

FINAL REPORT

Strengthening Community Resilience to Change
through Combining Local Innovation Capacity with
Scientific Research (CLIC-SR)Project

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Final External Evaluation Report

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Acronyms and abbreviations

AIS	Agricultural Innovation Systems
ARD	Agricultural Research and Development
CCAFS	Climate Change, Agriculture and Food Security
CLIC-SR	Community Resilience to Change: Combining Local Innovative Capacity with Scientific Research
CPs	Country Platforms
EAFIF	Eastern African Farmer Innovation Fair
FAIR	Farmer Access to Innovation Resources
FALIA-K	Farmer-Led Innovators Association of Kenya
FMC	Fund Management Committee
ICT	Information and Communication Technology
IFIDs	International Farmer Innovation Days
IIRR	International Institute of Rural Reconstruction
IPWs	International Partners Workshops
IS	International Secretariat
IST	International Support Team
IYFF	International Year of Family Farming
JOLISAA	Joint Learning and Innovation Systems in African Agriculture
KALRO	Kenya Agricultural and Livestock Research Organization
KIT	Royal Tropical Institute of The Netherlands
LISF	Local Innovation Support Funds
LSC	Local Steering Committee
M & E	Monitoring and Evaluation
MOU	Memorandum of Understanding
MSPs	Multi-Stakeholder Partnerships
MVIWATA	Network of Small Scale Farmer Groups in Tanzania
NECOFA	Network for Eco-Farming in Africa
NRM	Natural Resource Management
NSC	National Steering Committee
Nuffic	Netherlands Organisation for International Cooperation in Higher Education
PE	PROLINNOVA Ethiopia
PELUM	Participatory Ecological Land Use Management Association
PID	Participatory Innovation Development
PK	PROLINNOVA Kenya
POG	PROLINNOVA Oversight Group
PROLINNOVA	Promoting Local Innovation in ecologically oriented agriculture and NRM
PT	PROLINNOVA Tanzania
PU	PROLINNOVA Uganda
RF	The Rockefeller Foundation
TALIRI	Tanzania Livestock Research Institute
TAG	Technical Advisory Group
WN	World Neighbors

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- The coordinators of the four Country Platforms (CPs) of Uganda, Tanzania, Kenya and Ethiopia for providing me with project documents for analysis and for organising face-to-face and virtual evaluation meetings. The coordinators also took part in the evaluation meetings and provided important feedback and additions to the country-based summary of outputs that I prepared;
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Executive Summary

1. Background to the evaluation

This evaluation report discusses the findings, conclusions and recommendations on the project “Strengthening Community Resilience to Change: Combining Local Innovative Capacity with Scientific Research (CLIC-SR)” under the umbrella of the network Promoting Local Innovation in ecologically oriented agriculture and NRM (PROLINNOVA). This project was implemented in four Eastern African countries, namely Ethiopia, Kenya, Tanzania and Uganda. It was implemented by the Country Platform (CP) partners with coordination in the hands of one lead partner under the guidance of their respective National Steering Committees (NCSs). At international level, the project is governed by the PROLINNOVA Oversight Group (POG), managed and coordinated by the PROLINNOVA International Secretariat (IS) – hosted until June 2015 by ETC Foundation and thereafter by the Royal Tropical Institute (KIT) in The Netherlands – with monitoring and evaluation (M&E) support from the International Institute of Rural Reconstruction (IIRR) – a member of the International Support Team (IST) - and funded by the Rockefeller Foundation (US\$775,000). The project started in September 2012 and was originally scheduled to end in August 2015 but received a no-cost budget extension of one year, to August 2016. The evaluation took place within a period of three months and was completed and reported on in May 2016, three months before the end of the project. The findings of the evaluation were presented and discussed on 15 May 2016 in Senegal with all four CP partners, before the PROLINNOVA International Partners Workshop (IPW).

The project had five objectives, which are:

1. To strengthen the resilience to change of smallholder communities, especially women, by improving their innovative capacity and thus their livelihood security through participatory innovation development (PID);
2. To build the capacity of organisations working on agriculture and NRM so that they can effectively work with and support smallholders and communities in their efforts to adapt;
3. To increase insights and awareness on relevance and effectiveness of PID through sharing and learning;
4. To mainstream PID in national and international policies and programmes related to agricultural development, NRM and climate change adaptation; and
5. To coordinate and manage the project at national and international levels (including M & E).

The three main concepts that framed the project are: *Local Innovation and Participatory Innovation Development* (PID) to understand, extend/expand farmer innovation by combining it with scientific research using multistakeholder partnerships; *Scaling* to spread innovations and the farmer-led participatory innovation approach into other communities, contexts, programmes and policies; and *Local Innovation Support Funds* (LISFs) to enable direct local access to funds for farmer-led innovation processes aligned to local priorities.

2. Objectives of the evaluation

The Terms of Reference’s main questions contained the main objectives of the evaluation, and suggest that the main interest was project performance (effectiveness) against intended objectives and explanations for the levels of performance. The main evaluation questions were:

1. Has the CLIC–SR project been well implemented, given the initial project proposal and planning and taking into account the changing contexts in the countries of operation? What worked well and what did not? How can this be explained?
2. Has the CLIC–SR project contributed to reaching its main purposes? What have been main factors that helped realise this contribution, and which factors have constrained the project from doing so?

3. Evaluation methodology

The evaluation process was inclusive and participatory as it included all the key CLIC-SR key actors locally, nationally and internationally: farmers and farmer innovators, project coordinators, scientists from national agricultural research centres involved in the project, NSC members, and the international secretariat. It was also participatory in the sense that the project stakeholders were involved at four levels of the evaluation process: provision of data, review of the summary of outputs against indicators, review of the first draft report, and participation in a feedback meeting that was held just before the International Partners Workshop in Thiès, Senegal. All in all, 61 CLIC-SR stakeholders took part in the evaluation through face-to-face or Skype in-depth interviews, Focus Group Discussions (FGDs), group interviews and a feedback workshop. The evaluator made field visits to two project sites, one in Kenya and the other in Tanzania, and made observations. The main methodological limitation was time and resources to visit all the four CPs and local project sites.

4. Findings on project performance

The findings here are discussed against targets that were set under each of the five objectives of the CLIC-SR project. The achievement levels are grouped into four categories, namely: fully achieved where 100% or more of the targets were achieved; significantly achieved (70-99%); partly achieved (50-69%); and marginally achieved (49%). It is worth noting that none of the levels of achievement fell into the last category.

a. Objective 1: To strengthen the resilience to change of smallholder communities, especially women, by improving their innovative capacity and thus their livelihood security through participatory innovation development (PID)

Four of the six targets (67%) under this objective were *fully achieved* and these are the documentation of 29 farmer innovations instead of 24, the funding of 136 innovative farmers (includes members in groups) against the target of 120 in three countries (statistics from PROLINNOVA Ethiopia were unclear), the holding of 30 community training workshops in place of 24, the training of 1,329 community members where 800 were targeted. The other two targets were *partly achieved* as only 30% of the trained community members were women against the planned 50% and the documentation of 8 farmer-led joint experiments was at different stages of completion. However, the latter target is expected to be fully achieved by the end of the project period.

b. Objective 2: To build the capacity of organisations working on agriculture and NRM so that they can effectively work with and support smallholders and communities in their efforts to adapt

All the three targets (100 %) under this objective were *fully achieved* with 10 workshops being held in place of eight, 449 additional staff trained against a target of 400, and more than 30 % of the trained staff members being women. Here it is worth noting that while the overall target of trained staff was reached, one CP trained about 25 % of the targeted number but the number of days spent training each staff member was significantly higher and included a refresher course.

c. Objective 3: To increase insights and awareness on relevance and effectiveness of PID through sharing and learning

All five targets under this objective were *fully achieved*. An average of five agriculture and NRM organisations per country were involved in project management and each CP used the NSC to oversee and manage the project, hired or appointed a coordinator to implement the project and established an LISF committee in each project site. Innovation dissemination strategies were developed and used in each country; and 29 local innovations were disseminated against the planned 24 (see targets under Objective 1) through the direct involvement of about 60 farmer innovators at national and regional innovation fairs, radio shows, and national agricultural farmers days. One CP produced and distributed booklets on PID. International

dissemination was achieved through use of the PROLINNOVA and CLIC-SR Yahooogroup and website. Each CP and the IS produced the necessary annual reports.

d. Objective 4: To mainstream PID in national and international policies and programmes related to agricultural development, NRM and climate change adaptation

Two of the three targets were *fully achieved* and one was *significantly achieved*. The target of mainstreaming farmer innovations and farmer-led innovations into national policies and programmes has been achieved through conducting relevant policy reviews in each country and holding an average of 2 dialogue meetings in each country. Mainstreaming took place through the sharing of documented farmer innovations and during the process of farmer-led joint experimentation, which combined local innovative capacity with scientific research. It is worth noting that the mainstreaming largely took place at local level and in the course of joint farmer-led innovation and was not necessarily held back by delayed documentation of farmer-led joint experiments. The mainstreaming that took place can be summarised as follows:

- a. Integration of PID into agricultural and livestock research institutes' work plans and on their research agenda;
- b. Increased recognition and promotion of farmer innovators and innovations by Civil Society Organisations;
- c. Inclusion of PID in district council plans and activities where the project was implemented;
- d. Addition of farmer innovations into agricultural demonstration plots;
- e. Stimulation of the development of the Farmer-Led Innovators Association of Kenya (FALIA-K);
- f. Integration of the concept of innovation and farmer innovation in media discourse; and
- g. Incorporation of the results of some of the programme (the egg selection process) into the poultry industry in Ethiopia.

The two targets that were achieved are the holding of 10 policy dialogue meetings in place of the planned 8 and these were preceded by relevant policy reviews in each country. All the planned four high profile meetings were held and contribution to the international discourse on PID and LISF was accomplished through presentation of the CLIC-SR project at about 30 international events and the publication of several reports and papers. In addition, a policy paper was produced based on the experiences of the four CPs.

e. Objective 5: Coordinate and manage the project at national and international levels (including M & E).

Both targets under this objective were *fully achieved*, and these were the conducting of baseline studies in eight districts and the production of annual narrative and financial reports. Each CP and the International Secretariat produced the required number of reports, and these were informed by the project M&E system.

5. Summary on performance

The evaluation shows that the project fully achieved 16 (84%) of its 19 targets, significantly achieved one (5%) and partly achieved two (11%). This suggests a high level of achievement. At the same time, it is necessary to look at the activities and outputs that have only been partly achieved, as the targets do not necessarily carry the same weight. The partial achievement of the documentation of farmer-led joint innovation poses a significant challenge because the project sought to combine local adaptive capacity with scientific research. Documentation of how this could be done and of the results of such a process is critical for the success of the project as well as to make a case for pursuing this approach. The project successfully accomplished the establishing of multistakeholder partnerships, conducting local baseline studies, capacity development of staff and communities in PID, utilisation of LISF to support farmer innovations, holding policy-dialogue meetings and farmer innovation fairs and presenting on project experiences, and documentation and dissemination of farmer innovations. The project has not yet fully achieved its intentions in terms of documenting results of farmer-led joint experiments and disseminating the associated results. The fully achieved intentions were those that project implementers had direct control over and were immediate results. The partially and significant achieved targets were those that CPs had an influence over (and no

direct control) and were intermediate results. For example, cultural factors determined the proportion of women participants in community training workshops even though the CPs could influence participation through selection criteria; and joint experiments required the coordinated input of different stakeholders and subsequent documentation by someone with a good understanding of the project, the purpose and process of farmer-led joint experimentation. And more importantly, it required the careful tracking of what happened as a result of the process and the outcome of joint experimentation along the practice-to-policy value chain. This suggests that levels of achievement were partly determined by the CPs' degree of control over the process and outcomes.

6. Main project outcomes

The project enabled four major types of learning: (i) learning about contextual issues, including global changes; (ii) learning about PID as a learning and innovation process to address difficult issues being experienced by groups of people; (iii) learning in and through farmer-led joint experimentation, building on local farmer creativity and innovation (PID) to deal with adversity; and (iv) learning through implementing and integrating innovations. The project developed positive relationships and attitudes between farmer innovators and researchers through joint experimentation. This enhanced the self-esteem, status and value of local innovators. Researchers in the eight project sites largely view farmer innovators as key partners in tackling site-specific challenges. These relationships form an important mechanism for continued collaboration between farmers and researchers in the spirit of building local adaptive capacity by combining it with scientific research. Given that the project's main focus was to strengthen the innovative capacity of farming communities, especially women, through PID to become more resilient to change, it is important to note that the CLIC-SR project:

- a. Strengthened the innovative farmers' confidence, self-belief and self-esteem through recognising and publicising their work and creating platforms for farmer innovators to show case their innovations and innovativeness;
- b. Enhanced farmer innovation through investigating their essence using the LISF, which was managed locally by farmers themselves based on local needs and priorities;
- c. Increased the farming communities' climate resilience through the documentation and sharing of farmer innovations, which farming communities in the eight districts adopted in 'bundles' to increase production and diversity of crops, including fruits. The bundle of innovations often included water harvesting, water conservation, soil improvement, nursery establishment ahead of the rainy season to take advantage of the first rains, and locally-adapted crop varieties;
- d. Empowered farmers to deal with market and income-related challenges and improve their livelihoods through diversifying income sources, increasing productivity and producing crops that were out of season. For example, income sources were diversified through the addition of honey production using innovations that reduced the beehive colonisation period in Uganda. Productivity of scarce crops included the use of harvested water, highly fertile rock badger droppings, and the functional scaling of the finger millet nursery to watermelon production that resulted in bumper harvests that fetched high prices in Kenya. In Ethiopia, the egg selection innovation to determine the sex of chicks (which originated in Kenya) was used to increase the production of the desired chicks and generate more income. In Tanzania, a group of farmer innovators recently ventured into sorghum and groundnut (drought-tolerant crops) seed production for income generation;
- e. Increased the asset base of farming communities, including women-headed households, through enabling them to invest income generated in buying productive resources. This is amply demonstrated by the Makini women group of innovators in agriculture who have used technical innovations to strengthen their institutional innovation and to build better houses, buy bicycles and motorbikes and pay fees for their children to attend secondary school; and

- f. Broadened the range of resources, knowledge, and products available to improve local adaptive capacity by mobilising the contributions of agricultural research institutes, district and county structures and agricultural extension departments.

7. Main enablers and constraints

The project main enablers were: a critical number of local innovations, PROLINNOVA capacity and institutional arrangements, supportive researchers and research organisations, PROLINNOVA's international image, funding and government policies. The districts in which the CLIC-SR project was implemented had many farmer innovators who were willing to share their innovations with others. The CPs' long history of working with PID and with each other ensured that there was capacity to deliver on the project intentions. This was supported by necessary structures and operational arrangements at both national and local levels, and included the IPW, NSCs, the local multistakeholder groups and the LISF committees. Some agricultural research organisations and individuals valued farmer innovations and were keen to understand and promote them. The devolution policy in the Eastern African countries enabled better and more strategic cooperation between the project and government structures at local level. The funding from the Rockefeller Foundation was augmented by funds from Nuffic (Netherlands) to achieve some of the project targets. PROLINNOVA's international presence, history and reputation were key enablers in terms of dissemination of project outcomes and influencing related discourse. The main project constraints were: loss of project coordinators and key staff in partner organisations, long distances between research stations and joint experimentation sites, lack of funding to cover farmer-to-farmer look-and-learn visits, and limited capacities to document farmer-led joint experiments.

