PROLINNOVA Uganda
PROmoting Local INNOVAtion
in ecologically-oriented agriculture and natural resource management

PROLINNOVA–Uganda experiences during the field studies on Strengthening Community Resilience to Change: Combining Local Innovative Capacity with Scientific Research (CLIC–SR)

1. Background information

PROLINNOVA–Uganda is a multi-stakeholder partnership whereby all partners are involved in the implementation of PROLINNOVA activities. Environmental Alert (EA), Kulika Uganda are the PROLINNOVA–Uganda partners that are spearheading the implementation of the project "Strengthening Community Resilience to Change: Combining Local Innovative Capacity with Scientific Research" (CLIC–SR) in Uganda. EA is implementing the project in Moyo District while Kulika Uganda is doing so in Nakasongola District.

2. The methods applied in making the field studies

2.1 Methodology

The field studies adopted primarily a qualitative research design to have a clear and deeper understanding of the changes that farmers are experiencing. However, explanation of the phenomena was not enough; quantitative methods were also applied to triangulate the relationship of events under study. The study was conducted in Metu and Aliba Sub-Counties in Moyo District and Nakitoma and Nabiswera Sub-Counties in Nakasongola District, the areas that had been selected for the project. These sub-counties were selected because EA and Kulika Uganda were already working there and the communities are predominantly smallholder farmers heavily dependent on natural resources.

2.2 Study population

The study population included farmers, pastoralists and fishers, to provide information on the changes experienced and effects on their livelihoods and information on their adaptation measures and practices in agriculture and natural resource management.

2.3 Sample

The study sample size was 166 respondents in Moyo District and 120 respondents in Nakasongola District. They were residents of Metu and Aliba Sub-Counties in Moyo and Nakitoma and Nabiswera Sub-Counties in Nakasongola. They were farmers, pastoralists and other communities dependent on natural resources for their livelihoods.

2.4 Sampling procedures

Stratified purposive sampling was used to select the four (Metu, Aliba, Nakitoma and Nabiswera) sub-counties. Quota sampling technique was used to select the respondents. The quota was based on sex and occupation. Division of the respondents into quota basing on sex was because the study needed to target females who were assumed to be most greatly affected by the changes. Separation of quota basing on occupation was done to ensure that pastoralists and other communities dependent on natural resources would not be left out of the study. The sample size calculator (Raosoft) was used to calculate the sample size based on the population of the four sub-counties. Lists of residents at parish levels were used.

2.5 Data collection techniques and tools

Participatory and interactive methods, approaches and tools were used to assess the level of the community's understanding of impact of change (primarily climate change) and their coping mechanisms. This provided opportunity for building on existing knowledge and social organization to identify climate-change "hotspots" in the community and entry points for strengthening community resilience to change. The techniques included group discussions, Interviews, observation and surveys. The tools used included questionnaires, interview guide, focused interview guide and observation. The tools generated a lot of information to be shared with the community members and partners. The information will support the implementation of the project.

3. The actual process experienced in making the studies

- Preparation meetings were held by the two partners (EA and Kulika Uganda) and it was agreed to organize one inception meeting in each of the two selected districts in Uganda. (Nakasongola and Moyo Districts).
- This was followed by more detailed planning by the two organizations for activities of the introductory/inception workshops and field studies within each of the two districts.
- Inception meetings were organized in Nakasongola and Moyo Districts to mobilize the commitment of stakeholders to the project. Each meeting was attended by politicians and technocrats of the district, sub-counties and farmers.
- The tools for the study were developed and shared among the partners and were pre-tested to establish the tools' effectiveness to generate the required data. This enabled the teams to fill the gaps in the tools. A meeting was held with field officials to have a clear view of the study and what was expected from it. At the end of each day's work, the research teams met to discuss the progress and lay out the strategy for the next day.
- The project was delayed in starting because of the delayed release of the funds to EA. The field studies were not conducted in late 2012 but rather in early 2013 because both organizations (Kulika and EA) had end-of-year annual reviews planned in 2012.

