Opportunities in agribusiness value chains: incentives for sustainable intensification

What is the role of markets and value chains in sustainable intensification?

Sustainable agricultural intensification will (almost surely) be mediated by well-functioning markets and value chains. Four important principles for value chain development and research have been deduced from SIMLESA work. The basic notion is to modernize agricultural value chains to make them true drivers of sustainable agricultural intensification.

But what are the gaps in the agribusiness environment and how do they hold back sustainable intensification?

Smallholders can be regarded as small or micro-enterprises. The irony is that their market participation costs tend to be high. Many market intermediaries find it costly to supply inputs or aggregate produce from many farmers scattered over large areas each buying or selling relatively small quantities of inputs or produce. Moreover, infrastructural and organizational deficiencies make matters worse. Inadequate and delayed availability of inputs in rural areas are common. In some cases, the average distance to the seed and fertilizer dealers is 16 km, (approximately two hours of walking one way). In some locations it is reported that only 5 to 9 percent of respondents use fertilizer or other agro-inputs.

What can be done to close these gaps, and what did we learn from SIMLESA work?

No meaningful modernization of agriculture can take place with rudimentary and fragmented value chains. It is appropriate to invest in collective institutions to facilitate value chain coordination. Deliberate actions from public and private sectors as well as community action will help this process. This idea arises for the key approach in the implementation of SIMLESA research: The use of multi-stakeholder processes to promote collaboration, coordination, and improve value chain participation.
How can the research lessons be translated into action?

Consider collective action in demand creation and market growth in seed value chains
Extensive community demonstrations as part of the SIMLESA project were key to success in increasing seed demand among farmers. The project demonstrated that eight in ten farmers, who participated in field days around the demonstrations, chose to plant drought-tolerant maize seed. The lesson from this was that good and extensive demonstrations create market demand. While the project tested this in a research setting, individual agribusinesses do not have the incentives to invest in these kinds of activities that benefit the whole industry. This is because they cannot exclusively recoup the benefits of their efforts, a requisite for private investment. Therefore, demand creation for seed and other inputs could be done collectively for the benefit of the industry. As markets begin to grow, there will be a strong business case to invest in distribution channels.

Invest in collective action in machinery value chains
The low development of private markets in smallholder appropriate machinery suggests a need to invest in sector-wide efforts to improve mechanization. Similar to seed value chains, expert consultations in SIMLESA and related research have concluded that individual businesses may not have the capacity or incentive to carry out these industry-wide activities. Collective approaches from government and private agribusiness are needed to develop machinery markets. Moreover, research has shown that custom hire services can help overcome the high costs of equipment purchases. Even small machines are likely to be expensive for many smallholders. For many farmers, it will be more cost effective to hire machinery instead. A framework involving different players in the machinery sector for market demand creation and service provision is warranted.

Support innovators in rural market development
Some agribusinesses may be willing to invest in rural innovation, market development and technology adoption as part of their business model. These should be given full policy support. In SIMLESA, there were good examples of public-private partnerships through a competitive grants scheme. One way to scale up these kinds of efforts would be to link innovative agri-businesses with extension services to run demonstrations and the promotion of agro-inputs. If appropriate, participating businesses will need to qualify by demonstrating co-investment in the development of the relevant value chains. Another important opportunity for action may revolve around creating funds that small and medium agribusinesses can access to buy machinery for hire, for example. When this approach is combined with demand creation opportunities, the impacts are likely to be considerable.

About SIMLESA
Since 2010, the Sustainable Intensification of Maize-Legume Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA) has been implemented in Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Tanzania and Uganda. The project seeks to increase food security, productivity, income levels and resilience to climate change while simultaneously protecting the natural resource base through integrating sustainable intensification technologies and practices in African smallholder farming systems.

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Further readings
For further information on which this brief is based, please visit https://simlesa.cimmyt.org/resources to access policy briefs, synthesis reports, journal articles, datasets and other information.