Towards a scalable framework for evaluating and prioritizing climate-smart agriculture practices and programs

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CHALLENGE
Decision-support frameworks are needed to identify best-bet CSA practices and programs for specific contexts and channel investment to achieve CSA objectives and stakeholder desired outcomes at scale.

RESPONSE
The CIAT-CCAFS CSA Prioritization Framework (CSA-PF) provides a stakeholder driven process to target context appropriate investments in CSA practices and programs by:
- prioritizing with stakeholders existing and promising CSA practices/programs linked with specific regions and production systems;
- assessing tradeoffs between practices using indicators of CSA (productivity, adaptation, and mitigation);
- quantifying costs and benefits;
- identifying possible barriers to adoption.

TARGETS
Optimized national and sub-national planning increased investment towards CSA
Transformation of existing agriculture production systems through increased adoption of CSA

Implementing CSA-PF

The framework has been designed as a four phase process that can be modified for use at any level of decision-making. A long list of CSA practices, applicable to the scope of the assessment, is established in the first phase and is narrowed through each subsequent phase until investment portfolios are identified. Stakeholders have the ability to:
- select the metrics for evaluating CSA
- weight the metrics and goals of CSA
- evaluate costs and benefits of options
- balance outcomes of portfolios given user preferences
- assess barriers to adoption
- identify pathways to implementation

The CSA-PF is currently being piloted in Guatemala, Mali, and Colombia demonstrating the applicability of the framework across regions and levels.

GUADEMALA
USER: Ministry of Agriculture, Livestock, and Food
The ministry is targeting the ‘dry corridor’ region of the country due to a severe drought in 2014. Given this disaster a policy was implemented to incentivize adoption of various adaptation practices. The CSA-PF is being used to assess and validate the previously incentivized practices, and prioritized practices will be promoted by government extension.

MALI
USER: Climate change national platform
Three key zones in the country were identified, differentiated by climate change impacts and productions system, with the northern dry region being prioritized. The portfolios will be used by the platform to create technical information for use by farmers and for inclusion in cross-ministerial CSA programs to incentivize adoption across the landscape.

COLOMBIA
USER: Local organization Foundation Rio Las Piedras
This local community group in the Department of Cauca has already been implementing and assessing CSA practices being conducted by local farmers. A full cost-benefit analysis has not been done though, and the outcomes of this from the CSA-PF will assist the community in a) identifying how to improve practices and b) focus on scaling up high outcome practices.

Lessons Learned
- Decision-support processes should integrate the best scientific evidence possible, but move forward in the face of data limitations. Using qualitative assessments with experts was viewed as appropriate.
- Visualization of tradeoffs needs to be rigorous yet simple for stakeholders.
- Engaging in the process itself shifts knowledge, awareness, and integration of actors related to CSA.
- Regardless of the level of key user, integration must occur across levels to understand:
  - local preferences, data, and applicability of practices and programs
  - national effects of social, economic, and environmental externalities

- Stakeholder criteria for prioritization, not just the three CSA goals, should always be explicitly identified and built into the assessment of practices and programs starting in phase 1.
- CSA investment portfolios must be context specific, with reference to specific areas, production systems, and threats. Addressing uncertainty and decisions over various timescales should be further developed.

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