8. Recommendations

The evaluation makes the following recommendations:

- a. CPs should accelerate and complete the documentation of joint experiments and produce the necessary documents by the end of August 2016;
- b. Each CP should use the evidence generated from joint experiments to complete a policy document that addresses a related policy issue before the end of August 2016;
- c. The IST should provide the necessary backstopping support to ensure the achievement of the documentation of farmer-led joint experiments and the production of necessary papers;
- d. The IST should provide the necessary backstopping to ensure the delivery of targets not yet achieved;
- e. CPs should draw on experiences and insights to make their NSCs and Local Steering Committees more effective;
- f. Each CP and the IST should distil and document insights for incorporation in PROLINNOVA's future work;
- g. CPs should build on the achievements and developmental trajectory of the CLIC-SR project and consider increasing the number of local project sites; and
- h. The PROLINNOVA network should draw insights from and build on the CLIC-SR project experience to promote and refine PID.

Section 1: Introduction

1.1 Introduction to the project under review

This report discusses the findings and recommendations of a PROLINNOVA (Promoting Local Innovation in ecologically oriented agriculture and natural resource management) project that was implemented in four countries of eastern Africa by the respective PROLINNOVA Country Platforms (CPs) of Ethiopia, Kenya, Tanzania and Uganda. PROLINNOVA, which was conceived in 1999, is a network, community of practice and learning platform that involves multiple stakeholders in promoting local innovation in ecologically oriented agriculture and natural resource management (NRM). It currently has 21 CPs in Africa, Asia and South America. The Draft PROLINNOVA 2016-2020 Strategic Plan notes that *“farmer-led research is a focus of the network, which seeks to bring different knowledge systems together in such ways that farmers play a leading role.”* This spirit of the network is at the centre of the project that is under review, and which is entitled *Strengthening Community Resilience to Change: Combining Local Innovative Capacity with Scientific Research (CLIC-SR)*.

CLIC-SR began in September 2012, was scheduled to end in August 2015 and was extended by one year (budget-neutral) to 31 August 2016. The work in the CPs will end in May 2016 while work synthesis such as international reporting and production of policy briefs will be concluded by August 2016. It is managed and coordinated by the PROLINNOVA International Secretariat (The Netherlands), which was initially hosted by ETC Netherlands and later by the Royal Tropical Institute (KIT). The International Institute of Rural Reconstruction (IIRR), which is part of the International Support Team (IST), is responsible for overall monitoring and evaluation and the Rockefeller Foundation is providing the funds (US\$775,000) for the CLIC-SR project.

1.2 Project background

The idea of a project that utilises a combination of local innovative capacity and scientific research to strengthen community resilience emerged from PROLINNOVA’s earlier work in Africa and Asia. PROLINNOVA learnt that research and development interventions tend to be more effective when they recognise and build on local creativity and innovativeness. This resulted in the development of an innovation process approach called Participatory Innovation Development (PID), which was to be scaled through the CLIC-SR project.

The CLIC-SR project built on the gradual accumulation of PID knowledge and experiences in the eastern African CPs. It began in different years in different CPs – Uganda and Ethiopia in 2003 with IFAD funds, Tanzania in 2004 (with DGIS funds) and Kenya in 2007 (initially without funding). The Rockefeller Foundation (RF) funded PK’s piloting of Local Innovation Support Funds (LISFs), which went from 2008 to 2013 in the Farmer Access to Innovation Resources (FAIR) project. It led to the development and funding of a one-year project to develop lessons from piloting LISFs into policy-influencing strategies and activities: the “FAIR transition” project. At the same time, there was the EU-funded project JOLISAA, in which PK was involved (which covered the costs of the PK coordinator). In addition, all the CPs received Dutch funding over 10 years (up to 2011) to do work in promoting local innovation. Previous PID initiatives in the four eastern African CPs received IST backstopping visits, covering PID training, LISF mentoring and documentation support.

1.3 Conceptual framing of the project

There are two main concepts that frame the CLIC-SR project and these are: PID and scaling (up/out). Each of these concepts is briefly discussed below.

1.3.1 Participatory Innovation Development (PID)

PID is a process in which scientists and development agents **join with** farmers to further develop, adapt and test local ideas and initiatives, integrating local and scientific knowledge (Waters-Bayer & van Veldhuizen 2004¹). In its proposal to RF, PROLINNOVA explained PID and its contribution to building community resilience as follows:

The central objective of PID is to strengthen the adaptive capacities of farmers and communities to deal with change and, thus, to build their resilience. Local people involved become more proactive and are better able to analyze their situation and changes taking place, including those with a longer-time horizon. They are encouraged to collaborate and pool energies and knowledge, to experiment systematically with alternative options and to become better linked to other actors with whom they can continue to design and implement adaptive action to address newly emerging problems ... PID brings experiences, knowledge and action together in a way that generates new solutions – as well as the ability to continue doing so... informed choices are made jointly on the most feasible experimentation or innovation pathways. Involvement of field extension staff in the process creates openings at the local level for sharing results through the extension system. (ETC, 2012, p. 3²)

The project background shows the value that the project places on local knowledge and resources as a basis on which community adaptive capacity could be strengthened through other forms of knowledge. This is informed by the realisation that local communities are innovators who often adapt to changing conditions on their own. It illustrates that the CLIC-SR project sought to use plural ways of knowing to tackle complex and wicked problems faced by communities – with local knowledge and innovation as the starting point.

1.3.2 Scaling innovations and innovation processes

There are several definitions of scaling, with one of the CLIC-SR project partners defining it as something that *“brings more quality benefits to more people over a wider geographical area, more quickly, more equitably and more lastingly”* (IIRR, 2000, p. iv³). This definition suggests that scaling is beneficial, increases reach and is gradual. IIRR also make another noteworthy point: scaling up and out go together when it says: *“as one goes up the institutional levels (vertical scaling), the greater the chances for horizontal spread; likewise, as one spreads farther geographically (horizontal scaling), the greater the chances of influencing those in higher levels”* (ibid.). The World Bank (2005⁴) sees scaling as “expanding, adapting and sustaining successful policies, programmes or projects in different places and over time to reach a greater number of people”. The evaluation noted that expanding innovations and adapting them

¹ Waters-Bayer A & van Veldhuizen L. (2004). Promoting local innovation: enhancing indigenous knowledge dynamics and links with scientific knowledge. *IK Notes* 76. Washington DC: World Bank.

² ETC. (2012). Strengthening Community Resilience to Change: Combining Local Innovative Capacity with Scientific Research (CLIC-SR): A proposal for a 3-year project in eastern Africa.

³ IIRR. (2000). Going to scale: Can we bring more benefits to more people quickly? Silang: IIRR.

⁴ World Bank. (2005). “Reducing Poverty, Sustaining Growth: Scaling Up Poverty Reduction. Case Study Summaries,” A Global Learning Process and Conference in Shanghai, May 25-27, 2004.

could be central components in the CLIC-SR project – expanding when farmer innovations and innovators join with scientific knowledge, and adapting the innovations as they move from one spatial or temporal context to another. The evaluation also noted, from the project background, that there were two interrelated levels of scaling, namely:

- a. The scaling of PID as a process that enables farmers to work together with researchers and development agents to jointly develop solutions that reduce vulnerability to change while increasing community resilience, and
- b. The scaling of local farmer-led innovations that would be identified, jointly explored and expanded in and through the project using the PID process.

The evaluation noted that the scaling of innovations within the communities required interactions and communication among innovators and fellow farmers. But beyond the local community, farmer research and innovations required to be documented so that they could be understood by others who cannot afford to experience the innovations directly. Documentation of farmer innovations was also important for helping the project identify potential scientific research input. The next level of documentation was concerned with the joint farmer-led experimentation processes and outcomes for scaling out to other actors, including innovators and farmers in other contexts, who could benefit from the ‘expanded’ innovations and ‘adapt’ them in their local contexts to increase community resilience. At the same time, the documented processes and results had potential value in persuading policymakers and academics to adopt and mainstream PID as a collective learning and innovation approach in curricula and policies in a scaling-up process. Documentation would also enable horizontal scaling within the eastern Africa region and beyond – and this could feed into vertical scaling as noted by IIRR (2000).

1.3.3 Local Innovation Support Fund (LISF)

Local Innovation Support Fund (LISF) is a funding mechanism that gives farmers direct access to funds for innovation in line with their local priorities. The funds are used for supporting farmers’ own experimentation, improving farmer innovations, and farmer-led experimentation in partnership with researchers and to build local capacities to innovate and to deal with on-going change. Assefa (2005⁵) makes the point that LISF can be used for the purpose of identifying, developing and sharing of farmer innovations according to their priorities and decision making processes. The fund is administered by a Local Steering Committee (LSC) or Fund Management Committee (FMC), which is farmer-led (Waters-Bayer, 2013⁶). These local structures are linked to PROLINNOVA CPs that seek to integrate farmer-led participatory research and extension, based on local innovation, into mainstream research, development and education. All the four CPs in the CLIC-SR project were working with the LISF concept (with RF support) before the CLC-SR project in which it has been integrated.

1.4 Project intentions and inferred theory of change

The project intentions were shaped by PROLINNOVA’S vision of a world in which women and men in smallholder families and communities play decisive roles in innovation systems in agriculture and NRM for sustainable livelihoods. The project aimed to achieve the following outcomes:

⁵ Assefa, A. (2005). Challenges and prospects of farmer innovations in Ethiopia. Addis Ababa: Agri Service Ethiopia.

⁶ Waters-Bayer, A. (2013). Farmer-driven research to improve food and nutrition security: Local Innovation Support Funds – experiences and lessons. *Brussels Policy Briefing No. 34*.

- a. Innovation capacities strengthened of smallholder farmers and communities in target districts and effectiveness and strengths/weaknesses of local innovation and PID for building resilience to change understood and documented by stakeholders.
- b. Organisations working in agricultural development and NRM well equipped and capable of supporting communities in farmer-led adaptation and innovation.
- c. Wider enhanced awareness and dissemination of insights, experiences and understanding gained in PID and its role in building community resilience
- d. Acceptance in policy and programming of the relevance of local adaptation efforts and of PID as an effective approach for agricultural development, NRM and climate change adaptation.

The intended project outcomes suggest that the theory of change was that, if organisations that work in agricultural development and NRM acquire and apply PID knowledge, they would be able to facilitate processes of farmer-led innovation and adaptation; document and share PID insights, scale PID and its results into policies, programmes and practices and build community resilience.

1.5 Project implementation arrangements

Institutional arrangements were an important part of the project design, especially given its interest in bringing different actors and knowledge systems to work together towards building community resilience to change. At international level, the project was governed by the PROLINNOVA Oversight Group (POG), managed and coordinated by the IST, and monitored and evaluated by IIRR. In each country, the PROLINNOVA National Steering Committee (NSC), comprising experienced non-governmental organisations (NGOs) working with research institutes and other stakeholders, managed and implemented the project. Each NSC had the flexibility to design a strategy and set-up that was informed by the CP's history, experience and culture. In general, four main roles that were shared by NSC members are:

- Hosting the coordinator or coordinating project implementation and managing the budget,
- Coordinating joint experimentation at district or local level,
- Coordinating ARD policy and programme influence, and
- Project monitoring and evaluation.

At sub-national level, each CP had local structures that oversaw programme implementation, and in some instances, were responsible for deciding on the use of the LISF. The local structures comprised local farmer innovators and farmers, participating NGOs and research organisations in some cases but in others it only comprised farmer innovators and other farmers.

1.6 Aim and objectives of the evaluation

The aim of the external evaluation was to assess the extent to which the project has realised what it set out to do, to help all involved in the project to critically understand successes and failures, and to identify lessons learned that can help strengthen future similar work by PROLINNOVA. The Terms of Reference posed the following two main questions to guide the evaluation:

1. Has the CLIC–SR project been well implemented, given the initial project proposal and planning and taking into account the changing contexts in the countries of operation? What worked well and what did not? How can this be explained?

2. Has the CLIC–SR project contributed to reaching its main purposes? What have been main factors that helped realise this contribution, and which factors have constrained the project from doing so?

The specific objectives of the evaluation were to:

- a. Describe the type and level of understanding developed through the project of community resilience and community perceptions in the project areas of major current changes including climate change, and their responses to such changes.
- b. Establish the ways and forms in which the project has created links and interactions between local adaptation and innovation efforts, on the one hand, and actors in formal Agricultural Research and Development (ARD), on the other hand, for mutual benefit.
- c. Identify the farmer-level practices, technologies and/or innovation development approaches and methods that have emerged from the project with a potential for scaling up and out.
- d. Assess the functioning of the partnership among organisations involved in the project and the wider Prolinnova network, both at the level of each country and internationally. PROLINNOVA

The objectives of the evaluation show that there was an explicit interest to assess the extent to which the intended project outcomes had been realised and to find explanations for the results. The objectives were also interested in the drawing out of lessons learnt and the making of recommendations for future improvements. This understanding informs the structure and content of the report as outlined in the next sub-section (1.7) evaluation.

1.7 Organisation of the report

The report is organised into the following sections:

- a. Introduction, which discusses the context and objectives of the project evaluation,
- b. Methodology, which outlines the process by which the evaluation was conducted,
- c. Findings, which discusses the level of achievement for each project objective and associated outcome, and explanations on the progress; lessons learnt are also discussed in this part of the report,
- d. Conclusions, which discusses the findings against DAC criteria of relevance, effectiveness, efficiency, impact and sustainability, and
- e. Recommendations, where suggestions for the future are made, largely based on project experiences and insights.

Section 2: Methodology

2.1 Participatory and inclusive orientation

Consistent with the inclusive nature of the project under review, the evaluation methodology was participatory in terms of involving CLIC-SR project participants and stakeholders. This meant including stakeholders across vertical spaces from local to international structures of PROLINNOVA and its CLIC-SR project, as well as horizontally across geographical spaces, as well as according to the functions that are performed by actors in the project. Representatives and/or members of the NSC and/or implementing partners in each of the four CPs that took part in the project participated in the evaluation through Skype interviews. Since it was not feasible to visit each and every actor involved in the project, purposive sampling was used and two of the four CPs – PROLINNOVA Tanzania (PT) and PROLINNOVA Kenya (PK) – were visited. Each visit involved face-to-face meetings with the NSC, the coordinator and members of either the regional (sub-national) or local SC and a physical observation of at least one of the farmer-led innovations.

