SPIA strategic directions and updates

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Introduction to SPIA

- CGIAR Standing Panel on Impact Assessment: Independent experts with mandate to
  - Expand and deepen evidence of impact of CGIAR research investments
  - Support CGIAR's strong commitment to embed a culture of impact assessment into the System
- Supported by program manager and researchers & activity leaders
- Works with a wide network of collaborators
  - IA Focal Points in centers/CRPs
  - CGIAR researchers and research managers
  - IA researchers inside and outside CGIAR who implement studies

Karen Macours: Chair

JV Meenakshi: Member

Doug Gollin: Member

Challenges of measuring impact of CGIAR

- SPIA's mandate ~ impacts at system level of a set of agricultural research for development (AR4D) centers and programs with long and complex causal pathways
- AR4D faces uncertainty about
  - Scientific progress
  - Development processes

$\Rightarrow$ IA approach must differ from standard approaches to IA of development interventions

But acknowledge "rigor revolution"

$\Rightarrow$ Some similarities to approaches for innovation programs elsewhere

Overall logic

- To maintain confidence in the system:
  - Evidence needed on whether the benefits of the "big successes" exceed the <u>total</u> investments in the system
    - Rather than whether the benefit of a specific research activity > investment in that activity

$$Benefits\ system = \sum_{i}^{n} number\ of\ beneficiaries_i * (benefit/beneficairy)_i$$

    - Beneficiary i = farmers, consumers, communities,…
    - Benefit/beneficiary: can be small for many activities and very large for some

- At the same time:
  - Early learning needed to maximize possibilities for impact at scale
    - ~ testing assumptions along theory of change

    => which steps in the causal pathway may prevent innovations from achieving impact at scale?

- Portfolio of studies & multi-year process

Key elements of SPIA's workplan

- Support culture of impact assessment in the CGIAR
  - Generating and using high quality IA evidence in CGIAR
  - Engaging researchers, managers, MEL specialists etc as well as IA experts

- Expand and deepen evidence of impact of CGIAR research investments
  - Focus on <u>system-level</u> impact through support to two distinct types of studies—<u>Accountability and learning</u>—with different objectives and associated processes
  - <u>Systematic</u> collection of high quality adoption data at <u>policy relevant scales</u>, to document reach and the magnitude of potential impact (~N)

Accountability studies

- Long term, large scale studies that provide rigorous evidence on (few) "big wins" that justify investment in the system
  - The 2 types of uncertainty (science and development) mean that not all investments get to this point (in the relevant time frame)
  - Inherently backward looking
  - Methodological challenges to measure this impact rigorously mean that only some big wins can be subject of IAs
    - Need credible counterfactuals

Aside on attribution and counterfactuals

- How to know what would have happened in absence of the CGIAR research?
  - Would someone else have done the research? Would the policy have changed anyway? Were adopting farmers already more productive?
- Establishing the counterfactual is difficult exactly because of:
    - Farmers/communities chose whether or not to adopt certain innovations for a reason
    - Government/development partners decide to adopt/ promote innovations also for a reason
    - Change may have happened without CGIAR research (policy, adoption of a practice that can't be conclusively linked to CGIAR)
- And even harder at national or higher level

Estimating number of beneficiaries

- Systematic collection of data on adoption and use of CGIAR innovations at scale
  - Sign of potential big win—since reaching large numbers is generally key to having large impacts
  - Collaboration with World Bank Survey Team– SPIA influencing data collection approaches to allow us to identify adopters in large-scale surveys
  - Mainstreaming insights
    - Leverage 50 x 2030 data collection efforts => scale up the number of countries with high-quality agricultural surveys
    - Including DNA fingerprinting in guidebook
  - Geospatial panel data & linking with remote sensing, can expand the number of rigorous IA's that are possible
  - Can also provide inputs into assumptions of ex-ante work/ foresight

Some details country work

- Deepening work in Ethiopia and Uganda
  - Data on large-scale diffusion efforts to complement initial country-diagnostic
  - Scoping possibilities for:
    - Methods for scaling crop varietal identification – augmenting lessons from DNA fingerprinting
    - Improved measurement of crop and livestock management practices& outcomes
    - Measuring landscape (village) level outcomes
- Started scoping West Africa and Asia (Bangladesh and Vietnam)
- Opportunistic approach in other countries (esp. seeking "big wins")

From evidence to use: Learning studies

- Learning studies
  - Focus on recent research outputs that are going to scale
  - Can be specifically designed to fill evidence gaps related to key assumptions in ToC . E.g.
    - to the "adoptability" of innovations by target users
    - the size and distribution of impacts of that use on beneficiaries
    - trade-offs and synergies between different types of outcomes

  - SPIA role is in coordinating sets of studies that can give more generalizable lessons to these questions ~ steps in causal pathway multiple innovations
    - E.g. environmental impacts/trade-offs
  - ⇒Feedback into both research and dissemination efforts

Improve rigor individual studies & advise strategy

- Engaging researchers, managers, MEL specialists etc as well as IA experts and other stakeholders
  - Center visits, discussions with Science leader, …
    - Consultations; identify IA opportunities& synergies; share lessons
  - MEL-IA CoP
  - Feedback to IA specialists on research designs
    - All CGIAR research teams that submitted EoIs to recent SPIA call => improve rigor of their impact studies
    - Ad hoc basis
    - One-on-one matching with external impact assessment specialists
  - Collaborations & coordination with other IA research-focussed initiatives
- Methods work and guidelines

Using high quality IA data and evidence in CGIAR

- SPIA sharing lessons learned in various CGIAR fora
- Communications and publications strategy
  - Synthesis documents & briefs available on website
- Promote analysis of existing SPIA data
- Note on SPIA's approach to impact assessment developed (following earlier RoR note)

Results of relevance to SRG

- Evidence
  - Synthesis of findings of 25 impact assessments, by SLO
    - Accountability and learning
  - Set of 9 studies on adoption at scale of 6 major on-farm NRM practices and reflection piece

Impact of CGIAR's Agricultural Research for Development: Findings and Lessons from the SIAC Program

This report characterizes and synthesizes the findings from 25 impact assessments funded under SPIA's Strengthening Impact Assessment in CGIAR (SIAC) program between 2013 and 2017 (See Table 2 for full list). The studies examine the impacts of a wide range of inno-vations from three core areas of CGIAR research—crop improvement, production systems management, and policy. Studies used a range of methods, from RCTs to qualitative ap-proaches, depending on the specific research question being addressed.

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Farmer adoption of plot- and farm-level natural resource management practices: Between rhetoric and reality

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ABSTRACT

There is a significant gap between the rhetoric of claims about adoption of farm-level natural resource management practices and the reality. New empirical evidence of low adoption from several developing countries suggests that on-farm natural resource management practices face significant constraints to adoption, and that they deliver heterogeneous private and public benefits. Five recommendations are given to the research community related to: targeting; scaling-up; the proper role of research; trajectories of diffusion; and measurement of environmental impacts.