CIMMYT

SIMLESA
Sustainable Intensification of Maize and Legume Systems for Food Security in Eastern and Southern Africa

TARI
Transforming Agriculture

Australian Government
Australian Centre for International Agricultural Research

COUNTRY POLICY BRIEF

ENHANCING AGRICULTURAL RESILIENCE AND SUSTAINABILITY IN TANZANIA

Connecting farmers with other value chain actors fuels climate-smart agriculture in Tanzania

Summary and key facts

Lack of agro-dealers and inadequate infrastructure facilities - roads, organized markets - in rural areas inhibit the use of climate-smart technologies causing low average crop production and worsening food insecurity

AIPs provide an opportunity to fuel innovation and input adoption. Research shows farmers in AIPs receive more information about technologies, resulting in improved levels (more than 35% of farmers) of adoption

An AIP's strength and level of success is built on gender equitable participation, effective leadership, stakeholder diversity, joint planning and execution of tasks and ways to reach consensus

What is the problem?

Poor market access and weak value chains restrain farmer productivity

Smallholder agriculture can be regarded as small or micro-enterprises, their market participation costs tend to be high and many market intermediaries find it costly to supply inputs or collect produce from many dispersed farmers demanding or selling only small volumes each. The situation is linked to poor farmer organization. With around 70% of rural farming households working in isolation, farmers lose the chance to increase their bargaining power through the formation of groups and organizations.

> A lack of collective farmer participation in markets worsens inadequate and untimely availability of inputs, improved seed and fertilizers, and poor market reach of local produce.

Infrastructural challenges worsen farmer access to inputs and value chains:

- The average distance to seed and fertilizer dealers is about 15.2 km and 15.7 km, approximately 2 hours walking one way, respectively.
- On average, farmers use approximately 2 - 2.5 hours - one way - to reach a trading center where agricultural input or commodity dealers are found.

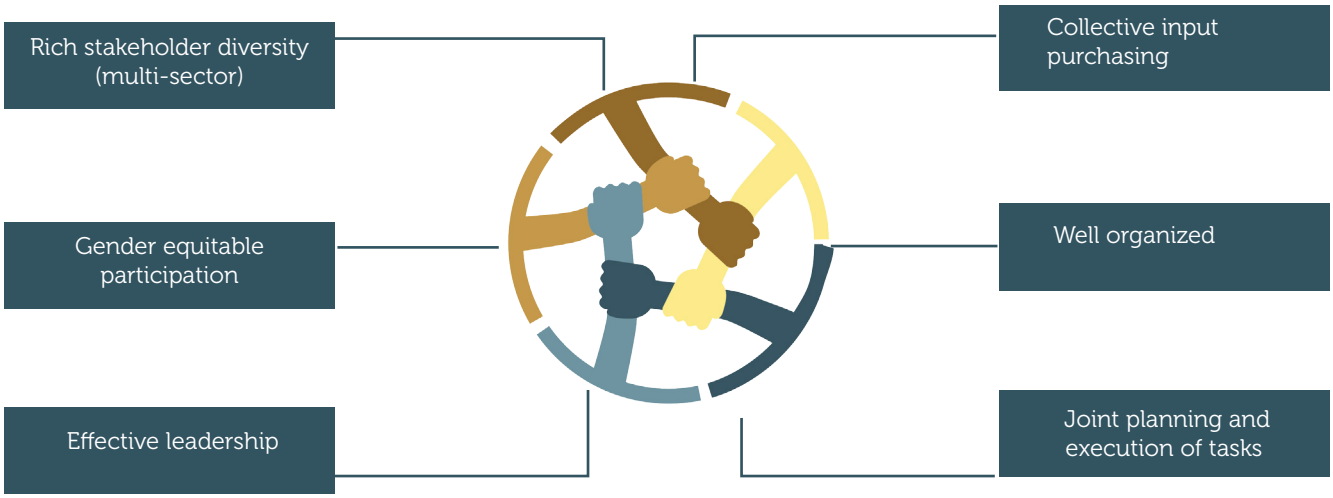
What solutions were identified from research?

