeño en el primer año, se realizó una encuesta a los representantes de los CAISs que participaron en el taller de fortalecimiento institucional, realizado en el CIAT en marzo de 2006. En la Tabla 2 se observa que para la mayoría de los representantes de los CAIS (11 de 18 observaciones), el proyecto está dando una respuesta satisfactoria al fortalecimiento institucional.

Los coordinadores del proyecto enfatizan la necesidad de una fase de seguimiento en campo que fortalezca los conocimientos adquiridos para consolidar las metodologías y tecnologías en sus zonas de trabajo.

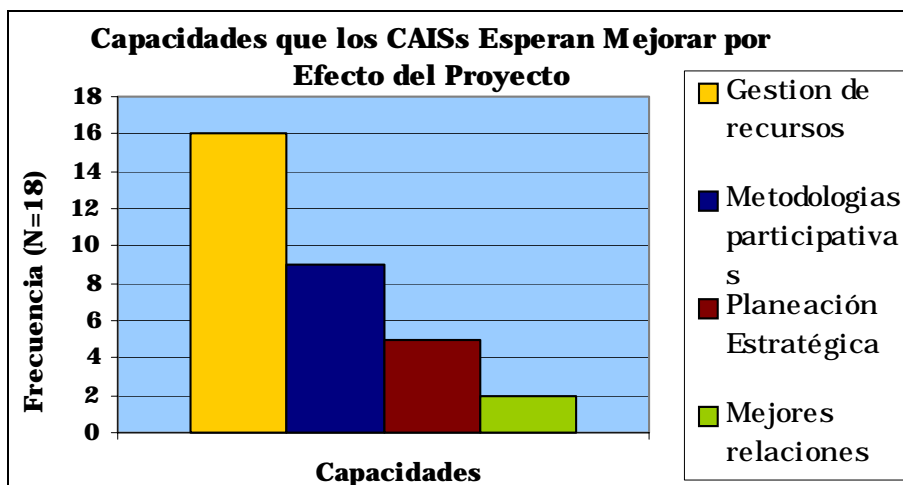
**Tabla 2.** Grado en que el CIAT está dando respuesta a las necesidades de los CAIS a través del proyecto de fortalecimiento institucional (N=18)

Ítem	Frecuencias			
Evalúe el grado en que el CIAT está dando respuesta a las necesidades de su CAISs en particular.	0	1	2	3
El contenido de los eventos de planificación y capacitación que se han desarrollado hasta el momento corresponde a las expectativas de fortalecimiento institucional de mi CAIS			7	11
El apoyo individual recibido de parte de los diferentes especialistas y personal de apoyo del CIAT ha respondido a mis necesidades y expectativas como miembros de un CAIS.		1	7	10
Las experiencias vividas en este evento de capacitación y las herramientas adquiridas, contribuirán al fortalecimiento institucional de mi CAIS.			7	11
Considero que la capacitación recibida contribuye al mejoramiento del desempeño de mi CAIS en términos de dar una mejor respuesta a mis socios y beneficiarios.			6	12

Escala de Valoración:  
0 = Inadecuado  
1 = Deficiente  
2 = Aceptable  
3 = Altamente Satisfactorio

## Expectativas de Fortalecimiento de Capacidades en los CAISs

En el Gráfico 1 se muestran las expectativas que los representantes de los CAIS tienen acerca del mejoramiento cualitativo en cuatro capacidades institucionales. El ítem “gestión de recursos” fue el de mayor observación.



**Gráfico 1.** Aspectos en los cuales los representantes de los CAIS consideran que la capacidad de los centros mejorará por efecto del proceso de fortalecimiento institucional.

### c) Accesos a información relevante y conocimiento actualizado

Con el objetivo de conocer cual era el estado inicial de los centros en esta área se realizó una encuesta vía E-mail que contenía preguntas con base a su conectividad y necesidades de información. Doce de los catorce centros oficiales respondieron la encuesta y mostraron interés en contar con una página Web interactiva que contenga bases de datos relacionada con sus temas de trabajo, videos, noticias, enlaces a otras páginas y galería de fotos.

Para responder a dicha necesidad el proyecto esta programando actividades cibernéticas y personalizadas para responder a dicha demanda. Uno de los temas iniciales y de marcado interés es poder compartir las Eco-tecnologías, que cada centro ha desarrollado y que tiene en uso, con los demás CAIS y sus posibles usuarios. Para ello hemos logrado identificar las tres eco-tecnologías más exitosas en cada uno y se están ubicando en la página web de IPRA/CIAT: [www.ciat.cgiar.org/ipra/inicio.htm](http://www.ciat.cgiar.org/ipra/inicio.htm) en donde pueden ser consultadas por los visitantes. En dicho sitio, se encuentra también la dirección electrónica de los responsables de las eco-tecnologías y la ubicación del CAIS la ha generado.

#### **d) Incorporación y sistematización del conocimiento local**

El desarrollo de capacidades de los CAISs para cumplir su misión, asume la incorporación de conocimiento a dos niveles: (a) a nivel del encuentro entre CAISs y CIAT, en donde el “co-desarrollo” exige que se haga un intercambio horizontal de saberes en el que se validan e integran las experiencias y conocimientos y (b) a nivel de la aplicación de las eco-tecnologías y metodologías con los beneficiarios finales de los CAISs, proceso inherente a la filosofía participativa de los enfoques usados por el Proyecto.

Esta integración, a nivel del fortalecimiento de las capacidades de los CAISs, ha permitido acercar conocimientos de carácter técnico y rigurosidad científica a la experiencia y conocimiento de los técnicos de los CAISs, dando paso a nuevas formas de eclecticismo entre la agricultura convencional y los hallazgos valiosos de la agricultura alternativa.

#### **e) Mecanismo para hallar la sostenibilidad en los CAIS**

Uno de los objetivos a corto plazo que los CASI requieren para continuar en la brega de la investigación y desarrollo es identificar algunos mecanismo para su sostenibilidad. Para ello el proyecto fortalecimiento de los CASI desarrollo un primer taller sobre herramientas para la sostenibilidad que fue realizado en Marzo de 2006. En dicho taller se desarrollaron los siguientes temas:

- Planificación estratégica para la sostenibilidad
- Marco lógico
- Elaboración de propuestas convincentes
- Historias de cambio más significativo

##### *1) Planificación estratégica para la sostenibilidad*

Inicialmente se compartió con los participantes los llamados senderos de impacto<sup>5</sup> que les permite visualizar las relaciones actuales, visión del futuro, acciones y estrategias de intervención que el centro mismo se proponga (Figura 3). Una vez establecida esta situación actual y la visión deseada se diligenciaron los planes de acción y el seguimiento que debería realizarse para lograrlo.

Así mismo, se compartió la metodología sobre la visualización de las redes sociales<sup>6</sup> que les permitió identificar el tipo de relación existente con cada uno de

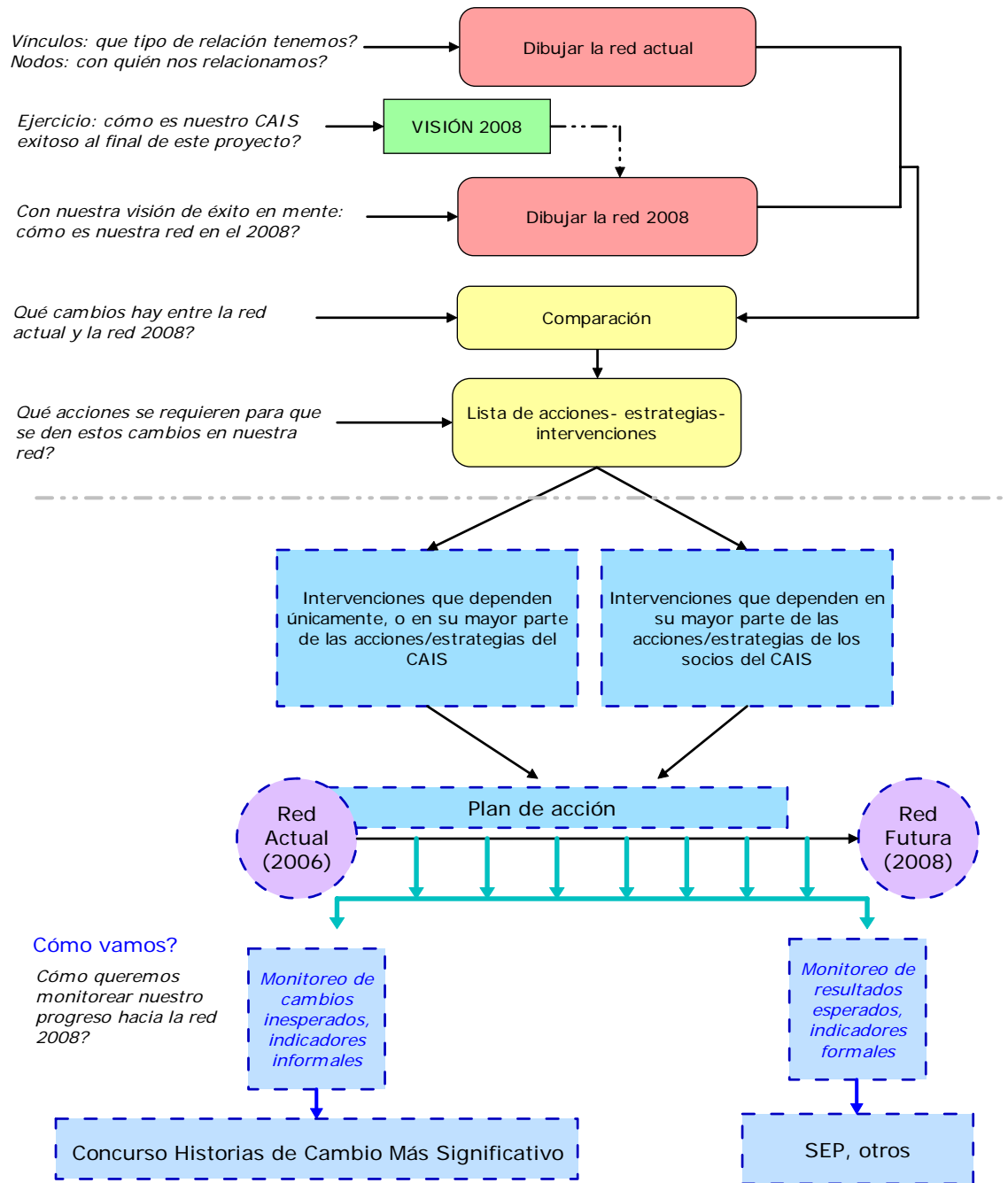
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<sup>5</sup> Para más información visite <http://www.lk.iwmi.org/cp/newsletter/2006febmarch.htm>

<sup>6</sup> Una red es un conjunto de personas y / o cosas que están conectadas unas a otras por algún tipo de relación.

Existen muchas clases de relaciones que pueden vincular tales entidades, involucrando transmisión e intercambio de dinero, bienes, afectos, influencias, etc.

sus socios o involucrados en sus proyectos, para poder plantearse la red que se necesita para el logro de sus objetivos.



**Figura 3:** Hoja de Ruta – Planificación Estratégica para la Sostenibilidad de los CAIS

La construcción de la futura red y la visión traen consigo la construcción de un plan de acción que tuvo como pilares:



- La identificación de las diferencias entre la red actual y la red futura
- La identificación de las acciones, ya sea que involucren a los socios o que de hecho ya sean parte del plan de acción del CAIS, para facilitar el logro de la visión futura.

Entre los puntos claves apreciados durante la exposición de los planes de acción elaborados por los participantes, son comunes entre los CAIS los siguientes:

- Los CAIS necesitan comunicarse e interactuar entre sí más frecuentemente y de la mejor manera posible.
- Los CAIS deben estar articulados con las diferentes instancias gubernamentales que inciden en las localidades en las que desarrollan sus labores, pues esta articulación les ofrece respaldo y apoyo no sólo en términos financieros sino también en gestión.
- Los CAIS deben establecer vínculos con otros donantes. Estos vínculos requieren criterios que definan los límites de la incidencia de los intereses de los donantes, en las decisiones y planes de los CAIS.
- Los CAIS deben fortalecer sus relaciones con sus beneficiarios directos e indirectos (comunidades y socios) con el fin de generar sentimientos de pertenencia y procesos de empoderamiento que faciliten una interacción más fluida y unos resultados más acordes con las necesidades e intereses de éstos.

## 2) *Historias de Cambios más Significativos*

El plan de acción que cada participante diseñó, requiere de un proceso de seguimiento que cuenta con dos componentes:

- SEP y otras metodologías y técnicas que se utilizarán en el monitoreo de los resultados esperados.
- Cambios Más Significativos<sup>7</sup>: técnica de monitoreo cualitativo que se encargará de los resultados inesperados y de dar cuenta del valor y la riqueza que habita en los hechos cotidianos vividos por los CAIS, en sus proyectos e iniciativas, mediante la documentación de éstos en las denominadas historias<sup>8</sup>.

Durante el taller se estableció el Concurso de Historias de Cambio más Significativo, mediante la realización de una ronda piloto que dio apertura oficial a la primera de las cinco que integrarán el concurso. Las siguientes rondas se desarrollarán durante los dos años siguientes de vida del Proyecto de Fortalecimiento de los CAIS.

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<sup>7</sup> Técnica de monitoreo cualitativo, creada por Rick Davies. <http://www.mande.co.uk/docs/MSCGuide.htm>

<sup>8</sup> Breves descripciones o narrativas de cambios que los observadores juzgan como tales por ser los más importantes durante el periodo de recolección establecido (ronda).

La riqueza de este proceso está en la oportunidad de compartir experiencias, conocimientos, ideas, dudas, etc., así como, en la posibilidad de generar espacios de discusión en torno a las historias.

El concurso de historias de cambios más significativos, no es solo una estrategia para el seguimiento de los resultados no esperados, sino que también es una contribución al fortalecimiento de la red de los CAIS.

### **Lecciones Aprendidas**

A lo largo de los encuentros realizados entre el CIAT y los CAIS para el desarrollo de las actividades del proyecto, se identificaron las siguientes lecciones:

- Compartir los conocimientos de manera horizontal entre los representantes de los CAIS y del CIAT es un fundamento base para el co-desarrollo de eco-tecnologías.
- Las contribuciones científicas de los especialistas del CIAT le brindan mayor fundamento a las ecotecnologías desarrolladas por los CAISs para alcanzar sus objetivos en el desarrollo
- Los CAISs se han fortalecido en gestión y formulación de proyectos mediante su participación activa en el taller de sostenibilidad en la medida que les aportó material e información de utilidad para iniciar procesos de consecución de recursos a través de proyectos convincentes.
- La trascendencia que tiene para el fortalecimiento institucional el facilitar la intercomunicación entre los diferentes CAISs para compartir sus avances y logros y acceder a la red universal de conocimiento y así compartir sus avances y explorar los de colegas en la mismo área.
- Los representantes de los CAIS expusieron su opiniones acerca de las tecnologías y metodologías que ha desarrollado el CIAT.y evaluaciones de los miembros de los CAISs
- Adquirir de los mismos gestores y practicantes de las eco tecnologías la información acerca de su aplicación, los logros obtenidos y las expectativas para su desarrollo.
- Someter a validación y ajuste las metodologías y tecnologías del CIAT ante un grupo de potenciales usuarios de las mismas.