2.2 Data generation methods

A diverse range of data generation methods was employed in order to increase the depth and validity of the findings. The methods are summarised below.

2.2.1 Document analysis and literature review

The evaluation used project documents to generate secondary data, which was important for drawing out the background to the project, the project intentions and scope as well as the output-level achievements that were made and recorded. Some of the main documents that were analysed are:

- The project proposal,
- Annual CP narrative reports on the project,
- Annual CP financial reports on the project,
- Narrative progress reports by the PROLINNOVA IST that were submitted to Rockefeller Foundation as the funding partner,
- Annual Partners' Meeting Reports that were presented at the International Partners Workshops,
- Documented case studies of farmer-research and farmer-led joint experimentation,
- CLIC-SR guidelines for policy change document and the resultant Working Paper on Challenges, Constraints and Opportunities in Influencing Policy to Become More Favourable for Farmer-led Participatory Approaches,
- Draft papers on CLIC-SR experiences in working with PID, and
- The Draft PROLINNOVA Strategic Plan (2016-2020).

In addition to the above-mentioned documents, the evaluation drew on participatory innovation and scaling literature to help frame some of the discussions in the different sections of the report.

2.2.2 Orientation Skype meeting

The orientation Skype meeting discussed and clarified the purpose, scope and requirements of the assignment. It involved two members of the IST and the evaluator. In addition, the meeting provided the necessary background to the project that was being evaluated and the institutional mechanisms through

which the project was being implemented. In short, the orientation meeting provided the necessary context to the evaluation and its link to the PROLINNOVA vision.

2.2.3 In-depth interviews

In-depth interviews formed a key strategy of primary data generation. Twenty-four (24) project participants were interviewed, comprising: farmer innovators, project coordinators, research scientists, implementing partners, NSC members, directors of organisations that host the project and members of the IST. Criteria for selection included international, national and local representation, representation of different roles in the project, gender and availability to participate in the interviews by either Skype or face-to-face meetings. Data generation with interviewees, who served as key informants, was guided by a checklist of questions. The interviewees provided important information on the project processes, achievements, challenges, enablers and constraints as well as lessons learnt and recommendations for the future.

2.2.4 Focus group discussions and group interviews

Focus group discussions and group interviews were used to generate data with groups of research participants who were met in Tanzania and Kenya. The three groups that took part in the evaluation and where these two data generation methods were applied were:

- The group of socio-institutional women farmer innovators in Dodoma and the research and extension officers that they work with, including those from the development agency (INADES-Tanzania),
- PROLINNOVA Tanzania NSC, which includes three farmer innovators, and
- The Machakos LSC, the lead researcher from the NSC and the CP coordinator.

The table below (Table 1) summarises the number of evaluation participants by CP and IST, which had 61 participants (51 % women), most of them in countries where evaluation visits were done. The names of evaluation participants are in Annex 6.2. Figure 1 shows evaluation participants during focus group discussions and group meetings in Dodoma and Machakos, respectively.



Figure 1: Multistakeholder evaluation meetings held in Dodoma and Machakos, respectively

Table1: Summary of evaluation participants

PROLINNOVA structure	Male	Female	Totals
IST	0	3	3
PROLINNOVA Ethiopia (PE)	3	0	3
PROLINNOVA Kenya (PK)	11	9	20
PROLINNOVA Tanzania (PT)	11	15	26
PROLINNOVA Uganda (PU)	5	4	9
Totals	30	31	61

2.2.5 Field-based observations

During the evaluation visits to Tanzania and Kenya, the evaluator visited some of the sites where farmer innovators were applying their creativity and innovation. In Tanzania, the evaluator visited the group of women whose major innovation was socio-institutional and listened to the story of the group's formation and evolution, including how the group's socio-institutional innovation was accompanied by technical innovations and practical improvements. In addition, he visited two sites where the women innovators were working with agricultural research scientists to grow drought-tolerant small grain seeds (groundnut and sorghum) for own use, sale and for increasing the local community's resilience to climate change (Figure 2). In Kenya, the evaluator observed the water-harvesting innovation and how the farmer innovator had utilised the water to increase crop production and diversity – adding the drought-resistant finger millet, and adopting and adapting the finger millet nursery innovation by another farmer innovator.



Figure 2: The Makini women's group in Tanzania in their groundnut and sorghum seed producing plots initiated under the project and based on collaboration between farmers, researchers and extension workers

2.2.6 Feedback processes

The evaluation processes provided for three main spaces for feedback to the evaluation findings. The four CPs' NSCs and the IST members had an opportunity to comment on and contribute to the emerging and draft findings:

- When a country-by-country summary of achievements was made, based on document analysis,
- When the first report was prepared and distributed for comment, and
- At the annual CLIC-SR partners meeting that was attended by all the four CPs in May 2016, just before the IPW in Thies, Senegal.

The purpose of the feedback events was to increase the quality and validity of the findings. This approach was also consistent with the inclusive and participatory orientation of the evaluation, and of the project under review.

2.3 Data analysis

Three main kinds of data analysis were used: predetermined, inductive and abductive. The predetermined level of analysis entailed the organising of findings according to the objectives and intended outcomes of the projects. Inductive analysis was used to cluster lessons learnt and insights generated in and through the project as well as in making recommendations. Innovation- and scaling-related concepts and tools were then drawn on to further organise the data in the form of abductive analysis, which was used in the introduction as well as in the findings and recommendations sections of the report.

2.4 Evaluation process

The evaluation followed a particular logic and sequence. It started with an orientation Skype, which helped the evaluator to better understand the evaluation assignment and its background. This laid the foundation for the next evaluation activity – document analysis to pull out data on the substance of the project, largely focusing on achievements, challenges, enablers and constraints. Document analysis informed the development of evaluation questions for primary data collection, as well as the decision on which countries to visit. Skype interviews, face-to-face interviews, focus group discussions and field-based observations were used to generate primary data. The evaluator then analysed the data and compiled a draft report and sought feedback from project coordinators, NSC members and IST members, before revising and producing a second report that was presented at an international PROLINNOVA meeting for further refinement.

2.5 Limitations of the evaluation methodology

The main limitation of the evaluation was associated with the time and budget, which constrained the possibilities to visit the four CPs and observe the farmer innovations as well as the farmer-led joint experiments that were conducted under the project. Purposive sampling, document analysis covering all countries and in-depth interviews covering all the countries and the IST were used to ensure that there was a fair coverage of all the different components and sites of the project.

Section 3: Evaluation findings

3.1 Introduction

This section discusses the main findings of the evaluation and seeks to address the two main questions that were stated in the Terms of Reference, namely:

1. Has the CLIC–SR project been well implemented, given the initial project proposal and planning and taking into account the changing contexts in the countries of operation? What worked well and what did not? How can this be explained?
2. Has the CLIC–SR project contributed to reaching its main purposes? What have been main factors that helped realize this contribution, and which factors have constrained the project from doing so?

In order to answer the first part of the first question, it is necessary to summarise the outputs that were achieved by each CP, given that their contexts are different, and then discuss the details of findings that directly address the evaluation questions later.

3.2 Organisation of the findings

The findings are organised according to the five interrelated objectives of the CLIC-SR project, which are:

- Objective 1: Strengthen the resilience to change of smallholder communities, especially women, by improving their innovative capacity and thus their livelihood security through participatory innovation development (PID),
- Objective 2: Build the capacity of organisations working on agriculture and NRM so that they can effectively work with and support smallholders and communities in their efforts to adapt,
- Objective 3: Increase insights and awareness on relevance and effectiveness of PID through sharing and learning,
- Objective 4: Mainstream PID in national and international policies and programmes related to agricultural development, NRM and climate change adaptation, and
- Objective 5: Project coordination and management.

Under each objective, the report: (a) outlines the activities and set targets; (b) the outputs that were achieved; (c) the outcomes or value that were generated; (d) the enablers; and (e) the challenges and constraints. In instances where the activities falling under a particular objective are closely related (e.g. dissemination at country and at international level), the enablers and constraints are discussed in the same paragraph. The evaluation established project outputs through document analysis and filled in a table that was reviewed by each CP and the IST (6.1) before finalisation. The outcomes, enablers and constraints are based on document analysis and primary data generation, including observations.

3.3 Strengthen the resilience to change of smallholder communities, especially women, by improving their innovative capacity and thus their livelihood security through participatory innovation development (PID)

3.3.1 Planned activities and targets

The three main project activities were project planning meetings and field studies, implementation and documentation of farmer-led documentation, and training of community groups to strengthen local adaptive capacity. The related targets were:

- a. Six (6) well-documented cases per country on successful endogenous innovation measures and practices in agriculture and/or NRM,
- b. Two (2) well-documented case studies on community/farmer-led joint innovation covering process, results and demonstrating good attention to gender issues and at least 40 innovative farmers/land-users/communities use and benefit from the Local Innovation Support Fund (LISF) to speed up local innovation and adaption, and
- c. At least six (6) training workshops are held and associated reports produced per country and at least 200 farmers, farmer leaders and community members are trained, at least 50 % of them being women and members of marginalised groups in the area.

3.3.2 Project outputs against targets

Substantial progress has been made towards achieving the activities and targets under this objective, with two of the three targets being exceeded: the number of documented farmer innovation case studies and the number of farmers trained to strengthen local adaptive capacity. The summary of achievements is as follows:

The four CPs documented 29 farmer innovation case studies and exceeded the overall target of 24 by five (5) case studies. This was because PE exceeded the target by six case studies, and PT did not reach its target by one case study. The criteria for selecting farmer innovations to document were similar across the CPs. For example, in Ethiopia, PE used the following questions to guide selection

- Is the innovation new?
- Does the innovation have added value?
- Is the innovation done using locally available material?
- What is the probability that the innovation can be scaled out?
- Does the innovation contribute towards ecological sustainability?

The number of farmer-led joint experimentation case studies that were initiated is 21 but none of these has been completed in terms of documentation (target: 8 case studies). If the CPs complete the documentation process in the remaining period of the project, each CP would reach the targeted number of farmer-led joint experiments with PU, PE and PT exceeding the targets. PT is at an advanced stage of documenting its five case studies. The targeted number of farmers that benefited from LISFs to accelerate local innovation was exceeded in the three CPs that provided clear statistic (PK, PT and PU). One hundred and thirty six (136) farmer innovators (68 % women) benefited where 120 were targeted.

The project exceeded the targeted number of workshops and farmers to be trained by conducting 28 workshops and training 1,329 farmers – with PE and PU exceeding the 200-farmer country targets with 887 and 223 farmers, respectively. Noteworthy is that PK, which trained 112 farmers, held longer

workshops that were followed by a refresher workshop while, in the countries where larger numbers of farmers were trained, the workshops were shorter. In terms of women participation, only PU was able to reach and exceed the 50% women farmers that were targeted (at 62%), with PT almost reaching the target at 45%.

Farmers, extension workers and research scientists shared roles in the joint experiments. For example, in the cattle fattening case study in Tanzania, they shared the roles as follows (Table 2):

Table 2: Sharing of roles in the experiment in cattle fattening using fish meal soup in Tanzania

Actor	Roles
Farmer innovator	<ul style="list-style-type: none"> • Fed the three emaciated cattle for three months • Provided security to the cattle being experimented with • Weighed and recorded animal weight weekly • Jointly assessed the condition of the animals and treated against diseases • Jointly recorded baseline data • Jointly drafted a research paper
Extension agent	<ul style="list-style-type: none"> • Monitored the progress of the experiment at least once per month • Gathered data that were recorded by the farmer innovator • Prepared booklets and other extension materials based on the innovation • Jointly assessed the condition of the animals and treated against diseases • Jointly recorded baseline data • Jointly drafted a research paper
Animal scientist	<ul style="list-style-type: none"> • Jointly assessed the condition of the animals and treated against diseases • Jointly recorded baseline data • Monitored the progress of the experiment monthly • Conducted data analysis and interpretation and wrote a scientific report • Gave feedback to members of the research group • Jointly drafted a research paper

The distribution of roles seems to have been determined by proximity to the research site and the strengths of each other. In addition, and more importantly, there were certain activities that were done jointly – and were an important site for collaborative learning.

3.3.3 Outcomes of documenting farmer innovations, training farmers and doing farmer-led joint experiments

The documentation and dissemination of farmer innovations demonstrated that farmers use their knowledge and resources to tackle challenges that they encounter as well as to utilise opportunities that emerge in the local contexts. This suggested that they are critical in finding solutions to local problems. In addition, and more importantly, the documentation of farmer innovations resulted in their dissemination and uptake, which in turn increased community adaptive capacities to climate change and livelihood challenges. For example, other farmers in Machakos (in addition to the original innovators) used the innovations involving water harvesting, finger millet nursery, and manure from rock badger droppings to increase production, food security, income and adaptation to climate change.

Farmer-led joint experiments underlined the importance of combining local innovative capacities with scientific research to build on local solutions, understand why the innovations work and use this understanding to scale the innovations for wider reach and impact. This was the essence of the project

as evidenced by its title. The value of including scientific research was found to lie in adding different knowledge and providing explanations concerning why an innovation works, which is critical for scaling out an innovation into a different context. For example, in Chamwino District, Tanzania the successful fattening of emaciated cows using fishmeal soup was explained by the farmer innovator, development agent and animal scientists participating in the joint experimentation as follows:

Once the animals receive the fish meal soup, they develop shooting diarrhoea with bad smell and mixed with soil and sometimes sand due to fat globules found in fish meal ... which removes unwanted material in the gastrointestinal tract; give room for more feed; increase the appetite as a result of increased surface area for digestion, absorption and assimilation of feed material and hence increased body weight and body condition score... Fish meals as they are of animal origin ... are a good source of fatty acids and essential amino acids like lysine and methionine necessary for body metabolism ... Fish meals, as they are of animal origin ... escape digestion by ruminal microflora (RUP) so most of nutrients are available to the animal; unlike proteins of plant origin, which are normally degraded with the help of microflora [and] part of nutrients are used by ruminal microflora and only part available to the host animal. (Sambuta, Lameck, Ndosi & Ninga, 2016, pp. 7-8⁷)

The LISF provided resources that enabled innovators, other farmers and researchers to meet, learn from each other and set the research agenda and encouraged researchers to participate. The farmers were able to decide what innovations to work on, which was critical for empowering them to focus on their priorities. Community training workshops increased community awareness of the broader context in which they were living and operating. They also helped farmers to understand the causes of some of their problems, and the opportunities to tap into in order to adapt to changing times.

