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

Promoting local innovation in Food and Nutrition Security (Proli-FaNS)

YEAR 2 NARRATIVE REPORT: 1 AUGUST 2017 – 31 JULY 2018

The *Promoting local innovation for Food and Nutrition Security (Proli-FaNS)* project is being implemented by Prolinnova Country Platforms (CPs) in five African countries from 1 August 2016 to 31 July 2019. This annual report for Year 2 of the project, covering the period from 1 August 2017 to 31 July 2018, describes achievements with regard to the project objectives, key activities and outputs accomplished, risks and unexpected opportunities encountered, and lessons learned.

DESCRIPTION OF HOW THE REPORT WAS PREPARED

Parties who were involved in preparing the report

The report was compiled by the Proli-FaNS Project Coordinator based at the Association of Church-based Development Projects (ACDEP) in Ghana from annual reports of the project partners, namely the coordinators of the CPs in Burkina Faso, Cameroon, Ethiopia, Ghana and Kenya; the subregional coordinators (SRCs) for West & Central Africa and for Eastern & Southern Africa; and the International Support Team (IST) members based at the Royal Tropical Institute (KIT) in the Netherlands.

Sources of information for writing the report

The main sources of information for the report were the annual reports and quarterly and semi-annual progress reports of the project partners. The sources of information for the partners' reports included field activity reports of the national coordinating non-governmental organisations (NGOs) and the NGO partners at the action-learning sites; training and monitoring and evaluation (M&E) reports of the technical support teams; reports of local multistakeholder platform (MSP) engagement and field support to farmer-led participatory innovation development (PID) and local innovation (LI) activities; minutes from meetings of the technical teams and/or the National Steering Committees (NSCs); and project M&E data. The report on the Proli-FaNS partners meeting and the African Prolinnova regionalisation meeting held in Nairobi in May 2018 provided additional information for this report.

CHANGES IN PROJECT CONTEXT DURING THE 12-MONTH REPORTING PERIOD

Significant changes experienced in the political, economic and social setting of the target groups

The political, economic and social contexts pertaining to the CPs and action-learning sites within the reporting period showed some variation of both positive and negative influence, but generally did not adversely affect the project in a significant way.

Burkina Faso: The insecurity situation in the Koumbri, Barga and Yatenga Provinces in the northern part of the country caused by militant attacks from Mali and Niger persisted. This security risk affected the pace of agricultural activities and the food security situation in the project communes and municipalities that are closer to the northern provinces. Specifically, the situation has hampered community mobilisation and development activities and sometimes compelled farmers to postpone certain activities until favourable conditions return through the intervention of security agents or local authorities in the volatile areas.

Cameroon: The PID process with Dschang University faced challenges, though the student placed to work on the PID case has defended his academic research report. The CP is in talks to improve the relationship with the university to maintain the collaboration. On the positive side, women were very proud to see their pictures in the catalogue produced and have requested copies to share in their neighbourhood. Secondly, farmers, women and men can now talk confidently about their innovations, as was observed during the International Farmer Innovation Day celebration held in November 2017.

Ethiopia: In the two action-learning sites, no changes have occurred in the political, economic and social settings that affect the project. There has been a change of government in Ethiopia, with complete restructuring of ministries and ministers and changes made or being planned in laws, including the civil society law that had restricted the functioning of networks in past years. Prospects for NGOs and networks are therefore promising.

Ghana: The year was characterised by favourable rainfall patterns. Coupled with the government "*planting for food and jobs"* policy, which increased access of rural farmers to subsidised chemical fertilisers, good harvests of major staples are anticipated, which would boost food security and incomes of smallholder farmers in the project learning sites.

Kenya: Communities in the two action-learning sites (Kisumu and Makueni) are adopting, adapting and integrating local innovations promoted or developed into their agricultural production and food security systems. The level of appreciation of LI and PID by the community groups (farmers, women, youth and fisherfolk groups) has been enhanced through the joint experimentation processes. At project inception, most women shied from sharing their innovations but, through Proli-FaNS, a change in perception of women's roles and stakes in agricultural production is being realised. Currently, more women are coming out to share their innovations; some of the innovators are being invited by local government departments and other informal organisations to offer training on their innovations. This is raising the social and economic profile of the women.