A. metodologías y tecnologías que hemos compartido. Esto permitirá que muchas otras instituciones prueben las metodologías, las apliquen y tomen sus conclusiones sobre su utilidad y uso. En los siguientes años del proyecto podremos saber más en detalle los resultados de las aplicaciones y usos de las metodologías y tecnologías. Aún es muy prematuro decir algo sobre su aplicación.

B. Diseminación. El proyecto IPRA del CIAT ha creado un espacio en su página Web en el cual se puede consultar información relacionada con el proyecto

Sostenibilidad de los CAIS. Con el apoyo e información suministrada por cada CAIS, hemos identificado las tres eco-tecnologías más importantes en cada centro en términos de aceptación y adopción para colocarlas en Web. En el momento se pueden consultar las que han completado su etapa de revisión por los autores, en la dirección: [www.ciat.cgiar.org/ipra/inicio.htm](http://www.ciat.cgiar.org/ipra/inicio.htm) En el próximo semestre estas eco-tecnologías estarán a disposición de los visitantes en la Internet y se podrán establecer vínculos con los diferentes autores.

## **2. Alianza Cambio Andino**

*Innovación agrícola en favor de los pobres*

### ***¿Por qué una alianza?***

una alianza que promueve el aprendizaje sur-sur sobre el uso de enfoques participativos, su impacto y las políticas necesarias para orientar la innovación a favor de los pobres, es una respuesta a la descentralización y la presión política para participar en el desarrollo local en los países andinos. Los pobres en la región andina comparten similares problemas de marginación con respecto al mercado y los servicios esenciales para su desarrollo, existe una oportunidad importante para un intercambio de experiencias sobre el uso de enfoques participativos y su impacto. La Alianza Cambio Andino es un Proyecto financiado por el DFID que se inició en octubre del 2007 y aún esta en el proceso de arranque con la identificación de los socios claves a nivel regional Andino (Bolivia, Perú, Ecuador y Colombia).

### ***¿Cuál es el propósito de la Alianza Cambio Andino?***

El bajo nivel de adopción de innovaciones tecnológicas por parte de agricultores pobres ha catalizado la reestructuración de los sistemas nacionales de innovación agrícola en varios países. Se han incorporado novedosos enfoques participativos buscando la creación de un mercado de servicios de investigación y desarrollo dirigido a los pobres.

El propósito del Alianza Cambio Andino es:

- Promover un intercambio de aprendizaje en la región sobre el uso de métodos participativos
- Incidir en la formulación y ejecución de políticas publicas en conjunto con los sistemas nacionales en la región andina sobre el uso de enfoques participativos

### ***¿Cual es el impacto que se espera?***

Se espera mejorar significativamente la inclusión de los productores pobres en la formulación de demandas para la investigación y servicios de extensión

agropecuaria, mejorar la relevancia de proyectos de innovación en beneficio de los pobres y acelerar la adopción de tecnología agropecuaria.

### ***¿Cómo es la organización de la Alianza?***

La coordinación regional estará ubicada en La Paz, Bolivia.

Cinco equipos temáticos regionales trabajaran sobre:

- Métodos participativos para levantamiento de demanda, planificación, monitoreo y evaluación en procesos de innovación agropecuarios,
- Cadenas de valor participativas
- Información, Comunicación e intercambio de conocimientos regional
- Estudio de impacto
- Diálogo sobre políticas públicas para aumentar el uso de enfoques participativos y lograr innovación a favor de los pobres

Asesoría: Por su carácter investigativo, el proyecto será asesorado por dos entidades internacionales: el Centro Internacional de la Papa (CIP) y el Centro Internacional de Agricultura Tropical (CIAT), con presencia y experiencia en la región.

Duración: 2006 – 2010

### **Los Socios**

Cambio Andino consiste en alianzas de cooperación con organizaciones internacionales regionales y nacionales que actúan en:

- Enfoques de investigación y aprendizaje participativo en cadenas de valor u otros procesos de innovación agropecuaria
- Evaluación de impactos
- Intercambio de conocimientos
- Incidencia en políticas

En conjunto se consolidarán el intercambio, el aprendizaje y el diálogo sobre enfoques participativos y su utilidad para la formulación de políticas para orientar la innovación hacia los pobres en Bolivia, Perú, Ecuador y Colombia de la región andina

### ***¿Cómo es la estrategia de trabajo?***

Aprovechando experiencias exitosas anteriores, en los cuatro países, con el uso de enfoques participativos en procesos de innovación agrícola, la Alianza Cambio Andino propone:

1. Documentar, sistematizar y difundir ampliamente en la región andina una gama de métodos y enfoques participativos exitosos y apropiados para fortalecer la articulación de los proveedores de innovaciones agrícolas

con los productores de escasos recursos. Esta gama incluye metodologías para:

- Identificar la demanda de los pobres
  - Planificación, monitoreo, evaluación y control social de proyectos de innovación agropecuaria
  - Enfoque participativo de articulación a mercado pro pobre
  - Intercambio de conocimientos
  - Evaluación de impacto
  - Diálogo sobre políticas institucionales
2. Identificar las oportunidades más significativas en los sistemas de innovación nacionales en los países andinos para la aplicación de enfoques participativos, a través de un análisis de oportunidades para mejorar la articulación entre la oferta de innovaciones agrícolas y la demanda por parte de la gente pobre.
  3. Llevar a cabo estudios de impacto en colaboración con los practicantes de un juego de 10 metodologías participativas seleccionadas, las cuales se propone introducir en algunas cadenas de valor o en programas de investigación y transferencia.
  4. Apoyar el intercambio de la evidencia sobre impacto y de la experiencia vivencial de los practicantes en el ámbito regional para influenciar el diseño de políticas de innovación agropecuaria
  5. Promover un diálogo sobre políticas institucionales que favorezcan la inserción de enfoques participativos en los sistemas de innovación nacionales con el fin de que la gente pobre se beneficie más de la innovación agropecuaria.

La “Alianza Cambio Andino” esta iniciándose y estamos trabajando con los socios en definir estrategias y planes específicos de trabajo con el propósito de alcanzar los objetivos y resultados arriba expuestos.

### **3. Mejoramiento de la Gestión de Conocimiento para el Desarrollo Empresarial Participativo en Zonas Rurales**

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## 1. Resumen del proyecto

El Proyecto “Mejorando la Gestión de Conocimiento para el Desarrollo Empresarial Participativo en Zonas Rurales” tiene como objetivo: Promover procesos efectivos de innovación rural, a través del desarrollo empresarial rural, la investigación participativa y la gestión de la información y el conocimiento, contribuyendo de esta manera al desarrollo social y económico en los territorios CIP de Bolivia (Azanakes, Chuquisaca y Acoraimes) y Perú (Trujillo, Carabaylo y Yacus).

Este proyecto se desarrolla en cuatro momentos como se muestra en la Figura 1.

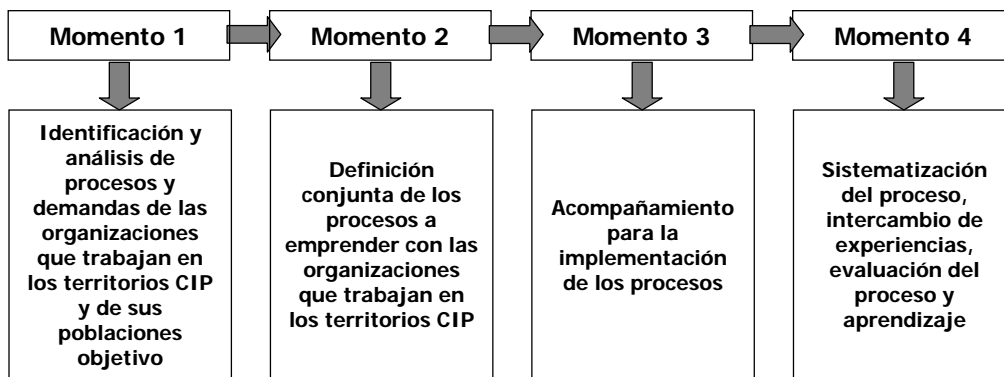


Figura 1. Momentos de Implementación del Proyecto

En la Figura 2 se presenta en forma esquemática la estrategia o modo de operación del proyecto en cada uno de los territorios CIP a distintos niveles.

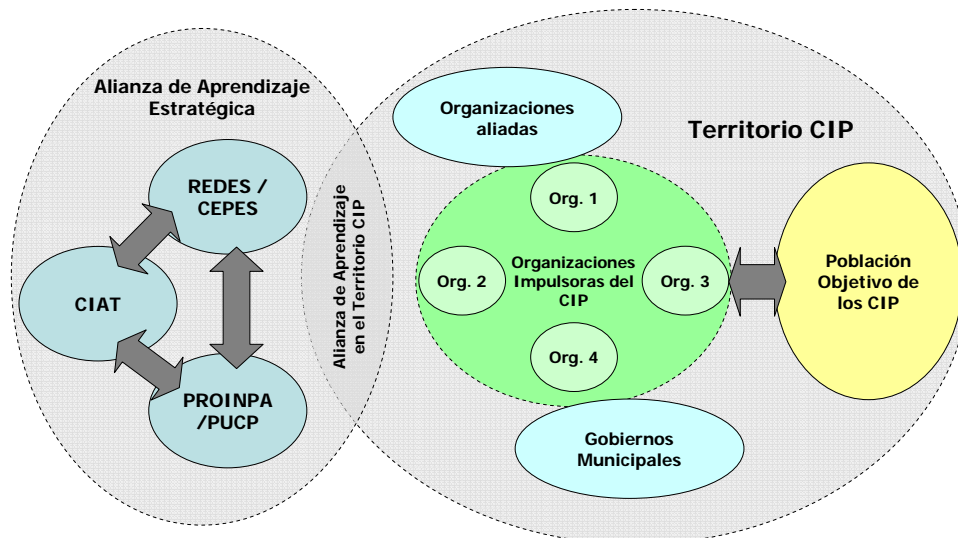


Figura 2. Estrategia de Implementación del Proyecto

En un primer nivel están las organizaciones socias del proyecto que forman el equipo de trabajo y apoyo para los CIP (CIAT, PROINPA, REDES, CEPES, INNOVA-PUCP) donde se integran diferentes temas de trabajo, experiencias y fortalezas, en el cual se viene conformando una Alianza de Aprendizaje Estratégica. En un segundo nivel están las organizaciones que implementan el proyecto GestionCIP (la Alianza de Aprendizaje Estratégica) y las organizaciones que desarrollan actividades en los territorios CIP, entre las cuales también se busca establecer y fortalecer un proceso de aprendizaje local, en el que se han ido reconociendo los enfoques, metodologías y aprendizajes de cada organización.

## **2. Presentación de resultados y avances**

Identificación y análisis de procesos y demandas de los CIP y sus territorios

### **2.1 Contextualización de los Territorios CIP**

En el CIP Chuquisaca, se puede determinar que el proyecto K'ayamanta es uno de los impulsores del concepto, en el CIP Ancoraimos el sentido de pertenencia está circunscrito al proceso general de desarrollo del Municipio, donde se advierten esfuerzos por enmarcar y articular las iniciativas de todas las instituciones en el Plan de Desarrollo Municipal (PDM) de Ancoraimos. Por su parte, en el CIP Azanakes, se percibe el CIP como una agenda más institucional que de la Mancomunidad.

#### **2.1.1 Bolivia**

Se identificaron potencialidades para la generación de ingresos en el sector: agrícola (tarwi, quinua haba, papa, arveja, hortalizas, duraznos y manzanas), pecuario (ganado camélido, vacuno y ovino), turístico (ruinas arqueológicas, fiestas patronales, paisajes históricos), y minero. Este potencial no es homogéneo entre los diferentes territorios CIP, y aún dentro de estos territorios es variable. El CIP Chuquisaca, por sus condiciones agro-ecológicas, tiene un mayor potencial para entrar en el mercado con productos de mayor valor como son las frutas y hortalizas. Sin embargo, la existencia de un largo periodo de sequía durante el año hace de este un negocio muy riesgoso si no existe una infraestructura mínima de irrigación, la cual actualmente sólo existe en pocas comunidades.

Los CIP de Azanakes y Lago Norte están conectados a las principales ciudades, especialmente La Paz, con una infraestructura vial adecuada, y también se encuentran cerca de importantes fuentes de agua como son el Lago Titicaca y el Lago Popo, pero la mayoría de las comunidades carece de infraestructura de riego. Adicionalmente, las condiciones climáticas limitan la posibilidad de diversificación hacia nuevos cultivos, por lo cual, las posibilidades están limitadas a productos tradicionales como el ganado camélido principalmente y la quinua.

## **2.1.2 Perú**

El CIP Carabayllo ha establecido los elementos conceptuales que orientan su accionar, trabajando bajo una perspectiva de desarrollo la cual contempla el enfoque de género, el de derecho y el enfoque intergeneracional. Sin embargo, han existido problemas al momento de concertar sobre la metodología y estrategias de intervención a aplicar. Actualmente, el trabajo de las instituciones dentro del CIP se rige por las coordinaciones internas de las instituciones y no por una línea de acción común. Esto genera que cada una de las instituciones realice lecturas diferentes y particulares de los procesos de desarrollo en los que están inmersos. Las alianzas surgidas entre las organizaciones miembros responden tanto a objetivos específicos (con respecto a las funciones estrictas que cada organización tiene dentro del proyecto) como a objetivos amplios y de largo plazo. Estas alianzas han sido concretadas a través de convenios interinstitucionales bilaterales que no involucran necesariamente a todo el CIP.

## **3. Feria de Conocimientos**

### **3.1 Bolivia**

La Feria de conocimientos fue clave para la socialización y diseño del enfoque de intervención que integre los temas de investigación participativa, desarrollo empresarial y gestión de la información y comunicación. Esto se logró a través de presentaciones de experiencias en cada componente, trabajos grupales por territorio CIP, y análisis de los planes de trabajo de cada enfoque. El conocimiento sobre el proyecto y sus alcances, mostrado por parte de los socios claves de los CIP durante el primer momento del taller, indicó que las visitas que el equipo realizó a los territorios CIP durante el primer semestre de implementación del proyecto contribuyeron a un mejor entendimiento de los objetivos y alcances del proyecto.

De esta manera, la feria del conocimiento hizo una importante contribución a la construcción de una propuesta estratégica de intervención que integre los temas y las diferentes experiencias de las organizaciones ejecutoras del Proyecto GestionCIP. En cuanto a los socios de los CIP, la feria de conocimientos les ofreció un portafolio de alternativas para incluir en sus planes estratégicos y de acción. Sin embargo, no se logró como se esperaba que los socios de los CIP visualizaran su plan estratégico y de acción como un proceso ordenado y lógico de intervención. En la lógica del proceso se entiende esta situación como un avance importante hacia el logro del resultado esperado, pero para llegar a alcanzarlo completamente se requiere un mayor acompañamiento por parte del equipo de apoyo.