3.3.4 Enablers of farmer innovation documentation and farmer-led joint experimentation

The main enabler of documenting farmer innovation was that the organisations that were tasked to document the case studies had a long history of working with farmers and farmer innovators in their respective countries. For example, in Tigray, Ethiopia:

This experience was gained during the time when the Tigray People's Liberation Front built up the extension service in the 1980s and during more recent work (1997–2001) in identifying local knowledge and innovation during the Dutch-supported ISWC project. (Fanos, 2012, in Wettasinha *et al.*, 2015, p. 6⁸)

Community training was enabled by working with implementing partners that had a strong presence on the ground and could easily mobilise farmers for the training. The relevance of the training focus also encouraged farmers to attend. The LISF was a major enabler in getting farmer innovators and research scientists to jointly experiment, as it enabled the project to meet some of the costs that were incurred, especially by the researchers. The involvement of agricultural extension departments was another key enabler in terms of encouraging the participation of agricultural researchers. Memoranda of

⁷ Sambuta, A. K., Lameck, P., Ndosi, E., & Ninga, S. I. (2016). Cattle fattening using fish meal supplement: Participatory Innovation Development (PID) joint experiment. Draft paper. Dodoma: Prolinnova Tanzania.

⁸ Wettasinha C, Waters-Bayer A, Amanuel A, Kamau G, Hailu A, Righa M & van Veldhuizen L. (2015). Facilitating extensionists to learn by doing in promoting local innovation. 22nd European Seminar on Extension and Education, 28 April–1 May, Wageningen, Netherlands.

Understanding (MoUs) that were signed by the farmer groups on the use of LISF, and which emphasised accountability and continuity of implementation, were another major enabler.

3.3.5 Challenges and constraints related to conducting and documenting farmer-led joint experimentation

There were no challenges related to documenting farmer research/innovations and to conducting community training. However, two main challenges and constraints were encountered in conducting farmer-led joint experimentation. It took time to persuade some of the researchers to take farmer innovators and innovations seriously. The other challenge was concerned with time, distance and costs. Research stations are often far from joint experimentation sites, making it expensive to visit the sites regularly and to participate in the experimentation and the documentation. This was reported to have delayed documentation of the joint research work, especially in Kenya.

Some of the farmer innovators involved in joint experiments indicated that they initially found the need to take many measurements, again and again, rather difficult to understand. For example, the farmer innovator who participated in the tree growing experiment in Tanzania said she initially did not see why she had to measure so many trees, and so often; and why she had to measure certain parts only, and why it was necessary to measure to millimetres. Researchers faced challenges in explaining some scientific concepts, such as fatty acids. In Machakos, Kenya, joint experimentation and documentation were disrupted when a finger millet variety from the research station performed badly in the finger millet nursery experiment.

3.4 Building the capacity of organisations working on agriculture and NRM so that they can effectively work with and support smallholders and communities in their efforts to adapt

3.4.1 Planned activity and targets

The planned activity was to train staff of organisations working on agriculture and NRM to support community-led innovation, and three associated targets were:

- a. Project partners and targeted research and development organisations attend at least two (2) training workshops on PID and climate change issues held per country, at least two (2) reports on the training workshops produced and at least 100 local staff are trained in supporting community-led innovation, 30 % of them being women.

3.4.2 Project outputs against targets

All the eight (8) planned workshops were held and each CP conducted two, and all the required 8 reports were produced. However, the total number of trained staff fell below the target of 400, at 349 (87 %). However, PE exceeded its target of 100 by training 131 staff, while PU and PT trained 98 each, with PK training 22. It is also worth noting that the staff members who were trained in Kenya attended a refresher course, meaning that they were trained twice. This approach appears to partly explain why relatively low numbers of personnel were trained.

3.4.3 Outcomes of training staff to support community-led innovation

The value of training local staff and leaders resided in the fact that they would create a multiplier effect by facilitating and supporting community-led innovation. Some of the trained staff members are playing active roles in the joint research experiments but the extent to which each one of them is working with

PID could not be established through the evaluation. The evaluation suggests a specific study that traces how the trained staff members are using PID. Some of the areas to look into during the study are:

- Scaling up the PID by including it in organisations' policies and programmes,
- Raising resources to support PID,
- Developing the capacities of PID among researchers, extension workers and farmer innovators,
- Scaling out the PID practice through practical identification of innovations and supporting them to be documented, developed and shared, and
- Documenting and publicising PID experiences.

3.4.4 Enablers of training staff

The main enabler for the training was Nuffic (Netherlands Organisation for International Cooperation in Higher Education) funding, which was accessed by PK and PU with the assistance of the PROLINNOVA International Secretariat at ETC. IST members from ETC also served as the principal PID trainer, in each case with co-trainers from the host countries. In some countries such as Ethiopia, where the value of local innovation was already widely known but constrained by funding (Wettasinha et al., 2015⁹), larger numbers of staff attended the training.

3.4.5 Challenges and constraints related to staff training

Funding was reported as the main constraint where the target was not achieved. However, there was a budget for training within the project and Nuffic funding was sought to augment that.

3.5 Increasing insights and awareness on relevance and effectiveness of PID through sharing and learning

3.5.1 Planned activities and targets

The four main activities that were intended to address the above objective were:

- a. The formation of PROLINNOVA multistakeholder partnerships,
- b. Country-wide dissemination of findings and lessons of farmer innovation,
- c. International dissemination of findings and lessons of farmer innovation, and
- d. Sharing progress during the annual International Partners Workshops (IPWs).

The associated targets were:

- Key national agriculture and NRM organisations actively involved in the project and informed on progress and findings,
- Dissemination strategy implemented and at least six (6) examples of successful local innovation and two (2) of farmer-led innovation,
- Regular flow of e-messages on farmer innovations through the PROLINNOVA listserver and other relevant listservers,
- One annual report per country.

⁹ Wettasinha C, Waters-Bayer A, Amanuel A, Kamau G, Hailu A, Righa M & van Veldhuizen L. 2015. Facilitating extensionists to learn by doing in promoting local innovation. 22nd European Seminar on Extension and Education, 28 April–1 May, Wageningen, Netherlands.

3.5.2 Project outputs against targets

Each of the four CPs has a CLIC-SR NSC, comprising between four and eight organisations. PE and PT had the highest number of partners, which were also diverse – eight each. PT was the only CP working with more than 1 research organisation while PE was the only CP working with educational institutes (2). PU and PT partnered with local government structures. In addition, each CP established sub-national project structures. Further details on the multiple-level country structures are discussed below:

- a. *National Steering Committee:* Each CP has an NSC comprising NGOs and the agricultural extension department as process and content specialists, and research institutions as content specialists. Only PT's NSC has a farmer representative (who is also the Deputy Chairperson). Each NSC was responsible for project planning, implementation and accountability. Certain roles were distributed between some members of the Steering Committee. For example, in PT, Participatory Ecological Land Use Management Association (PELUM) is responsible for national matters while INADES-Tanzania is responsible for the implementation of local and sub-national regional activities as well as for financial management and accountability. In PK, World Neighbors is responsible for financial accountability and programmatic oversight while Kenya Agricultural and Livestock Research Organisation (KALRO) is responsible for monitoring and evaluation. Network for Eco-Farming in Africa (NECOFA) and INADES-Kenya are responsible for awareness raising and information dissemination. Each of the four countries has two implementing partners that have a strong presence in the areas where joint experimentation is taking place (e.g. Kulika in Uganda). Each NSC had a coordinator, most of whom were hired, except in Tanzania where a manager from the coordinating organisation was allocated the role. In Uganda, the Director of the coordinating organisation served as the coordinator when the project coordinator resigned.
- b. *Sub-national structures:* PT was the only country with a sub-national regional structure that occupies the space between a national and local structure. Evaluation participants in PT indicated that the main logic for having such a structure is to replicate the national structure at a lower level where all the three main partners (farmer innovators, extension workers and development facilitators, and researchers) are found. In most cases, some districts and counties – where local structures are found – do not have researchers and research institutes. In addition, the regional structure was established as an acknowledgement that PT was not covering the whole country yet. All the CPs established local structures at district level and their composition tends to vary between and even within countries. Farmer innovators are present in all local structures, but researchers and even extension workers are not always part of them. It is worth noting that, in Ethiopia, farmers who are also Members of Parliament (and therefore serve a policymaking role) form part of the local structures. In Kenya, in the Baringo area, representation in the local structure is broader and was determined by farmer innovators in the area. It comprises stakeholder groups and is dominated by farmers: 8 farmer representatives from two local areas, 1 Ministry of Agriculture representative from extension, 1 KALRO representative, 2 local chiefs from the two local areas, and 1 NGO, which is a project implementing partner. Local structures are sometimes called Local Steering Committees (LSCs).

The national and sub-national structures held periodic meetings and shared findings and issues emerging from the project.

All the CPs produced dissemination strategies, and jointly exceeded the targeted number of farmer innovation to disseminate (29 instead of 24). All the CPs used the Eastern African Farmer Innovation Fair in 2013 and annual International Farmer Innovation Days (IFIDs) as the major strategy for disseminating documented farmer innovations. In addition, radio programmes were used in Uganda, newspapers were used in Kenya and booklets were published and distributed in Ethiopia. Farmers in the same neighbourhood – such as those in Machakos – learnt through look-and-learn visits and through local meetings. The flow of information at international level was partly achieved through the creation and use of the newly created CLIC-SR Yahoo Group, which is poorly used, and mainly through the already existing PROLINNOVA Yahoo Group (355 messages in 2012, 346 in 2013, 256 in 2014, 211 in 2015 and 36 thus far in 2016). In addition, CLIC-SR reports were posted on the PROLINNOVA website.

The annual CLIC-SR meetings that were organised back-to-back with the IPWs were attended by representatives from all four CPs and 2–3 IST members. They reflected on the preceding year, discussed various content/administrative issues, shared experiences and planned for the year ahead. In addition, they shared with the larger network during the IPW. The IST produced three synthesised annual reports.

3.5.3 Outcomes that arose from multistakeholder partnerships and dissemination of project insights on PID

The main value of the national and sub-national structures is to enable the implementation of the project and to learn from it. The composition of the structures also reflected the spirit of the project, which was to bring together plural ways of knowing and innovation, based on local needs and innovation, to help communities to adapt to change. While the annual CLIC-SR partner meetings were used to share findings and learning between the participating CPs and IST, it was also a space where further learning and insights were generated (Table 3).

Table 3: Evidence that CLIC-SR Annual Meetings generated lessons and insight from and for the project

Source document	Lessons learnt
2013 Annual Meeting	<ul style="list-style-type: none"> • Identifying farmer innovation is not a one-off process • A shared conceptual understanding of innovation is necessary in a farmer-led innovation project • There are different types of innovations (technical and socio-institutional), and both/all ought to be sought out • Innovative farmers are seldom recognised for their contributions even though their work has potential to improve communities and livelihoods • Local councils are an important site for policy/by-law influence: this meant district council in Tanzania and sub-county council in Uganda • There are two kinds of innovations that are needed for policy influence: (i) impact on people’s livelihoods, and (ii) impact on relationships and attitudes
2014 Annual Meeting	<ul style="list-style-type: none"> • Mainstreaming PID is a slow process, which requires paying attention to both process and outcomes • PID interventions should be grounded/anchored or mainstreamed into the work of the partner organisations and IST members (for impact and sustainability) • PID calls for linkages between farmer innovation and science through joint experimentation and Local Innovation Support Funds • PID calls for building on the innovative work of farmers and addressing farmers’ questions, while also motivating researchers to take part in joint experimentation through addressing their research needs • Joint research needs to address the interests of both farmers (practical value) and researchers (new ideas for wider sharing, public good) • The level of funding required to support joint farmer-led innovation can vary from place to place. For example, in Kenya the joint millet experiment was allocated US\$3000 while Tanzania allocated US\$250 per joint experiment
2015 Annual Meeting	<ul style="list-style-type: none"> • Focused on the key questions that should be addressed when deciding on and doing farmer-led joint experimentation and these were identified as follows: <ul style="list-style-type: none"> ✓ What is the farmers’ motivation, interest and questions that should be addressed and what do the farmers need or want from the results, i.e., the practical value? ✓ How should the cases be selected, and what should the decision-making process be regarding the design of the joint experiment and its documentation? ✓ How, by whom and in response to what change was the farmer innovation developed (acknowledgement of the farmer innovation)? ✓ How will the different actors participate in the joint experimentation (male and female farmers, youth, extensionists and researchers) and how will the process empower farmers, especially women? ✓ Who pays for what expenses in the joint experimentation and what are the incentives for farmers and support agents? and ✓ What was the process and what were the results of joint experimentation?

There is strong evidence to suggest that the lessons that were shared in 2013 and 2014 have been implemented in the CPs. For example, the central importance of the local council in terms of policy and practice influence has been demonstrated by including them in the Local Steering Committees and local PID processes. PK’s Baringo LSC demonstrates this, and so does the involvement of the local district authority in Tanzania. The participation of Village Party Leader and Village Government Leader in the Tanzania evaluation visit further demonstrates the institutionalisation of this idea. This means that the strategy for influencing local policymakers lies in working with them and in helping them see the evidence on the ground for themselves – and not necessarily in the production of policy briefs.

Evidence of the incorporation of the 2015 insights will best be inferred from the contents of the eight farmer-led joint research reports that are yet to be shared. An analysis of two draft reports from PT shows that most but not all of the questions have been addressed (in the reports). It is very likely that there is a time lag between the time that a lesson is learnt, and is implemented.

The main value of disseminating farmer innovations locally was that it increased the abilities of farmers to adjust to changes while improving their livelihoods. For example, one farmer in Machakos who participated in the evaluation integrated various innovations from the local area and increased her production, productivity and income generation. Her water-harvesting design added another form of harvesting: sand for construction purposes, she used water harvested to develop an orchard and fertiliser from a mix of cattle manure and rock badger droppings. In Tanzania, giving recognition to farmer innovation and farmer innovators' experience in PID processes had increased women's capacity to speak for themselves and to demand accountability from local government officials and development agents. Disseminating farmer innovations at national and regional level had the effect of increasing the policymakers' interest in farmer innovations and of potentially increasing PID credibility and value.

3.5.4 Enablers of multistakeholder partnerships and dissemination of PID insights

The main enablers of the formation of PROLINNOVA multistakeholder partnerships were: the relationships that had existed between the coordinating organisations and the partner and implementing organisations prior to the project; the interests and experiences of individual actors and leaders in some of the institutions; and the provision of funds for holding meetings, which are important for trust building. The sharing of roles and responsibilities between and among the partners also enabled the effective functioning of the partnerships. In PK, rotating the network coordination role appears to have been another enabler. The high number of research organisations participating in PT potentially explains why the CP has already drafted reports on their five farmer-led joint experiments (i.e. reached an advanced stage of documentation). The use of the local language – Kiswahili – during project meetings and in conducting the joint experiments also appears to create a conducive collaborative environment as it empowers farmers to share their thoughts clearly.

