Some musings on evaluating the impacts of integrated systems research

Karl Hughes, Head Impact Assessment & Acceleration
CIFOR-ICRAF
CRP Involvement: FTA, PIM, WLE & GLDC
Is the system large \( N \) or small \( N \)?

**LARGE \( N \), e.g., farming systems**

- Statistical counterfactual impact estimation (with/without) theoretically possible

**SMALL \( N \), e.g., a country’s agri-food system**

- Statistical with/without approaches generally not possible, so need to rely on mechanistic (explanatory) approaches

- And often efforts undertaken to improve both systems simultaneously, e.g., improving farm-level production while strengthening other value chain nodes
How does change in complex systems happen?

“…change in complex systems occurs in slow steady processes such as demographic or technological shifts, punctuated by sudden, unforeseeable jumps. Often these jumps...are driven by crises, conflicts, failures and scandals, which disrupt social, political or economic relations, creating an appetite for new ideas and opening the door to previously unthinkable

How relevant then is evidencing the unfolding of our own prospectively developed Theories of Change?

Retrospective approaches, e.g., Process Tracing, would therefore seem attractive to evaluators…
...but often need for “deep” understanding of system & context

- Not always easy for evaluators to gain such an understanding
- Actual decision-making processes (or reasons for reforms, etc.) often inaccessible
- Insider knowledge useful & important but high potential for confirmation bias
- Consensus on methods for addressing bias in large $n$ studies not same degree as for small $n$
- Historians & political scientists often debate reasons for big changes in history—things
How to link systems changes to changes in state?

Sphere of Control
(Things research teams can control)

Sphere of Influence
(Changes in capacity, behavior, practice & policy that hopefully can be influenced—including improving or even transforming systems)

Sphere of Interest
And things much more complex with systems transformation: relationships in whole system will change in unexpected ways

Even when we can evidence contributions to systems-level change, go back to same small $n$ evaluation challenges

Source: Adapted from Ofir and Schwendt, 2012.
Towards new paradigm for systems-focused R4D impact evaluation (& R4D impact expectations)?

- Arguably, the demand for direct impact evidence has made R4D less effective at inducing (or contributing to) desirable systems transformation

- We (and donors) need to recognize (and embrace) the inherent complexity, and, in turn, limitations

- Systems oriented R4D should focus—through well targeted research & engagement—on increasing the likelihood that the system will pivot (or jump) towards a more positive trajectory—without assuming control or ability to predict exactly what this trajectory will be

- Evaluation can stop there if a jump has not happened—or if it has—further interrogation may be warranted and useful