### **3.2. Perú**

La Feria de conocimientos facilitó el encuentro y el intercambio de experiencias entre las instituciones participantes de los CIP de Trujillo, Huancayo (Yacus) y Carabayllo; así como permitió compartir con los CIP los conocimientos, enfoques, experiencias y metodologías desarrolladas por las instituciones



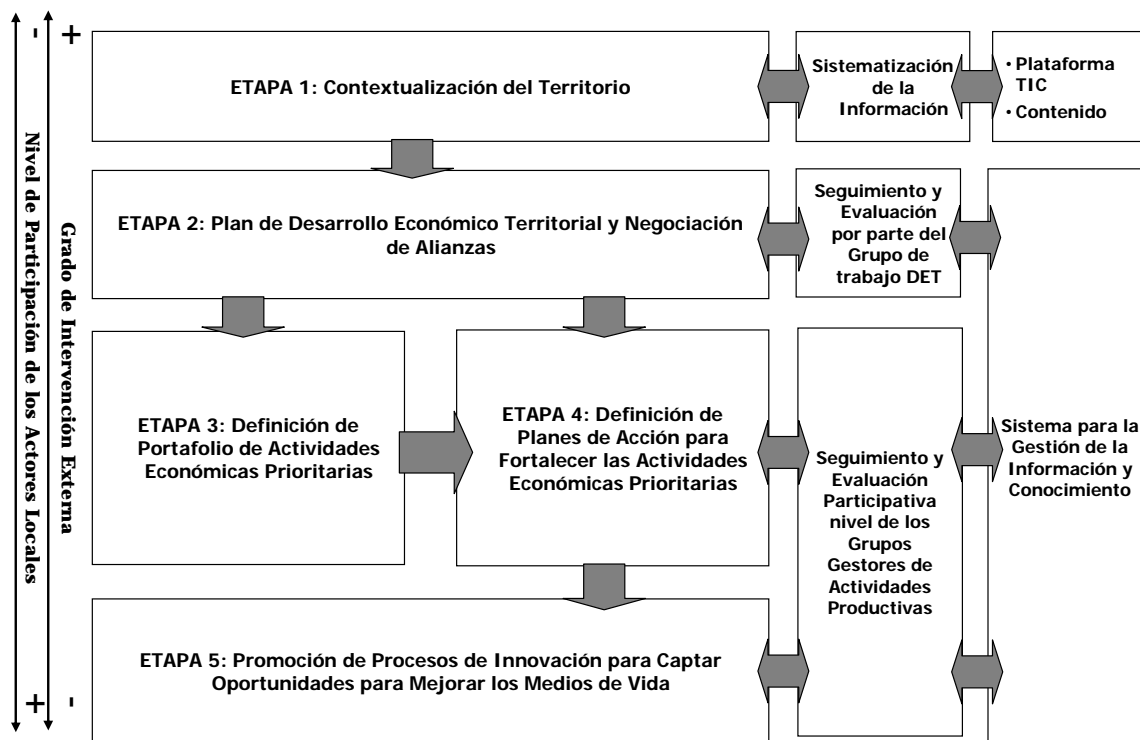
miembros de la alianza de aprendizaje que conforman el proyecto GestionCIP. Además, la feria estimuló el intercambio y la retroalimentación de información sobre cada uno de los proyectos y acciones llevadas a cabo por los CIP, así como también se amplió información sobre la propuesta y los ámbitos de trabajo del CIAT. Los participantes reconocieron la importancia de este tipo de actividades como espacio de aprendizaje. Se pudo apreciar el interés mutuo con respecto al trabajo que viene realizando cada CIP en cada uno de los ejes temáticos planteados.

En términos generales, la Feria logró satisfactoriamente dos de sus tres objetivos propuestos: (1) facilitar el encuentro y el intercambio de experiencias entre las instituciones participantes de los CIP de Trujillo, Huancayo y Carabayllo; y (2) compartir con las organizaciones impulsoras de los CIP de Trujillo, Carabayllo, y Yakus los conocimientos, enfoques, experiencias y metodologías desarrolladas por las instituciones miembros de la alianza de aprendizaje que conforman el proyecto GestionCIP. El objetivo que no se alcanzó en esta ocasión fue la elaboración de estrategias integrales orientadas al tema de innovación rural. Ello debido a que estos procesos están en pleno proceso de construcción a nivel conceptual, y aunque fue posible revisar la etapa en la que cada CIP se encuentra con respecto a la Estrategia Integrada de Intervención, no se llegó al punto de definir actividades concretas con cada CIP. Definición conjunta de los procesos a emprender con los CIP en sus territorios y apoyos en las áreas del proyecto

**Objetivo:** Diseñar conjuntamente una serie integrada de enfoques para mejorar la gestión local de conocimiento para el desarrollo empresarial rural, y definir actividades de apoyo concretas y articuladoras.

#### **4. Estrategia Integrada de Intervención**

En la Figura 3 se muestra en forma esquemática la estrategia integrada de intervención propuesta. Esta estrategia incluye cinco etapas secuenciales: (1) la contextualización del territorio, (2) el diseño de un plan de desarrollo económico territorio, el análisis de grupos de interés y la negociación de alianzas para su implementación, (3) la definición y negociación de un portafolio de actividades económicas prioritarias para el desarrollo económico del territorio, (4) la definición y negociación de planes de acción para fortalecer las actividades económicas prioritarias para el territorio, y (5) la promoción de procesos de innovación para captar oportunidades que mejoren los medios de vida en el territorio.



**Figura 3.** Estrategia de Intervención que Integra los Componentes de Investigación Participativa, Gestión de Información y Comunicación y Desarrollo Económico Territorial

La selección participativa de las actividades productivas o económicas es una parte importante del proceso de toma de decisiones, especialmente en el caso de territorios que están evaluando por primera vez sus potencialidades y oportunidades. El uso de métodos participativos evita las decisiones de arriba hacia abajo, ayuda a tomar decisiones de manera más objetiva, y permite a los actores del territorio aprender y elegir basados en su experiencia y su evaluación del riesgo. Sin embargo, es importante reconocer que en muchos casos las actividades productivas o económicas se seleccionan con base en estudios de pre-factibilidad que están basados en datos macroeconómicos o en la opinión de expertos. Si este es el caso, puede pasarse directamente de la etapa 2 a la etapa 4 como se muestra en el esquema de la Figura 2. Adicionalmente, cuando los actores involucrados en una actividad productiva o económica ya tienen identificado y priorizado algún cuello de botella específico, la etapa 5 se puede comenzar en paralelo con la etapa 4.

En esta estrategia, el proceso de seguimiento y evaluación participativa tiene una gran importancia ya que articula la parte operativa del proceso con el componente de gestión de información y conocimiento, a través de la sistematización y generación de contenidos pertinentes para la promoción de procesos de innovación que contribuyan al desarrollo económico territorial. Por otro lado, si bien la estrategia que se propone puede ser ajustada a las necesidades específicas de cada territorio, a partir de las experiencias de

intervención sistematizadas y las lecciones aprendidas, esta propuesta se caracteriza por tener un enfoque territorial; promover un proceso de aprendizaje colectivo para el cambio; basarse en un proceso participativo; tener un enfoque de mercado; visualizar la actividad productiva más allá de la finca y el territorio; promocionar relaciones comerciales entre los actores de las cadenas productiva; facilitar procesos organizativos; promocionar el ahorro y la capitalización local; fomentar procesos continuos de Innovación; buscar el fortalecimiento de capacidades locales; ser sensible al género; buscar la flexibilidad pero con rigurosidad; reconocer que los procesos toman tiempo; y buscar consolidar un proceso sostenible de desarrollo económico territorial.

## 5. Lecciones Aprendidas

Sobre los territorios CIP y el concepto:

- El trabajo propuesto para apoyar a los CIP de Perú y Bolivia, pasa por la comprensión de la multiculturalidad existente en estos territorios y así mismo, sobre las nociones construidas para cada uno de los temas que propone el proyecto. Es así como en el momento de contextualización, además de analizar la información socio-demográfica y de medios de vida, es importante identificar las prácticas culturales asociadas. En este sentido, es importante el reconocimiento de los idiomas quechua y aymara para las estrategias que se planteen en Bolivia.
- La efectividad del apoyo de un proyecto como GestionCIP, y más aún la posibilidad de implementar la estrategia integrada de intervención que propone el proyecto GestionCIP mediante la facilitación de procesos de aprendizaje colectivo orientados a la innovación., esta condicionada a la existencia de un proceso inter-institucional como el que propone el concepto CIP que sea funcional y este fortalecido en la práctica entre las organizaciones que lo impulsan.
- El trabajo en alianzas es complejo ya que supone una identificación y negociación clara del área de interés común alrededor del cual se construya la alianza, y se vaya generando compromiso de las partes y confianza. Muchas de las alianzas suscritas por los CIP no tienen clara esta área de interés común y menos han pasado por un proceso de negociación de estas alianzas, resultando en un limitado compromiso real de las contrapartes, especialmente por parte de los Gobiernos Locales. La negociación de estas alianzas, la cual pasa por temas de financiamiento, pero también de organización y gobernabilidad de la alianza, debe ser un proceso paralelo a la elaboración de los planes de acción, y no menos importante. Adicionalmente, se deben definir mecanismos de seguimiento y evaluación a estas alianzas, que aseguren el cumplimiento de acuerdos y compromisos de las partes.
- Las nueva tecnologías de información son pueden ser útil para facilitar el proceso de gestión de información y conocimiento. Sin embargo, estas son sólo un medio y no un fin, y necesariamente debe ir complementada por el uso de otros medios de comunicación que permitan ampliar la cobertura

todavía muy limitada de esta tecnología. Más aún, la información por sí misma difícilmente facilitará un proceso de aprendizaje colectivo si esta no va acompañada por un proceso que facilite su análisis y utilización para la toma de decisiones que contribuyan al desarrollo local.

Sobre aspectos de la Alianza de Aprendizaje:

- La Estrategia Integrada de Intervención debe realizarse paralela a la aproximación que se hace a los territorios para caracterizarlos, de tal manera que se constituya en una orientación estratégica desde el primer momento. Los principales aprendizajes se identifican: a) trabajar colectivamente entre socios nacionales articulando campos de trabajo, visiones, métodos, culturas institucionales y voluntades individuales para lograr los mejores resultados; b) identificar las mejores estrategias de relacionamiento y negociación con los CIP; c) identificar los actores e interlocutores más proactivos de cada CIP para implementar el proyecto; d) demostrar los beneficios de articular la agenda de trabajo de GestionCIP en las instituciones y proyectos del CIP.

## **6. Construcción de alianzas con otras organizaciones externas al proyecto**

A partir del trabajo diseñado para la Gestión de información y Conocimiento con el uso de las TIC, se ha avanzado en la consecución de aliados para este propósito.

- Con el Consorcio para el Desarrollo Sostenible de la Ecorregión Andina (CONDESAN), específicamente con su medio de información “InfoAndina” que provee información vía Internet, en publicaciones y a través de la realización de talleres itinerantes, se realizó la primera reunión en Lima para estudiar la posibilidad de articular los contenidos de InfoAndina en los sistemas de información que se generen con los CIP de Bolivia y Perú. En un segundo encuentro programado para octubre, se definirán acciones concretas para el apoyo mutuo de las iniciativas en cuanto a la generación y difusión de contenidos.
- Con la Dirección de la Fundación para el Desarrollo Tecnológico Agropecuario (FDTA)- Valles, del Sistema Boliviano de Tecnología Agropecuaria (SIBTA) que coordina el Sistema de Información de Mercados (SIMA) se realizó un primer acercamiento para generar una alianza que permita a los CIP bolivianos tener acceso a la información de mercados que ofrece el SIMA, pero también a la información y posibilidades de gestión de proyectos que ofrece esta Fundación y otras del SIBTA (Altiplano, Chaco o Trópico Húmedo). De esta manera, para acceder a contenidos generados por otras plataformas de información, se realizó una primera reunión con la coordinación del SICTAF, que es actualmente el sistema de información del SIBTA en Bolivia y avanza en la integración de información de distintas organizaciones bolivianas del sector agropecuario.
- Para apoyar al CIP Ancoraimés, se ha trabajado entre CESA y la Superintendencia de Telecomunicaciones Boliviana para agilizar la obtención de la licencia de la radio comunitaria de Ancoraimés.

## 7. Planes Futuros

Este listado comprende las actividades que se desarrollarán en el siguiente año de trabajo:

- Reunir a los socios de la Alianza Estratégica para evaluar y ajustar el proyecto, según la visión y misión planteada en el “Mapeo de Alcances” utilizado para el diseño del Proyecto GestionCIP, y con base en esto revisar el plan de acción para el segundo año de implementación del proyecto. Este proceso de evaluación estará centrado en identificar cambios en el comportamiento, las relaciones, y las actividades de la gente y las organizaciones involucradas directamente en el proyecto. Para este proceso será muy útil retomar la sistematización de las actividades realizada entre los responsables del proyecto para promover un proceso de análisis y reflexión entre estos.
- **Continuar con el acompañamiento para el fortalecimiento e implementación de la estrategia integrada de intervención propuesta por el proyecto en las áreas de investigación participativa y gestión de información y conocimiento para promover procesos de innovación que contribuyan al desarrollo económico territorial.**
- Organizar talleres periódicos con cada CIP para la presentación de resultados, la sistematización del proceso y la reflexión acerca de las experiencias y resultados de la aplicación de la estrategia integrada de intervención con su conjunto de enfoques y metodologías, e identificar los ajustes por realizar.
- Desarrollar capacidades en los socios locales para la aplicación del Seguimiento y Evaluación Participativos (SEP) en las actividades emprendidas con el proyecto y realizar un acompañamiento periódico para esto. La metodología SEP es la alternativa pensada para el seguimiento y evaluación de las actividades que esta desarrollando el Proyecto GestionCIP en los territorios CIP, centrándose principalmente en el proceso y no tanto en los resultados. En el momento de implementación en se encuentra el proyecto, uno de los principales retos es el diseño y puesta en marcha de este sistema para apoyar el proceso de aprendizaje a los diferentes niveles de implementación del proyecto.
- **Con respecto a la actividad anterior, surgió inicialmente inquietudes sobre la duplicidad de esfuerzos con el proceso diseñado e implementado por la Fundación Kellogg para el seguimiento y la evaluación de la iniciativa CIP. Por esta razón, se planea conocer esta iniciativa de manera más detallada, así como sus primeros resultados para avanzar en una propuesta que no entre en conflicto con el proceso de DESCO ni duplique esfuerzos y que permita cumplir los objetivos del proyecto GestionCIP.**
- Conducir una caracterización rápida de las actuales redes de información y flujos de conocimiento en las áreas de influencia de los CIP, con los grupos

de trabajo específicos con los que cuenta en este momento el proceso e identificar con ellos los recursos, potencialidades y limitaciones del territorio, en términos de información y conocimientos orientados al desarrollo empresarial rural, para complementar las propuestas de trabajo actual en la gestión de información y conocimiento.