The main enablers of the achievement of sharing PID findings and lessons at local level were farmer and LSC meetings, which enabled farmers to learn from farmer innovators in their respective districts and counties. Farmer innovators were also able to learn from fellow farmer innovators through the same interactions. For example, the water-harvesting farmer innovator in Machakos adopted the finger millet nursery innovation at two levels: process and principle. In terms of process, he established a nursery and transplanted the seedlings when the rains had come about a month later, thus benefiting from the first rains. And when he had no water to do a nursery, he still grew finger millet by applying the principle of taking advantage of the first rains. In Dodoma, the innovative women farmer group spread its innovation through drama and dance, and influenced the formation of about 35 similar groups – leading to the scaling up of the socio-institutional innovation. The group learnt from others through exchange visits. The LISF was important for enabling farmer-to-farmer interactions. The enablers of country- and regional-level sharing of PID findings and lessons were the Farmer Innovation Fairs, where farmer innovators participated. The growing government interest in innovations in the context of climate change and related challenges also enabled the sharing of findings and lessons. Information and Communication Technologies (ICT), especially Yahoo Groups and websites, were another key enabler regarding the dissemination of project work.

3.5.5 Challenges to do with multistakeholder partnerships and dissemination of PID insights

The main challenge of the multistakeholder partnerships appears to have been the general lack of national-level farmer associations that have a strong interest in farmer-led research and that can provide the necessary political weight and support towards structural and policy changes at national level. The CPs have generally done well in ensuring farmer representation in the NSCs (although this is not highlighted in the institutional arrangements). In Tanzania, where the Network of Small Scale Farmer Groups in Tanzania (MWIWATA) has a long history of organising smallholder farmers on production, marketing and policy influence, the farmer representative is a Deputy Chairperson of the NSC. Prospects to get representation of a national farmer innovation organisation in PK's NSC are increasing as some farmers are in the process of establishing a national farmer innovator association. The Kenyan farmer innovators who attended the Eastern African Farmer Innovation Fair in 2013 took the initiative to form the association in a country where the national farmer association is dominated by commercial farmers.

Two main challenges were identified as obstacles to the effective dissemination of farmer innovation findings and lessons. Within the countries, the major constraint was funding to cover farmer-to-farmer look-and-learn visits. The challenge of sharing findings and lessons between countries and more widely internationally was associated with timely and targeted documentation. For example, the delay in the writing up of farmer-led joint experimentation has delayed dissemination.

3.6 Mainstream PID in national and international policies and programmes related to agricultural development, NRM and climate change adaptation

3.6.1 Planned activities and targets

The two main activities under this objective were:

- a. Country-based policy dialogue, and
- b. International policy dialogue.

The associated targets were:

- Inputs into selected policy processes based on evidence created under documented farmer innovations and farmer-led joint experimentation and through country alliances/ platforms, and one (1) profile event organised by country partners and associated report per country, and
- Contributions to international discussions through e-based and face-to-face dialogue.

3.6.2 Project outputs against targets

Each of the CPs made significant progress towards the production of evidence to shape selected policies and policy processes. Each CP identified and reviewed relevant policies first, and then conducted policy-dialogue meetings during which each CP highlighted where/how PID could be factored in. The specific actions that were taken by the CPs and IST in this regard are:

- PE conducted 5 policy dialogue meetings and developed a policy brief on LISFs to inform local policy dialogue. It also held one public lecture on local innovation for 100 high-level policymakers and academics,
- PK held 2 local policy workshops strategising with 25 farmers, researchers and extensionists/NGO facilitators, which culminated in the production of a draft policy brief. It engaged policymakers during the Eastern African Farmer Innovation Fair, while farmer innovators dialogued with

agricultural administrative officers during celebrations of the International Year of Family Farming (IYFF),

- PT identified areas where national ARD, biodiversity and NRM policies could benefit from PID and used the National Agriculture Farmers' Day to stimulate dialogue between farmers, researchers and policy makers,
- PU presented on opportunities for mainstreaming PID during a policy-dialogue meeting that was hosted by the Uganda Forum for Agricultural Advisory Services. It later held a consultation meeting on indicative policy issues on agricultural extension that was attended by 24 local innovators and partner staff, and
- IST produced a paper entitled: *"Changes, constraints and opportunities in influencing policy to become more favourable for farmer-led participatory approaches"* based on the policy-influencing review reports of the four CPs.

There were no specific targets from international policy dialogue and it is therefore hard to tell whether the project performed well. Below are some of the key achievements:

- Production and dissemination of project reports and papers by CPs and IST. These include three papers (i) Enhancing knowledge-to-action linkages in Agricultural Innovation Systems in Eastern and Western Africa, and (ii) Multistakeholder partnerships that promote farmer-led innovation, and (iii) Changes, constraints and opportunities in influencing policy to become more favourable for farmer-led participatory approaches,
- Attending about 25 international policy meetings and presenting on PID and LISF based on project experiences and insights and advocating for farmer-led joint innovation and adaptation in agriculture and NRM, and
- Collaborating with similar projects and like-minded organisations in Africa and internationally. These include and are not limited to partnering with the CGIAR's Climate Change, Agriculture and Food Security (CCAFS) on enhancing knowledge-to-action linkages in Agricultural Innovation Systems (AIS); and CCAFS Social Learning Linking Knowledge with Action involving Prolinnova-Kenya and PROFEIS¹⁰ Senegal.

3.6.3 Outcomes of policy-dialogue processes in relation to mainstreaming PID

The mainstreaming of PID in national programmes appears to be taking place in some of the agricultural research institutions which have directly engaged with PID and are involved in farmer-led joint experimentation. In Tanzania, this was evidenced by the active involvement of the Livestock Research Institute (TALIRI) in the research as well as in the evaluation. The Director of the TALIRI who, attended the evaluation meeting, remarked that his institute was finding the PID process helpful in increasing the relevance of research conducted by scientists. The evaluation identified the following pathways to the mainstreaming of PID in the four countries:

- Integration of PID into agricultural and livestock research institutes' work plans and on their research agenda – notably NARO in Uganda, TALIRI in Tanzania and KALRO in Kenya. For example, TALIRI is conducting further experiments with fish meal as livestock feed. Scientists in Ethiopia have developed interest in farmer-led research and joint experimentation;

¹⁰ PROFEIS: Promoting Farmer Experimentation and Innovation in the Sahel, the title that some of the francophone Prolinnova CPs gave themselves.

- Inclusion of PID in district council plans and activities where the project was implemented. The districts include Machakos (Kenya), Chamwino (Tanzania) and Nakasongola (Uganda);
- Infusion of PID into the national agricultural extension system, which took place in Ethiopia where farmer innovations have become part of the demonstration plots in Farmer Training Centres;
- Increased recognition and promotion of farmer innovators and innovations by Civil Society Organisations (CSO) in the four countries;
- Inspired the development of the Farmer-Led Innovators Association of Kenya (FALIA-K);
- Mainstreaming of the concept of innovation and farmer innovation in media discourse in place of and in addition to agricultural research and technology development in the four countries; and
- Incorporation of the results of some of the programme (the egg selection process) into poultry industry in Ethiopia.

The value of international policy influence was that it put or supported the PID agenda on international forums for possible scaling up. Engagement with organisations such as the CGIAR, which is international, has potential to influence how agricultural research is conducted in formal agricultural research institutions also at national level. This will become even more feasible when results from joint experiments in which agricultural researchers are involved demonstrate the value of PID in enabling communities to develop new ways of dealing with disruptive changes.

3.6.4 Enablers of policy-dialogue processes

The enablers of the country-based policy-dialogue processes were the existing relevant policies that were used for the identification of spaces for influence. Another major enabler was the countries' devolution policies (e.g. Kenya and Uganda), which enabled counties and districts to make some decisions locally. Evaluation participants pointed out that it is easier to influence local by-laws than national policies, as bureaucracy is heavy at national level. In Ethiopia, where farmers are also Members of Parliament in local and regional (sub-national) government decision-making structures, policy influence was made easier. In Tanzania, the active participation of local government in the project (and one of them participated in the evaluation over two days) provided a rare and strategic opportunity for trust building and policy influence at local level.

The main enablers of international policy-influencing work by the project were the relevant international events that it was able to take advantage of. PROLINNOVA's international presence, history and reputation also enabled it to create or be offered space to contribute to policy discussions at international level. Underpinning this enabler is PROLINNOVA's ability to work with different knowledge systems, which is informed by an appreciation of plural ways of knowing and linked to an understanding that today's complex and wicked problems require collaboration between multiple actors.

The evaluation found it difficult to identify constraints, especially given that the activity appears to have been done adequately and there is no target against which to judge performance. However, it is very likely that, if the results of farmer-led joint experiments were documented and shared, the content and kind of policy influence would have been different.

3.6.5 Challenges and constraints concerning mainstreaming of PID in programmes and policies

The main challenge to do with policy influence for the mainstreaming of PID was that it required documentation and dissemination of evidence generated through joint experimentation (in addition to documented farmer innovations). Even though there are far more cases of farmer-led joint experiments than planned for, their documentation had not been completed, and therefore the experience has not been used to support PID using different knowledge systems in order to strengthen community resilience. The PROLINNOVA International Support Team (IST, 2013, p. 2¹¹) analysed challenges and constraints to influence policy to become more favourable to PID, based on the four CPs' contributions, and identified seven constraints, including the following five:

- a. Lack of well-researched, articulated and convincing evidence to justify policy change,
- b. Negative perceptions of farmer innovators and innovation among some policymakers, which is worsened by poor documentation and demonstration of benefits,
- c. Limited technical capacity to do policy-influencing work and lack of legitimacy, especially in cases where farmer representation and the associated political capital are missing,
- d. The time that it takes to do the rigorous data collection and analysis to meet scientific requirements and satisfy policymakers and participate in numerous rounds of stakeholder consultations and reflections, and
- e. Inadequate financial resources for ensuring participation throughout the long processes of policy influence.

A close analysis of the Discussion Paper Based in Policy Influencing Experiences in the Four [CPs] Eastern Africa Countries (2013) suggests that one of the major limitations is that the inability to tap into the different knowledge and experience of the multistakeholder partnership (MSP) members undermines policy influence. This was partly attributed to uneven power relations within the partnerships, and competing and conflicting interests. This could also be partly explained by the limited participation of advocacy organisations in the partnerships, which is why farmer movements that have political capital are necessary to include. The discussion paper also underlines hard evidence as the missing link between PID practice and policy influence in the region. Soft evidence was recognised as insufficient to influence national policy – although it seems useful for influencing policymakers at local level.

3.7 Project coordination and management

3.7.1 Planned activities and targets

There were two main activities under the project coordination and management objectives, and these were:

- a. Management and monitoring of country-level activities, and
- b. Overall management and monitoring and evaluation (M&E).

The two sets of associated targets were:

- Two baseline studies and reports (one per district), one annual and one financial report per country, and efficient management of project activities and partnerships through clear planning, budgeting, M&E and reporting, and

¹¹ Prolinnova IST. (2013). Challenges, constraints and opportunities in influencing policy to become more favourable for farmer-led participatory approaches: Discussion paper based on policy influencing experiences in eastern African countries. Unpublished. Leusden: Prolinnova IST.

- Smooth and regular flow of planning, budgeting and reporting cycles, increased capacities of CP staff involved to strategise, implement, monitor and evaluate projects, development and implementation of mutually agreed internal M&E framework, and three annual coordination meetings and associated reports.

3.7.2 Project outputs against targets

Efficiency in achieving the second target was periodically disrupted by the resignation of coordinators in three of the four CPs, and by work overload in the case of the fourth CP, which did not employ a coordinator but engaged a senior staff member in the coordinating organisation to do the work part-time. These disruptions and delays partly explain why there was a one-year no-cost extension.

The overall coordination targets were reasonably well achieved through:

- Finalising and signing cooperation agreements with 4 CPs, the coordination of overall reporting by IST and the holding of annual review and planning meetings,
- The preparation, sharing, improvement and subsequent use of the M&E framework that was developed by IIRR, the International Secretariat and CLIC-SR partners,
- The development of result indicators for the project by CLIC-SR partners and IST,
- Five IST backstopping visits to CLIC-SR partners, and
- The successful holding of and reporting on 4 annual coordination meetings involving the CPs and IST.

3.7.3 Outcomes of project management, monitoring and evaluation

The main value of project management, monitoring and evaluation resided in keeping track of the entire project at district, national and international levels. It also enabled joint learning at multiple levels, and the sharing of these lessons to improve the project and its potential impact. There was cross-fertilisation of ideas during local, national, regional and international interactions, which was important for increasing the practical value of the project to the beneficiary communities. One example of joint learning occurred through the adoption of one farmer innovation that originated in Kenya for experimentation by farmers in Ethiopia. At another level, the overall management function also helped ensure project coherence. The value that the project implicitly intended to create and has only partly achieved is the institutionalisation of inter-CP collaboration in eastern Africa. This was intended to increase the scaling-up and -out potential of the project, and therefore its reach and impact. The idea of establishing an inter-country regional structure was discussed at one of the IPWs but is still to be realised. At another level, M&E helped NSCs to assess and adjust their MSPs, as van Veldhuizen, Waters-Bayer and Wettasinha (2015, p. 24¹²) highlight:

IIRR developed together with the CP coordinators some M&E tools for PROLINNOVA activities and for MSPs, and gave M&E training ... The NSC of PROLINNOVA -Kenya monitored programme activities and the coordination frequently and even changed the host organisation when it noticed that the MSP was not functioning. Unfortunately, this did not happen in the case of PROLINNOVA -Uganda in recent years.

¹² van Veldhuizen, L., Waters-Bayer, A. & Wettasinha, C. (2015). Understanding how multistakeholder partnerships work: Prolinnova experiences in East Africa. Prolinnova Working Paper 36. Leusden: Prolinnova International Secretariat.

3.7.4 Enablers of project management, monitoring and evaluation

Within CPs, the main enabler of effective project cycle management was division of labour among lead partners in the project. Coordinating organisations that performed well had robust programming and accountability systems, necessary capacities to implement the systems and a tradition of accountability. The passionate perseverance of some individuals in each of the CPs has been one of the major project enablers. Good relationships with partners, especially with research organisations or researchers, and with local government, agricultural extension workers and farmers enabled collaborative work. Technical backstopping by the IST, though limited in terms of on-the-ground face-to-face because of limited funding, was also identified as a key enabler, and so was the development and socialisation of the M&E system.

The enablers of the overall management and M&E support from the IST were the tools and frameworks that were developed, adapted and adopted for use in the project. These frameworks include and were not limited to the MoU, M&E reporting framework, and guidelines for the review of experiences in trying to influence and change policy in favour of farmer-led participatory approaches.

3.7.5 Challenges and constraints concerning project management, monitoring and evaluation

Project management, monitoring and evaluation at country level were constrained by loss of coordinators and other key staff working in partner organisations. In addition, the M&E framework that was drafted by IIRR took long to be adapted for use in the project, which delayed its application. The main constraint to overall coordination, monitoring and evaluation was the lack of dedicated funding for supporting learning-oriented M&E visits. The IST had to piggyback on events or visits paid to other projects in order to carry out such M&E visits, which were inadequate. Another challenge that was highlighted by PU in its 2015 annual report is that *“the M&E tool has been too complex, making it hard to involve farmers in participatory monitoring of the project.”*

But perhaps one of the most important insights about monitoring and evaluating a research and learning oriented project such as the CLIC-SR project was the need for a critical awareness to the emergent, and not just the anticipated and pre-determined changes and effects arising from the intervention. This insight arose when the evaluation posed questions that helped reveal some of the changes caused by the project and not mentioned in CP reports. In addition, a more careful analysis of some of the literature to which PROLINNOVA has contributed, suggests that impact of multistakeholder or partnership-based agricultural research should be sought in several sites, especially in the areas of: (i) producing new knowledge, (ii) resolving practical problems faced by stakeholders, and (iii) building the relationships and capacities of stakeholders for increased autonomy and self-sufficiency¹³.

