BUILDING SMALLHOLDER FARMERS RESILIENCE IN KAYONZA DISTRICT
A CASE STUDY OF STARLIT PROJECT
STARLIT IN KAYONZA

Kayonza district is a drought prone area in Eastern Rwanda. The district has been experiencing rainfall shortage and food insecurity for the past few years. Cordaid through IFAD funding is implementing the STARLIT (Strengthening Agricultural Resilience through Learning and Innovation) project, which aims to strengthen the resilience of farmers in the context of prolonged disasters, such as the COVID-19.

STARLIT is an 18-month project and targets 2800 smallholders’ farmers in maize value chain in Rwanda and Kenya of which 45% are women. To strengthen farmers’ resilience STARLIT focuses on four thematic area:
During the COVID-19 pandemic, smallholder farmers could not access trainings due to lockdown, movements and gathering restrictions. In partnership with VIAMO, STARLIT designed digital remote training focusing on good agricultural practices (GAP) to improve maize production. The developed training module was approved by the Rwanda Agricultural Board (RAB). Due to high illiteracy rate among rural farmers (30% per baseline report, 2022), the project designed interactive voice responses (IVR) approach where smallholders received voice training through their mobile phones.

With this old mobile phone, I received 8 training lessons sitting in my house. I also invited my neighbors who are not part of our cooperative to learn with me through my mobile phone. We learnt a lot ranging from field preparation to post-harvest management. This was the first time to receive such training. Training was very flexible, we could receive them from anywhere and if you missed, you could dial back and get the training on a convenient time. I believe my harvest is going to increase. Says... INGABIRE Josiane, Cooperative Imirasire-Rukara

Digital remote training targeted 1700 farmers who own mobile phone but reached 2,623 including non-project beneficiaries. Project beneficiaries who received voice call could put loud speaker and learn with neighbors. The project noticed that there was knowledge change of 28% of participants comparing baseline and endline survey, with completion rate of 90%. To ensure sustainability in accessing digital remote training, a hotline was established by partner digital company (VIAMO) where farmers can call and access training remotely at a low-cost rate.
2. ACCESS TO AGRICULTURE MECHANIZATION

Due to drought in the area STARLIT builds farmers resilience to climate change through improving access to irrigation technology. The project is partnering with irrigation equipment suppliers, to raise awareness on the importance of irrigation to control drought by conducting field demonstration. Furthermore, the project developed agri-equipment loan product with partner microfinance institution (RIM Microfinance).

Through partnership with Youth Engagement in Agricultural network (YEAN,) STARLIT developed agri-equipment maintenance model and trained youth who will provide maintenance services on fee-based to the farmers (fee-based service provider).

Last season was very terrible, we planted but we could not harvest due lack of rainfall, our hope and prayers has been on rainfall but with a lot of disappointments. This season we received 2 irrigation systems to irrigate our two hectares, and we have started irrigation, we have no worry even if it does not rain, thanks for STARLIT project facilitation and support. “ Claude Twagiramungu president of IMIRASIRE RUKARA Cooperative–Rwimishinya Village.

This is very innovative. I did not know that there is a lot of opportunities in agri-sector. I have seen a lot of agri-equipment disfunctional in many farmer organizations, this is an opportunity for me to fix them and get money to sustain my life. I will do my job very well and hope to get many clients, if all goes well, I will create my own company and expand my business and hire more youth. Regine female fee-based equipment maintenance service provider.

One of the main challenges that limits farmers to invest and access agri-equipment is lack of skill maintenance service, this discourages farmers from buying and using agri-equipment. To overcome this, STARLIT project trained 18 youth on agri-equipment maintenance of which 30% are female to ensure farmer access maintenance services but also create employment opportunities for youth in rural areas.

Through project facilitation 46 solar-powered irrigation systems have been accessed by 3 farmers organizations and 14 individual farmers to irrigate thei their land.
3. ACCESS TO AGRICULTURAL FINANCE

Access to agri-finance is a paramount in building farmers resilience to climate change, access to inputs, produce aggregations, buying irrigation and post-harvest equipment all these require capital. STARLIT project supported partner microfinance institutions to develop tailored agri-financial products, for instance agri-equipment loan product which suits the need of farmers. Furthermore the project trained partner financial institutions on agri-finance risk management, to further improve risk management in agricultural lending. STARLIT also introduced Agricultural credit assessment tool (A-CAT) which helps financial to estimate on loan required. With A-CAT loan officers can determine the ideal loan size per land size and crop and expect revenue. Hence reduce the risk of lending more or less than they should.

Financial linkage sessions contributed to build strong relations between MFIs, SACCOs and smallholder farmers but also increased farmers confidence working with financial institutions. Through various interventions, 1,176 farmers accessed agri-loan of which 52% are women. STARLIT provided technical assistance to 12 SACCOs in Kayonza, 4 Microfinance institutions. It introduced loan assessment tools, financial products, risk-management and refinancing, to foster smallholder farmers access to agriculture financing.

<table>
<thead>
<tr>
<th>52% WOMEN</th>
<th>48% MEN</th>
<th>1,176 Smallholder farmers received loans</th>
</tr>
</thead>
</table>

Our cooperative is located in Rukara sector, access to finance has been a challenge, financial institutions have been letting us down. Since we started working with STARLIT project, things have changed, I have noticed financial institutions willingness to work with us. Our Cooperative have been able to access 2,300 USD loan from Rukara SACCO, we were able to buy inputs for all our 16 members, Murengera president of Dukundisuka Cooperative.
4. SOUTH-SOUTH KNOWLEDGE EXCHANGE

In STARLIT project, knowledge exchange and learning is fundamental and forms a basis of the project intervention. Sharing and communicating innovation and successful intervention to project partners and sectoral stakeholders helps to upscale and replicate achievements in the agricultural sector.

STARLIT organizes quarterly knowledge exchange sessions with project partners and stakeholders commonly known as Plan, Do, Check, and Act (PDCA). The intention is to share, learnings, innovation, opportunities and challenges with project partners and stakeholders.

STARLIT approach is very interesting, it puts private sector private partners at the center of project implementation while project play facilitation role. Learning workshop organized by the project helped me understand and learn more about project success and challenges and the role I can play to support sustainable results while helping my business grow by working with smallholders. I have not seen this in other projects, I believe once the project end we will not have any problem working with farmers. NSANZEMUCYO Thernence-ISales manager, Ignite Powers.

The STARLIT project developed case studies to highlight achievements, lessons learned and innovation. The intention is to ensure that learning and best practices generated from the project are shared and can help other development interventions replicate its model. Exchange visits between Kenya and Rwanda are also planned to share knowledge on the implementation of innovative agricultural solutions.