## OUTPUT 3

A resource-to-consumption framework for enabling rural innovation and empowering rural women to increase food security, access market opportunities and better management of their resources, tested and applied in Africa and Latin America

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### **1. Linking Farmers to Markets: Assessing Planned Change Initiatives to Improve the Marketing Performance of Smallholder Farmer Groups in Northern Tanzania**

By James Barham

[http://www.capri.cgiar.org/wks\\_1006.asp](http://www.capri.cgiar.org/wks_1006.asp)

In recent years, the importance of smallholder agriculture has been greatly recognized, demonstrated by both by governments and the donor community pledging to engage in the requisite interventions to generate agricultural and economic growth. In post-structural adjustment Africa, this growing recognition has led to two major crosscurrents of theory and practice that are now defining the major policy directives concerned with boosting Africa's faltering agricultural economies. First, agricultural development will not occur without engaging smallholder farmers. The second current, which intersects with the first, is that the major obstacle facing smallholder-led agricultural growth is lack of market access. Thus, the major proponents of market-led growth contend that enhancing market access for smallholders will lead to increased incomes and food security, more opportunities for rural employment, and sustained agricultural growth (Dorward et al., 2003; Stiglitz, 2002; Poulton et al., 1998; Bates, 1997).

This study was conducted within the context of these two crosscurrents of theory and practice. The primary objective of this study is to identify and understand the underlying factors that enable smallholder farmer groups to improve their market situation. This objective is approached through an evaluation of a government-led program in Tanzania – the Agricultural Marketing Systems Development Program (AMSDP) – that attempts to increase smallholder farmers' incomes and food security through improvements in market access. Within AMSDP, improving market access includes the following components: (1) reforming the regulatory and taxation system; (2) improving market infrastructure (e.g., building more roads, post-harvest facilities, market centers); (3) establishing agricultural marketing information systems; and (4) strengthening farmer groups and creating market linkages.

#### **Methodology**

The specific objective was to examine to what extent certain group characteristics and asset endowments facilitate collective action initiatives to improve group marketing performance.

A total of 34 groups with a mean group size of 35 members were surveyed.

As represented in Figure 1, the wider and determinate infrastructure encapsulates this planned changed initiative and includes such factors as the smallholder groups' farming systems, the agro-ecological conditions under which they must work, and their physical access to markets (e.g., distance to markets, access to feeder roads, conditions of roads, etc.). Farmer groups are represented under the social structure and this includes a number of factors that will affect a group's ability to enact successful collective action initiatives (i.e., the group's asset configurations, composition and characteristics). The partner agencies (PAs) are intervening to enhance human capital in form of marketing skills, business acumen, and other group capacity trainings, which is represented by the solid line going from the PA directly to the social structure. Along with these training activities, the PAs are also providing some groups with market linkages to other chain actors and this is represented by the dotted line going to the collective action initiative, as well as the lines connecting PA intervention to market chain actors. Farmer groups are also carrying out collective action initiatives without direct linkages from the PA, which is represented by the lines connecting the collective action initiatives to the market chain actors. The performance outcomes represent the extent that groups have improved their market situation and affected positive livelihood outcomes to the members of their groups.

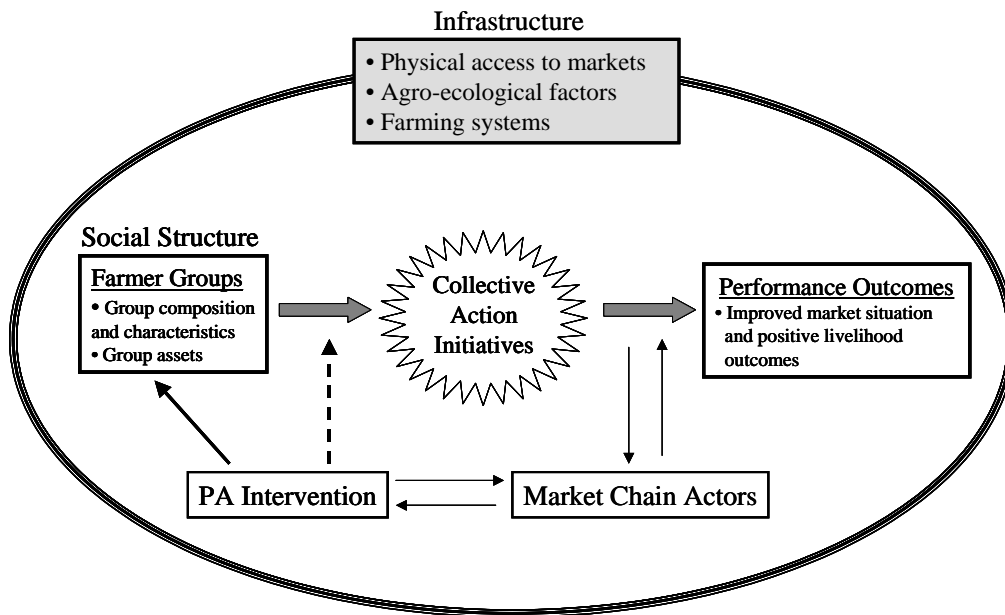


Figure 1. Conceptual framework for research study



## Results and discussion

A number of group assets, characteristics, and other explanatory variables were tested to ascertain how these might play a factor in group marketing performance. Tests of association and correlation (ANOVA and Pearson's R) were conducted to analyze the statistical significance of mean values between farmer groups. The results of bivariate analysis yielded six statistically significant variables ( $p < 0.10$ ) and three other variables that approach significance ( $p < 0.15$ ).<sup>9</sup> These included: reliable water source; education; leadership by sex; group maturity; activity level; tribal heterogeneity; commodity types; partner agency; and PA market linkages. Step-wise multiple regression models were then utilized to assess the interactive effect of the explanatory variables on group marketing performance. Based on the literature review of factors that should affect group marketing performance – and bolstered by the bivariate analysis results of significant factors, a number of variables were chosen that most effectively represent the three factor domains, in reference to the study's conceptual model. The final list of 17 explanatory variables inputted into the regression models are shown in Table 1, categorized by Infrastructure, Social Structure, and NGO Intervention.

Table 1. Explanatory variables categorized by factor domains

Infrastructure	Social structure	NGO intervention
<i>Market access</i>	<i>Group assets</i>	Partner agency
Distance to market	Wealth ranking	PA linkage
Road conditions	Education	
	Providers/Partners	
<i>Agro-ecological factors</i>	Altruism	
Staple food crops	Help trust	
Reliable water source		
	<i>Group Compos./Characteristics</i>	
	Group maturity	
	Leadership by sex	
	Activity level	
	<i>Group Heterogeneity</i>	
	Tribal	
	Gender	
	Wealth	

## Conclusions

The study found that some of the underlying factors shown to be important in influencing market performance of groups included: access to a reliable water source; being an established group with several years of experience and functioning internal activities; and having enough and the appropriate group assets that can be leveraged at the right time when market potentials emerge.

<sup>9</sup> Due to the small sample size ( $n=34$ ), all independent variables with a  $p$  value below 0.10 are considered statistically significant, and  $p$  values below 0.15 as approaching significance. These tests of significance are being used primarily to bring attention to certain variables that warrant further exploration and discussion, as well as to ascertain if these differences are *meaningfully* significant, and not only statistically significant.

Factors that did not seem to impact group marketing performance included the size and age of the group, as well as what can be considered more cognitive forms of social capital – trust among members and altruistic behaviour. These findings help support the premise that even though a group may be endowed with a high stock of social capital in terms of trust, group cooperation and cohesion, amongst others, does not predicate successful collective action outcomes. In the case of groups attempting to affect positive market change, the necessity of natural capital - as exemplified in this study by groups having available farming lands, adequate soils, and a reliable water source - can not be overstated.

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## **2. Enabling Rural Innovation: Empowering Farmers to take advantage of Market Opportunities and improve livelihoods**

**Susan Kaaria, Annet Abenakyo, Winnie Alum, Flavia Asiiimwe, Rupert Best, Julius Barigye, Colletah Chisike, Robert Delve, Diiro Gracious, Ignatius Kahi, Peace Kankwatsa, Elly Kaganzi, Robert Muzira, Grace Nalukwago, Jemimah Njuki, Pascal Sanginga, and Noel Sangole (Paper presented at the Innovation Africa Symposium, 21-23<sup>rd</sup> November 2006, Kampala, Uganda)**

### **Introduction**

Agricultural markets can play significant roles in reducing poverty in poor economies, especially in countries which have not already achieved significant agricultural growth. Dorward et al. (2005) highlight three broad mechanisms through which agricultural growth can drive poverty reduction: (1) Through the direct impacts of increased agricultural productivity and incomes; (2) Through the benefits of cheaper food for both the urban and rural poor; (3) Through agriculture's contribution to growth and the generation of economic opportunity in the non-farm sector. However, experience has shown that markets can fail the poor, especially poorest and marginalized groups, especially women. Johnson (2005) argues that in remote rural areas markets may fail because they maybe

too 'thin', or the risks and costs of participating especially for poor people may be too high, and or there maybe social or economic barriers to participation. There is evidence that women face more constraints as they endeavor to engage with market systems. Empirical studies on intra-household gender dynamics in Africa have shown that when a crop enters the market economy, men are likely to take over from women, and that women therefore do not benefit from market-oriented production.

It is now widely accepted that projects must integrate specific strategies to encourage and promote participation by the poor. CIAT is testing and evaluating one such approach, Enabling Rural Innovation (ERI) with partners and communities in Uganda, Tanzania, Malawi, Zimbabwe, Kenya, Mozambique, Zambia, Rwanda, and DR Congo. Enabling Rural Innovation (ERI) is a research for development initiative that uses participatory research approaches to strengthen capacity of research and development (R&D) partners and rural communities to access and generate technical and market information for improving farmers' decision-making. A key thrust in this approach is that applying "empowering" types of participatory research approaches can build human and social capital in ways that: (1) Enhance the innovative capacity of farmers to experiment with new agricultural practices. (2) Strengthen farmers' general analytical abilities, problem-solving skills, and ability to initiate and sustain innovation with external facilitation. This paper presents preliminary lessons from applying this innovative approach for linking smallholder farmers to markets.

## **Methodology**

An empirical study was conducted to assess the impacts of applying a novel approach, termed the "Enabling Rural Innovation" approach for linking smallholder farmers to markets. The specific objectives were to: (i) Assess the effectiveness of the ERI approach in promoting pro-poor market linkage; (ii) analyze households investments decisions, (including investments in NRM) and priority uses for income from agro-enterprises; (iii) Assess other tangible and non-tangible benefits (empowerment, capacity building, gender dynamics, social and human capital build up) of the ERI approach; (iv) identify key gaps and areas that need strengthening, and potential opportunities on rural women and the poor in terms of income; intra-household decision-making; control and access over resources; empowerment, and investment in assets.

Groups and communities for the study were selected from the initial ERI countries (Uganda and Malawi). An important criterion was that the communities / group had earned significant income from the community agro-enterprises. Currently there are 3 such groups (1 in Uganda, 2 in Malawi): Nyabyumba, Kabale 77 group members out of 125 members; Malawi the sample sizes: Chinsewu, Kasungu - 34 out of 75 households; Katundulu, Ukwe 26 out of 36 households. Results show evidence that households benefited significantly from linkages to markets using ERI approach, however, the results also showed significant income disparities between the women and men members.

## **Results and Discussion**

### **1. How do different households invest income from enterprises? What are the priority uses for income from agro-enterprises? Are households re-investing in NRM?**

A comparison of how households invest their income from enterprises shows that households in Malawi (Katundulu and Chinseu) invest most of their income in food security and NRM, while households in Kabale (Nyabyumba) invested in household items. NRM investments in Malawi, mainly involved the purchase of fertilizer to apply on the Maize fields. Households in Malawi also invested significantly in improving their diets, by purchasing fish, meat, beans, chicken, fresh vegetables. Other investments were in education that included paying school fees, buying school uniform, and notebooks. In Uganda, the largest budget went to increasing household assets, including beds, beddings, mattresses, chairs, and clothing for husband, wife, and children. The results also showed that increased income led to increased investments in farm inputs. However, for the majority of farmers in Kabale, re-investment in NRM was not a priority. Tests of significance difference between income generated from sale of potato and the use various NRM practices (crop rotation, incorporate crop residue, manures, agroforestry trees or shrubs, trenches trash lines, cover crops, and resting land), were not significant.

### **2. Does applying the ERI approach promote gender equity and women's empowerment in decision making and in control of income from agro-enterprises?**

Gender equity and empowerment of women are of central to the ERI process, therefore one of the key research questions for the ERI process is whether market orientation is benefiting women and the poor. In assessing gender equity within ERI, our focus was to assess changes in decision-making patterns in the household, in relation to the enterprise. Results showed that with the Potato enterprise, 46% of the respondents indicated that income was kept by the wife. On the other hand with the pig enterprise; all the respondents (100%) indicated that income was kept by the husband or men. In informal discussions, women farmers in Katundulu, Malawi indicated that they could access the benefits indirectly. In the pig enterprise, women accessed benefits through increased food security (from purchase of food) and through sale of surplus Maize produce (where fertilizer purchased had been applied).

Changes in decision-making patterns in the household were assessed by asking who made decisions on where to plant, which markets to go to, and how income from the sale of enterprise was used. Figure 1 shows changes in intra-household decision-making in the case of the Kabale, Uganda. In all instances, there was a significant reduction decisions made by men alone, and a corresponding increase in decisions made by both men and women in partnership. These results are supported by literature on intra-household dynamics that argues that

by putting income in the hands of women, one can increase their bargaining power.

### **3. How does ERI approach affect social and human capital and the capacity of farmer organizations to better organize their communities?**

In this study social and human capital impacts were measured by assessing changes in group members' capabilities over the past 3 years. Results from Kabale, Uganda showed that in terms of ability to help other farmers solve agricultural problems currently, a majority of the farmers (49% and 40%) felt they were very good to good, on the other hand three years ago very few (5% and 24%) felt the same.

### **3. Integrated natural resource management in practice: Enabling communities to improve mountain livelihoods and landscapes.**

Delve, R.J., Chitsike, C., Kaaria, S., Kaganzi, E., Muzira, R. and Sanginga, P. 2006. Smallholder farmer-market linkages increase adoption of improved technological options and NRM strategies. (In: Amede, T., German, L., Opondo, C., Rao, S. and Stroud (eds). 2006. Proceedings of a conference held on October 12-15, 2004 at ICRAF-Headquarters, Nairobi, Kenya. Kampala, Uganda: African Highlands Initiative).

The paradigm of involving farmers in research is based on strong evidence that enhancing farmers technical skills and research capabilities, and involving them as decision-makers in the technology development process results in innovations that are more responsive to their priorities, needs and constraints. Linking the technology development process to market opportunities has the potential to promote links between investment in natural resources, markets, and adoption of technologies. Market orientated agriculture for reducing poverty and environmental degradation needs to centre on three related paradigms; strengthening biological processes in agriculture (to optimise nutrient cycling, minimise external inputs and maximise the efficiency of their use); building farmer's capacities (to learn and innovate focused on improving livelihoods and the management of natural resources); and developing forward and backward linkages (between natural resources, production and markets). Starting with identification of market opportunities, natural resource management (NRM) issues are often raised during the process, for example, investment in soil fertility, leading to an iterative cycle of participatory action research with communities. In a multi-stakeholder coalition, CIAT and its partners are working in Malawi, Mozambique, Tanzania and Uganda to explore and understand how market orientation leads to improved NRM at the farm level. This paper uses case studies from Kabale in south western Uganda to highlight and discuss examples where identifying potential markets for existing and new products has led to increased investment in NRM and how developing innovative agricultural technologies that meet the specific needs and constraints of different wealth and

gender groups leads to improved livelihoods. This active involvement of stakeholders in the design of the NRM system points to ways of tightening the nutrient cycle, for example, in relation to women's management of small livestock, and the use of multipurpose legumes and dual purpose barriers as sources of biomass for soil fertility, livestock feed, fuel and fencing.