¹³ Fraure, G., Gasselin, P., Triomphe, B. Temple, L. & Hodcé, H. (Eds.) (2014). *Innovating with rural stakeholders in the developing world: Action research in partnership*. Wageningen: CTA.

Section 4: Conclusions

4.1 Introduction

The evaluation conclusions address the evaluation's 'specific areas of attention' as spelt out in the Terms of Reference, and these are:

1. The type and level of understanding developed through the project of community resilience and community perceptions in the project areas of major current changes including climate change, and their responses to such changes.
2. Ways and forms in which the project has created links and interactions between local adaptation and innovation efforts, on the one hand, and actors in formal ARD, on the other hand, for mutual benefit.
3. Farmer-level practices, technologies and/or innovation development approaches and methods that have emerged from the project with a potential for out- and up-scaling? How has the project encouraged such out- and up-scaling, including the mainstreaming of "community resilience" thinking within ARD policy and practice at chosen levels?
4. The functioning of the partnership among organisations involved in the project and the wider PROLINNOVA network, both at the level of each country and internationally.

4.2 Types of knowledge and understanding developed through the project

The project enabled four major types of learning:

- Learning about the context, which described the motive or the why of PID,
- Learning about PID, which addressed how PID could be done to cover issues being experienced in the context,
- Learning in and through farmer-led joint experimentation, building on local farmer creativity and innovation (PID) to deal with adversity, and
- Learning through implementing and integrating innovations.

4.2.1 Learning about contextual issues, focusing on global changes

Farmers, farmer innovators and staff from participating organisations learnt about global changes concerned with climate change and the resultant effects on local temperatures and rainfall. They also learnt about ecosystem degradation and its bearing on food security and livelihoods of local and global populations as well as about unemployment and rural-urban migrations, increasing unemployment in urban areas and increasing rural-urban migration. The main point about global changes was that most of them were caused by people and could also be solved by them. Global changes have longstanding root causes and these need to be addressed at all levels in communities. In addition, they also learnt about the different actors and systems that had an effect on the context. Among these actors were policymakers, academics, researchers, local innovators and entrepreneurs.

They also learnt that different knowledge systems and products, including farmer innovations, are an important part of the solution to the social-ecological challenges being faced globally and locally. But for the innovations to benefit more people, they have to be recognised and promoted by decision-makers

and decision-making tools such as policies, by-laws and ordinances. They also learnt that increased community capacities to tackle global challenges increase community resilience and adaptive capacities.

4.2.2 Learning about a collective learning and innovation process to tackle difficult problems arising from global changes

The project shared knowledge about how complex and wicked problems associated with global changes could be solved and/or resolved through PID, which combines local innovative capacities with scientific research, that is, local knowledge and creativity with the rigour of formal research. This learning was essentially about a methodology of joint learning and innovation that acknowledges and builds on local knowledge and resources. This approach is associated with post-normal science and combines citizen science with formal science, community learning with formal learning, community innovation with formal scientific innovation. PID's interest goes beyond addressing academic questions and has a strong interest in creating practical value and causing broad and deep impact. This is achieved through scaling out and up. This kind of learning provided the conceptual framework and guidelines for the farmer-led joint experimentation that took place in and through the project.

4.2.3 Learning about existing local innovation and through jointly experimenting and scaling

There were four levels of learning that emerged from implementing PID. At the beginning of the process, researchers learnt about how farmer innovators were creatively dealing with complex problems in their respective contexts. Many of the problems being tackled arose from global challenges such as unemployment in the case of women innovators, drought as exemplified by water harvesting, finger millet, feeding of emaciated cows with fishmeal soup, and ecosystem degradation as exemplified by use of rock badger manure. During the course of the joint experimentation, farmer innovators learnt about how experiments are conducted – the procedures – and many of them participated in taking measurements and monitoring developments. Through the procedures and the analysis, both the farmer innovators and the scientists learnt about how the innovation works. The fourth level of learning occurred when farmers learnt about and implemented the innovation in their different contexts or in the same context but under different circumstances. While replication entailed implementing the proven innovation procedures and processes (scaling out), there were instances in which diversified scaling was done using the principle that lies in the innovation, which explained why the innovation works. For example, one farmer in Machakos who developed the finger millet nursery innovation applied it to other crops such as watermelons and butternuts, which yielded high returns. And when there was a drought and one farmer had no water to establish a finger millet nursery, he still planted the crop and used the first rains. This appears to illustrate not just an understanding of the process of the innovation, but also of the principle behind it (making the most of rainfall and water available).

4.2.4 Learning through adjusting and integrating innovations in real-life situations

One of the changes that have happened from implementation of innovations is an increase in both production and productivity, which in turn has increased food security and income generation and therefore, household- and group-level resilience. The women group's social innovation expanded the women's freedom and therefore capabilities to do business and travel to far-away places, thus increasing their markets and range of economic activities, resulting in economic resilience. It has influenced other women to form similar groups (over 35 of them), which now have the capacity to demand village leaders' accountability in their respective villages (e.g. by accounting for budgets and explaining project progress), resulting in localised and yet critical improvements in governance. Women

are being taken seriously and their views are respected. Scaling innovations was also reported to have increased social resilience through solidarity among farmers, collective decision-making and working in partnership with extension workers and research scientists. Some innovations were reported to have spread across cultures and tribes that had historically fought each other.



Figure 3: The picture of the right shows how a water-harvesting pit was adjusted by a woman farmer in Machakos who adopted it, covering it for safety and to reduce evaporation

4.3 Relationship and attitudinal changes between local innovators and agricultural researchers

4.3.1 The value, status and self-esteem of local innovators and innovation has improved through joint experimentation

Farmer-led joint innovation has resulted in the recognition and validation of the innovative capacities of smallholder farmers. Their creativity was utilised to increase the communities' capacities to adapt to degraded lands, climate change and harsh economic conditions, as well as to advance the interests and tackle the needs of marginalised groups, including women. Consequently, confidence in farmer knowledge and innovations was developed among research partners in the project. This has empowered the farmers – especially women – and increased “morale and self-esteem”, as pointed out by one interviewee. In this connection, a farmer innovator in Tanzania who has been participating in joint experimentation said, *“We can now research and get the facts. We can measure, quantify and explain things in numbers. We are no longer afraid of working together with learned people.”*

4.3.2 Researchers see farmers as key partners in tackling site-specific problematic issues

Researchers who took part in the evaluation pointed out that their relationship with farmers is working better as a result of listening to farmer issues, and building on what farmers are already doing, as opposed to developing and implementing site-specific solutions from their research stations. Innovative farmers who have taken part in joint experimentation have developed more positive attitudes towards researchers because they have worked with them and understand how they operate. For example, a scientist who is the director of a national research institute took part in a joint experiment on using fishmeal soup as animal feed. He remarked, *“Farmers have a lot to teach us. They know a lot of things but are just sometimes not confident to explain them. They can give scientists work to do.”* It looks like

the major site where PID mainstreaming and structural change is likely going to be is in research institutes.

4.4 Farmer-level innovations, practices and approaches with potential for scaling

The evaluation established three main answers to this question, based on project experiences. These are discussed in the next two paragraphs.

4.4.1 All innovations have potential to be scaled

Firstly, the evaluation established that nearly all the farmer innovations that have been documented can be scaled, and especially into similar contexts. Secondly, it established that scaling into different contexts makes it necessary to identify the process and/or principle that makes it work. For example, feeding fishmeal soup to emaciated cattle so that they gain weight and generate income in a shorter space of time for both ecological and economic resilience would work in contexts where fishmeal is easily accessible and affordable. But when the innovation is applied in dry inland countries where fishmeal soup is likely to be expensive or hard to find, the principle of using fatty acid in animal protein becomes the essence or germ cell of the innovation that should be scaled out.

4.4.2 Innovations should be scaled out in ‘bundles’ if they are to have a lasting impact

When innovations are scaled out, they should be accompanied by other innovations and will not sustainably work in isolation. In this regard, it appears more effective and strategic to work with the concept or approach of *bundle of innovations along value chains and within specific contexts*. For example, the innovation in sexing of chicken eggs needs to be accompanied by marketing-related innovations, the beehive innovation needs to be accompanied by honey processing and marketing innovations; and the socio-institutional innovation by Raia Makini women in Dodoma needed and was accompanied by other social and technical improvements and innovations. In Moyo, Uganda, after reducing the time that it takes for bees to colonise hives, innovative farmers have moved on to drying mango peelings to supplement feed for bees during the dry season when wild fires destroy plants on which bees depend for food. And later, in response to abundant honey production, they have processed the honey to produce medicines that treat fungal and other infections – working in partnership with Moyo General Hospital. The non-regulation of the prices of agricultural commodities in the same district, where production is no longer an issue, has given rise to the need for collective marketing and bargaining capacities among the farmers towards social and economic justice.

4.5 Functionality of project partnerships

4.5.1 Project partnerships are functional but facing some challenges

The CLIC-SR project partnerships in the project have generally worked well as they have built on the already existing partnerships within the respective CPs. The partnerships are working at the level of technical, horizontal scaling out and not yet effective at political scaling up, partly because the evidence for policy influence at national level has not yet been gathered. The main challenges that they have

faced are to do with staff turnover, which has happened in PE, PK and PU, as Wettasinha *et al.* (2015, p. 11¹⁴) note:

In most of the PID cases in Ethiopia and Kenya, NGO extensionists facilitated the process. However, before the process could be brought to some level of completeness, the NGO project sometimes came to an end or the passionate extensionists facilitating the process were transferred to another post, and it was often difficult to find others who were equally knowledgeable on the topic and keen to be involved in the PID... It might be possible to have more continuity in supporting farmer-led PID if a central body were coordinating such activities.

A recent self-assessment into what makes CPs function well revealed that it is “the leadership and commitment of the host organisation and the NSC and their ability to find a capable coordinator. Handling the diverse motivations and interests of the partners is a balancing act that requires sensitivity and moderation skills,” (Quiroga, Waters-Bayer & PK, 2016, p. 3¹⁵). The same CP self-assessment suggested that one of the main challenges in the MSPs is to do with involving formal researchers, especially in Kenya. However, the situation that obtained in Tanzania at the time of the evaluation suggested that formal researchers and research institutes are active partners.

During the time of the evaluation, all the NSCs were generally functional, although there were indications that the frequency of NSC meetings was less often than necessary. The loss of the coordinator in PU and the heavy workload of the part-time coordinator in PT seemed to be compromising the efficiency and effectiveness of the CPs. Having said that, it is important to note that the partnerships in the CLIC-SR have fed their experiences into the broader PROLINNOVA network through reports, meetings and other joint events. But more of this will happen if the project continues into the future and adequate experience is gained and documented. The empirical evidence will also provide the necessary material for advocacy and lobbying for farmer-led research to tackle some of the global changes.

Local- PROLINNOVA group development is generally less developed than national level because LSCs were established after NSCs. But the speed of group development is likely to be faster given proximity and the frequency of interest and greater ‘sense of place’ that is likely to obtain at local level. A potential lesson that arises from the Machakos experience of a finger millet variety from a research station failing to perform as expected is that, when one body of knowledge challenges another, the trust and collaboration between the partners are negatively affected.

4.5.2 Using the group development theory analyse CLIC-SR project partnerships

Group development theory suggests that, after forming the partnerships, it was likely that a storming stage would be reached during which competition and conflict arise in connection with the distribution of power, resources, roles and responsibilities. This stage appears to have been passed in all national

¹⁴ Wettasinha C, Waters-Bayer A, Amanuel A, Kamau G, Hailu A, Righa M & van Veldhuizen L. 2015. Facilitating extensionists to learn by doing in promoting local innovation. 22nd European Seminar on Extension and Education, 28 April–1 May, Wageningen, Netherlands.

¹⁵ Quiroga Gilardoni, G., Waters-Bayer, A. & PK. (2016). Multistakeholder partnerships to promote farmer-led innovation. *Welt-Sichten Dossier*. Frankfurt.

partnerships of the project. The third stage, which all national partnerships have reached, is norming, which is characterised by clear and accepted roles and responsibilities, standards and norms and group cohesion. However, some local partnerships, such as the LSC in Machakos, where collaboration with the local research institute is being re-worked, have not yet reached this stage. The national partnerships seem to be operating at the post-storming stage – somewhere between norming and storming. There seems to be need for more time and resources for the groups to fully operate at the performing stage, which is characterised by high levels of synergies, buy-in and collective ownership of the goal, and the achievement of the objectives of the partnership. It is usually at the advanced level of this performance stage that partnerships or groups become better able to work with other groups – bringing and linking.

In their analysis of the development of PROLINNOVA MSPs using group development theory, Quiroga *et al.* (2016¹⁶) drew on the work of Critchley *et al.* (2006¹⁷) and Ssuuna *et al.* (2012¹⁸) to identify the following as critical features of a performing CP in the context of PROLINNOVA: collective ownership, openness and transparency, open nucleus and gradual growth, effective communication, capacity building for partnership management, good governance that includes the NSC and operational team, conflict management, documentation as a tool for co-learning, action-reflection based on practice, joint planning and M&E, and carefully matching partners' own interests with common agenda. This evaluation would add more aspects to two of the critical features that are italicised and in quotes:

- Documentation as a tool for co-learning and "*evidence generation to scale up (into policies, curricula and research agenda) and out (into diverse practices and activities in multiple contexts)*", and
- Joint planning and M&E "*experimentation, innovation, impact generation & accountability.*"

4.6 Conclusion

Given that the project's main focus was to strengthen the innovative capacity of farming communities, especially women, through PID to become more resilient to change, it is important to note that the CLIC-SR project:

- Strengthened the innovative farmers' confidence, self-belief and self-esteem through recognising and publicising their work and creating platforms for farmer innovators to show case their innovations and innovativeness;
- Enhanced farmer innovation through investigating their essence using the LISF, which was managed locally by farmers themselves based on local needs and priorities;
- Increased the farming communities' climate resilience through the documentation and sharing of farmer innovations, which farming communities in the eight districts adopted in 'bundles' to increase production and diversity of crops, including fruits. The bundle of innovations often included water harvesting, water conservation, soil improvement, nursery establishment ahead of the rainy season to take advantage of the first rains, and locally-adapted crop varieties;
- Empowered farmers to deal with market and income-related challenges and improve their livelihoods through diversifying income sources, increasing productivity and producing crops that were out of season. For example, income sources were diversified through the addition of honey

¹⁶ Quiroga Gilardoni, G., Waters-Bayer, A. & PK. (2016). Multistakeholder partnerships to promote farmer-led innovation. *Welt-Sichten Dossier*. Frankfurt.

