

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

**YEAR 3 ANNUAL REPORT ON ACTIVITIES IN GHANA:
AUGUST 2018–SEPTEMBER 2019**



Ms Abaa Akabire, an innovator in Soe-Yidongo in Bongo District, improves her family nutrition using leafy vegetables produced using liquid manure (Photo: Dominic Avea, Extension Officer)

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1.0 THE PROCESS USED IN PREPARING THE REPORT

The report was prepared by the Country Platform (CP) coordinator, drawing from quarterly progress reports, project monitoring and evaluation data, project field assessment reports and activity reports from the project's action-learning sites. The monitoring and evaluation (M&E) focal point provided inputs to ensure that the report responded to the project indicators and targets pertaining to Ghana.

2.0 CHANGES IN THE PROJECT CONTEXT

Political and economic changes: In 2017, the Government of Ghana introduced an agricultural policy dubbed “*Planting for Food and Jobs*”, which provided 50% subsidised chemical fertilisers for crops cultivation. The programme was expanded in the 2018 and 2019 farming seasons, and made a tremendous impact on maize and other cereal crop production in the country to boost food security and incomes of the rural small-scale farmers, as well as engaging the jobless youth in agriculture for livelihoods. With the success achieved in the crop sub-sector, the programme has been extended to cover the livestock sub-sector in the current year under the name: “*Rearing for Food and Jobs*”. It targets business-oriented small-scale farmers and youth by providing “start-up” breeds of small ruminants (goats and sheep), improved poultry and guinea fowls on subsidised credit, accompanied with technical and entrepreneurship capacity building. In the context of Prolinnova's goals and principles, the Rearing for Food and Jobs programme will increase manure production by the livestock of the farmer beneficiaries in the rural communities to support and sustain diversified food-crop production and increase adaptation of the local farming systems to climate change.

Personnel changes: There were no staff changes at the project coordination level at ACDEP. However, because of funding challenges and staff resignations which affected EPDRA (Evangelical Presbyterian Disaster and Relief Agency), the local NGO partner at the Yendi action-learning site, project implementation suffered and some project targets could not be achieved at this site.

3.0 IMPLEMENTING THE PROJECT AND ACHIEVING ITS OBJECTIVES

3.1 TO WHAT EXTENT ARE PROJECT OBJECTIVES BEING ACHIEVED?

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

Local innovations identified, documented and disseminated

By the end of the final year of the project, the CP has met its target, having identified and documented (profiled) 40 relevant local innovations at its two action-learning sites. These comprise 30 innovations by women, 7 innovations by men and 3 innovations by mixed groups of men and women. Twenty-nine of the innovations were shared in the project sites and to the general public using community sharing sessions, field days, annual National Farmers Day exhibitions, exchange and learning visits, radio presentations and farmer innovation fairs, reaching approximately 10,500 people. Additionally, in Year 3, calendars and brochures were produced and shared at local and national events and at the Prolinnova International Partners Workshop (IPW) in 2019 in Senegal, as well as through posting two short video documentaries on women's sheabutter processing and local soap-making innovations on YouTube, linked to the Proli-FaNS webpage. The dissemination and

promotional activities together have created awareness and generated increased interest among farmers and local agricultural research and development (ARD) stakeholders on local innovation(s) and participatory innovation development in agriculture and food security for rural people and should lead to more farmers in the project sites adopting or adapting some key innovations for food and nutrition enhancement.

Farmer-led joint experimentation or PID on selected innovations

In Year 3, more PID processes were conducted in the two learning sites, bringing the total number to nine cases conducted in the project period. The new cases are: (i) Improving the nutritional value of local bean cake (*kooshie*) by a female *kooshie* seller in the Yendi site; (ii) Managing African swine fever (ASF) in pigs using local herbs, by a livestock farmer in the Bongo site; and (iii) Improving the method of preserving Bambara beans with sheabutter processing liquid waste by a sheabutter processor in Bongo. Drafts of detailed process documentation on these latest cases are attached to this report. The CP could not meet its target to conduct ten PID processes because of the above-mentioned staffing challenges within the main local NGO partner at the Yendi site. The final 3-year project report will include detailed process documentation on all of the nine completed PID cases.