#### **4. Changing the rules of the game: institutional innovation and change processes in organic agriculture.**

**Hauser, M, Delve, R.J., Ssebunya, B., Mulindwa, J., Byandala, S. 2006.**  
***(Paper presented at the Innovation Africa Symposium, Kampala, Uganda)***

In early 2006 the number of certified organic farms in Uganda exceeded 40.000. Much of the organic sector expansion is market-led. If international markets continue their projected growth rate, the increasing demand for organic commodities will provide new market and income opportunities for small farmers. However, the classical institutional setup of certified organic agriculture perceives farmers as passive producers rather than active and creative organic agriculturalists. Power relations favour traders and exporters, production decisions are made on behalf of farmers and the use of research products play a minor role. We argue that the current 'rules of the game' within the organic sector are likely to become a main barrier to the further development of organic agriculture in Uganda. Linking demand to the production of organic produce requires a sustained, collective capacity of farmers for generating site-adapted farm management strategies. In the long run, the competitiveness of the organic sector will be as strong as its weakest system component; there are signs that this will be at the production side. Against this background, a novel approach to strengthen the competitiveness of organic agriculture is being tested. The purpose of a four years' action research project has been the development of means to support farmers to transition from subsistence / traditional to commercial / organic agriculture. A central methodological element of this approach is the 'Enabling Rural Innovation' (ERI) process which seeks multi-stakeholder partnerships between organic farmers, non-governmental organisation, exporters and research. Such partnerships become the basis for an institutional innovation and change process that support farmers in (i) making informed and autonomous production decisions (rather than being told what to grow), (ii) testing and adapting new organic farm management practices (rather than adopt blanket recommendations), and (iii) negotiating long term contracts with exporters (rather than passively accept or reject buyers' offers). The project is implemented in two pilot sites in Mukono and Hoima district in central and western Uganda. In each site an ERI based research and development process supports farmers in establishing linkages with organic markets and subsequently produce for organic markets. Lessons from both pilot sites suggest that the ERI approach enables farmers to access new market information (e.g. prices, quantities, quality) and new research products (e.g. disease resistant germplasm, variety evaluation for export, etc.) on critical aspects of production. It can be

shown that the approach helps farmers to develop competitive organic enterprises for home consumption and export. Moreover, it can be demonstrated that building farmers' capacities to learn about the ecological, economical and institutional complexity of the organic sector using participatory approaches is a critical empowerment strategy. The paper discusses first experiences with the application of the ERI approach to organic agriculture and concludes that changing the rules of the game (and hence institutional setups) is critical for the future development of the organic sector.

## **5. Sustaining Smallholder farmer Linkages to High Value Markets: The Role of Internal Savings and Credit Institutions**

**J. Barigye<sup>10</sup>, H. Ahimbisibwe<sup>1</sup>, E. Kaganzi<sup>11</sup>, J. Njuki<sup>12</sup> and S. Kaaria<sup>2</sup>**

There is an increasing recognition of the need for systems approach in working with smallholder farmers. This includes the recognition that smallholder farmers require not only access to improved technologies but also access to financial resources with which to develop their agriculture enterprises. This has become increasingly important as smallholder farmers endeavor to engage in high value markets. Previous efforts to help the smallholder farmers access high value markets, has put much emphasis on collective action of pooling the volumes to meet the quantities and frequency of supply required by the markets.

Access to financial resources has emphasized on farmers accessing credit from banks and other rural and urban financial institutions. Smallholder farmers however face very many constraints in accessing funds from these institutions such as the lack of collateral, high interest rates, the unpredictable nature of agricultural production, which varies depending on climate among others. While there is potential for internal savings and loans in overcoming some of these constraints, little has been done to find out how the small holder farmers can access and maintain linkages to high value markets using their internal saving and credit institution and which categories of people are utilizing the savings to sustain the markets. Internal savings and credit schemes offer an opportunity for smallholder farmers to access the much-needed credit from their own resources without the stiff formal requirements of the rural and urban financial institutions. While the potential exists, it is important to understand how such internal savings and credit schemes should be structured and who stands to benefit from these schemes.

This paper uses a case study of the Nyabyumba United Farmers Association to critically analyze the role of internal savings and credit schemes, it describes and analyses the structure and resources of the organization how farmers are using

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different strategies to pool savings together. An analysis of how different types of households including men and women are benefiting from the internal savings and credit schemes. The paper also makes a comparison of other different sources of financing for farmers and how this compares with the internal savings and credit schemes. Results show that while internal savings and loans are an important strategy for rural financing especially useful for smallholder farmers that require financing to maintain links to high value markets, different strategies are required to mobilize enough resources to make them sustainable sources of funds for their members.

Nyabyumba United Farmer Group has been able to sustain and maintain market-linkages through its internal saving and credit scheme where members access affordable credit to purchase farm inputs like clean potato seed, spray pump, fertilizers, chemicals, land for rent to meet market demands; and sometimes buy potato ware from non group members to raise the quantity required by the market. There is differentiation in the type of households accessing different loan products including agricultural loans, school fees loans and emergency loans. While these internal savings and credit schemes are good sources of finance for their members, they need to be supplemented by other rural financial mechanisms especially for borrowers that require large amounts of money and also policies which encourages and supports farmers in forming producer-co-operatives alongside internal savings to ensure comprehensive small holder farmers income.

## **6. PM&E and the Empowerment of Producers' Organizations**

The Participatory Monitoring and Evaluation (PM&E) system developed by International Center for Tropical Agriculture (CIAT), was applied by the Promoting Changes project in the context of the Bolivian Agricultural and Livestock Technology System (SIBTA), and others organizations of the technology innovation, prior adaptation and adjustments of the methodology for the different rural areas, characterized by having one of the highest levels of poverty in Latin America. The principles of PM&E are oriented towards contributing to the empowerment of the people, organizations and institutions. This article is based on analyses of information about the progress made and results accomplished in processes of implementing PM&E in Small Farmers Economic Organizations. Poverty in the rural area characterizes 82% of the population; extreme poverty is 55%. In the rural area, poverty is explained in great part by the low productivity of the agricultural and livestock sector and the low value of the products on the market. After analyzing the effects of applying PM&E in organizations, it was possible to determine that the methodology contributes to empowerment, primarily in the following aspects: Appropriation, greater participation and levels of commitment of the beneficiaries in the projects; better performance of the service-providing entities as a result of the producers'



evaluation; greater knowledge of the beneficiaries about the products, milestones and activities that the projects consider; and farmers' management and leadership capacity enhanced.

### Objectives

- Characterize the context where the PM&E methodology was implemented
- Determine indicators of empowerment
- Identify the relevant contributions of this methodology to the empowerment of small agricultural and livestock producers' organizations

### Methodology

This article is based on analyses of information about the progress made and results accomplished in processes of implementing PM&E in Small Farmers Economic Organizations (OECAs) that are demanders of PITAs, promoted by SIBTA and financed by the FDTAs (FDTA-Valleys) and in projects of the Services and Technical Assistance Program (PROSAT), supported by the Prefecture of the State of Chuquisaca, Bolivia.

### Results

***PM&E and empowerment of the OECs:*** It would be an overstatement to assert that the implementation of PM&E empowers the organizations and the people; or said differently, that the people and organizations that use PM&E are empowered. PM&E is one element among many that contribute to empowerment. In the case of APAJIMPA, they underwent a process of about one-and-a-half years to adopt PM&E. In this process the Association's leaders were committed to institutions and entities such as the Municipal Government, which provides the services, and FDTA, as well as to fulfill the objectives of both the PITA and the organization. In the Chaco<sup>13</sup> region, different from APAJIMPA, which had a "bottom-up" process, the executive bodies of the FDTA-Chaco, based on the successful application of PM&E in other settings, promoted the validation of the methodology in their context and contributed to generating mechanisms for its institutionalization.

Based on the information of the experiences regarding the effects of PM&E in different contexts, it was concluded that overall, PM&E contributed to empowerment in the following aspects:

- The organizations have begun a process of appropriating PM&E, in which their leaders have played an important role in training and disseminating it among the farmers.

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<sup>13</sup> Hot, semiarid lowlands.

- PM&E is permitting the supplier entities to provide a better service.
- PM&E is contributing to there being a better response and participation of the beneficiaries in the process.
- The producers in their different strata are informed about the characteristics and development of the projects of which they are beneficiaries.
- PM&E is contributing to improve the management and leadership capacity of the producer organizations' managers.

## **Conclusions**

- PM&E contributes to the empowerment of the producers' organizations, basically because it promotes the active participation and involvement of the members of the organization in all project phases and decision-making related to their own development.
- The use of PM&E is contributing to a change from a passive (receptive) attitude to an active one (decision-making) on the part of the farmers. Thus it is improving their capacity for (a) representativeness and internal democracy, (b) participating effectively with proposals in the strategic planning exercises, (c) negotiating with other institutions and actors, and (d) developing a sense of co-responsibility.

## OUTPUT 4

**Methodologies for strengthening community-managed and institutional participatory monitoring and evaluation systems (PM&E) validated and widely disseminated**

### 1. Strengthening Community Learning and Reflection: The Role of Community-Driven Participatory Monitoring and Evaluation Systems

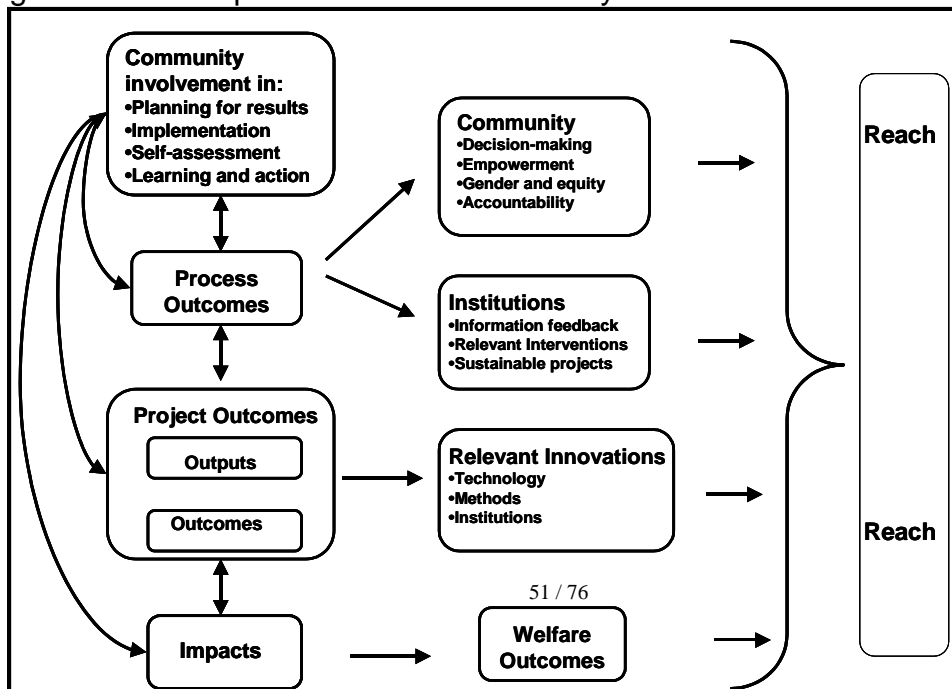
**Susan Kaaria, Jemimah Njuki, Colletah Chitsike, Pascal Sanginga and Pamela Pali**

*(Submitted to Evaluation and Program Planning)*

Community Driven Participatory monitoring and evaluation (CD-PM&E) is an important tool for community learning and empowerment. Community-driven participatory monitoring and evaluation (CD-PM&E) has emerged as an important tool for enhancing community learning and empowerment. The CD-PME approach builds on the concepts and ideas developed in earlier research studies that have applied PM&E as a tool for taking into account the perspectives of local people in project development and management. This paper presents lessons and experiences from establishing and applying CD-PM&E systems by CIAT and their partners in countries in Eastern and Southern Africa (Kenya, Uganda, and Malawi). It gives a description of the process used for supporting the establishment of CD-PM&E systems including methods and tools developed for building capacity of communities to establish PM&E, identification of community indicators, data collection, analysis and use of information for decision-making.

#### Conceptual framework for CD-PM&E

Figure 1: A conceptual model for Community-Driven PM&E



*Adapted from McAllister (1999) and McDuff, M.D. (2001)*

Figure 1 shows the conceptual framework and the expected outcomes of the CD - PM&E process are: (1) Improved decision making and community empowerment with respect to the ability to track progress of activities and achievement of results; (2) Integration of different perspectives from the community thus enhancing inclusion especially of vulnerable and marginalized groups; (3) Increased accountability and performance of R&D institutions working with or providing services to communities; (4) Increased local control over external interventions and community initiatives. (5) Improved execution of community projects and achievement of group objectives.

## **Results and Discussion**

The results show various similarities and differences in community expectations and indicators identified by communities, thus providing an opportunity for cross - comparison. In comparing objectives across communities, regions, and countries, we have found that in communities where the wealth level is higher, the priority objective is increasing income, while in poorer communities food security is the priority. The most significant factors causing differences among types of stakeholders in the indicators defined were gender and wealth or well-being, each of which will be discussed in turn.

Table 1 shows differences between the indicators selected by men and women farmers for the same objectives. For example, men's indicators for increased income focused on asset building, e.g. constructing a house with iron sheet roofing or buying bicycles. In contrast, women's indicators tended to prioritise children's education, especially that of girls; improving the quality of food, clothing, and improvements in household, such as purchasing beds, chairs, cupboards, plates, cooking pots, amongst others. Additionally, we found that women indicators were related to tracking changes in their decision-making roles, such as women being able to go to the market, having capacity to buy clothes without requesting for permission from husbands and having bank accounts in their own names. We found that indicators differ based on the wealth or well-being status of the community. For example, in Kitale, Kenya where communities are relatively well off, the indicators for improved food security are quality and quantity of food available for consumption and in storage. On the other hand, in Mtwapa, Kenya where households are relatively poorer, the indicators for improved food security are an increase in number of meals per day from one to three and availability of food throughout the year (no emphasis is made on quality). We have also found that local indicators reflect differences in culture and beliefs. For example, increased ceremonies are a common indicator of increased food availability among the Kenya coastal communities where ceremonies are part and parcel of their culture. These differences demonstrate the role of CD - PM&E in understanding local realities and ensuring that action taken as a result of the processes are related to local realities.

