Objective 4: To support the development of local and regional innovations systems and scaling-out modalities

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Innovation systems, scaling: why?

- Scaling is a critical in SI
  - (IIRR 1998; Uvin and Miller 1994)

- Increasing Programme impact, benefits (incl. spillovers, co-benefits)
  - see IIRR 2000; Proctor 2003

- Need for transformational investments
  - Investments in extension yield up to 80% annual rates of return
  - 40–60% is the norm (G-FRAS 2012)

- Equity:
  - 15% of the world’s extension agents are women
  - only 5% of women farmers benefit from extension services

- In Africa, extension – farmer ratio is worse than 1:2000
  - (Duo and Bruening 2007)

- African smallholder has diverse information sources
  - 75% get knowledge through social networks
SIMLESA simplified: an adaptation of the AIDED Model (www.yale.edu)

- **Assess the contexts, select suitable technologies**: SIMLESA I
  - political, regulatory, economic, social/cultural, technological, institutional (NARS)
  - constraints, opportunities (baseline)
- **Innovate to fit**: tailor CA-based options i.e. trials, PVS – SIMLESA I
  - AIP-based learning for **CA portfolios, social equity**
- **Develop support**: policies, institutions, **buy-in** – SIMLESA II
- **Engage next-user groups**: **handover** – advanced AIP practice, CGS – SIMLESA II
- **Devolve efforts, (to) spread SIMLESA innovation**
  - Transfer **benefits** e.g. apply lessons for climate smart practice
  - **Institutionalisation** – regular application through co-investments
Objective 4: Scaling science

i) Reach:
   How many farming households – women and men – are verifiably reached, supported to access SIMLESA portfolios, in a given period?

ii) Support for adoption:
   How does each approach support farmers against common adoption challenges?

iii) Support for institutionalisation:
   How do the employed approaches connect the SI process to opportunities (resources, policies, values) occurring in the broader economic, political, or cultural context?

iv) Value for Aus$:
   Which approach or scaling model offers best comparative value for investments?

v) Institutional innovation:
   How does the scaling programme change the basic routines, resourcefulness and partnership map of the implementing organisations?
1. Reach

• CGS, the numbers
  – About 4.1 million reached
  – About 17% estimated to be trying out

• Key conclusion:
  – ICT, media reach more people faster. Interactive approaches influence more adoption ratio. Business approaches must be niche driven (see Table)

• Significance:
  – Scaling strategy must seek optimum integration of approaches
## Optimum integration – illustration

<table>
<thead>
<tr>
<th>Country</th>
<th>Target reach</th>
<th>Current reach</th>
<th>% achieved</th>
<th>Est. % adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>Hadiya Zone</td>
<td>53,140</td>
<td>52,902</td>
<td>99%</td>
</tr>
<tr>
<td>Kenya</td>
<td>University (Egerton)</td>
<td>30,000</td>
<td>18,050</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>TV (Mediae)</td>
<td>2,000,000</td>
<td>3,654,000</td>
<td>183%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Business (AgriMerc)</td>
<td>50,000</td>
<td>36,020</td>
<td>72%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Farmer Org. (MVIWATA)</td>
<td>50,960</td>
<td>26,498</td>
<td>52%</td>
</tr>
<tr>
<td>All CGS partners</td>
<td></td>
<td>2,938,010</td>
<td>4,110,180</td>
<td></td>
</tr>
<tr>
<td><strong>Selected SIMLESA CGS guiding principles</strong></td>
<td></td>
<td></td>
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<tr>
<td>-------------------------------------------</td>
<td></td>
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<tr>
<td><strong>Mediae</strong></td>
<td>Shamba Shape Up, iShamba (<a href="http://shambashapeup.com">shambashapeup.com</a> – <em>watch series 7</em>)</td>
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<tr>
<td><strong>AgriMerc</strong></td>
<td>Agro-dealer system, Mobile platform</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Recoda</strong></td>
<td>RIPAT (<a href="http://www.recola-tanzania.org/ripat">www.recola-tanzania.org/ripat</a>)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Farm Radio</strong></td>
<td>Participatory radio (<a href="http://farmradiomw.org">farmradiomw.org</a>)</td>
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<tr>
<td><strong>ISPM</strong></td>
<td>SMSs (QAAFI led programme)</td>
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<tr>
<td><strong>Egerton</strong></td>
<td>Participatory, farmer group networks, radio, print media</td>
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</tr>
<tr>
<td><strong>NASFAM</strong></td>
<td>Club Model (<a href="http://nasfam.org/index.php/history">nasfam.org/index.php/history</a>)</td>
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</tr>
</tbody>
</table>
2. Support for adoption