Within the reporting period, the CP continued to facilitate sharing and promotion of the results of the earlier completed six PID processes within the learning sites. This included training of interested groups and individuals on the improved innovations by the innovators. The activities included upscaling and commercialisation of three innovations on local nutritious foods, two innovations on women's income generation and the outscaling of one innovation on environmental conservation.

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

Thirty of the 40 local innovations identified, documented and promoted were developed by women, thus exceeding the CP's target of 20 innovations by women. Also, six of the nine PID cases facilitated are by women or women's groups. The CP has also almost achieved its target to facilitate the recognition and awarding of 17 women and 3 men by relevant institutions, as eight women and two men received awards in December 2017 (Year 2) and another nine women and one man were given awards in December 2018 (Year 3). Details of Year 3 achievements are described below.

Women's innovations identified, developed, documented and shared

In the Bongo site, two new women's groups were trained on the improved sheabutter processing innovation and provided with toasting machines. With the new skills and machines, the groups have significantly increased their scale of production and incomes from the activity. Also the women's group making local soap in Yendi was trained in packaging of their product. They now package their soaps in different forms and well labelled for sale. With the skills gained, the women have increased the commercial scale of their business and the incomes earned. In addition, two innovations developed by women were further developed jointly through PID. The joint experimentation to improve the nutritional value of local bean cake (*kooshie*) in the Yendi site led to diversified recipes which are more nutritious than the original innovation through addition and substitutions with moringa leaves, *dawadawa* fruit powder etc. The second PID case involving a woman innovator was on treating Bambara beans for storage using sheabutter processing liquid waste in the Bongo site. The PID sought to determine the right temperature of the liquid waste and duration to treat the Bambara beans to ensure their protection against storage pest as well as to maintain viability of the bean seed for planting. The results of the PID processes will enhance food and nutrition and incomes to better the livelihood status of local women.

Women innovators recognised & awarded from relevant government bodies at local or higher level

In this final year, ten deserving innovators (9 women and 1 man) were awarded with certificates and small farm inputs by the Ministry of Food and Agriculture (MoFA) at the annual National Farmers Day in Bongo and Yendi in December 2018. The ten innovators (five from each action-learning site) were selected jointly by the local Multi-Stakeholder Platforms (MSPs), the local implementing NGOs and staff of the District Departments of Agriculture (DoA) in Bongo and Yendi. The innovators also showcased their innovative products or processes in the form of local foods, crop storage, climate-resilient seeds, ethnoveterinary medicine and local soaps at the two events. As a further recognition of women innovators under Proli-FaNS, the Bongo sheabutter innovation group has been registered with the Department of Cooperatives to operate as a legal cooperative society and is now able to access credit facilities to support its businesses. The group has also entered into a partnership with KOICA (Korean International Cooperation Agency), through which they received organisational development and entrepreneurship training and a sheabutter milling machine in January 2019. Added to these is the recognition and award of the key actor of the Community Tree Chief concept by the Bongo Traditional Council in 2018.

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

CPs supported in governance, networking and project implementation

Throughout the project, the Subregional Coordinator (SRC) for West and Central Africa Prolinnova (WCA), the National Steering Committee (NSC) and the CP Technical Support Team have remained very active in performing their duties, which have greatly enhanced the CP governance and Proli-FaNS project results in Year 3. Some of the activities of the NSC in Year 3 that have led to these achievements are:

- The NSC held an annual meeting in April 2019 and reviewed and advised on CP sustenance and project implementation to sustain Prolinnova approach in Ghana.
- Four NSC members participated in two monitoring visits and farmers' experience-sharing sessions at the action-learning sites. Further to this, the NSC Chair and two other members also participated and made speeches at Farmer Innovation Fairs held in April 2019 in the two sites.
- The CP M&E focal person, after taking part in a training workshop on gender analysis in local innovation development offered by a Prolinnova International Support Team (IST) member and a KIT (Royal Tropical Institute) colleague in Nairobi in October 2018, held a similar training in February 2019 for ten (3 female and 7 male) field-implementing staff members in the two action-learning sites to help them improve the Proli-FaNS PID results and also their other work on integrating and reporting on gender issues.

