

SIMLESA Final Review

Some tentative views and questions arising

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Note: We will refer to “SIMLESA” in these notes but as far as future activities are concerned (at this stage) we are agnostic on whether this is a Phase 2 completion issue or a SIMLESA extension matter or in fact a matter for some future activity beyond current planning horizons.

The socio-economic context

- Tentative View : SIMLESA socio-economic research has generated broad-based and novel insights into the state of farming systems, the technology adoption landscape and the human dimensions of small-holder farming.
- Some Questions:
 - Can the econometric approaches be complemented by more qualitative synthesis that brings together agronomic, economic, social and anthropological perspectives and informs a range of stakeholders?
 - Can the insights from 5 countries and multiple regions within countries be placed in a broader continental context ?
 - In hindsight, were the regional and national policy and institutional dimensions of the baseline & longitudinal diagnostic underdone?

The technology options

- Tentative View : SIMLESA agronomic research has developed / demonstrated a set of technologies and practices that (generally) offer (if adopted) significant increases in yield with reduced downside risk and sustainability and labour saving benefits.
 - The options are not completely novel but the combinations and scale at which these have been investigated on-station and on farm is unique and of great significance.
- Some Questions:
 - At a continental scale, what maize agro-ecologies have been covered and what have not?
 - What synthesis products still need to be developed within countries and across countries / continent ?
 - Have we taken full advantage of the measurement and modelling resources?

Adoption progress and likelihood

- Tentative View : Some good adoption progress is claimed but this requires further clarity as partial adoption measures can obscure what is really happening.
 - Indications that improved varieties, intercroops, rotations (?) and fertilisers are most readily adopted followed by reduced tillage in some specific agro-ecologies. Residue retention more generally problematic but some adoption particularly in the absence of livestock.
 - There is a risk of multiple versions of the adoption narrative (Country level, Obj 1 level, MEL, Ex ante) circulating. Critical to develop an integrated SIMLESA view that will be robust in the face of scientific critique.
- Some Questions:
 - Can SIMLESA move away from “clunky” adoption measures (1 or 2 technologies on 25% farm for >2yrs) ?
 - Could SIMLESA combine monitoring and modelling capabilities to generate an integrated adoption index (0-100%) like “whole-farm yield gap closed”
 - Can we get clarity on true autonomous adoption and spread as distinct from adoption arising from a direct intervention such as provision of inputs ?
 - How best to ensure a consistent robust SIMLESA “adoption narrative”.

Needs/Opportunities for continued pursuit of technological investigation

- Tentative View : Some continuing need for technological investigation, in particular in the area of production, management and utilization of residues in integrated crop-livestock systems.
 - In addition, some attention warranted to emerging weeds, pests and disease issues.
 - Also with appropriate support, there would be global value in further targeted investigations of the greenhouse gas emissions and carbon sequestration dimensions as well as adaptation prospects in the face of climate change.
- Some Questions:
 - Have all the possible innovative approaches to generating residues for crop management in systems with livestock been fully exhausted?
 - Is SIMLESA aware of the ACIAR work in Australia the 1980's on this topic? Is there relevant work elsewhere?
 - Downside risks of min-till without residue on some soils and agro-ecologies (soil surface structure degradation)
 - Many of the sustainability benefits are long term – how can long term consequences on soil, weed, pest and disease systems be followed?
 - How to expand the “Climate Smart” technical credentials through experimentation and modelling?

Seed systems investment

- Tentative View : SIMLESA has significantly contributed to stronger seed systems in ESA through broad based public and private sector engagement and support.
- Some Questions:
 - Has the seed input systems strengthening been “overdone” at the expense of strengthening other input systems (fertilisers, agro-chemicals)?
 - Can the experience from seed systems be leveraged into research that focuses on strengthening other input and output market systems?
 - Are there continuing impediments to functional seed systems in ESA and if so can SIMLESA assist? (eg. Cross-country policy issues ?)

Is maize/legume productivity sufficient?