Organisational and personnel changes relevant to project

Ethiopia: The previous coordinator of Prolinnova–Ethiopia (Hailu Araya), who was also the director of Best Practice Association (BPA), the organisation hosting Prolinnova–Ethiopia, resigned from both positions. He was replaced by the new BPA Acting Director, Yosef Garedew, and the new Prolinnova–Ethiopia coordinator, Ms Beza Kifle, who joined BPA in the fourth quarter of the second year of the Proli-FaNS project.

Ghana: ACDEP's bilingual officer, Wilhelmina Ofori-Duah, who provided part-time French–English translation services to the project, left ACDEP in December 2017 following expiration of her contract with ACDEP. Georges Djohy, SRC for West & Central Africa, provides critical translation support to ACDEP, in addition to local experts in Ghana who carry out smaller translation tasks.

Kenya: Prolinnova–Kenya recruited a full-time coordinator, Vincent Mariadho, in November 2017 to fill a vacuum created by the resignation of the previous part-time coordinator. This has improved coordination and implementation of the project activities.

Implications of the changes for project implementation and achievement of project objectives

The political, social and economic changes in the project context described above have been largely positive and have enhanced the project implementation and achievement of objectives. The organisational changes experienced slightly affected project implementation but were addressed by the CPs through re-adjusting their activity plans and drawing increased technical support from their technical teams or core working group members.

IMPLEMENTING THE PROJECT AND ACHIEVING ITS OBJECTIVES

Objective 1: Rural communities develop their innovative capacities to effectively improve food security, nutrition security and nutritional diversity

Indicators:

- *Local innovations identified, validated and documented*
- *Local innovations disseminated at learning events for adoption / adaptation*
- *Farmer-led joint experimentation to improve priority food & nutrition security innovations*

BURKINA FASO

Identification and dissemination of local innovations

Twenty relevant innovations have so far been selected, documented and shared with more than 320 people in the North and East regions of Burkina Faso, using innovation fairs, visits, radio broadcasts, posters and datasheets.

PID outcomes and promotion

The results of five innovations developed through joint experiments in the two action-learning sites are being integrated by five women's groups into their food security, nutrition security and livelihood improvement activities. The innovations that were improved upon through joint research focused on food processing, nutritional enhancement for children and mothers, soil fertilisation with different types of bio-compost and pest control in market vegetables using bio-pesticides. The key outcomes achieved and integrated included the following:

- Bio-fertiliser experiment: Four types of good-quality compost based on the joint experiment have been validated by INERA (national agricultural research institute) and marketed in bags of 50kg for 2500F and 100kg for 5000F CFA to organic producers in major cities of the country.
- Two new enriched flour formulations for preparing porridge for malnourished children based on local food materials (millet, soya, milk and Moringa leaves) have been produced.
- One knowledge-sharing strategy (module) on types of processing of cereals into enriched flour for porridge for malnourished children has been developed.
- Four millet-based infant-enriched baby porridge formulations with other local oilseeds such as peanut, cowpea or bean, and Moringa have been developed and marketed in the local markets and health centres.
- Bio-pesticide innovation: Methods of harvesting herbs for formulation of pesticides have been identified and tested; the dosage of the herbal remedies was evaluated to be effective against pests associated with cowpea, tomato, cabbage and eggplant.

CAMEROON

Identification and validation of new innovations

Four new innovations were identified in Year 2, adding to the eight innovations identified in Year 1 to make a total of 12 innovations validated and promoted thus far. The four new innovations are:

- Cooking technique of snails to enhance nutritive value, by a woman innovator

- Use of specific *Xanthosoma* leaves in breeding and feeding snails, by a woman innovator
- New organisational method to help farmers acquire lands for farming, by a women's group
- Use of faecal droppings of hedgehogs as fertiliser for crops and fish farming by a woman innovator.

Documentation and dissemination of innovations

All eight innovations validated during Year 1 (August 2016–July 2017) have been documented in a brochure, which was shared among members of the CP and other organisations interested in the theme of local innovation. It was also distributed among partners during the Proli-FaNS and African partners meeting held in Nairobi in May 2018. The innovations were also shared with a total of 461 farmers (340 men, 121 women) and other stakeholders through other dissemination methods. The *fonge* beehive in particular has been adopted by about 1000 other male beekeepers around the country. Farmers also shared their innovations at the International Farmer Innovation Day held in Ekoumdouma town in November 2017, where the brochure was also distributed.

PID processes and progress

Two PID processes were undertaken during the period. Progress made is as follows.