Fundraising to support local innovation and PID activities

ACDEP as the host institution of Proli-FaNS worked with the IST and SRCs to develop and submit a 3-year proposal to Misereor in June 2019 for a follow-on project to Proli-FaNS. ACDEP also submitted a proposal to Misereor in April 2019 for a 3-year project to scientifically validate and integrate farmers' ethnoveterinary medicine innovations within the animal healthcare system in northern Ghana for more accessible and affordable healthcare services to rural smallholder farmers, using participatory processes. The project is to be implemented in partnership with the Swiss TPH (Tropical and Public Health Institute) at the University of Basel as international technical partner, and with the Council for Scientific and Industrial Research (CSIR) Animal Research Institute, the governmental veterinary service, the Pong-Tamale Central Veterinary Laboratory and three selected NGOs in the ACDEP (and Prolinnova-Ghana) network as local project partners.

Conclusions on achievement of the project objectives

By the end of the third year of implementation, the achievement of the project objectives toward the overall goal was as follows:

- Participatory identification of relevant innovations with farmers and sharing the innovations has increased the interest of female and male farmers in harnessing their own creativity and available local resources to enhance their farming and livelihoods.
- Through local innovation and PID processes, men and women farmers have established stronger mutually beneficial collaboration and learning relationships with local extension staff and researchers, who have become more supportive of farmers' initiatives for sustainable solutions. For example, in the focus-group discussions (FGDs) conducted in both the Yendi and Bongo action-learning sites, participants said that, as a result of working on local innovation and PID, their working relationship with DoA, Evangelical Presbyterian Relief & Development Agency (EPDRA) and the Navrongo Bolgatanga Catholic Agricultural Development Office (NABOCADO) has been strengthened through more frequent contacts and has been expanded to include the Women in Agricultural Development (WIAD) Directorate, the Department of Cooperatives and the Veterinary Services Department of MoFA, all of which show interest in and are supportive of the farmers' initiatives.
- PID processes have helped to improve women's capacities in improved food and agro-enterprise processing methods, which has enabled them to develop more nutritious local foods for their families whilst also earning increased incomes from their innovative enterprises than before. For example:
 - Ms Fusheini Adamu in the Yendi site said she often used to take her anaemic child to the hospital but, after she was involved in PID and started feeding her family with foods fortified with soybeans and moringa, she has not needed to take her child to hospital again.
 - Ms Asoo Awine in Tamolga in the Bongo site said she started a lucrative trade of daily preparation and sale of drinks made of sweet potato in the local school and community centre after the PID process on making flour from orange-fleshed sweet potato. She no longer has to travel to southern Ghana for menial jobs, as she now earns good extra income from her locally made drinks, from which she is better able to care for her two children, who now attend school more regularly.
 - Ms Sanatu Baba, a *kooshie* seller in Zang in the Yendi site, said that, after she took part in the PID process, her sales volume and production frequency increased, raising her average profit margin from GHS 30.00 to GHS 50.00 per week.
- The targeted and focused involvement of women in the project made them more popular, appreciated and recognised by community members, ARD stakeholders and the wider public. This has drawn more attention of local government and political authorities to them for potential funding and technical support to upscale their innovations. This recognition inspires them to greater achievement in local innovation.
- Proli-FaNS implementation has helped improve governance of the Prolinnova–Ghana platform as well as networking and learning on farmer-led research and innovation among local ARD partner institutions towards institutionalisation of the PID approach. Local fundraising to support or sustain this approach was, however, not achieved on account of the funding challenges facing target institutions and NGOs in Ghana.

3.2 CURRENT STATUS OF IMPLEMENTATION OF ACTIVITIES AND GENERATION OF OUTPUTS

By the end of the third and final year of the project, the CP in Ghana has accomplished the following major activities and outputs:

Farmer-led research

- Forty local innovations in food processing, crop storage, animal health, income generation and environmental conservation have been identified in the project sites, and 29 of these have been disseminated among farmers for uptake or adaptation through field days, community-sharing sessions, exchange visits, radio broadcasts and farmer innovation fairs. The innovations have been fully profiled and a catalogue of innovation was produced.
- Nine of the selected innovations (6 by women and 3 by men) have undergone PID, thereby increasing their benefits and value to the innovators and other community members. The benefits include improving the nutritional content of household foods, incomes and processing capacities (knowledge and skills). With the capacities acquired, the innovators are scaling up and also commercialising some of the improved innovations.