- Tentative View : Lifting productivity in maize/legume systems is a necessary but not sufficient foundation for food and nutritional security.
 - There is a place for diversification into activities with strong demand in cash markets
 - There are important livelihood dimensions of food/nutritional security that has not been a central focus in SIMLESA.
- Some Questions:
 - Looking forward, will the SIMLESA effort need to strengthen its livelihoods focus, particularly if a “Climate Smart” framing is intended?

The dominant SIMLESA scale-out paradigm

- Tentative View : SIMLESA's scaling-out efforts to date have been dominated by a “reach” paradigm – getting the knowledge out to farmers, demonstrating the benefits etc.
 - The innovative methods being explored (AIPs, CGS) are largely (but not solely) framed within this paradigm. There are early signs of success but full evaluation will be critical
- Some Questions:
 - Does SIMLESA have a comprehensive “scale-out” strategy that considers all dimensions of the innovation system including extension system functionality, fertiliser, seed and agro-chemical input systems, micro-finance, insurance, post-harvest storage and logistics, market penetration and resilience ?
 - Looking forward, does SIMLESA need some new partnerships to achieve such a strategy ?

The place for AIPs and CGS in achieving impact at scale

- Tentative View : The AIPs and CGS mechanisms are relevant to informing a scale-out strategy but they are unlikely to serve as a scale-out strategy on their own.
- Some Questions:
 - Does SIMLESA have an approach for crafting a scaling out Business Model for each AIP?
 - To what extent are AIP and CGS partners configured into an “innovation system” applying a systems approach towards social and commercial success of interventions?
 - In what ways are the AIPs and CGS impacting on the national agricultural innovation system?

The macro-scale context for SIMLESA scale-out – input & output markets

- Tentative View : Market failure is a major impediment to scaling out of SIMLESA successes.
 - Input markets (seed, fertiliser, herbicides, machinery) are constrained by an incoherent national strategy in building these industries.
 - There is a preponderance on niche markets and limited attention to mainstream markets.
- Some Questions:
 - How deeply does SIMLESA diagnose the domestic market in tailoring the scaling out strategy?
 - Can it be assumed from SIMLESA research that the fastest growing markets are the local ‘middle class’ and rural towns?
 - What are the specifics on “market failures” that is being addressed by capacity building strategies for scaling out?

The macro-scale context for SIMLESA scale-out – enabling government policy and political will

- Tentative View : While SIMLESA is doing more than most similar programmes, its potential to impact on the policy environment is still to be realised.
 - The communication strategy may need to be complemented with a “social marketing” strategy.
- Some Questions:
 - If scaling out requires some degree of enhanced on incremental government commitment and participation beyond the R&D institutions, what is the SIMLESA strategy for this at national level?
 - What are the specifics on “institutional failure” that is being addressed by capacity building strategies for scaling out
 - Are there any partnership efforts to address the challenge of “aggregation” and “agrologistics”?