- *Local multiplication of bee colonies.*

In Year 1, the innovator had benefited from the Local Innovation Support Facility (LISF) to install a queenbee multiplication station. In Year 2, Dschang University provided a student to conduct research on the "*Characteristics of beekeeping and reproductive performance of bee colonies*". Although the student has completed and submitted his thesis to the University, we had difficulties with him and his supervisor because they could not follow the PID principles in their academic research. Both of them have promised to do proper documentation in line with the Proli-FaNS guidelines for documenting PID processes.

- *Using natron to reduce bitterness in cocoa*

The topic of this PID case is *"Reduction of bitterness in cocoa cake using natron and assessment of the effects on the nutritional quality of chocolate*". Three partners took part in the study in the following ways:

- Yaoundé 1 University provided its laboratory for food sciences and metabolism to analyse the polyphenols and flavonoids contents in the chocolate produced using natron;
- Chocolate samples from Yaoundé 1 were transferred to the Institute of Medical Research and Studies of Medicinal Plants (IMPM), which analysed dry material, total ash, total lipids, raw proteins and raw fibres.
- The International Institute of Tropical Agriculture (IITA) analysed essential elements such as magnesium, calcium, iron, phosphor, zinc etc.

The Maroua University student who was involved in the experiment has completed his thesis and will defend it in September 2018.

ETHIOPIA

Training in M&E

Ten farmers and agricultural experts took part in training in M&E organised for local communities from the two action-learning sites: from the Axum area, four participants (including 1 woman) and from the Enebse Sar Midir (ESM) area six participants including one woman. There were also three participants (including 1 woman) from Addis Ababa: the trainer and training facilitators. The training was held on 15–16 October 2017 in the Panorama Hotel in Addis Ababa.

Consultative meeting with media partners

In August 2017 in Mekelle, Tigray Region, a consultative meeting was held with media people to update them about promoting LI and about the Proli-FaNS project so that they include this in their

field observations. There were 26 participants: 9 journalists (3 F), one farmer presenter (M), 12 researchers and academicians (2 F) and 4 participants from private documentation organisations (M).

In the Axum area, the Proli-FaNS project is improving food security, nutrition security and nutritional diversity in the following ways:

- M&E and familiarisation visit by Hailu Araya on 28 November–2 December 2017 for M&E; the new CP coordinator visited Axum in June 2018 for mutual introductions with the farmers and site coordinator and to visit the farmers' innovations together with Hailu;
- SRC visit: To improve the implementation capacity of the project team and the governance of Prolinnova–Ethiopia, Amanuel Assefa, the SRC for Eastern & Southern Africa, visited Axum on 29 September–2 October 2017 together with Hailu.
- Participatory Innovation Development (PID): Four farmer-led experiments are underway in the Axum site, involving altogether 14 participants (3 females, 11 males).
- Identification of baobab tree as existing resource for new purposes: during field investigations on 17–19 October and training on 20–21 October 2017 in the Axum area in northwestern Tigray, baobab was found in 11 villages and was identified by innovator farmers and the local administration as an ample resource but not used by the local people for food. Yet elsewhere in Tigray Region – specifically in Shire Endesilase – the local people use the powder of the tree leaves as a food additive to improve their health. The idea is to share the local practice from Shire Endesilase to other areas in Tigray Region.

In ESM, Proli-FaNS is improving food security, nutrition security and nutritional diversity in the following ways:

- Experience-sharing visit: on 8–14 December 2017, eight farmers from ESM (including 3 women) visited 10 farmers at the Axum learning site to learn from their experiences in local innovation and farmer-led experimentation.
- The new CP coordinator visited the ESM site on her own on 11–14 June 2018; the farmers discussed the status of their innovations with her.
- Three Farmer Field Schools (FFSs) were established in three *kebeles*[1] (010, 018 and 022) to enhance the engagement of stakeholders, including farmers, in promoting farmer innovation, involving 38 males and 18 females. This took place at a meeting on 8 July 2018 involving staff from the ESM District Agricultural Office, ESM District Communication Office, Mertulemariam TVET (Technical Vocational Education and Training) College and Mertulemariam Agricultural College.
- Capacity building in innovation, food and nutrition security and training on PID as an accepted approach to attain food and nutrition security within Ethiopia was given on 17–19 June 2018 by Atalay Yigrem, the ESM site coordinator and General Manager of the Alem Birhan community-based organisation. A total of 44 (20 F) participants comprising farmers and staff members of Alem Birhan attended the training.