Documentation

- Documentation products have been developed on local innovations and PID processes and shared with farmers and other project stakeholders, and being used for dissemination and advocacy work in order to encourage other community members to try out the innovations and also in order to mainstream the PID approach in ARD institutions. The products include two short video documentaries on improved sheabutter processing and improved soap-making by two women's groups, 500 calendars portraying local innovation and PID activities, over 1000 brochures on innovations further developed through PID and 500 brochures on five local innovations. Project narrative reports have also been posted on the Prolinnova website and Proli-FaNS webpage. Documentation activities have led to increased awareness, knowledge and interest, as well as stronger partnerships for a farmer-led innovation and research approach to sustainable food and nutrition security.

Advocacy to institutionalise the PID approach

- For their outstanding achievement in local innovation, 19 women and one man have been given certificates and awards in the form of farm inputs and small equipment by the MoFA and the Bongo Traditional Council at the annual National Farmers Day held at district level. The beneficiaries have felt recognised, valued and more encouraged to continue to innovate to address their farming and livelihoods problems.
- Sharing of local innovations and the project approach on local radio by farmers and local project partners, and the involvement of staff of the university, research Institutions, DoAs and Local Government as research facilitators and members of national and local MSPs have also helped to promote the approach. A female university lecturer on the project technical team is already using some of the PID results in her lectures.
- Farmer innovation fairs were organised at the two action-learning sites in April 2019, in which 18 male and 20 female innovators exhibited and shared their innovations. Communities, local political authorities, relevant government institutions, traditional rulers, media, private entrepreneurs and NGOs attended. As a result, there is growing interest of government institutions and political authorities at the district level to support and fund women's innovation in farming and agro-processing. However, the CP could not organise the annual national policy-dialogue fora to share results from farmers with policymakers because of the great amount of time spent by project partners on facilitating local innovation and PID processes and on dissemination activities at community level, which had not been expected to be so time-consuming. However, at the level of Northern Ghana, the 2017 IPW held in Tamale and the

annual Farmer Awards Days provided good opportunities to share on local innovation and the PID approach, as well as for farmers to present their results to other ARD stakeholders and political authorities.

Project management/ CP coordination

- The NSC, the CP Technical Support Team and the site-based local MSPs performed their respective roles by ensuring good CP governance and project implementation. However, expansion of the national platform to include more relevant institutions and networking with other relevant platforms could not be achieved because of the general financial constraints of potential institutions for such engagement.
- In June 2019, ACDEP/Prolinnova–Ghana supported and coordinated the preparation and submission of a proposal to Misereor for a follow-on project to Proli-FaNS and also submitted another proposal to the same donor to develop farmers’ ethnoveterinary innovations.
- ACDEP/Prolinnova–Ghana coordinated organisation of the 2019 IPW and annual Proli-FaNS partners meeting held in May 2019 in Senegal. Similar events had earlier been held in Ghana in 2017 and in Kenya in 2018. The learning and experience acquired have helped improve project implementation and results at the action-learning sites.
- With respect to South–South backstopping of CPs, Djibril Thiam (Prolinnova–Senegal) and Joe Nchor visited Prolinnova–Cameroon in Year 2, and Georges Djohy (SRC for West & Central Africa) and Joe Nchor visited Burkina Faso in Year 3 (January 2019). Earlier in July 2018 within Year 2, James Japiong (ACDEP Finance) visited and supported Prolinnova–Ethiopia on financial management and reporting. The visits have helped to improve the technical implementation and project coordination of the two CPs.

3.3 UNINTENDED EFFECTS ARISING FROM PROJECT IMPLEMENTATION

No unintended effects were observed or recorded.

3.4 RISKS AND/OR UNEXPECTED OPPORTUNITIES

Risks:

Use of herbal concoctions in an innovation to drench pigs to manage African swine fever (ASF) could pose some health risks to the animals if the concentrations and storage period are not scientifically determined. Even though a PID process was conducted to determine these characteristics (i.e. to confirm the efficacy of the herbs in managing ASF and to try different methods to propagate the herbs), the herbal preparations will need further validation through laboratory analysis and tests. Similarly, application of liquid manure on the foliage of vegetables as an innovation of women gardeners in the Bongo site could introduce contaminants and poisonous chemicals if the decomposition processes are incomplete. Hence, more work is required in collaboration with formal researchers to scientifically determine and standardise the liquid substrate each time before use in order to eliminate or reduce any risk of poisonous effects to consumers.