**Table 1: Examples of Community Objectives and Indicators Across Communities in Kenya, Malawi and Uganda**

Results/ Objectives	Indicators	
Food security	<ul style="list-style-type: none"> <li>• Good health: shiny faces; reduced skin diseases; cases of kwashiorkor reduced</li> <li>• Amount of food stored in granary</li> <li>• Presence of food leftovers in homesteads</li> <li>• Healthy dogs and chicken</li> <li>• Presence of dish racks with clean utensils</li> <li>• Un-harvested fruits (papaw and bananas) ripening in farms</li> </ul>	
Empowerment	<ul style="list-style-type: none"> <li>• Farmers and group members seeking services independently from other service providers</li> <li>• Ability to apply skills learnt</li> <li>• Ability to make decisions</li> <li>• Women buying things without asking for permission</li> <li>• Women having own bank accounts</li> </ul>	
The group will have increased income from the sale of our produce in better markets	<p><b>Indicators by men</b></p> <ul style="list-style-type: none"> <li>▪ Better housing: large with iron sheet roofs</li> <li>▪ Hire labor to help in farms</li> <li>▪ Buy new bicycles</li> <li>▪ Income generating activities initiated</li> <li>▪ Men not drinking traditional beer</li> </ul>	<p><b>Indicators by women</b></p> <ul style="list-style-type: none"> <li>• Send children to secondary schools</li> <li>▪ Improved homes (good food, beds, chairs, cupboards, plates, cooking pots)</li> <li>▪ Better clothing -- women wearing new <i>khangas</i> (fabric), <i>kodokodo</i> (high heels)</li> <li>▪ Women going to market weekly</li> </ul>

### Conclusions

This paper analyses experience with establishing and supporting CD-PM&E processes with communities in three countries in Uganda, Malawi, and Kenya. Our results indicate that there are several important aspects in establishing and supporting these systems. First, it is crucial to develop a capacity building strategy. This includes applying diverse tools and methods that can encourage active participation of local communities, such as graphics, role plays, stories from the farmers' daily lives, and identifying local vocabulary for the technical terms. Second, it is important to ensure that indicators are negotiated and that the information collected is relevant to local people. We found that using CD-PM&E, community-based organizations and their development service providers generated relevant information that communities could use to improve the

functioning of their projects, communication within the group, and for informed decision-making. As a result, CD-PM&E strengthened information feedback processes between communities and service providers in R&D systems.

## **2. Building Capacity for Innovation systems: Integrating Stakeholders Perspectives in Participatory Monitoring and Evaluation within R&D systems**

**Njuki JM, Kaaria SK, Sanginga P, Murithi FM, Njunie M and Lewa, KK**

In the last few decades, there has been a substantial growth in the use of participatory approaches in research and development. For years, research and development organizations applied participatory approaches in the planning and implementation of research and development programmes and yet reverted to traditional and conventional means in evaluation. The situation is slowly changing with the current impetus for participatory evaluation. One of the reasons is the concern that when programme implementers or users of evaluation results are not involved in the evaluation, there is limited use of evaluation results for programme improvement and for organizational learning and change. There is recognition however that involving programme staff and stakeholders is necessary but not sufficient to promote use of evaluation. Another growing focus is the different elements or types of use including process use. There is recognition that use must be supported by evaluation capacity building so that the skills and knowledge from participation in evaluation are translated into changes in the way individuals and organization work. The concept of 'participation' is broadened to move beyond programme staff to include communities and other stakeholders involved in the implementation of programs and projects. This paper describes the process of a collaborative action research oriented participatory monitoring and evaluation between the Kenya Agricultural Research Institute and the International Centre for Tropical Agriculture. It focuses on the capacity building in evaluation skills, integration of other stakeholders, in facilitation skills and attitudes for self evaluation. The outcomes of this process in terms of consequences of integrating different stakeholders, evaluation capacity at individual and collective level and organizational changes are described. Most of these outcomes are not from the use of evaluation findings from specific programmes but result from the involvement of programme participants, communities and other stakeholders in the monitoring and evaluation process itself and the accompanying capacity development.

The development of evaluation capacity has also to start with the pre-existing situation and with a diagnosis of actual needs. It is a process that takes time and goes through a number of stages and a process in which the role of the facilitator changes as the capacity is built.

The objective of this evaluation research and capacity building programme was three fold;

- 1) To build the capacity of staff of the Kenya Agricultural Research Institute in participatory Monitoring and Evaluation
- 2) To involve and integrate other stakeholders into the participatory monitoring and evaluation process including organizations collaborating in KARIs research programmes and community groups
- 3) To achieve organizational learning and change through the mainstreaming of evaluation in KARI

### Methodology

The capacity building was done in 4 phases;

- a) Awareness and training for attitude change
- b) Building capacity for technical skills in PM&E
- c) Building capacity for involving communities / beneficiaries in PM&E
- d) Bringing it all together: The Action Learning and mentoring process

### Selected Results

Key result area	Result description
Integrating community objectives into the PM&E framework: Looking beyond direct outputs to outcomes	Broadening the scope of monitoring and evaluation to include both outcomes and outputs Integration of community perspectives into monitoring and evaluation
Integrating community indicators into the PM&E framework; measuring the unusual	There was a clear difference between researchers and community indicators. While researchers' indicators tended to be generic, and mainly quantitative, community indicators were mainly local, qualitative and a reflection of the community situation. Integrating these indicators into the PM&E systems provided insights to the researchers on what changes were important to farmers and allowed for the measuring of these changes from farmers perspectives.
<b>Change in relationships between researchers and communities</b>	There was involvement of farmers beyond their information provision role to decision making of what the desires changes are, what activities should be carried out, what the indicators of change are and even in collecting, analyzing and using PM&E information. This has in effect changed the relationships between the national research organizations and the communities that they work with. As some community members noted;
<b>Creating a culture of reflection, learning and improvement</b>	These cycles of reflection, learning and action utilized both the researchers' perceptions of what was going well or not going well with the programmes and also utilized evidence and data collected from stakeholders on the programmes. These reflections were both on the programmes and the M&E process itself.
Institutionalization of PM&E	Institutionalization of the PM&E into other research

	programmes started with other projects adopting the process. This has however not moved beyond the institutions outside the pilot institutions.
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## Conclusions

The achievements made in this collaborative effort were a result of a long term partnership building process between CIAT and KARI and between the evaluation facilitator and the research and extension staff involved in the process as well as the communities. Moving from monitoring and evaluation by outsiders and managers for purposes of accountability to a monitoring and evaluation process geared towards learning and improvement relies a lot on this kind of partnership but also on intensive capacity building for the programme staff to be able to carry out the process and to integrate and mainstream it within the research programmes. Current efforts are concentrating on studying the institutionalization process, the facilitating and constraining factors.

### 3. Enhancing Community Empowerment through Community Driven Participatory Monitoring and Evaluation Systems

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<sup>1</sup>Kenya Agricultural Research Institute, Mtwapa, P.O. box 16, Mtwapa, Kenya, <sup>2</sup> CIAT Malawi, P.O. Box 158, Lilongwe, Malawi, <sup>3</sup> CIAT Africa, P.O. Box 6247, Kampala, Uganda

Participation of community members in planning and implementation of their development projects has been considered integral to community empowerment leading to the success and effectiveness of the projects. Currently, many agricultural technology transfer projects in Kenya use group approaches such as farmer field schools (FFSs). The success of these FFSs depends primarily on the collective action and decision making by their members. However, poor participation was observed in some of the FFSs in the region. To improve this situation, PM&E was introduced on a pilot basis in two projects: Soil and water management project (SWMP) and the Tissue culture banana (TCB) project. Training on PM&E was conducted on staff from both projects. They selected eleven FFS, eight from SWMP and three from TCB where PM&E was introduced. The project staff started by engaging the FFS members in discussions to raise their awareness on the importance of PM&E. The aim was to empower the groups to understand this process since community based PM&E is managed and supported by the local communities. After this step, the groups were facilitated to envision their long and short-term objectives using the current - future situations. The FFS members identified the changes/impacts they expected from the project, identified indicators for those changes and agreed on what to monitor and evaluate. Eventually, the groups formed monitoring and evaluation (M&E) committees whose responsibilities were to gather information, process and present it to the whole group for discussion during reflection and feedback sessions. Members used the reflection/feedback sessions to discuss the PM&E results, derive lessons and design adjustments to their activities and



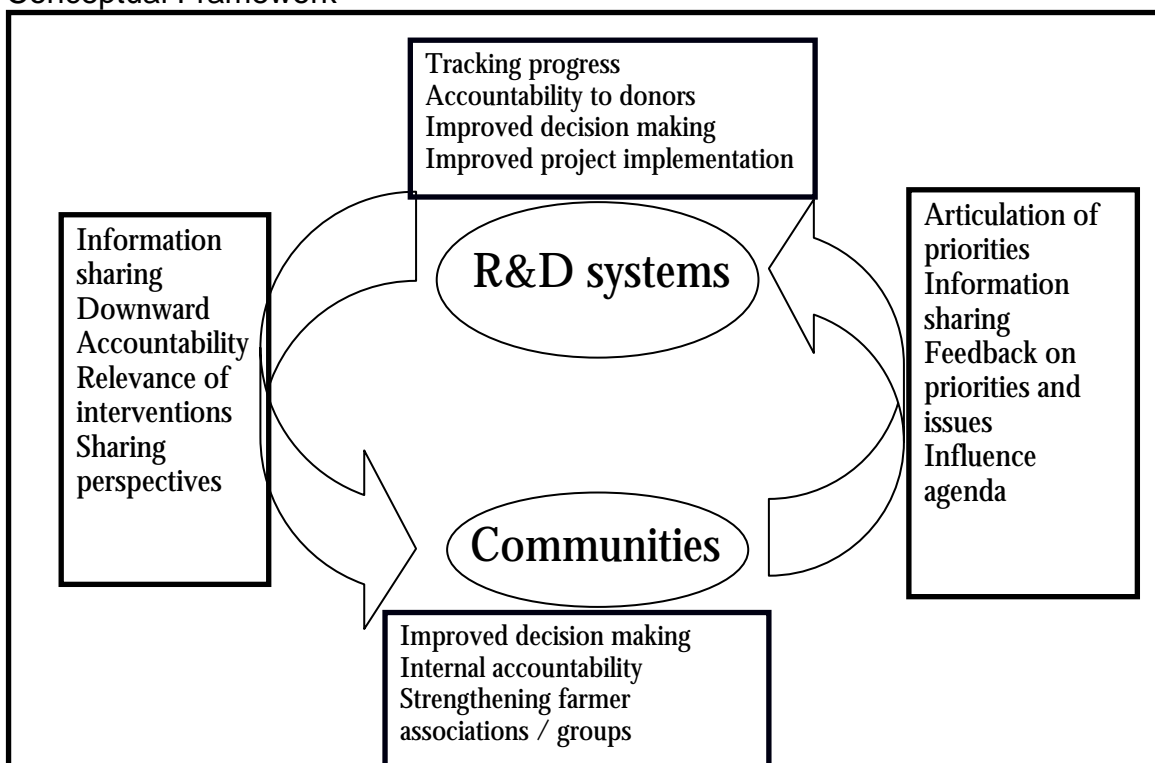
strategies. The study showed that farmers use M&E information but not in a systematic manner. However, when PM&E was integrated coherently, it enhanced farmer empowerment in a number of areas: Women participation and confidence increased as evidenced through more participation in group discussions and decision making; Group organization improved. Members felt the need to enforce their existing constitutions. Where existing constitutions were not adequate to meet members' needs, they were amended accordingly. There was improved planning of group activities, and implementation could be followed keenly. Constant discussions ensured that expected group outcomes remained in focus and there was increased accountability of funds from group officials. Demand for change was made when officials were not accountable. Members had a better understanding of their projects and the costs/benefits associated with those projects. For project staff, there was improved feedback from the farmers and a better understanding of the farmer priorities. This brought up the need for diversification in the projects currently undertaken by the farmer groups.

#### **4. Developing Internal Participatory Monitoring and Evaluations Systems for Programme Improvement, Organizational and Community Learning and Change**

**Jemimah Njuki, Susan Kaaria, Pascal Sanginga, Festus Murithi**

Participatory monitoring and evaluation (PM&E) offers new ways for strengthening learning and change both at community, project and institutional level. PM&E can and has been used for various purposes, including project planning and management, organizational strengthening and learning, understanding and negotiating stakeholder interests, and the assessment of project outcomes and impacts. This paper describes a process of developing an internal participatory monitoring and evaluation systems within an agricultural research organization. The paper describes the process and analyses the extent to which such a system contributes to improving project performance, ownership, and success; strengthens local decision-making processes; and enhances accountability of formal R&D organizations to communities, thereby improving the delivery of outputs and outcomes.

## Conceptual Framework



Internal PM&E systems build forward and backward linkages between communities or farmer associations and research and development organizations while at the same time strengthening the functioning of both. These linkages are shown in the conceptual framework above.

### Key Results;

#### Differences in indicators between scientists and farmers

Outcome	Indicators
Improved soil fertility	<p><b>Quantitative</b> Nutrient levels (carbon, phosphorus, macronutrients) Increase in yields</p> <p><b>Qualitative</b> <i>Perception of farmers on change in soil quality (-colour, -type &amp; presence of weeds, -texture)</i></p>
Increased food security	<p><b>Quantitative</b> Amount of food stored and number of months with food / <i>Having Food throughout the year</i> Increased production (acreage and yields)</p> <p><b>Qualitative</b> <i>Perception of men and women farmers of food availability and composition( e.g. Number of meals per day , -Quantity of meals, Composition of meals, Maize purchases, Amount of relief, Farmers looking for casual for casual labour)</i></p>

## **Conclusions**

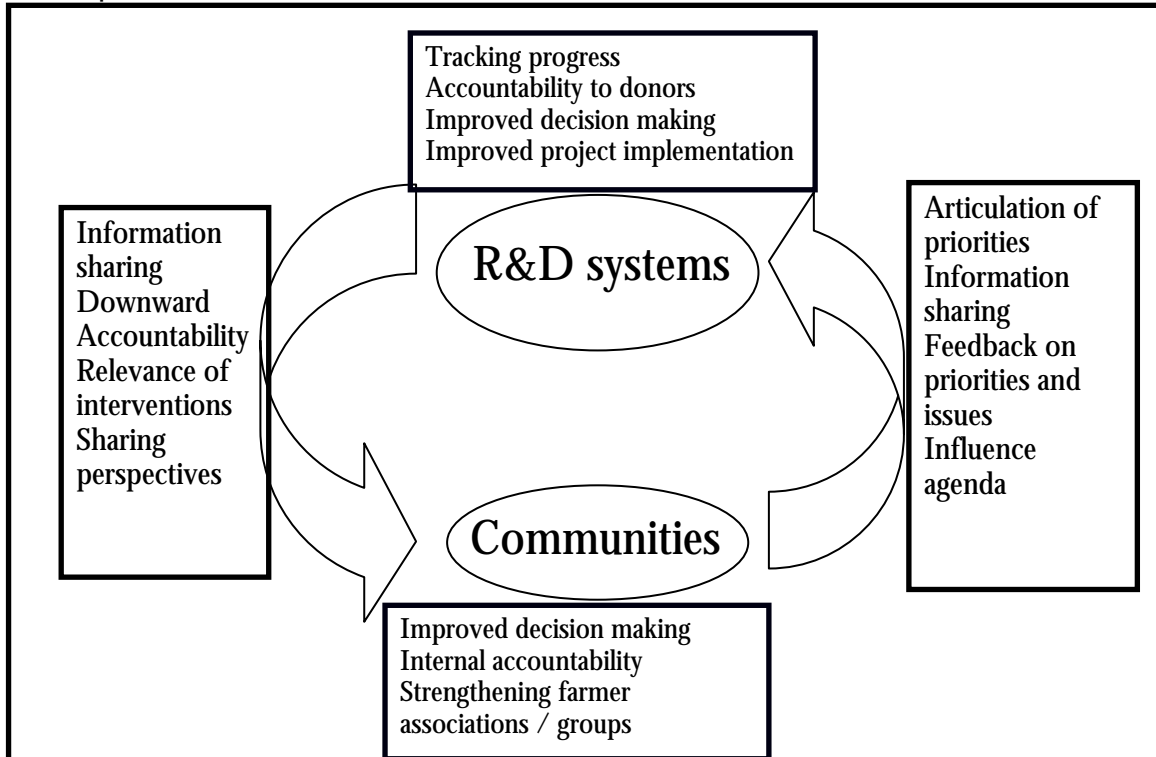
This paper analyzes experience with establishing and supporting PM&E processes both at community and project level in three countries in Uganda, Malawi, and Kenya. Our initial results indicate that there are several important aspects in establishing and supporting these systems: (i) Developing a capacity building strategy for PM&E. This includes applying diverse tools and methods that can encourage active participation of all members, such as graphics, role plays, stories from the farmers' daily lives, and identifying local vocabulary for the technical terms. (ii) Ensuring that indicators are negotiated information is only collected on those indicators that are relevant, from the perspective of the different stakeholders. (iii) The initial stages of establishing PM&E systems at require a strong mentoring and follow-up component from facilitators to ensure appropriate establishment and skills enhancement. (iv) the Community-driven PM&E system provides relevant information that communities can use to improve the functioning of their projects, communication within the group, and for informed decision-making. (v) Integrating community indicators with project level indicators providing a more holistic view of the project benefits and can strengthen information feedback process between communities and R&D systems. (vi) The PM&E system must include a communication system that allows information to be exchanged between the stakeholders and to be interpreted so that it can form a basis for taking appropriate decisions (vii) Linking PM&E to impact assessment improves the process and allows for more reflection and learning making the results of the impact assessment useful for future improvements (viii) Involving different stakeholders especially communities in PM&E improves the measurement of the benefits of participatory processes such as empowerment, capacity and organizational skills.