Agricultural Innovation Platforms create strong support systems for climate-smart agriculture

The Sustainable Intensification of Maize-Legume Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA) project pioneered the use of Agriculture Innovation Platforms (AIPs) to address challenges in farmer access to agricultural input and output markets, in rural areas in the north (Arusha) and east (Morogoro) of the country. To initiate the exercise, the Tanzania agricultural research Institute (TARI) organized meetings and employed the use of focus group discussions as a tool to reach consensus. The focus group discussions included stakeholders such as farmers, traders, knowledge providers (local government officers), village leaders, agro-dealers and political leaders. Each stakeholder performed different but complementary roles in the development, dissemination and adoption of knowledge for socio-economic benefit.

What Makes an AIP Successful?

Highly successful AIPs, Kwimage and Mageuzi, benefited from:



Kwimage AIP profile:

- 22 active members (12 men, 10 women).
- Members come from various parts of the village with the chairperson being a farmer, the secretary is an extension officer and the treasurer a farmer.
- Remaining members constitute farmers, agribusinesses and the sub-village heads.
- Bi-monthly meetings to discuss issues related to agriculture.
- New members and interested parties are invited to attend sessions of the meetings.
- Some of the agenda discussed includes contributions for collective input purchases, and new opportunities arising from government interventions.
- Members benefit from collective selling and purchasing, technological capacity building (from developmental partners), increased yields, increased options for crop diversification (intercropping).

Mageuzi AIP profile:

- 18 active members (8 men, 10 women).
- Structure includes a chairperson, secretary, treasurer and members.
- Members include smallholder farmers, village leaders, village extension officers, agribusiness and political leaders.
- Meetings are scheduled at three week intervals.
- The agenda includes, collective input purchases and group farming.
- Proven advantages include timely access to herbicides, seeds and fertilizer.
- Recently, members of this group called for help to control American Fall Armyworm.

Key achievements of the ten AIPs include:

Increase in input use by farmer: Scaling out SIMLESA technologies into the surrounding community even among farmers outside the AIP, creating spillovers. The outcome saw an increased number of farmers using improved seeds in maize and legumes from 30-40% before SIMLESA intervention up to 85%.

Strengthening social capital among farmers: Membership in farmer groups and AIPs enhanced the exchange of information and increased farmers' knowledge about new technologies leading to enhanced adoption. Many farmers were able to interact in AIPs that consisted of an average of 22 people involving fellow farmers, agribusiness owners, extension workers, scientists, sub-village officials and political leaders.

Opportunities for policy action

Invest in collective institutions for innovative farming communities

Use local extension and community development departments to support the growth and development of AIPs

The synergies created among partners in the maize-legume value chains show opportunity for establishment of similar models in other locations. The approach used by AIPs allowed greater access to information, technical assistance and production of inputs by farmers through the involvement of different actors, including agro-dealers. Therefore, local action should focus on supporting such groups. Using agricultural extension and community development departments as an entry point for providing farming communities with technical support in group formation, leadership, financial and business management skills.

Strengthen and formalize social network formation in farming communities

The importance of social networks enabled by AIPs suggests the need to support collective institutions as well as other organizations such as service providers to assist in accessing markets, inputs, information and credit. Investments in rural advisory services and extension can help bridge the low capacity for formation and running of collective organizations capable of effective engagement with markets. Opportunities to formalize and support farmers' groups is important to create networks of information exchange, market access and resource mobilization.

Why act now?

Continuing to have many farmers operate in isolation and bearing large marketing costs is not conducive to agricultural modernization and development. Reducing the cost of operations and increasing the efficiency of all actors along the value chain, is a national development imperative. Without this, the foundations of the nation's economy will remain weak.

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