Opportunities:

The Ghanaian Government’s development initiative for rural areas dubbed *One District One Factory (1D1F)*, which is being led by the private sector to create wealth and jobs through harnessing available raw materials including agricultural produce within a particular district to produce local and exportable products, is an opportunity for the women’s sheabutter processing groups and individuals in the Bongo and Yendi action-learning sites. The groups could take advantage of the market opportunities that will be created through establishment of sheabutter processing factories at different locations to scale up and increase their incomes from their sheabutter processing.

The Government is embarking on a programme to stop illegal logging and export of rosewood timber and to stop small-scale mining of gold, which destroys the vegetation and water bodies in communities in Northern Ghana. NABOCADO is taking advantage of this programme and working strongly with the Forestry Commission in the Upper East Region to scale up the Tree Chief concept to the Bongo and Talensi Districts to help curb these destructive activities so as to safeguard the environment for sustainable livelihoods. The Tree Chief concept, which was refined through PID, is a way of empowering a local volunteer to lead in enforcement of locally developed bylaws with support of traditional rulers to be able to protect the community vegetation and restore the integrity of the environment.

3.5 PROJECT EVALUATION

ACDEP as the project host coordinated an end-term evaluation of the Proli-FaNS project undertaken from January to April 2019 by a consultant team from the University of Parakou in the Republic of Benin, with field visits to Burkina Faso and Ghana (of the five CPs in the project) for interviews and data collection. The draft report was reviewed and improved by project partners – ACDEP, Prolinnova Oversight Group (POG) co-chair, IST members, SRC for West & Central Africa and the five CPs involved – and the final report was submitted to Misereor at the end of June 2019. Key results and recommendations of the evaluation were as follows.

Results:

- Local innovations in food processing, crop production and storage, animal health and organic fertilisation were documented and shared.
- Innovative women have attracted respect and recognition by both men and women and serve as a motivation to other women whose voices could not be heard in the communities.
- Confidence of “outsiders” and their appreciation of rural people’s own creativity and innovativeness have increased.
- Relationships among farmers and between farmers and other ARD stakeholders for joint work and learning on PID activities have been improved and strengthened.

Recommendations:

- Introduce positive competition mechanisms at subregional, national and subnational levels.
- Invest more in capacity building at different levels on the principles, guidelines and values of the Prolinnova network.
- Rethink the staffing structure, strengthening the existing knowledge management system and give more attention to identifying and making good use of “friends” of Prolinnova.
- Integrate a “smart” M&E system with the use of information and communication technology (ICT).
- Improve the M&E practices through conducting a baseline study, mid-term and final evaluation for future projects.
- Engage more with research institutions to scientifically validate and develop farmers’ innovations.
- Build capacity of CPs and their partners in fundraising to sustain the Prolinnova work in each country.

In addition, an end-of-project sharing and learning workshop for the CPs involved in the project was held immediately before the annual Prolinnova IPW in May 2019 in Senegal. This enabled an assessment of achievements, weaknesses and constraints of the project, which are lessons to improve implementation and results of future Prolinnova projects.

4.0 CONCLUSIONS

The project objectives have been largely achieved at the end of the 3-year project period, as innovators have been well exposed to others who are valuing, further developing and using their innovations to improve farming and livelihood activities. Women are scaling up their innovations on nutritious food processing and income-generating enterprises for more benefits to the women and their families. The CP governance and networking among Prolinnova–Ghana platform members have seen a significant strengthening with greater appreciation for the PID approach.

Key lessons learned:

- The confidence of local ARD stakeholders and political and administrative authorities on the importance of rural people’s creativity and innovativeness has increased, giving hope for sustainability of this approach.
- The local MSP concept has worked well to promote learning and capacity building among the members at each action-learning site, and is contributing to mainstreaming PID within their other ARD-related activities and approaches.
- Although Prolinnova–Ghana has made significant achievement of project targets related to women and gender, the local NGO field staff and the CP Technical Support Team members need to be more skilled in understanding and addressing gender issues in promoting local innovation and facilitating PID in order to achieve better results.

In conclusion, Proli-FaNS project implementation has provided valuable experiences, lessons and capacity building of the project partners to better implement their other projects and activities related to agricultural research and development as well as a possible follow-on project to scale up the results for greater impact on the lives of rural women and men.