GHANA

Documentation and dissemination of local innovations

By the end of Year 2, 38 innovations (25 by women/groups and 13 by men) have been identified and documented at the two action-learning sites for dissemination and farmer-led joint research. Nineteen of the innovations were shared with 551 people (201 men, 350 women) within the two learning sites through field days. Inter-site exchange and learning visits on local innovations and PID were held between the two sites, involving 26 innovators, 26 MSP members and 126 community members (52 men, 74 women). Two short video films have been produced on improved sheabutter

[1] Lowest level of administration in Ethiopia, similar to a ward.

processing and improved soap-making PID processes undertaken by two women's groups, and viewed by people in the two PID communities. The short video films have also been posted on YouTube and linked to the Proli-FaNS website for public viewing.

PID processes and scaling up

Six local innovations out the 38 identified innovations successfully underwent PID and the outcomes are being disseminated. They are:

- Improving sheabutter processing and marketing with the Soe-Yidongo women's group in Bongo
- Processing of sweet potato by a woman innovator in Bongo
- Institutionalisation of the "Tree chief" concept by formulating local bylaws and installing a Tree chief to enforce local laws to protect economic trees and forest in Bongo
- Improving local soap using herbs and other materials with the Sunson women's group in Yendi
- Improving the local food *wasawasa* made from *dawadawa* fruit powder by a woman in Yendi
- Preserving dried cassava chips using a chilli pepper solution with a male innovator in Yendi.

The CP has assisted the innovators to scale up and disseminate their PID results, using community participatory evaluation and sharing sessions which encouraged many other women and men to begin to adopt and adapt the improved innovations. The innovators have also trained 300 women and 150 men in nearby communities on their improved innovations. All the six PID cases have been documented in order to produce brochures to facilitate dissemination and advocacy activities.

KENYA

A total of 31 innovations have so far been identified and documented. Out of these, 11 are still undergoing joint experimentation. These include seven innovations (4 by men and 3 by women) from the Kisumu site and four innovations (2 by men and 2 by women) from the Makueni site. Nineteen of the identified innovations have been comprehensively documented using the local innovation documentation guidelines. The promotion of local innovations through their identification as well as joint experimentation is building the innovative capacities of the community. The local community is recognising their innovative capacity and ability to effectively enhance their agricultural production and diversity, which will result in better food and nutrition security. Community members are adopting and adapting the various local innovations and this, in the long run, is expected to further increase agricultural production and productivity.

Objective 2: Women are more widely recognised as innovators and are supported in further developing their innovations, from which they control the benefits

Indicators:

- *Women's innovations identified, developed, documented and shared*
- *Women innovators recognised and awarded from relevant government bodies at community or higher level*

BURKINA FASO

- 17 women innovations have been documented according to the Prolinnova template and have been shared with more than 320 people (175 men, 145 women) at local, provincial and regional events.
- At an innovation fair in the Gourcy learning site, 25 farmer organisations received recognition titles in research and development of local knowledge in agriculture and child nutrition. The fair included three groups of innovative women farmers, from which seven were honoured with awards by the government agriculture department in the areas of bio-pesticides, rice-drying techniques and innovative ways of organising themselves to combat child malnutrition.

CAMEROON

Three women's innovations identified and validated during Year 1 of Proli-FaNS were documented and shared in a hundred copies of a brochure. The three women with their male farmer colleagues also showcased their innovations during the International Farmer Innovation Day in Ekoumdouma in November 2017. The women innovators are:

- Ms Eyenga Nkoah, who uses the bark of the *Santiria trimera* tree (locally known as *ebap*) for local fermentation of maize beer;
- Ms Marceline Obama, who conserves shallots in a local traditional basket, often made by her mother, but she is recycling polystyrene material instead of using sticks of rush as her mother used to do;
- Ms Irène Nga who, instead of pouring away the cassava residues after extracting starch, uses the residues to make cakes as a food, after enriching the cassava flour with eggs and vanilla.