¹⁷ Critchley W, Verburg M & van Veldhuizen L. 2006. *Facilitating multi-stakeholder partnerships*. Silang: IIRR.

¹⁸ Ssuuna J, Gonsalves J & van Veldhuizen L. 2012. *Making partnerships work*. Silang: IIRR.

production using innovations that reduced the beehive colonisation period in Uganda. Productivity of scarce crops included the use of harvested water, highly fertile rock badger droppings, and the functional scaling of the finger millet nursery to watermelon production that resulted in bumper harvests that fetched high prices in Kenya. In Ethiopia, the egg selection innovation to determine the sex of chicks (which originated in Kenya) was used to increase the production of the desired chicks and generate more income. In Tanzania, a group of farmer innovators recently ventured into sorghum and groundnut (drought-tolerant crops) seed production for income generation;

- Increased the asset base of farming communities, including women-headed households, through enabling them to invest income generated in buying productive resources. This is amply demonstrated by the Makini women group of innovators in agriculture who have used technical innovations to strengthen their institutional innovation and to build better houses, buy bicycles and motorbikes and pay fees for their children to attend secondary school; and
- Broadened the range of resources, knowledge, and products available to improve local adaptive capacity by mobilising the contributions of agricultural research institutes, district and county structures and agricultural extension departments.

Section 5: Recommendations

The recommendations being made here are organised into main sets of recommendations: one set focusing on the period between now and the end of the project; and the other set looking at the period beyond the end of the CLIC-SR project

5.1 Recommendations focusing on the remaining project period

The evaluation noted that most CP activities should be completed by the end of May, and synthesis of reports and compilation of policy briefs should be done by the end of August. The following recommendations are made with that reality in mind.

5.1.1 Each CP should accelerate and complete the documentation of two joint experiments by end of June 2016

The central idea of the CLIC-SR project was to combine local innovative capacities with scientific research through farmer-led joint experiments, their documentation and use for policy influence and scaling out. Each CP committed to documenting two case studies of joint experiments and, in order for this commitment to be achieved before the project ends, there is need to focus on two case studies and meet the commitment before the end of the no-cost extension period. With most countries working on more than two case studies, it is essential to now focus on the required number of cases and deliver on the promise. Completing the papers at the end of April will leave enough time for peer review before the end of May. The papers on the case studies should address all the areas of interest that the CPs agreed on during the 2015 Annual Meeting (see Table 3). The following reporting outline (Table 4), which builds on reflections that were done by project partners, could be considered for review and use.

Table 4: Rough outline for reporting on farmer-led joint experiments

Innovation component	Sub-components
1. Origin of innovation	a. Who developed the innovation b. Under what circumstances c. How did CLIC-SR get connected
2. Objectives of the innovation	a. Academic b. Practical
3. Methodology	a. Joint experimentation process b. Shared roles and contributions c. Facilities, tools and equipment etc d. Types of data sought/generated (experiment and control) e. Data analysis (in short)
4. Results and their explanations	a. Results in connection with the academic objective(s) b. Results in connection with the practical objective(s) c. Explanations for challenges and success d. Key conclusions
5. Caution/risk	a. What to consider or watch out for before or during the application of the experiment
6. Contribution to global change adaptation	a. Aspects of global change adaptation that the innovation addresses b. Aspects of community resilience that the innovation develops c. Other global changes that the innovation potentially tackles
7. Potential for scaling up/out	a. The process that is employed b. The principle or 'generative idea' that lies behind or underneath the innovation, which has potential for wider application in different contexts

5.1.2 Each CP should use the evidence generated from joint experiments to complete a policy document that addresses a related policy issue before the end of August 2016

One of the main outstanding commitments made under the project was to use evidence generated from farmer-led joint experiments to influence relevant policies and policy processes in the spirit of scaling up. In the spirit of accountability and impact creation, it is essential for the project partners to deliver on this promise within the remaining period of the project. Given the insights coming from the project, it may be more productive to focus some of the policy-influencing work at local levels where impact is more feasible in the short to medium term, with a view to scaling it up in the long term. On its part, the International Secretariat should provide the necessary technical backstopping.

5.1.3 Each CP should document the impact created through the project beyond the stated project outcomes before end of June 2016

Primary data-generation processes during the interview suggested that there was much more significant work and outcomes being done in and through the CLIC-SR project than the project reports tell. This observation was confirmed during field visits and was supported by project partners from outside the region who had held meetings and conversations with NSC members and coordinators. One of the reasons that was given for this ‘under-reporting’ was that many of the nuanced and important changes arising from the project are emergent and therefore not immediately obvious. Given this fact, and the need to articulate impact as part of acknowledging contribution to development, the evaluation recommends that each CPs gathers and documents evidence of the impact that the project has generated for sharing with other CPs and for informing the next strategic plan. The key guiding questions are: (a) What impact has the CLIC-SR project created? and (b) What evidence exists to support that this impact is there and was caused by the project?

5.1.4 Each CP and the IST should identify the most important insights from the CLIC-SR project for possible incorporation in the 2016-2020 Strategic Plan

Consistent with CLIC-SR partnership meeting practice and two of the features of a performing CP as already highlighted in the evaluation – documentation as a tool for co-learning and action-reflection based on practice – the evaluation recommends each CP to identify and articulate key insights from the project. The insights can feed into the Strategic Plan deliberations during the May 2016 strategic planning meeting. Some of the areas to seek insights on could be: multistakeholder partnerships in PID; farmer-led joint experiments, pathways for influencing policy at national and local levels; scaling farmer innovations across contexts; mainstreaming PID in programmes; and LISFs.

5.1.5 The IST should provide the necessary backstopping support to ensure achievement of project commitments by the end of the project period

As the project draws to an end, and some of the project activities have not yet been completed, it is necessary for the IST as the overall management structure to provide the necessary support to ensure that that the project delivers on its promises. This way, the IST would contribute to the acceleration of CP efforts to complete the remaining targets by end of May for most activities. Accomplishing the activities and targets within the agreed time frame is necessary because there will be no further no-cost (budget-neutral) extension. Such IST support could include physical visits to CPs to help the teams better appreciate some of the challenges and realities on the ground.

5.2 Recommendations beyond the project

The recommendations made under this sub-section are based on an appreciation that the project was part of the strategic plans and programmes of the PROLINNOVA network that seeks to scale participatory approaches to ARD based on local innovation processes.

5.2.1 CPs should consistently incorporate lessons learnt to ensure ongoing qualitative improvements

The analysis of CLIC-SR in particular and PROLINNOVA documents in general suggest that there has been considerable documentation of lesson learning and insights generation – conceptual capitalisation. This has been achieved in some of the annual partnership meetings and through joint papers, which have been cited in this evaluation report. The challenge has been that some of the important insights are not integrated into CP practices or institutionalised into MSPs. The evaluation therefore recommends the systematic pulling out of these lessons and their considered application within the CPs in particular and PROLINNOVA in general.

5.2.2 PROLINNOVA and its CPs should consider adopting a theory-of-change approach in their strategic plans and programmes

Put simply, theory of change refers to the mapping of a logical sequence of events that are intended to lead to a particular outcome; and based on critical thinking about the contextual conditions that influence the programme or plan, the motivations and contributions of the stakeholders and the different interpretations and assumptions about how and why that sequence of change might come about (Vogel, 2012, p. 9¹⁹). The main value of using the theory-of-change approach lies in its clear and robust attention to pathways of change in a manner that identifies and articulates the missing middle in most logical frameworks. An articulation of pathways of change leading to policy influence and changes to do with PID would help show the intermediate outcomes between the policy brief or high-profile meeting (the immediate outcome) and the long-term outcome of the policy change. This way, it is easier to tell and acknowledge progress towards impact. At the same time, the theory of change would enable CPs and the PROLINNOVA community in general to design and make use of different pathways that could lead to policy change. Some of the possible pathways in PID that would also have intermediate outcomes appear to be:

- ARD policy change at national level,
- Agricultural research agenda setting processes in public research institutes,
- Curricula review and recontextualisation,
- Innovation recognition and industrial standards that allow for farmer innovations to be valued by relevant bodies,
- Smallholder farmers and farmer innovators' capacity to self-organise and advocate, and
- Multistakeholder agricultural and NRM research partnerships.

5.2.3 CPs should draw on experiences and insights to make their NSCs and LSCs more effective

CPs should develop and agree on a basic structure that enables the effective functioning of national and local MSPs. Insights from the project suggest the advantage of having a dedicated coordinator who reports to the NSC chairperson periodically and works under the supervision/direction of an experienced/senior programme officer of the host organisation. In this regard, the CPs could build on

¹⁹ Vogel, I. (2012). Review of the use of 'Theory of Change' in international development: Review report. London: Department for International Development (DFID).

the insights highlighted in Quiroga, Waters-Bayer and PK (2016) to development guiding principles for MSPs in promoting farmer-led innovation, covering areas such as:

- Leadership and governance,
- Depth of partnerships and shared vision,
- Dealing with diversity and dissent,
- Linkages between local and national structures,
- Country-to-country linkages,
- Operational coordination and management,
- Documentation, monitoring, evaluating and developing partnerships, and
- Self-development, including development of partners lagging behind in some way.

5.2.4 CPs and the IST should consider exploring and working with the ‘bundles of innovations’ approach in scaling out innovations

One of the most important findings of this evaluation is that when farmers adopt innovations that last, they do so by combining several of them, often along a particular value chain. For example, a production innovation works better when it is subsequently accompanied by a value-addition or marketing innovation. At the same time, the evaluation suggests that socio-institutional innovations will last if accompanied by technical innovations or improvements, and vice versa. The evaluation’s recommendation in this regard is for CPs and the IST to test this conclusion and possibly use it to strengthen scale out strategies.

5.2.5 IST should consider integrating more specific targets for itself in future projects

The PROLINNOVA 2016-2020 draft strategy makes it clear that the IST plays specific roles in the network (often alongside other organs such as CPs). These are: fundraising, backstopping and coaching, capacity development, fund management, policy advocacy, M&E, strategy development, information dissemination and institutionalisation. It would be necessary to set related activities and targets for itself in relation to any of the above roles that are associated with each project. This would enable it to raise the necessary resources for the activities and to track its own progress.

5.2.6 The Rockefeller Foundation should consider extending its support to the CLIC-SR into the future in order to build on the decent achievements and progress made

The fruits of the project are beginning with the norming of CLIC-SR partnerships. But the partnerships are yet to move into the next stage of full performance, which is important for causing the kinds of changes that the project set out to achieve. Given this background, it appears necessary and strategic for the Rockefeller Foundation to support the CPs to continue with the intentions of the project, and to build on the momentum and achievements that have been made to date. The time that was available to do policy-influencing work was limited. Additional funding is necessary for enabling the IST to provide technical backstopping and periodic M&E that is learning and impact oriented. Some of the recommended areas for continued support are:

- Identification and documentation of farmer innovations in other districts in order to broaden the range and coverage of innovations, which increases the pool of ideas that smallholder farmers can use to adapt to change, while also generating more evidence for policy influence,

- Farmer-led joint experiments to confirm or challenge claims about the efficacy of farmer innovations, and to identify the processes and principles that enable them to work for more effective scaling,
- Local Innovation Support Funds (LISFs) to support farmer-led joint experiments in the current and new districts,
- Documentation of joint experiments and the production of journal papers, development features and policy briefs and manuals for influencing policy and practice,
- Mainstreaming of PID into local, national, regional government and international agriculture and NRM policies, agricultural research institutes, college curricula and industrial innovation standards.

6. Annexes

Annex 6.1: Summary of project outputs against targets

Objective 1: Strengthen the resilience to change of smallholder communities, especially women, by improving their innovative capacity and thus their livelihood security through participatory innovation development (PID)						
ACTIVITY	TARGETS	ACHIEVEMENTS BY COUNTRY				CONTRIBUTION
		Ethiopia	Kenya	Tanzania	Uganda	IST
Activity 1.1: Project planning meetings and field studies	<ul style="list-style-type: none"> 6 well-documented cases per country on successful endogenous innovation measures and practices in agriculture and/or NRM 	<ul style="list-style-type: none"> 2 project start-up meetings held 12 cases documented 2 best-practice books printed and shared 6 experience-sharing events conducted 	<ul style="list-style-type: none"> 2 planning meetings held 6 cases documented At least 5 sharing events held 	<ul style="list-style-type: none"> 1 inception meeting held 5 cases documented 	<ul style="list-style-type: none"> 4 planning meetings held 6 cases documented 2 sharing events conducted 	<ul style="list-style-type: none"> IST member visited each partner organisation in 2012 & gave project input Lack of dedicated funds for backstopping was limiting (piggybacking on travel for other purposes was used)
Activity 1.2 Implementation and documentation of farmer-led joint innovation	<ul style="list-style-type: none"> 2 well-documented case studies on community/farmer-led joint innovation covering process, results and demonstrating good attention to gender issues At least 40 innovative farmers/land-users/communities use and benefit from the LISF to speed up local innovation and adaption 	<ul style="list-style-type: none"> 6 documented case studies selected for farmer-led experimentation Farmer groups started using results of farmer led-experimentation. Farmers are trained on photo and video documentation Farmers are heard by experts, researchers, officials Farmers reach policymakers more easily LISF beneficiary data not provided 	<ul style="list-style-type: none"> 2 finger millet joint experiments documented and 3 identified 2 functional Local Steering Committees 2 functional LISF systems, one of them registered as a community-based organisation (Baringo) 10 case studies identified for LISF support 45 innovative farmers (53 % women) benefited from LISF 	<ul style="list-style-type: none"> 5 joint experiments have been completed, and research reports are being finalised 40 innovative farmers (60% women) benefited from LISF 	<ul style="list-style-type: none"> 8 cases selected and received LISF for implementation 11 cases selected for joint experiments Results from joint experimentation are being documented 51 farmer innovators benefited from LISF, of these 75% were women. 	