- SIMLESÄ approach to supporting adoption
  - 58 AIPs, 1654 (60% women) membership
  - Main strength – benefits, co-benefits, spillovers (>100 times)

- Lesson – AIP is ideal for:
  i) social equity
  ii) business niche
  iii) cost reduction

- Significance:
  - Institutionalisation – change management (IISiR Project)
AIP maturation is key in supporting smallholder adoption

Progressive ingredients in AIP growth

Generalised illustration of time

Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9

Inclusive SI Research
AIP initiation
Capacity (knowledge, skills)
Business niche identification
Membership contributions
Mainstreaming inclusivity
Facilities/Infrastructure
Spill-over (co-benefits)
Institutionalisation

Main factors of AIP progression
Policy (instruments)
Transformational investments
Agri-business/diversification
National coordination

Australian Government
Australian Centre for International Agricultural Research

CIMMYT
3. Support for institutionalisation

- Existing partners have connected SIMLESA to
  - Resources – e.g. KCEP Project (KALRO), World Centre of Excellence (Egerton)
  - Policies – Ethiopia dialogue, Entebbe Ministerial meeting

- Lesson – policy engagement strategy lacking

- Significance:
  - Research in policy strategising: i) objective ii) right form of evidence iii) stakeholders iv) change theory v) key activities vi) resources to implement strategy
4. Value for Aus$

• Definition: benefits of scaling
  – Which approach or scaling pathway offers best comparative value for investments?
  – SIMLESA OYE research

• Value for Aus$ must consider
  – Visible and invisible benefits (co-benefits, spillovers)
5. Institutional innovations

- Change in basic routines:
  - AIP as a key pathway to impact (e.g. KALRO)
  - SIMLESA model informing many programmes (e.g. IIAM)
- Resourcefulness, partnerships
  - Expanded map of partners e.g. Mediae, AgriMerc, SATEC, Farm Radio
- Institutional innovation is dependent on capacity
  - Mentoring for institutional scaling capacity is a critical missing link
- Significance:
  - Prioritise research on institutionalisation of science-led scaling to guide basic routines, resourcefulness and partnership maps of implementing organisations
Fig 3. SIMLESA, the numbers

**Qualitative expansion**
- Institutional ownership/Anchorage (19 Agencies handed over SIMLESA through CGS)
- >20 national and sub-national structures (buying in, supporting)
- 58 AIP (and allied) partnerships among local institutions. Equity and Social inclusion key achievement

**Quantitative expansion**
- International support (funding, program linkages)
- Policy (instruments) and investments (15 SIMLESA policy briefs)

Au$40m, >65 districts covered, >4,100,000 reached by 2017, ~20% reduced production costs, >25% increased productivity, >15% increased access to markets, >650,000 households deriving benefits from 5 sets of CA-based portfolios.
Future investments: scaling plan

1. Scaling strategy that seeks *optimum integration* of approaches
   - What scaling pathways offer country-level best comparative value for investments?

2. Research in **policy strategising**: *The anthropology of policy*
   i) objective ii) right form of evidence iii) stakeholders – dynamics iv) change theory v) key activities vi) resources to implement strategy

3. **Institutional innovation** is dependent on organisational capacity
   - Science-led mentoring for institutional scaling capacity is a critical missing link

4. Research in **institutionalisation** options:
   - Science-led change management (IISiR Rwanda)
References – upcoming

SIMLESA Book:
1. Chapter: 1.5. The science of scaling
   M. Misiko, G. Bruno, G. Mburathi, J. Dixon, M. Mekuria
2. Chapter 4.5. Agricultural innovation under multiple constraints: the value of transdisciplinary approaches
   M. Misiko, D. Rodriguez, G. Mburathi, M. Mekuria, J. Dixon, E. Wilkus

Journal papers:
3. Agricultural Innovation Platforms and sustainable intensification
4. Adaptive scaling through competitive grants: part 1
   M. Misiko et al. (proposed for AGSY)
Marc Schut, Jean-Joseph Cadilhon, Michael Misiko and Iddo Dror. 2016. The state of innovation platforms in agricultural research for development. In Iddo Dror et al., Innovation Platforms for Agricultural Development Evaluating the mature innovation platforms landscape.

Marc Schut, Jean-Joseph Cadilhon, Michael Misiko and Iddo Dror. 2016. Do mature innovation platforms make a difference in agricultural research for development? A meta-analysis of case studies. Expl Agric. doi:10.1017/S0014479716000752


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 Scaling


Other SIMLESA publications


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  - NARO
  - RAB
  - QAAFI
- Farmers, farmer organisations
- CIMMYT
- CGS Partners