ETHIOPIA

- Ms Haregu Gobezai a woman innovator in Rama, Tigray Region, has developed a commercial orchard on about 12 ha with a modern irrigation facility that runs across the farmland. She has over 6000 well-managed apple-mango trees and more than 500 orange trees. She is also running a very innovative activity that she calls a "soil bank": she harvests the alluvial soil from the river running alongside her farm. She managed to harvest several tons of alluvial soil from the water during the wet season and started to spread it in her orchard. Her innovation has been documented for wider dissemination.
- The CP supported women innovators who are interested in keeping poultry and planting *gesho* (for preparing local drinks) and *shibaka*. Both plants are multipurpose and are planted on farm boundaries and in backyards. *Shibaka* is a source of animal feed and can also be used to fence in the homesteads. In Mai Tsa'eda (near Axum), a village visited by Amanuel and Hailu on 29 September–2 October 2017 to see where these activities are taking place, the lead farmer who facilitated the visit was Ms Berha Tadesse.
- In the Axum site, Hailu gave training in farmer-led experimentation for female-headed households; the training was attended by 13 women and 3 men (an expert from the District Agriculture Office, a researcher from Aksum University and one man who attended the training because his mother was sick and he came in her place). Six of the local innovations identified were developed by women farmers, and women were involved in seven other local innovations that were identified in the site (these innovations were by husband and wife).
- In the three *kebeles* at the ESM site, the involvement of women is also high in a total of eight innovations by mixed-gender groups.

GHANA

- 25 women's innovations have so far been identified and fully documented and disseminated at community field days and learning sessions, and in video films and radio broadcasts; 4 of the women's innovations (2 by women innovators and 2 by women's groups) have undergone PID.
- The PID processes have built the women's capacities in improved processing techniques for their products, which enabled them to transform their innovations into profitable enterprises and earn increased incomes to supplement their food security and livelihoods needs.
- Ten outstanding women innovators (5 each from each site) were given certificates and awards by the Ministry of Agriculture at the annual National Farmers' Day at district level. The innovators also showcased their innovative products at the events.
- The Korean International Cooperation Agency (KOICA) working in Northern Ghana has recognised the work of the 60-member women's group doing sheabutter processing and marketing in Bongo by building their capacities in group development and entrepreneurship. The

training has qualified them to be registered as a formal cooperative by the Department of Cooperatives in order to access credit facilities and other equity capital to expand their enterprises. The National Commission on Civic Education has also adopted the group and is working with them to lead advocacy campaigns on gender and women's empowerment and has also linked them to a large buyer for their sheabutter.

KENYA

- Women put a lot of effort in order to ensure food- and nutrition-secure households through the use of local innovations, either knowingly or unknowingly. However, even though they are the major contributors to agricultural production, the systems always fail to recognise their efforts and, on many occasions, they do not control the benefits accrued. This male-dominated culture has also resulted in women being pushed behind in matters of using and promoting local innovation.
- Through Proli-FaNS, Prolinnova–Kenya is helping to change this situation by recognising women innovators and the role they play in promoting food and nutrition security. Out of the 31 innovations identified, 13 are by women. Out of these 13 innovations, five are undergoing PID. In addition, women innovators from across the two project sites participated in a farmer innovation fair held in Kasikeu market in Makueni in February 2018, where their efforts were appreciated and 13 innovators were awarded certificates by the government authorities.

Objective 3: Subregional Prolinnova platforms support CPs to develop capacity for collective learning, mobilising resources and effective policy dialogue

Indicators:

- *Subregional platforms support CPs to develop capacities for learning and policy dialogue:*
- *Fundraising initiated by CPs and SRCs to support promotion of local innovation and PID*

This section summarises the achievements of the two SRCs (Georges and Amanuel) in supporting the CPs to implement Proli-FaNS project and Prolinnova activities in general. This includes improving CP governance, policy dialogue, networking among the CPs, documentation and communication, backstopping and monitoring support, and fundraising to support LI and PID.

a) Policy dialogue and networking

Georges participated in five national, regional and international meetings and training sessions, where he shared the principles, values and achievements of Prolinnova with a wide range of stakeholders. These were the Global Forum on Agricultural Research (GFAR) media training and the 44th Session of the World Committee for Food Security (CFS44/FAO) and a GFAR meeting, both in Rome; a National Institute of Agricultural Research (INRAB) meeting in Benin; and the Regional Workshop of African Partners & Meeting of the Prolinnova Oversight Group (POG) in Kenya.

Amanuel: Collaboration of Prolinnova with the African Forum for Agricultural Advisory Services (AFAAS) has been started, and Brigid Letty from South Africa represented the Eastern & Southern Africa platform in November 2017 in the AFAAS conference in Durban, South Africa. The SRC had a brief meeting with Amos Guay, the capacity development head in the Forum for Agricultural Research in Africa (FARA) and both parties agreed to collaborate by finding a common project that will help them become better acquainted with each other. The SRC had assigned the PELUM[2]–Tanzania coordinator and Executive Director to meet people from the Eastern and Southern Africa Small-scale Farmers' Forum (ESAFF) to explore possibilities of collaboration with Prolinnova.

