Small Investments, High Returns: Collective action triggers multiple benefits in maize-legume value chains

Summary and key facts

- Over 85% of commodity value chain players work in isolation, consequently, they cannot take advantage of the horizontal and vertical linkages, and synergies inherent in the system.

- The Agricultural Innovation Platform (AIP) approach brings together farmers, input suppliers, produce buyers and service providers, so that all actors along the commodity value chain sustainably and more profitably conduct business.

- In a pilot AIP implemented by Kalongo sub-county actors, operational costs reduced especially among farmers, produce buyers and extension agents, leading to increased profitability.

- To multiply the success of this collective approach, there is need to scale it up by mainstreaming it nationally in the Agriculture Sector Strategic Plan (ASSP) and integrating it in extension systems at district level.

What is the problem?

Fragmented agricultural value chains hold back production for all

Over 85% of commodity value chain players, such as farmers and agribusiness dealers, operate in isolation, consequently they cannot take advantage of the horizontal and vertical linkages, and synergies inherent in the system. Farmers individually buy inputs, operate separately without sharing experiences and information amongst themselves and tend to do individual rather than collective marketing of farm produce. This leads to higher costs of production and inability to gain from economies of scale. In addition, the lack of effective extension services due to the absence of organized farmer groups leads to poor adoption and demand for farm inputs. Added together this lowers the business case for agro-dealers (input suppliers) to engage in input trade at scale.
What solutions were identified from research?

Connecting actors along maize-legume value chains a win-win for all

In 2012, the International Maize and Wheat Improvement Center (CIMMYT) introduced the Sustainable Intensification of Maize-Legume Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA) project in Uganda to increase smallholders’ food and nutrition security, and income levels. This was realized through integration of sustainable intensification practices such as conservation agriculture for increased productivity and protection of the environment.

Initially, farmers had to be trained in the use of Conservation Agriculture-based Sustainable Intensification (CASI) technologies; This implied that access to modern inputs on one hand and opportunities to tap markets for the increased production were necessary. The project therefore introduced the Agricultural Innovations Platforms (AIPs) approach to bring together farmers, input suppliers, produce buyers and service providers so that all actors along the commodity value chain could sustainably and more profitably conduct their business.

AIPs bring value chains together

An Agricultural Innovation Platform (AIP) is a forum established to foster interaction among a group of relevant stakeholders around a shared interest or goal. The stakeholders perform complementary roles in the development, adaptation, dissemination and adoption of knowledge for biophysical and socioeconomic benefits.

The AIP approach is relatively new in Uganda and has not been fully integrated in the frontline extension system. In that regard, there was no platform bringing together the different actors in the commodity system. In addition, extension services tended to focus exclusively on farmers leaving out other key actors along the value chain.

Before the AIP mode of operation, more than 90% of farmers procured farm inputs, such as fertilizer and seed, individually in limited quantities. As a consequence, farmers faced high input purchase prices since they were bargaining as individuals. In addition, the cost of inputs was increased by the long distances farmers had to cover in search of inputs. Furthermore, extension cover was limited and expensive because farmers were not working together in groups. More than 80% of the farmers were not attracting extension or financial services because of the cost of handling individual farmers rather than organized farmer groups.

On the side of marketing, more than 80% of farmers would sell produce immediately after harvest due to lack of storage facilities and bulking arrangements, hence fetching low prices. In addition, flow of information about market prices and available buyers was poor amongst the farmers. From business model analysis, the SIMLESA project identified the different actors along the commodity value chain and contextualized their challenges, constraints and opportunities.
Opportunities for policy action

Invest in local extension systems to support AIPs

Capacitate local extension departments (through training and funding) to support the growth and development of AIPs

The synergies created among partners in the maize-legume value chains point to the opportunity to establish similar models in other locations. The AIP approach allowed greater access to information, technical assistance and procurement of inputs by farmers through the involvement of different actors, including agro input dealers.

Therefore, local action should focus on supporting such groups. Use agricultural extension and community development departments as entry points for providing farming communities with technical support in group formation, leadership, financial and business management skills.

Why Act Now?

Modern economies are characterized by tightly interconnected supply and value chains. For the modernization of Ugandan agriculture to take place, the seeds for the growth of interconnected value chains need to be planted now. It is envisaged that using the AIP approach will lead to better integration and functioning of maize-legume value chains and provide incentives for local development of agribusinesses. This will lay a good foundation for agricultural modernization in Uganda.
References and sources


Please also visit us at:

www.simlesa.cimmyt.org for more publications and data on Uganda and other SIMLESA program countries

Acknowledgements

Financed by the Australian Centre for International Agricultural Research (ACIAR), SIMLESA project was led by the International Maize and Wheat Improvement Center (CIMMYT) in collaboration with Uganda National Agricultural Research Organisation (NARO), numerous partners, including national agricultural Research institutes in Ethiopia, Kenya, Malawi, Mozambique, Rwanda and Tanzania in collaboration with other CGIAR centers. Other regional and international partners included Queensland Alliance for Agriculture and Food Innovation (QAAFI) of the University of Queensland, Australia and the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), among others.

For further enquiries please contact:

Drake N. Mubiru, National Agricultural Research Laboratories (NARL) – Kawanda/ National Agricultural Research Organization (NARO).
P.O. Box 7065, Kampala, Uganda.
drakenmubiru@yahoo.com

William N. Nanyeenya, National Livestock Resources Research Institute (NaLIRRI)/ NARO.
P.O. Box 5407, Kampala, Uganda
will04nan@yahoo.com

Charlotte Kemigyisha, NARO Secretariat.
P.O. Box 295 Entebbe, Uganda.
ckemigyisha@naro.go.ug

Jalia Namakula, National Agricultural Research Laboratories (NARL) – Kawanda/ National Agricultural Research Organization (NARO).
P.O. Box 7065, Kampala, Uganda.
jalianamakula7@gmail.com

Joselyn Kashagama, National Agricultural Research Laboratories (NARL) – Kawanda/ National Agricultural Research Organization (NARO).
P.O. Box 7065, Kampala, Uganda.
joselynleah@yahoo.com