4. Challenges faced in making the studies and how we dealt with these challenges

- Language barrier: Many of the farmer innovators express themselves effectively in their local languages and the interviewers encouraged them but some of the meanings were lost in the interpretation. In addition, due to the interpretation, the focus group discussions took longer time than planned.
    - *Training interviewers to administer the tools well.*

- In administering the questionnaires which were in English, the enumerators were to write the responses in English and consequently some meanings were lost in the translation from the local language to English.
    - *Supervisors were allocated in each location specifically to support the enumerators.*

- The field survey focused on resilience to change not necessarily climate change and a common understanding of the concept among the stakeholders was a problem.
    - *Training that aimed at supporting the enumerators as well as other partners involved in the survey to understand the various concepts and administer the tools was done.*

- Difficult to understand the meaning of innovation and some farmers would not see what they are doing as new because they had been practicing some of the innovations for some time.
    - *Continuous effort to explain the meaning of innovation and further probing.*

- The process of analyzing the questionnaires by external consultants took longer and this resulted in delays in preparing the final reports.

- Some interviewers were not able to understand the concepts and effectively administer the questionnaire due to the short time for orientation and understanding of the concepts.

- Time for interviewing was determined by the innovators' daily and unforeseen activities.
    - *Flexibility of interviewers.*

- Tracking of changes that had happened over last 20 years was a problem.
    - *Further probing was done.*

- Long distances between innovators in the enumeration areas.
    - *Used more time and met transport expenses.*

- Farmers' time keeping was very poor during focus group discussions and this also affected the number of respondents we interacted with. We would arrive on time and wait for the farmers.
    - *We would prompt them to hurry by telephoning them. In subsequent meetings, we would mention the start time to be 30 minutes before the real time*

- Initially farmers 'understanding of the term "local innovations" was mainly limited to "local medicine or remedies"; this made them neglect innovations that adapt to change.
    - *We had to spend more time on probing, paraphrasing and observation to get the information about innovations from the farmers.*
- The exercise took more time than had been planned due to long distances between farmers and time taken with each farmer.
    - *We had to recruit more enumerators.*

5. Opportunities revealed through the field studies and how we are following them up

Some local innovations identified

- Drying cassava on raised platform/racks
- Early maturing planting
- Irrigation using tapwater
- Poultry treatment using local herbs
- Improvement on soil fertility using animal droppings
- Poultry feeds
- Making of briquettes (charcoal dust and groundnut husks)
- Palm tree trunk beehives
- Water storage ditches/dams
- Fruit pest traps in oranges and mangoes
- Use of compost to rejuvenate barren land
- Use of drought- and termite-resistant live hedges to make paddock
- Use of farmers' concoctions for treatment of livestock and human diseases.

Partners identified for support of farmer innovators

Moyo District

NAADS especially District and sub-county NAADS officials

NARO/ Abi Zonal Agricultural Research and Development Institute

District and Sub-County Local Governments

PELUM (Participatory Ecological Land Use Management)

VEDCO (Volunteer Efforts for Development Concern)

CEFORD (Community Empowerment for Rural Development)

Nakasongola District

District and Sub-County Local Government

Ministry of Water and Environment (NAPA Center)

World Vision

Sustainable Land Management (SLM) Project

Ministry of Agriculture, Animal Industries and Fisheries (GCCA Project)

FIYA FOCAL

National Agricultural Advisory Services (NAADS)

Caritas Uganda

Save the Children Fund

Following up with partners

- Partners are invited during workshops and meetings for CLIC–SR project
- Report and workplan for CLIC–SR are shared with the partners

6. The main lessons learnt in the course of making these field studies

- Farmers have developed ideas to adapt to change.
- Farmers reveal information about their innovations to the person they trust; therefore, one needs to create rapport with the farmers.
- The concept of innovations needs to be thoroughly explained to the farmers. Farmers have several local innovations but don't consider them to be innovations. Therefore, researchers had to take time to observe and listen and also probe to get them out.
- Innovations improve the livelihood of farmers. Farmers have developed innovations which improve their health and income, e.g. local medicine / drugs for fever / malaria, chicken and pig diseases. The local beehives have generated more income for a number of farmers than the "improved" bee-top hives and others that are expensive to buy.
- Local innovations need to be validated before being disseminated to other farmers.
- Monitoring of the innovations needs to be organized to collect all the required information about the innovations more than the few days it was given in this exercise.