[2] PELUM: Participatory Ecological Land Use Management

b) Documentation and communication

Georges published six blogs that added value to the PID activities and results of some CPs and promoted the overall values of Prolinnova. They focused on farmer innovation, gender and women's creativity and sustainable livelihoods. The sharing of blogs on the websites of international organisations such as FAO and GFAR and the publication of some in the weekly reviews of the FAO Pastoralist Knowledge Hub have contributed significantly to increasing the visibility of Prolinnova work at the international level.

He engaged AgriProFocus–Benin, Access Agriculture and the Beninese Network for Sustainable Management of Genetic Resources (JINUKUN) to collaborate with Prolinnova.

He designed, translated and shared about 30 different documents with the French-speaking partners. These documents included 15 Prolinnova guidelines, 13 of which were put in the form of an easy-to-use booklet, two policy briefs, a working paper (also put in the form of a booklet), seasonal action plans, a charter of the subregional platform, a self-assessment report of the regionalisation process in WCA and two annual activity reports of the CPs, among others.

He translated project reports for ACDEP, CPs' progress reports, project guidelines and relevant information into either French or English for the comprehension of the CP coordinators.

Amanuel contracted a communication expert, who assisted the network to design an innovation catalogue, which includes the objectives and programmes of the network and representative innovation cases (with brief descriptions) from all CPs in Eastern & Southern Africa. The catalogue will be ready before the end of 2018 for printing and distribution.

c) Backstopping and M&E support to CPs

Georges made backstopping visits to Mali in November 2017 and to Cameroon in December 2017. The back-to-office reports were developed and shared with partners and published on the Prolinnova website. He also used email, telephone exchanges and Skype to provide solutions to specific problems of some Proli-FaNS CPs.

Amanuel made backstopping trips to Sudan and Tanzania in October 2017 and in Ethiopia with Sabine Dorloechter-Sulser from Misereor in November 2017. Brigid Letty of Prolinnova–South Africa backstopped Mozambique in February 2018 on behalf of the SRC. He worked to improve the governance, project implementation and M&E in Prolinnova–Ethiopia through participating or organising several meetings with the coordinator, the Technical Advisory Committee members and the members of the NSC. He helped to develop a comprehensive action plan for the second half of the year and divided tasks among the NSC members and the site coordinators to support the new CP coordinator. He prepared a draft charter for ESAPP sub-region will be harmonised with the WeCAPP charter to guide the future Prolinnova-Africa.

d) Fundraising

Georges co-authored a concept note with Amanuel Assefa and Ann Waters-Bayer that secured additional funding from Misereor/KZE (German Catholic Central Agency for Development Aid) to cover costs of some Prolinnova partners to attend the African partners' workshop in Nairobi in May 2018. He became involved in a fundraising initiative with Zacharia Malley of Prolinnova–Tanzania on a concept note in response to a call from the Global Alliance for the Future of Food: "Call for Ideas – 2050: Visions for Global Food Systems Transformation". Unfortunately, this concept note was not selected for funding.

Amanuel developed project ideas and shared them with the CPs to use for preparing concept notes/ proposals. A proposal initiated by the CP in Uganda has shown better results and will start in September 2018 with EU funding. A proposal prepared by the SRC on agri-business innovation and incubation was submitted to the FAO subregional office in December 2017 to cover work in Ethiopia,

Tanzania, Uganda, Kenya and Sudan, but could not be funded. The SRC also drafted a proposal on innovation by livestock keepers to cover work in Ethiopia, Uganda and Kenya. The draft was finalised with the inputs from the CPs and the IST and submitted to ILRI, but without success.

Through the efforts of the Eastern & Southern Africa task force (led by Brigid Letty), Prolinnova–Kenya is involved in developing a proposal for the project "Southern and Eastern Africa Sustainable Food Systems and Healthy Diets Transition Lab (AFRIDIETS–Lab)", in collaboration with Prolinnova CPs in South Africa, Tanzania and Uganda, the University of Hohenheim (Germany), the Research Institute of Organic Agriculture (FiBL) and several other partners.

CURRENT STATUS OF IMPLEMENTATION OF ACTIVITIES AND GENERATION OF OUTPUTS

Partners' accomplishments of the main project activities (Farmer-led Research, Advocacy, and M&E/Coordination) are summarised below.

