Evidence from the SIMLESA Program shows the scaling of technologies informed by research and implemented through experienced scaling out partners and Agricultural Innovation Platforms (AIPs) are reaching hundreds of thousands.

SIMLESA has 58 Agricultural Innovation Platforms showing different degree of success.

Success in scaling of technologies is largely possible due to investments in research and development, and supportive policy.

Figure 1. SIMLESA is achieving both scaling up and out simultaneously
EXECUTIVE SUMMARY:

In-depth case research among 5 successful AIPs illustrate how research and development continuum can be achieved seamlessly. Through a competitive grant scheme (CGS), 13 development organisations applied innovative complementary approaches (e.g. ICT, media, collective action, marketing) to scale SIMLESA portfolios. They triggered innovation targeted to achieve at least 15% (about 440,940) adoption among those reached. This built upon AIP achievements, which include sustainable spill-over benefits and equitable sharing. In Rwanda, research-guided transformative investments through AIPs were catalysed by policy (instruments) and national coordination of rural agricultural programmes.

KEY FACTS AND FIGURES:

- Scaling is critical in Sustainable Intensification (SI) (IIRR 1998; Uvin and Miller 1994)
- Investment in extension yields 80% annual rates of return, however, only 15% of the world’s extension agents are women (G-FRAS 2012). The African average is much lower (FAO 2000)
- Only about 5% of women farmers benefit from direct formal extension services (G-FRAS 2012)
- In sub-Saharan Africa, extension–farmer ratio is about 1:2000 (Duo and Bruening 2007)
- Beyond reaching households, it is necessary to increase programme benefits and impact (see also IIRR 2000; Proctor 2003) and social equity through policy and investments.

SIMLESA EXPERIENCE AND LESSONS

Extend portfolios, rather than components

SIMLESA portfolios refer to systematic and contextually optimal combinations of research options that prioritise quality tillage, integrated crop management, and improved crop and forage germplasm. These vary across the 8 SIMLESA countries.
Catalyse innovation

The SIMLESA CGS is a novel funding mechanism to apply practicable scaling ideas (e.g. Mbabu and Hall 2012; World Bank. 2010). Beyond extending portfolios, the CGS is designed to contribute to SIMLESA’s overall adoption target of >650,000 households by 2018. It is building upon AIP successes to catalyse innovation by integrating scaling science (i.e. research evidence) with approaches that prioritise contextual realities (social, economic and ecological) based on partners’ extensive hands-on experience.

Pass the baton efficiently

The CGS ensured research passes CA-based portfolios procedurally to next-users. And that next-users deliver them successfully to beneficiaries.

SIMLESA CGS was crafted as a handover strategy, to facilitate sharing of research portfolios through partnerships among private and public extension, private sector (media, ICT, seed), national farmer organisations, universities, market-focused NGOs, church organisation.

Figure 2. Better social and economic benefits are realised from SIMLESA portfolios, rather than individual components (Kassie et al., 2015).
Due to the absence of survey data, we use the CGS partners’ approximation as a scientific guide to estimate reach and adoption (see Hassan et al. 2001). By 2023, partners estimate about 440,940 (15% of those reached) will be adopting different combinations of SIMLES research options.

Figure 3. Research and development as a relay continuum. In this CGS illustration, the baton is the set of research portfolios that get handed over seamlessly. SIMLES research in scaling served to build a strategy for handover.

Trigger equitable spill-overs, for impact at scale through AIP

Evidence shows mentoring (for adaptive capacity) and investments (i.e. identification and pursuing of agri-business niches among AIPs resulted in bundles of services and goods. This is illustrated by two non-SIMLES innovation platforms (KIAI and Mudende) of Rwanda, which had a network of 700 men and women. Their core activities were processing cassava, milk, and seed potato (and potato seed) production. Through their commercial services (cleaning produce, storage/preservation, factory/urban delivery, fortification/product development, etc.), they i) increased market access, mitigated transaction costs and leveraged better and stable prices for smallholders ii) improved nutrition among the vulnerable
iii) attracted infrastructure development e.g. Mudende feeder road
iv) attracted banking facilities and services
v) provided affordable and secure produce transport
vi) facilitated equitable sharing of proceeds and influence/leadership
vii) aided responsible management of common pool natural resources including land, water and new germplasm. Within SIMLESA, Kieni AIP (Kenya) attracted insurance and poultry investments that benefitted thousands outside the 35 membership. Rhotia AIP (Tanzania) created new international market channel for pigeon pea smallholders, lowered transaction costs and helped to commercialise an otherwise subsistence pattern of production.

By integrating AIP, CBO, cooperative and farmer group principles, the combined direct service network and infrastructure reach of KIAI and Mudende was over 7500 non-member households. This was largely possible due to investments in research and development, and supportive policy.

Mitigate AIP pitfalls

AIPs suffered from common collective action strains, such as conflicting goals or functions, tension between social and business functions. They’re however more adaptive, and embrace socially and economically heterogeneous membership. Usually, social heterogeneity fosters exclusion and elite capture in market-focused systems. The AIP model as applied in Rwanda illustrates that when well managed, heterogeneity is a strength that breeds mutual interdependencies. AIPs enabled much more complex linkages for multipurpose roles. This complicated internal coordination, and required initial external facilitation to bring significant benefits that propelled take-off. The Rwanda cases of successful rural transformation were possible because of policy instruments (incl. 40% state support on capital machinery costs, along with access road improvement to successful investments, last resort enforcer of equity policy and national coordination) and facilitation of non-public investments along the value chain for responsible market integration.

POLICY AND INVESTMENTS

The preceding Rwanda cases illustrate that policy and national coordination are needed to spur both local and foreign investments to build upon SIMLESA AIP successes. The SIMLESA CGS has generated ground for new sort of policy instrument for information chain development, such as a National Agricultural Scaling Innovation Facility.
FURTHER READING

IIRR. 2000. Going to scale: can we bring more benefits to more people, more quickly? Nairobi: International Institute for Rural Reconstruction.
ACIAR’S CONTRIBUTION TO RESEARCH

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