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## **Conclusions**

This paper analyzes experience with establishing and supporting PM&E processes both at community and project level in three countries in Uganda, Malawi, and Kenya. Our initial results indicate that there are several important aspects in establishing and supporting these systems: (i) Developing a capacity building strategy for PM&E. This includes applying diverse tools and methods that can encourage active participation of all members, such as graphics, role plays, stories from the farmers' daily lives, and identifying local vocabulary for the technical terms. (ii) Ensuring that indicators are negotiated information is only collected on those indicators that are relevant, from the perspective of the different stakeholders. (iii) The initial stages of establishing PM&E systems at require a strong mentoring and follow-up component from facilitators to ensure appropriate establishment and skills enhancement. (iv) the Community-driven PM&E system provides relevant information that communities can use to improve the functioning of their projects, communication within the group, and for informed decision-making. (v) Integrating community indicators with project level indicators providing a more holistic view of the project benefits and can strengthen information feedback process between communities and R&D systems. (vi) The PM&E system must include a communication system that allows information to be exchanged between the stakeholders and to be interpreted so that it can form a basis for taking appropriate decisions (vii) Linking PM&E to impact assessment improves the process and allows for more reflection and learning making the results of the impact assessment useful for future improvements (viii) Involving different stakeholders especially communities in PM&E improves the measurement of the benefits of participatory processes such as empowerment, capacity and organizational skills.

## **6. Integration of Community based PM&E within FFS curricula**

**Njunie M.N<sup>1</sup>, K.K Lewa<sup>1</sup>, J. Ndungu<sup>1</sup>, FN Muniu<sup>1</sup>, J. Njuki<sup>2</sup>, and B. Mweri<sup>3</sup>**  
**<sup>1</sup>Kenya Agricultural Research Institute, Mtwapa, P.O. box 16, Mtwapa, Kenya, <sup>2</sup> CIAT Malawi, P.O. Box 158, Lilongwe, Malawi, <sup>3</sup>Coast Development Authority P.O Box 1322-80100, Mombasa, Kenya**

The farmer field school (FFS) approach for technologies up scaling was first introduced to coastal Kenya in 2000 through FAO. The main objective of using the FFS approach was to empower farmers to train others on available technologies, and consequently increase household food security and income in smallholder farms. The FFS involves the farmers in decision-making and improves adoption of technologies. The FFS implementation process involves ten established steps: ground working; identification of participants and training needs; identification of sites; training of trainers; Participatory technology development (PTDs); follow ups by trainers; field days; graduation; farmer run FFS and Monitoring. In coastal Kenya, FFS approach has been used to up-scale:

fodder production and utilization; use of green manure for maize production; soil fertility improvement; water harvesting, and cashew and banana production. By July 2006, over 336 FFS involving 7,772 farmers had been established in coastal Kenya.

Participatory monitoring and evaluation (PM&E) was introduced in the region to facilitate project staff and the farmers to systematically analyse, interpret change and measure progress towards achievement of their objectives at the project and farm level. The PM&E concept was first introduced in 2004; KARI Mtwapa being among the five centres that implemented “Strengthening PM&E in research and development systems project” pilot phase. Consequently, two projects were engaged in PM&E: Soil and Water Management project to enhance food security in coastal Kenya (SWMP) and Tissue culture banana (TCB) projects. To start, 14 research and 13 extension staff involved in various projects were introduced to PM&E principles and concept at KARI Mtwapa in May and June 2004. Performance frameworks that incorporated current and future situation, impact goal, outcomes, outputs, activities, indicators, information requirements, and data collection tools were developed for 11 FFS (eight from SWMP and 3 from TCB projects).

Having identified useful attribute of PM&E, 15 ATIRI (Agricultural technology information response initiative) farmer groups were later introduced to PM&E process. In addition, the cashew productivity project included PM&E as a special topic during FFS approach training. Sixty extension officers were trained and later established 80 cashew management FFS. Based on anticipated benefits of integrating FFS and PM&E, KARI, CDA and CIAT project staff developed a curriculum that integrates the. The first step was to build capacity of the staff in their understanding of both the FFS and PM&E. Twenty three participants attended the workshop (six FFS farmer facilitators; 11 extension staff; and six research staff), and would apply the skills gained during the implementation of TCB, Cashew, and SWMP projects in the region.

Integration of FFS and PM&E showed potential to strengthen the FFS approach. The integrated process would facilitate performance monitoring of the technologies under farmer experimentation and the effects of the FFS itself, thus enhancing both the acquisition of technical knowledge and collective action by the group members

Key words: FFS; PM&E; Training; coastal Kenya

## 7. Empowering Communities through Participatory Monitoring and Evaluation in Tororo district

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The Community Based Participatory Monitoring and Evaluation (CB-PME) tool empowers poor local farming communities to improve their livelihoods. While this process is people centred, it draws on local people's capacities, while giving the end users of a technology a voice. The experience of the Katamata farmers' group in Tororo district using PM&E is given in this paper. This group have embarked on a commercial groundnut production enterprise to improve their livelihoods. They decided to monitor one and three year-prioritized objectives for this enterprise. The three year objectives were based on the improvement of the farmers' livelihoods and included having food security, with a marketed surplus, creating an awareness of HIV/AIDS, and individual commercial production, while the one year objectives dealt with the improvement in agricultural production. Some short term objectives have been achieved. The farmers have selected the best variety for commercial groundnut production. They have since reflected on these objectives and indicators with the monitoring and evaluation committee from their group whose main function is to collect, synthesize, store and report information to the group, community and visitors. This participatory process has empowered farmers to make production and marketing decisions on their enterprises and social lives with the ultimate goal of improving their livelihoods.

**Key words:** participatory, monitoring, evaluation, reflection, indicators, tools, monitoring committee

## APPENDICES

### 5. List of 2006 Publications

#### 1.1. Articles in refereed journals

- Douthwaite, B., A. Carvajal, S. Alvarez, E. Claros and L.A. Hernández, (2006). Building farmers' capacities for networking (Part I): Strengthening rural groups in Colombia through network analysis. *KM4D Journal* 2(2): 4-18
- Franke, A.C., Ellis-Jones, J. Tarawali, G. Schulz, S. Hussaini, M.A., Kureh, I., Chikoye, D., Douthwaite, B. Oyewole, B.D., Olanrewaju, A.S. White, J. (2006). Scaling-up integrated *Striga hermonthica* control technologies through a participatory research and extension approach in the savanna of northern Nigeria. *Crop Protection* 25(8): 868-879.
- Gotschi E.; B. Freyer; R. Delve and P. Sanginga (2006): Investing in and benefiting from social capital: some insights into farmer groups and engendered imbalances in rural Mozambique. (*Submitted to Agriculture and Human Values*)
- Kaaria, S., J. Njuki, C. Chitsike, P. Sanginga, and P. Pali (2006). Community Driven Participatory Monitoring and Evaluation and its role in enhancing community learning and empowerment (*Submitted to Evaluation and Planning*)
- Njuki, J.M., Kaaria, S. K., Sanginga, P.C., Chitsike, A.C and Murithi, F.M (2006) Developing Internal Participatory Monitoring and Evaluations Systems for Programme Improvement, Organizational and Community Learning and Change (Submitted to American Journal of Evaluation)
- Sanginga P. C. ; R. Muzira , B. Vanlauwe, S. Kaaria, J. Chianu, and N. Sanginga 2006. Exploring the "Market-led Hypothesis" in Soil Fertility Management: Preliminary Evidence from Farmers' Re-investment Preferences in Eastern and Southern Africa. (*Submitted to Nutrient Cycling in Agroecosystems*)
- Sanginga, P. C., R. N. Kamugisha and A. M. Martin 2006. The Dynamics of Social Capital and Conflict Management in Multiple Resource Regimes: A Case of the South-Western Highlands of Uganda. *Ecology and Society* 12 (1): 6. [online] URL: <http://www.ecologyandsociety.org/vol12/iss1/art6/>
- Sanginga, P., Kamugisha, R. and Martin, A. 2006. Conflicts management, social capital and adoption of agroforestry technologies: empirical findings from the highlands of south-western Uganda. *Agroforestry Systems* DOI 10.1007/s10457-006-9018-5
- Sanginga, P.C.; Tumwine, J.; Lilja, N. 2006. Patterns of participation in farmers' research groups: Lessons from the highlands of Southwestern Uganda. *Agriculture and Human Values* 23(4):501-512.



## 1.2. Articles in non-refereed journals

## 1.3. Books and monographs

- Ferris, S.; Kaganzi, E.; Best, R.; Ostertag G., C.F.; Lundy, M.; Wandschneider, T. 2006. A market facilitator's guide to participatory agroenterprise development. Centro Internacional de Agricultura Tropical (CIAT), Cali, CO. 130 p. (Enabling rural innovation in Africa. Enabling rural innovation (ERI) guide 2)
- Paz R., Dorward A., Douthwaite B. (2006). Methodological guide for evaluation of pro-poor impact of small-scale agricultural projects. Centre for Development and Poverty Reduction. Imperial College, London.
- Sanginga and Chistiske, 2006. *The Power of Visioning: A Handbook for Facilitating the Development of Community Action Plans* Enabling Rural Innovation in Africa Guide 1. International Centre for Tropical Agriculture, Kampala, Uganda (134pp).

## 1.4. Book chapters (preferably we would like to receive a copy of the book, otherwise provide us with the correct citation)

- Gandarillas E; Fernández J; Polar V; Fuentes W; Almanza J; Quiroz CA; Hernández LA; Zapata V. 2006. Seguimiento y Evaluación Participativa (S&EP) para la Innovación Tecnológica Agropecuaria. Experiencias, adaptaciones y lecciones aprendidas. Proyecto Fomentando Cambios. Cochabamba, Bolivia. 388 p.
- Gotschi, Elisabeth, Robert Delve, Pascal Sanginga & Bernhard Freyer. 2006. Participatory Photography: A Qualitative Approach for Doing Cross-Cultural Research - Chapter 17: In: Pranee Liamputtong (ed.). Doing cross-cultural research: ethical and methodological perspectives. School of Public Health, La Trobe University, Bundoora, Australia.
- Gotschi, Elisabeth, Robert Delve, Pascal Sanginga & Bernhard Freyer. 2006. Participatory Photography: A Qualitative Approach for Doing Cross-Cultural Research - Chapter 17: In Pranee Liamputtong (Editor). Doing Cross-cultural Research: Ethical and Methodological Perspectives, School of Public Health, La Trobe University, Bundoora, Australia
- Place, F., Njuki, J., Murithi, F., and F. Mugo. 2006. Agricultural Enterprise and Land management in the Highlands of Kenya. In: Pender, Place, and Ehui (eds) Strategies for Sustainable Land Management in the East African Highlands. World Bank and International Food Policy Research Institute, Washington, DC.\*
- Sanginga P C, S Kaaria, R Muzira, R Delve, B Vanlauwe, J Chianu and N Sanginga: 2006 The Resources-to-Consumption System: A Framework for Linking Soil Fertility Management Innovations to Market Opportunities. In: Advances in integrated soil fertility management in sub Saharan Africa:

- challenges and opportunities, Eds: Andre Bationo, Boaz Waswa, Job Kihara and Joseph Kimetu. Kluwer, the Netherlands.\*
- Sanginga, P., Kamugisha, R., and Abenakyo, A. 2006. Tracking social capital outcomes and sustainability of local policy initiatives. Scientific report. Annex A of the Final Technical Report of project R8494. Kampala, Uganda: CIAT-AHI. 50pp. [www.nrsp.org.uk/database/documents/2856.pdf](http://www.nrsp.org.uk/database/documents/2856.pdf)
- Zapata V. 2006. Manual para la Formación de Gestores de Conocimiento. Cali, Colombia. 164 p.
- Zapata V; equipo Boliviano de gestores de conocimiento. 2006. La Gestión de Conocimientos como Enfoque Metodológico para Facilitar la Innovación Tecnológica. Elementos Claves para su Aplicación. Bolivia.

**1.5. Articles and abstracts in proceedings (preferably we would like to receive a copy of the proceedings, otherwise provide us with the correct citation)**

- Delve, R.J., Chitsike, C., Kaaria, S., Kaganzi, E., Muzira, R. and Sanginga, P. 2006. Smallholder farmer-market linkages increase adoption of improved technological options and NRM strategies. In: Amede, T., German, L., Opondo, C., Rao, S. and Stroud (eds). 2006. Integrated natural resource management in practice: Enabling communities to improve mountain livelihoods and landscapes. Proceedings of a conference held on October 12-15, 2004 at ICRAF-Headquarters, Nairobi, Kenya. Kampala, Uganda: African Highlands Initiative.
- Pali, P.N. G. Nalukwago<sup>1</sup>, S. Kaaria, P. Sanginga & P. Kankwatsa 2005. Empowering Communities through Participatory Monitoring and Evaluation in Tororo District. African Crop Science Conference Proceedings, Vol. 7: 983-989
- Sanginga, P.C., Chitsike, C., Best, R., Delve, R.J., Kaaria, S., and Kirkby, R. 2006. Enabling Rural Innovation in Africa. In: Amede, T., German, L., Opondo, C., Rao, S. and Stroud (eds). 2006. Integrated natural resource management in practice: Enabling communities to improve mountain livelihoods and landscapes. Proceedings of a conference held on October 12-15, 2004 at ICRAF-Headquarters, Nairobi, Kenya. Kampala, Uganda: African Highlands Initiative.
- Sanginga, P.C., Kaaria, S., Muzira, R., Delve, R.J., Vanlauwe, B., Chianu J. and Sanginga, N. 2006. The Resources-to-Consumption System: A Framework for Linking Soil Fertility Management Innovations to Market Opportunities. In Andre Bationo, Boaz Waswa, Job Kihara and Joseph Kimetu Eds. *Advances in integrated soil fertility management in sub Saharan Africa: challenges and opportunities*. Tropical Soil Biology and Fertility Institute (TSBF) Publication.