Key activities	CP achievements
Farmer-led research	**Burkina Faso** – 20 innovations documented and being disseminated – 5 joint experiments completed, results promoted to improve food security and livelihoods of beneficiaries **Cameroon:** – 12 local innovations identified and validated; 8 local innovations documented in a brochure – 2 PID processes implemented with Maroua and Dschang Universities; University of Yaoundé 1 was also involved in one PID process for lab-based analysis – Researchers and development agents are appreciating farmers' innovativeness and working more closely with them than before. **Ethiopia** – 40 local innovations documented in the 2 sites – 4 local innovations undergoing PID at the Axum site and 3 planned for the ESM site in Year 3 – The farmer innovators are keenly conducting experiments on innovations because the innovations are making a great difference in their lives. **Ghana** – 38 innovations (25 by women and 13 by men) identified and profiled for dissemination or improvement – 19 of the innovations fully documented and shared with other farmers and other stakeholders, including video documentation on 2 PID cases – 6 innovations (4 by women and 2 by men) have undergone PID, and outcomes being shared; 15 stakeholders trained in LI and PID – Women's involvement in local innovation and PID have made them more visible, and their innovative skills are recognised and now receiving more support from agricultural research and development stakeholders. **Kenya** – 31 innovations identified and documented; 11 innovations (6 by men, 5 by women) undergoing joint experimentation – 19 of identified innovations comprehensively documented using LI documentation guidelines, including video documentation

	– The promotion of local innovations and PID is building the innovative capacities of the community. The local community is recognising their innovative capacity and ability to effectively enhance their agricultural production, nutrition diversity and food and nutrition security.
Advocacy	**Burkina Faso** – Several events such as fair and visits were organised with support of political, administrative and technical authorities for farmer innovation and research. The country network, after a first year of decentralisation of its organs, is active in advocacy at local level in promoting farmer innovation in the productive activities of households. **Cameroon** – Women's innovations were identified, validated and progressively shared with other partners. Three women innovators were given awards during the International Farmer Innovation Day celebration in November 2017. **Ethiopia** – In the Axum site, six of the local innovations identified were developed by women farmers, and women were involved in seven other local innovations that were identified there (these were by husband and wife). In the ESM site, women's involvement is also high: a total of eight innovations by mixed-gender groups in the three *kebeles.* **Ghana** – 10 deserving women innovators, 5 each from the two learning sites, were awarded with certificates and prize items by the Ministry of Agriculture at the annual National Farmers' Day in December 2017. The Korean International Cooperation Agency (KOICA) in Northern Ghana is building the capacity of 60 sheabutter innovation group members to access credit facilities and market linkages for their sheabutter. **Kenya** – Prolinnova–Kenya in collaboration with World Neighbors, INADES Formation and Makueni Local Steering Committee conducted a farmer innovation fair in which 13 innovators from the two sites (Kisumu and Makueni) exhibited their innovations. The innovators were awarded with certificates that were presented to them by the local leaders and government officials.
Project M&E/ CP governance	**Burkina Faso** – The two MSPs in Gourcy and Gomponsom set up in January 2017 enabled better monitoring of project activities in the field with the support of the NSC. **Cameroon** – A joint meeting of the NSC and Prolinnova–Cameroon national platform members was held to review the Year 2 achievements under Prolinnova and Proli-FaNS. The meeting also discussed possible strategies of raising funds to increase the resources for the CP, as well as ways to address challenges (delays) the CP had faced with partners in the PID processes, particularly with University of Dschang. **Ethiopia** – The CP is benefitting from being part of a subregional Prolinnova platform. The SRC helps the CP in different ways by participating in the meetings of the NSC and giving important suggestions and also supporting the project in monitoring, management and other ways.

	Ghana – The NSC meeting held an annual meeting to review progress and advised on new fundraising and policy-dialogue strategies for Year 3. The ACDEP Finance Manager visited Prolinnova–Ethiopia in July 2018 and gave backstopping on project financial management and reporting. This has improved the management capacity of the implementing team. **Kenya** – 3 NSC meetings were held on Proli-FaNS project progress, resource mobilisation, the African CPs' Nairobi meeting, performance and strengthening of the CP and NSC. – The CP hosted and participated in the African CPs' meeting held at the Methodist Conference and Resort in Nairobi on 22–24 May and the POG meeting on 25 May 2018.