Activity 1.3: Training community groups to strengthen local adaptive capacity	<ul style="list-style-type: none"> At least 6 training workshops are held and associated reports produced per country At least 200 farmers, farmer leaders and community members are trained, at least 50% of them being women and members of marginalised groups in the area 	<ul style="list-style-type: none"> Held 12 workshops Trained 887 participants, below 20% of them being women 	<ul style="list-style-type: none"> Held 5 workshops Trained 112 participants, about 34% of them being women 	<ul style="list-style-type: none"> Held 6 workshops & produced 6 reports Trained 223 farmers, about 45% of them being women 	<ul style="list-style-type: none"> Held 7 workshops & produced 7 reports Trained 107 farmers (62% women) Conducted 2 backstopping visits to each farmer group 	
Objective 2: Build the capacity of organisations working on agriculture and NRM so that they can effectively work with and support smallholders and communities in their efforts to adapt						
ACTIVITY	TARGETS	ACHIEVEMENTS BY COUNTRY				CONTRIBUTION
		Ethiopia	Kenya	Tanzania	Uganda	IST
Activity 2.1: Staff training	<ul style="list-style-type: none"> Project partners and targeted research and development organisations attend at least 2 training workshops on PID and climate change issues held per country At least 2 reports on the training workshops produced At least 100 local staff are trained in supporting community-led innovation, 30% of them being women 	<ul style="list-style-type: none"> 2 workshops held and 2 reports produced 131 staff trained (36% women) 	<ul style="list-style-type: none"> 2 workshops held (1 being a refresher) and 2 reports produced 22 staff trained (23% women) 	<ul style="list-style-type: none"> 2 workshops held and 2 reports produced 98 staff trained (30 % women) 	<ul style="list-style-type: none"> Held 4 workshops and produced 4 reports Trained 98 staff and district leaders (38 % women) 	<ul style="list-style-type: none"> PID training in Kenya and Uganda were done through Nuffic funding with IST (ETC) support IST member from ETC was the main PID trainer Trainees prepared a post-training assignment and implemented it and attended the refresher training with new capacity needs
Objective 3: Increase insights and awareness on relevance and effectiveness of PID through sharing and learning						
ACTIVITY	TARGETS	ACHIEVEMENTS BY COUNTRY				CONTRIBUTION
		Ethiopia	Kenya	Tanzania	Uganda	IST
Activity 3.1: Facilitation of PROLINNOVA multistakeholder partnerships	<ul style="list-style-type: none"> Key national agriculture and NRM organisations actively involved in the project and informed on progress and findings 	<ul style="list-style-type: none"> NSC involving 7 organisations established Held regular meetings 	<ul style="list-style-type: none"> NSC involving 5 organisations established Held regular meetings 	<ul style="list-style-type: none"> NSC involving 5 organisations established Held regular meetings 	<ul style="list-style-type: none"> NSC involving 5 organisations established Held regular meetings 	

		<ul style="list-style-type: none"> • Project coordinator employed (and replaced) 	<ul style="list-style-type: none"> • Project host organisation rotation • Project coordinator employed (and replaced) 	<ul style="list-style-type: none"> • Host organisation coordinates project implementation • Jointly implement project with local government 	<ul style="list-style-type: none"> • Project coordinator employed and replaced by host organisation Director • Jointly implement project with local government 	
Activity 3.2: Countrywide dissemination of findings and lessons	<ul style="list-style-type: none"> • Dissemination strategy implemented and at least 6 examples of successful local innovation and 2 of farmer-led innovation 	<ul style="list-style-type: none"> • 15 farmer innovators exhibited innovations at Eastern African Farmer Innovation Fair, Nairobi • Participated in the International Farmer Innovation Day (7/12) & a collaborative partnership meeting • Developed a dissemination strategy • Published 2 booklets on local adaptation & PID, printed 6000 copies & distributed 	<ul style="list-style-type: none"> • 15 farmers exhibited innovations at Eastern African Farmer Innovation Fair • Farmer innovators attended 5 innovation fairs • Developed a dissemination strategy • Produced & disseminated print and video material on farmer-led innovation • Published 2 innovation stories in a national daily 	<ul style="list-style-type: none"> • 8 farmer innovators exhibited innovations at Eastern African Farmer Innovation Fair • 13 farmer innovators (mostly women) shared PID experiences at 2 consecutive annual National Agricultural Farmers' Day • Developed a dissemination strategy 	<ul style="list-style-type: none"> • 10 farmer innovators exhibited innovations at Eastern African Farmer Innovation Fair • Farmer innovators shared their PID experiences on radio and 16 listeners called in • Farmer innovators shared innovations at 2 national events • Developed a dissemination strategy 	<ul style="list-style-type: none"> • Held a workshop to mark IFID in The Netherlands, attended by 35 people
Activity 3.3 International Partners Workshop (IPW)	<ul style="list-style-type: none"> • One annual report per country 	<ul style="list-style-type: none"> • 3 annual reports prepared and presented 	<ul style="list-style-type: none"> • 3 annual reports prepared and presented 	<ul style="list-style-type: none"> • 3 annual reports prepared and presented 	<ul style="list-style-type: none"> • 3 annual reports prepared and presented 	<ul style="list-style-type: none"> • Synthesised annual reports and shared them • Organised and reported on 3 IPWs
Activity 3.4: International dissemination of findings and lessons	<ul style="list-style-type: none"> • Regular flow of e-messages on farmer innovations through the PROLINNOVA listserver and other relevant listservers 	<ul style="list-style-type: none"> • Joined & participated in CLIC-SR Yahoo Group • Participated in the PROLINNOVA Yahoo group 	<ul style="list-style-type: none"> • Joined & participated in CLIC-SR Yahoo Group • Participated in the PROLINNOVA Yahoo group 	<ul style="list-style-type: none"> • Joined & participated in CLIC-SR Yahoo Group • Participated in the PROLINNOVA Yahoo group 	<ul style="list-style-type: none"> • Joined & participated in CLIC-SR Yahoo Group • Participated in the PROLINNOVA Yahoo group 	<ul style="list-style-type: none"> • Extensive ICT-based information sharing on the CLIC-SR project • 765 messages were exchanged among 662

					<ul style="list-style-type: none"> Put CLIC-SR joint experiments on YouTube 	<ul style="list-style-type: none"> members of the two Yahoo Groups Posted CLIC-SR reports on the PROLINNOVA website Wrote Kenya farmer innovator blog GFAR
Objective 4: Mainstream PID in national and international policies and programmes related to agricultural development, NRM and climate change adaptation						
ACTIVITY	TARGETS	ACHIEVEMENTS BY COUNTRY				CONTRIBUTION
		Ethiopia	Kenya	Tanzania	Uganda	IST
Activity 4.1: Country-based policy dialogue	<ul style="list-style-type: none"> Inputs into selected policy processes based on evidence created under 1.1-1.2, through country alliances/platforms 1 high-profile event organised by country partners and associated report per country 	<ul style="list-style-type: none"> Conducted a study to inform PE's policy influencing strategy Developed a policy brief on LISFs to inform local policy dialogue 5 policy-dialogue workshops and meetings held 1 public lecture on local innovation made for high-level policymakers & academics (attended by over 100 people) 	<ul style="list-style-type: none"> Reviewed national ARD policies & frameworks & identified policy & institutional opportunities for PID Held a 2-day policy strategising workshop attended by 25 researchers, farmers & practitioners (32% women) Drafted policy brief Engaged policymakers at the EAFIF Farmer innovators engaged agricultural administrative officers during IYFF 2015 	<ul style="list-style-type: none"> Reviewed national ARD, biodiversity and NRM policies and identified 'elements' for PT's policy-influencing strategy Used the National Agriculture Farmers' Day for policy dialogue between researchers, policymakers and farmers 	<ul style="list-style-type: none"> Reviewed national ARD policies & efforts at mainstreaming PID in local government Presented on PID during a policy-dialogue meeting hosted by the Uganda Forum for Agricultural Advisory Services Held a consultation meeting on indicative policy issues in agricultural extension for local innovators and partner staff in 2016 (24 participants, 21% were women) 	<ul style="list-style-type: none"> Produced a paper entitled: <i>"Changes, constraints and opportunities in influencing policy to become more favourable for farmer-led participatory approaches"</i> based on policy-influencing review reports of the 4 CPs
Activity 4.2	<ul style="list-style-type: none"> Contributions to international 	<ul style="list-style-type: none"> IST attended 5 international meetings and presented on PID & LISF at 3 of these. The inviting organisations met the costs. 				

International policy dialogue	discussions through e-based and face to face dialogue	<ul style="list-style-type: none"> • CLIC-SR partnered with CGIAR's CCAFS on enhancing knowledge-to-action linkages in AIS in Eastern and West Africa • IST collaborated with CCAFS Social Learning Linking Knowledge with Action together with PROLINNOVA -Kenya and PROFEIS-Senegal • IST drafted 2 papers on: (i) Enhancing knowledge-to-action linkages in Agricultural Innovation Systems in Eastern and Western Africa, and (ii) Multistakeholder partnerships that promote farmer-led innovation • IST presented/discussed project experiences at 12 international meetings • IST and CP members advocated for a farmer-led joint innovation and adaptation approach at 10 international workshops • IST finalised a paper on the impact of farmer-led innovation development • IST and CP members published several reports & articles • IST presented paper at 22nd European Seminar on Extension Education in Wageningen in April 2015, written together with partners in Ethiopia and Uganda • A Kenyan farmer innovator (Joe Ouku) joined two IST members to international consultation at QUNO (Quakers United Nations Office) in Geneva in May 2015 				
Objective 5: Project coordination and management						
ACTIVITY	TARGETS	ACHIEVEMENTS BY COUNTRY				CONTRIBUTION
		Ethiopia	Kenya	Tanzania	Uganda	IST
Activity 5.1: Management and monitoring of country-level activities	<ul style="list-style-type: none"> • Efficient management of project activities and partnerships as evident from clear country planning, budgeting, M&E activities and reporting • Two baseline study reports per country (one per district) • One annual progress and one annual financial report per country (4) 	<ul style="list-style-type: none"> • 4 annual work plans and budgets developed • M&E system adopted & implemented by Technical Advisory Group (TAG) • 2 district baseline studies conducted • 4 annual narrative and financial reports produced 	<ul style="list-style-type: none"> • 4 annual work plans and budgets developed • M&E system adopted & implemented by KALRO & WN • 2 district baseline studies conducted • 4 annual narrative and financial reports produced 	<ul style="list-style-type: none"> • 4 annual work plans and budgets developed • M&E system adopted & implemented by INADES-Tanzania • 2 district baseline studies conducted • 4 annual narrative and financial reports produced 	<ul style="list-style-type: none"> • 4 annual work plans and budgets developed • M&E system adopted & implemented by Environmental Alert & Kulika • 2 district baseline studies conducted • 4 annual narrative and financial reports produced 	<ul style="list-style-type: none"> • IST provided technical backstopping support to CPs from a distance (Netherlands, Germany, Philippines); there was no budget for face-to-face backstopping in the CLIC-SR project
Activity 5.2: Overall management and M&E (support received from the IST)	TARGETS <ul style="list-style-type: none"> • Smooth and regular flow of planning, budgeting and reporting cycles • Increased capacities of CP staff involved to strategise, implement, monitor and evaluate projects • Development & implementation of mutually agreed internal M&E framework • Three annual coordination meetings and associated reports 		<ul style="list-style-type: none"> • Cooperation agreements with 4 CPs were finalised and signed • IST coordinated the overall project and reporting • IIRR prepared M&E framework and finalised it using CPs' input • IST and CLIC-SR partners developed result indicators for the project • IIRR introduced the M&E tools to CLIC-SR partners and provided technical advice • 3 annual coordination meetings were held and attended by representatives from all four CPs and 2–3 IST members, and associated reports were produced • 5 IST monitoring visits to CLIC partners were conducted, piggybacking on other events/visits 			

Annex 6.2: Table of evaluation participants

Country: Ethiopia		
Names	Role/Title	Gender
1. Hailu Araya	CP Coordinator	M
2. Amanuel Assefa	NSC/TAG member	M
3. Yohannes Gebremichael	NSC/TAG member	M
Country: Kenya		
4. Philomena Kitetu	Machakos LSC member	M
5. Daniel Kivyuvi	Machakos LSC member	M
6. Philip Kilaki	Machakos LSC member	M
7. Simon Masila	Machakos LSC member	M
8. Stella Kioko	Machakos LSC member	F
9. Lydia Mbwika	Machakos LSC member	F
10. Stella Musyoki	Machakos LSC member	F
11. Eunice Kioko	Machakos LSC member	F
12. Janet Mutuku	Machakos LSC member	F
13. James. M. Musyoki	Machakos LSC member	M
14. Duncan. M. Kimeu	Machakos LSC member	M
15. Purity. N. Peter	Machakos LSC member	F
16. Jackson. M. Musyoka	Machakos LSC member	M
17. Grace. S. Mula	Machakos LSC member	F
18. Sospeter K Wambua	Machakos LSC member	M
19. Priscilla Yula	Ministry of Agriculture Extensionist	F
20. Eunice Karanja	CP Coordinator	F
21. Geoffrey Kamau	KALRO researcher – NSC	M
22. Chris Macoloo	World Neighbors Director – NSC	M
23. Righa Makonge	World Neighbors, Programme Manager	M
International		
24. Ann Waters-Bayer	IST	F
25. Chesha Wettasinha	IST	F
26. Brigid Letty	IST	F
Country: Tanzania		
27. Monika Mtumba	Raia Makini Women Farmer Group	F
28. Feith Kobwa	Raia Makini Women Farmer Group	F
29. Olipa Ndalul	Raia Makini Women Farmer Group	F
30. Lucy Mtimi	Raia Makini Women Farmer Group	F
31. Eda Mtimi	Raia Makini Women Farmer Group	F
32. Sophia Makorongo	Raia Makini Women Farmer Group	F
33. Olipa Mahala	Raia Makini Women Farmer Group	F
34. Emi Kusupa	Raia Makini Women Farmer Group	F
35. Yudith Makorongo	Raia Makini Women Farmer Group	F
36. Hagali Simando	Raia Makini Women Farmer Group	F
37. Ester Matayo	Raia Makini Women Farmer Group	F
38. Gladis Kobwa	Raia Makini Women Farmer Group	F
39. Veronica Lebeje	Raia Makini Women Farmer Group	F

40. Samweli Kusupa	Makoja Village ruling party chair	M
41. Donald Malaika	Makoja Village government chair	M
42. Eliabu Ndosu	Kondoa District Council officer	M
43. Eliabu Ndosu	Kondoa District Council officer	M
44. Gilbert Msuta	TALIRI Director, animal scientist	M
45. Grace Mketo	INADES, CLIC-SR social scientist	F
46. Antony Mbeho	TALIRI, animal scientist	M
47. Antony Mbeho	TALIRI, animal scientist	M
48. Athenas Sambuta	TALIRI, animal scientist	M
49. Patrick Lameck	CP Coordinator	M
50. Edwin Kilave	INADES Director – NSC	M
51. Subira Mwinyijuma	Farmer innovator – NSC	F
52. Godson Chengula	PELUM – NSC	M
Country: Uganda		
53. Harriet Ndagire	Kulika, Nakasongola District	F
54. Moses Sekate	Environmental Alert, Moyo District	M
55. Alabi Noel	Environmental Alert, Moyo District	M
56. Joshua Zake	Environmental Alert C/o PROLINNOVA-Ug Secretariat	M
57. Stella Lutalo	PELUM Uganda	F
58. Winnie Nakyagaba	NARO-MUZARDI	F
59. Innocent Akampurira	UNCST	M
60. Magdalene Amujal Ogwang	KULIKA-UG	F
61. Richard Lumu	NARO-MUZARDI	M