**1.6 Papers presented at formal conferences and workshops with external attendance (provide name, date & venue of the conference or workshop)**

- Barham, J. 2006. Collective Action Initiatives to Improve Marketing Performance: Lessons from Farmer Groups in Tanzania. Paper presented in Research Workshop on Collective Action and Market Access for Smallholders, 2-5 October 2006, Cali, Colombia
- Centros de Aprendizaje e Intercambio de Saberes, CAIS.  
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- Douthwaite, B., Douthwaite, B., Alvarez, B.S., Cook, S., Davies, R., George, P., Howell, J., Mackay, R. and Rubiano, J, C. Ringler. 2006. CPWF Impact Pathways Approach. Poster presented to the Science Council in September at CIAT, and at the SPIA meeting in Nairobi in October
- Ferris, S.; Engoru, P.; Kaganzi, E. 2006. Making market information services work better for the poor in Uganda. Presented at the CAPRI Conference held in Cali, Colombia, 2-5<sup>th</sup> October 2006. 13p.
- Fernandez J; Gandarillas E. 2006. PM&E and the Empowerment of Producer's Organizations. Innovation Africa Symposium. 21–23 November 2006. Kampala, Uganda.
- Fernando, F., V. Sandoval and S. Kaaria. Assessing the Social and Human Capital Impacts of Participatory Research Processes: A case study of Local Agricultural Research Committees (CIALs). Poster presented at the Innovation Africa Symposium, 21-23<sup>rd</sup> November 2006 Speke Resort Munyonyo Kampala Uganda. [www.innovationafrica.net](http://www.innovationafrica.net)
- Ferris, S.; Engoru, P.; Wood, M.; Kaganzi, E. 2006. Market information and innovations [on line]. In: Ferris, S. (ed.). Expert consultation on market information systems and agricultural commodities exchange: Strengthening market signals and institutions: Proceedings of an expert meeting held in Amsterdam, The Netherlands, 28-30 November 2005 [on line]. Technical Center for Agricultural and Rural Cooperation (CTA), Wageningen, NL. p. 71-81. (CTA working document)
- Gotschi, E., Freyer, B., Delve, R.J. 2006. The "Wrong" Gender: Is Social Capital more accessible to Men? Tropentag, Hohenheim, Germany
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- Kaaria, S., J. Njuki, P. Sanginga, P. Pali, G. Nalukwago, and N. Sangole. 2006. Strengthening Community Learning and Reflection: The Role of Community-Driven Participatory Monitoring and Evaluation Systems. Paper presented at the American Evaluation Association held in Portland, Oregon, United States, from November 1-4, 2006.
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- Polar V; Gandarillas E; Fernandez J; Fuentes W; INNOVA Project. 2006. Participatory Methods for a Project's Life Cycle. Innovation Africa Symposium. 21–23 November 2006. Kampala, Uganda.
- Sanginga Pascal C., Susan Kaaria, Simba Machingadize; Rupert Best; Ignatius Kahiu, Colletah Chitsike; Rogers Kanzikwera, Jemimah Njuki and Michael Hauser (2006) Strengthening Partnerships for Enabling Rural Innovation in Africa: Achievements, Prospects and Challenges. Poster presented at the Innovation Africa Symposium, 21-23<sup>rd</sup> November 2006 Speke Resort Munyonyo Kampala Uganda. [www.innovationafrica.net](http://www.innovationafrica.net)
- Sanginga, P.; R. Kamugisha and A. Martin. .2006. Social Capital and Environmental Governance: Emergence and Implementation of Community Bylaws in NRM . Paper presented at the System Workshop on Bylaws in NRM. ICRAF-CAPRI, (27-29 Nov. 2006) Nairobi Kenya
- Sanginga, P.C., A. Abenakyo, R. Kamugisha, R. Muzira and A. Martin. 2006. Tracking Outcomes of social and institutional innovations in NRM. Paper presented at the Innovation Africa Symposium, 21-23 November, 2006, Kampala Uganda. [www.innovationafrica.net](http://www.innovationafrica.net)
- Sanginga, P.C., A. Abenakyo, R. Kamugisha, R. Muzira and A. Martin. 2006. Tracking Outcomes of social and institutional innovations in NRM. Paper presented at the Innovation Africa Symposium, 21-23 November, 2006, Kampala Uganda. [www.innovationafrica.net](http://www.innovationafrica.net)
- Taller de Sostenibilidad para los Centro de Aprendizaje e Intercambio de Saberes, CAIS. Cali, Colombia. Marzo 21 al 31 de 2006. CD
- Taller de seguimiento para el fortalecimiento de las capacidades locales en los Centros de Aprendizaje e intercambio de Saberes, CAIS. Ciudad de Guatemala, Guatemala. Junio 26 al 7 de julio de 2006. CD

#### **1.6. Articles in international newsletters or other scientific series (provide series name, date & publisher information)**

- Douthwaite, B., Sikka, A., Suliman, R., Best, J. Gaunt, J. (2006). Learning with Innovation Histories. LEISA Magazine Vol 22.

[http://www.leisa.info/index.php?url=show-blob-html.tpl&p%5Bo\\_id%5D=80649&p%5Ba\\_id%5D=211&p%5Ba\\_seq%5D=1](http://www.leisa.info/index.php?url=show-blob-html.tpl&p%5Bo_id%5D=80649&p%5Ba_id%5D=211&p%5Ba_seq%5D=1)

### **1.7. Extension bulletins and brochures**

Fernandez J; Gandarillas E; Polar V; Fuentes W; Almanza J; Quiroz CA. 2006. Seguimiento y Evaluación Participativa en Organizaciones Locales. Una herramienta de control social. Proyecto Fomentando Cambios. Cochabamba, Bolivia. 32 p.

### **1.8. Thesis PhD**

Gandarillas, E. 2006. Institutional Arrangements to Improve the Responsiveness of Agricultural Innovation Systems to the Needs of the Poor: An Investigation of Participatory Monitoring and Evaluation in Bolivia. PhD Thesis. Imperial College London, University of London, England

## 7. Training and Capacity Building

Lugar	Fecha	Evento	Institución participante	No. Participantes
Cali Colombia	Nov. 1 –12 2005	Taller de Tecnologías Componente Central	<ul style="list-style-type: none"> <li>·Fundación Solidaridad</li> <li>·K'anchaywasi</li> <li>·Campo da Sementeira / SERTA</li> <li>·Save the children</li> <li>·Fundación Talita Kumi – CIP</li> <li>·UACH / Chapingo-Uruza</li> <li>·SANUT Los Limomes</li> <li>·CINVESTAV / Centro Comunitario para el Desarrollo Social"Yaxcaba</li> <li>·CENTEOTL</li> <li>·UNOSJO /San Juan Tabaa</li> <li>·Campus Córdoba / Colegio de Posgraduados</li> <li>·SETAGRO</li> <li>·Ladera Dorada / CEPROM</li> <li>·PASAR</li> <li>·FUN. SUR FUTURO</li> <li>·EDUDELIC</li> <li>·Plan Sierra/ CEDAF</li> <li>·CAJIR</li> <li>Universidad QuisQueya</li> </ul>	28
Republica Dominicana	2006	Taller de Planificación	<ul style="list-style-type: none"> <li>·Fundación Solidaridad</li> <li>·K'anchaywasi</li> <li>·Campo da Sementeira / SERTA</li> <li>·Centro de capacitación INCAP</li> <li>·Fundación Talita Kumi – CIP</li> <li>·UACH / Chapingo-Uruza</li> <li>·SANUT Los Limomes</li> <li>·CATA</li> <li>·Centro Educativo para el Desarrollo Rural (CEDER, GRUPEDSAC)</li> <li>·CENTEOTL</li> <li>·Campus Córdoba / Colegio de Posgraduados</li> <li>·Ladera Dorada / CEPROM</li> <li>·PASAR</li> <li>·CIMPA</li> <li>·FUN. SUR FUTURO</li> <li>·EDUDELIC</li> <li>·CSDI</li> <li>Universidad QuisQueya</li> </ul>	25
Akosombo Ghana	January	Impact Pathways Workshops (external)		18
Lilongwe Malawi	January		Sub sector/market Chain Analysis and agro enterprise planning.	Team member trained Tennyson Magombo
Lilongwe Malawi	February		Sub sector/market Chain Analysis and agro enterprise planning.	Team member trained Tennyson Magombo

Lugar	Fecha	Evento	Institución participante	No. Participantes
Vientiane Laos	February	Impact Pathways Workshops (external)		18
Cali Colombia	February	CIAS Project		25
Cali Colombia	February	DAPA Project		6
Cali Colombia	Marzo 21-31 2006	Taller de Sostenibilidad de los CAIS	<ul style="list-style-type: none"> <li>·Fundación Solidaridad</li> <li>·K'anchaywasi</li> <li>·Campo da Sementeira / SERTA</li> <li>·CAIS Lucía Gonçalves de Oliveira (APAEB)</li> <li>·Centro de capacitación INCAP</li> <li>·Fundación Talita Kumi – CIP</li> <li>·UACH / Chapingo-UruzaSANUT Los Limomes</li> <li>·SANUT Los Limomes</li> <li>·CINVESTAV / Centro Comunitario para el Desarrollo Social"Yaxcaba</li> <li>·CATA</li> <li>·Campus Córdoba / Colegio de Posgraduados</li> <li>·Ladera Dorada / CEPROM</li> <li>·PASAR</li> <li>·FUN. SUR FUTURO</li> <li>·EDUDEL C</li> </ul>	18
Malawi	1-11 April	PM&E		Team member trained Edidah, Annet, Leonard
Lilongwe, Malawi	30 May	Participatory Rural Agro enterprise Development		Tennyson Magombo
Iran	May	Impact Pathways Workshops (external)		14
Guatemala	Junio 25 al 07 julio 2006	Taller de Seguimiento para el Fortalecimiento de las capacidades locales en los CAIS	<ul style="list-style-type: none"> <li>·EDUDEL C</li> <li>·Centro de capacitación INCAP</li> <li>·Fundación Talita Kumi – CIP</li> <li>·Cooperativa Cuatro Pinos</li> <li>·Finca El Rejón</li> <li>·CARE</li> <li>·PASAR</li> </ul>	26
Kampala, Uganda	June 26	Participatory Innovation Development		Team member trained Kankwatsa Peace



Lugar	Fecha	Evento	Institución participante	No. Participantes
	July	Indo-Gangetic Basin		17
México	Sept. 18 – 30 2006	Seguimiento a los planes de Acción y para el fortalecimiento de las capacidades locales de los CAIS	<ul style="list-style-type: none"> <li>·SANUT Los Limones</li> <li>·GRUPEDSAC-ITT-OAXACA</li> <li>·CATA</li> <li>·Centro Educativo para el Desarrollo Rural (CEDER, GRUPEDSAC)</li> <li>·CENTEOTL</li> <li>·UNOSJO /San Juan Tabaa</li> <li>·Campus Córdoba / Colegio de Posgraduados</li> <li>CSDI</li> </ul>	11
Blantyre, Malawi	11 -16 Sept	Participatory Market Research		Team member trained Tennyson Magombo
Harare, Zimbabwe	18 - 22 Sept	Enabling Rural Innovations Course		Team member trained Tennyson Magombo
Zimbabwe	19-29 Sept	ERI General		Team member trained: Edidah, Flavia, Tennyson, Leo, Bella
	October	Andes System of Basins and Sao Francisco Basin		18
Accra, Ghana	October	Volta Scaling Workshop		14
Cochabamba Bolivia	Nov. 20- 25 2006	Taller de seguimiento a los Planes de Acción y Fortalecimiento de Capacidades para los CAIS	<ul style="list-style-type: none"> <li>·CAIS Pingüe</li> <li>·cip-Kayamanta</li> <li>·K'an chaywasi</li> <li>·Campo da Sementeira / SERTA</li> <li>·CAIS Lúcia Gonçalves de Oliveira (APAEB)</li> <li>Ladera Dorada / CEPROM</li> </ul>	13
Blantyre, Malawi	27 <sup>th</sup> Nov - 1 Dec. 2006	Market Chain analysis and Farmer Participatory Research		Team member trained Tennyson Magombo



## 8. Summary budget prepared by Finances.

### ACTUAL EXPENDITURES 2006

### PROJECT SN3: Participatory Research Approaches

SOURCE	AMOUNT US\$	PROPORTION (%)
Unrestricted Core	370,332	18%
Restricted Core		0%
<b>Sub-total</b>	<b>370,332</b>	<b>18%</b>
Special Projects	1,535,124	73%
Water and Food CP	195,807	9%
<b>Total Project</b>	<b>2,101,264</b>	<b>100%</b>

## 9. Staff List

### Researchers and support staff: Position and time fraction

<b>Carlos Arturo Quiróz</b>	<b>Acting Project Manager</b>	<b>100%</b>
<b>Boru Douthwaite</b>	<b>Senior staff</b>	<b>100%</b>
<b>Susan Kaaria</b>	<b>Senior Scientist</b>	<b>100%</b>
<b>Pascal Sanginga</b>	<b>Senior Scientist</b>	<b>100%</b>
<b>Vicente Zapata</b>	<b>Senior Scientist</b>	<b>50%</b>
<b>Jemimah Njuki</b>	<b>Senior Research Fellow</b>	<b>100%</b>
<b>Luis Alfredo Hernández</b>	<b>Research Associate I</b>	<b>100%</b>
<b>Edson Gandarillas</b>	<b>Research</b>	<b>25%</b>
<b>José Ignacio Roa</b>	<b>Professional Specialist</b>	<b>100%</b>
<b>Juan Fernández</b>	<b>Research</b>	<b>25%</b>
<b>Vivian Polar</b>	<b>Research</b>	<b>25%</b>
<b>Gabriela Silva</b>	<b>Reserch</b>	<b>100%</b>
<b>Elias Claros</b>	<b>Research Assistant</b>	<b>100%</b>
<b>Walter Fuentes</b>	<b>Technician</b>	<b>25%</b>
<b>Freddy Escobar</b>	<b>Technician</b>	<b>50%</b>
<b>Jorge Cabrera</b>	<b>Technician</b>	<b>100%</b>
<b>Annet Abenakyo</b>	<b>Research Associate</b>	<b>100%</b>
<b>Sophie Alvarez</b>	<b>Consultant</b>	<b>100%</b>