Unintended effects arising from project implementation

Burkina Faso

Barely a week after radio broadcasts and media coverage (radio broadcast) of advocacy and exchange of experiences by the research groups and also the two MSPs in rural areas, it is estimated that there were more than 800 calls to gather information on innovations and how to access them. The broadcasts carried out by six media coverage sessions were listened to by more than 1000 listeners in the coverage area of the two radio stations (that of Yako and FM Savane Gourcy).

Kenya

In Kenya, the use of plastic bags has been banned and thus an innovator came up with the idea of making shopping and school bags from used fabrics. The move was geared at not only bridging the gap caused by the ban on plastic bags but also as a source of income and environmental conservation. During the innovation fair, Prolinnova–Kenya encouraged such innovators to share their innovations for purposes of scaling up and documentation. Prolinnova–Kenya is planning to support sharing of the innovation in future fairs and learning workshops.

Risks and/or unexpected opportunities

Burkina Faso

The project area is in the north of the country and prone to terrorist attacks from Burkina Faso's neighbours in the north and north-east. Another form of risk is planting explosive devices on major roads, with the security lacking the capacity to detect and neutralise the explosives. Also, low and poorly distributed rainfall in the 2016–17 season negatively affected agricultural yields. This obliged farmers to innovate in the following season (2017–18) by engaging more in dry-season commercial gardening and developing bio-compost and bio-pesticide innovative products through joint experimentation.

Cameroon

While sharing results of laboratory analysis with the innovator who is using natron to reduce the bitterness of chocolate, the farmer also received a grant from the Ministry of Planning in cooperation with Swiss Foundation. The innovator is now interested in building a company with his innovation.

Ethiopia

There has been a change of government in Ethiopia, with complete restructuring of ministries and ministers and changes made or planned in laws, including the civil society law that had restricted the functioning of networks in past years. Prospects for NGOs and networks are therefore promising.

Ghana

This farming season saw the spillage of excess water from the Bagre dam in neighbouring Burkina Faso in August, thereby causing serious flash floods and damage to crops in downstream communities in parts of the Upper East and Northern Regions of Ghana. The situation has created an opportunity in which the Governments of Burkina Faso and Ghana have initiated cooperation to build a large irrigation dam on the White Volta River in the Upper East Region of Ghana to trap the annual spillage to support irrigated farming for food, which will also create jobs for women, men and youth in the affected towns and communities.

Kenya

The general elections held in August 2017 and the second round of presidential elections in October 2017 reduced the pace of Prol-FaNS coordination and implementation, as the periods before and after the polls were characterised by heightened political activities, thus curtailing effective conduct of development activities. However, through the new political leaders, the CP intends to create local platforms for policy dialogue for prioritisation and inclusion of local innovation in the development agenda as an approach to improving the social-economic wellbeing of rural communities.

Project evaluation

Although there has not been a mid-term evaluation, we used the annual project partners' meeting and regionalisation workshop held in May 2018 in Nairobi, to assess the progress made by each CP and by the project as a whole. We identified challenges and planned new priorities for the final year of implementation of the Proli-FaNS project.

CONCLUSIONS

Overall assessment of status of achievement of project objectives and some lessons

At the end of Year 2 of the project, significant results and targets have been achieved in the area of engaging women and men in PID and local innovation activities and building their capacities in the methodology and approach for self-empowerment towards achieving sustainable food and nutrition security, especially by women. However, wider dissemination of outcomes could not be accomplished because some of the experiments lasted longer than expected.

There is increased interest and partnership between local agricultural research and development practitioners and rural communities in farmer-led research and local innovation. This will be further pursued, developed and sustained from Year 3.

Activities by the SRCs have improved networking, communication and information exchange among the five project CPs, while strengthening linkage with and governance by non-project CPs. Independent fundraising efforts of the project CPs have not yielded positive results yet.

Way forward for Year 3

Going into the last year of the project, the CPs will seek to consolidate gains so far by focusing more on documenting the processes and results and using the products to engage in policy dialogue and advocacy for mainstreaming within institutions of agricultural research, development and education. They will also be working on scaling up and disseminating the PID outcomes and local innovations developed to many more farmers in the project communities for wide-scale adoption or adaptation.

The SRCs will continue to provide capacity support to CPs and strengthen networking among them, while also working further towards establishing a regional (Africa) network, including finalising the charters and harmonising them as a guiding constitution for the future Prolinnova–Africa.