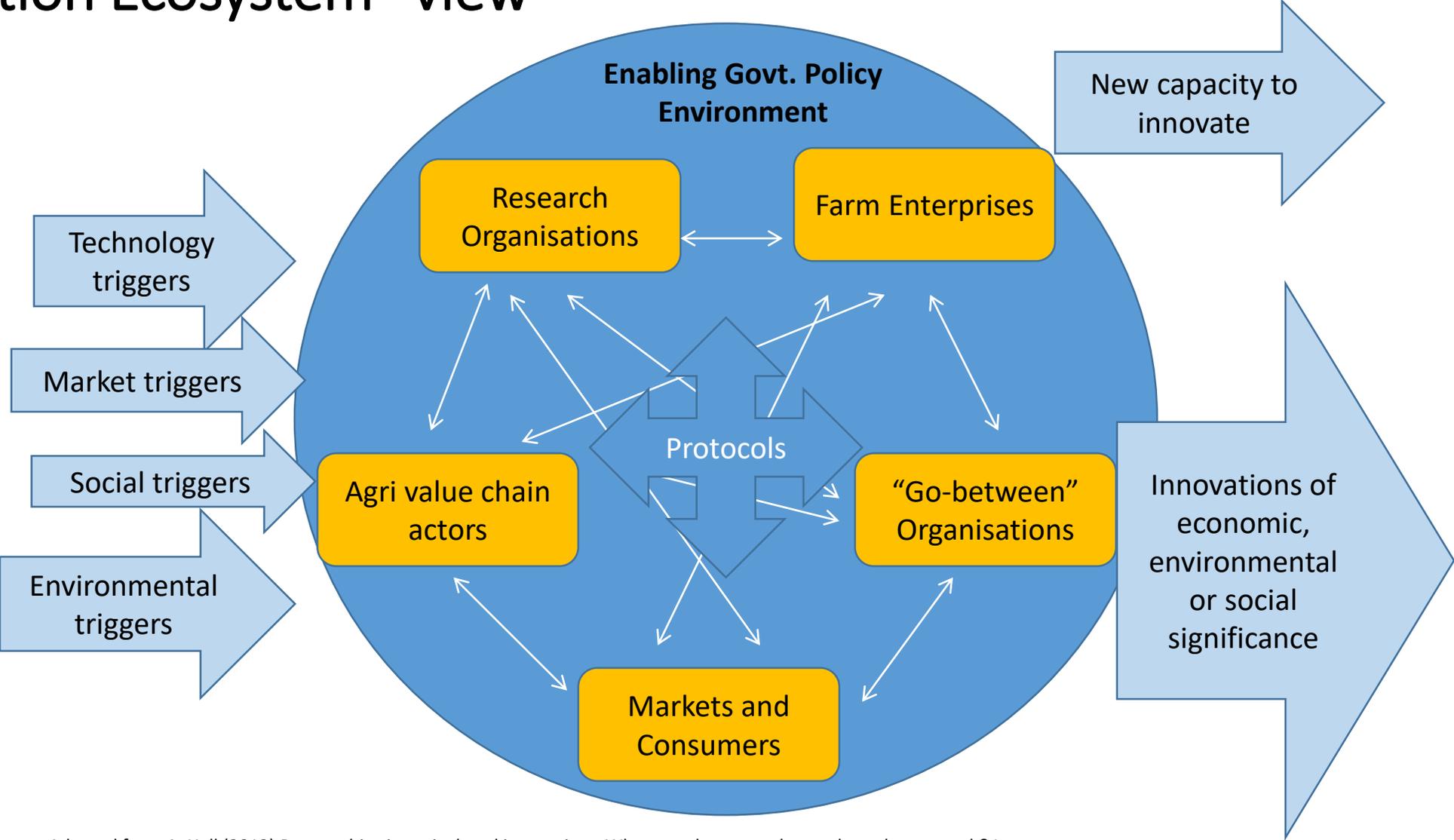
Agriculture as part of the rural transformation system

- Tentative View : Agricultural transformation in SIMLESA sites can not happen in isolation, but as part of a broader process of structural transformation shaped by the inter-linkages between agriculture, the rural non-farm economy, manufacturing and services.
 - It has been difficult to estimate some of these social and economic impacts off SIMLESA
- Some Questions:
 - How much have we measured and how much do we know about links between farm and non-farm economic activities in SIMLESA sites?
 - What is the diversification of production patterns and livelihoods within the farm-rural non-continuum?
 - Can the socio-economic components of SIMLESA do more in articulating this market and linking the farm-non farm dimensions.

Evolution of SIMLESA as a true innovation catalyst

- Tentative View : A great strength of SIMLESA is its partnership across national institutional, CGIAR, other international institutions and partners in private sector, NGOs and farmer groups.
 - But are your partnerships at risk of “lock-in” in the face of evolving needs?
- Some Questions:
 - Do you have mechanisms for the partnerships to evolve based on the research needs and development targets – or are you going to be “locked in” to history?
 - Do you know how to position science effectively in the wider innovation system ?

“Innovation Ecosystem” view



Adapted from A. Hall (2012) Partnerships in agricultural innovation - Who puts them together and are they enough? In OECD Conference on Improving Agricultural Knowledge and Innovation systems