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Expanding the evidence base on the impact of rural advisory services

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Motivation

“ Evaluation of public extension services reveal inefficiency and lack of impact; unclear objectives, extension agents without a clear sense of what they are expected to accomplish, poorly motivated workers and management, no incentives to produce results, top-down approaches, no accountability to farmers, inappropriate messages, no funds for running costs, lack of supervision, no in-service training, lack of linkage with research etc.”

~R. Haug (1999), *J Agricultural Education & Extension*, p. 271

Why is evaluation important?

- Learning: building evidence about what works and why
- Accountability
- Transparency
- Feedback to management
- Policy design

Why do we evaluate extension?

- To measure the impact of advisory services on technology adoption
.... And the impact of adoption on productivity, sustainability, and welfare
- What have we learned? Adoption is constrained by
 - Biophysical characteristics: Land, soil, water, biology
 - Individual, household attributes: credit, tenure, education, social capital
 - Behavior: Preferences, aversions
- Where do we go from here?
 - Pursue the social and psychological dimensions of adult learning
 - Evaluate with better designs and greater rigor

Why do we need better designs, more rigor?

- Sample selection bias
 - Those who learn/adopt may be fundamentally different from those who don't
 - Bias limits our ability to make wider inferences
- Endogeneity
 - Reverse Causation: $A \rightarrow B$ or $B \rightarrow A$?
 - Simultaneity: the “Reflection Problem”
- Heterogeneity
 - Beyond average effects: Measuring outcomes for specific groups within a population

With a better toolkit, we can do a lot more...

- Qualitative
 - Understanding context
 - Understanding impact pathways and theories of change
- Quantitative
 - Internal validity: good identification strategies
 1. Experimental Methods: RCTs
 2. Non-experimental methods: PSM, RDD, Ivs, D-in-D
 - External validity: generalizability
- Mixed Methods

...to ask the right questions...

How do different extension approaches to adult education affect learning outcomes?

...with a better conceptual grounding

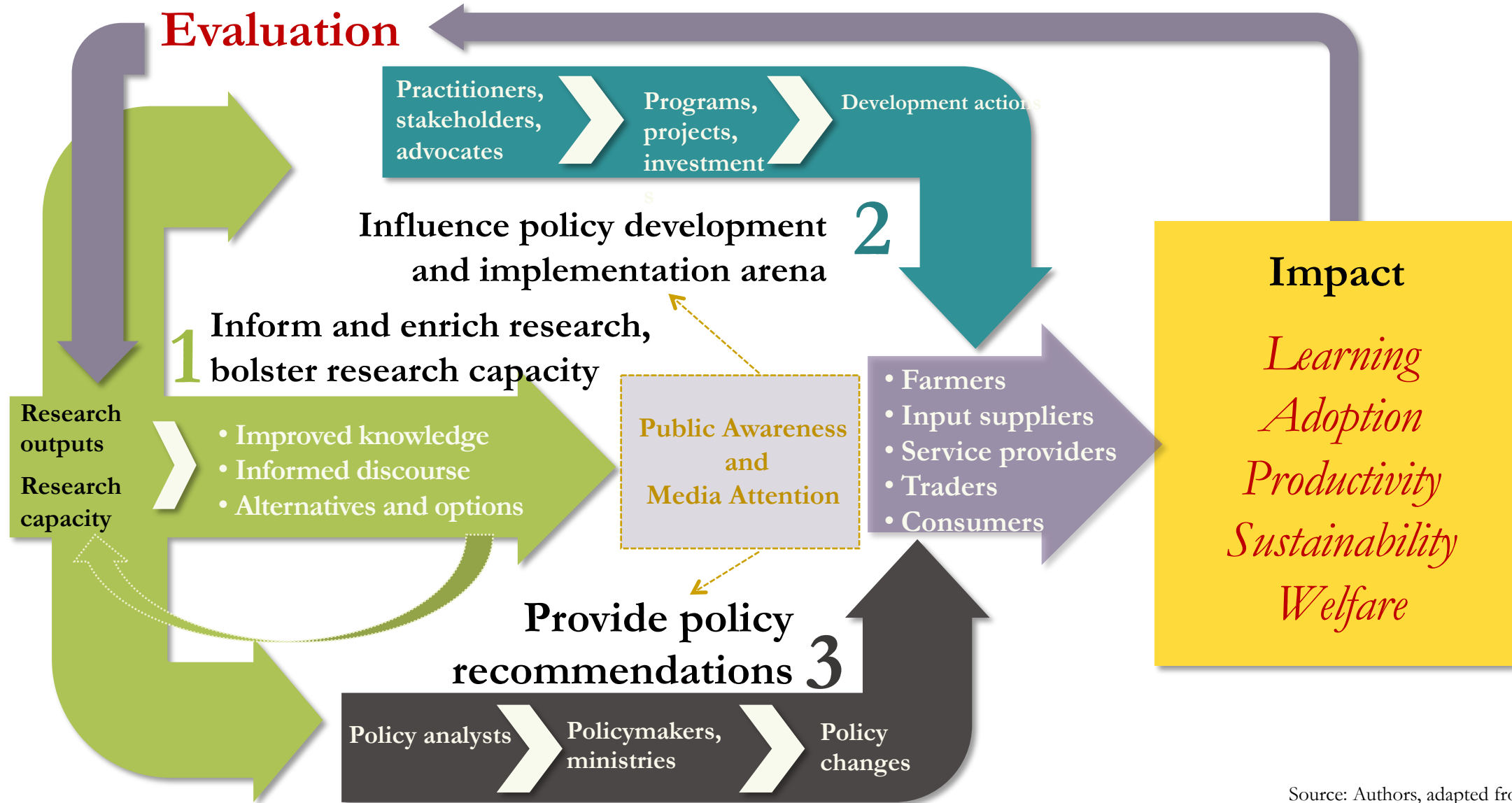
- Combine economics, education, and social psychology
 - behavior dimensions of learning and technology adoption in agriculture
- Evaluate type and intensity of training
- Study the step-by-step process of learning
- Evaluate changes in aspirations and locus of control
- Evaluate learning failures
- Evaluate peer effects

New ideas for future research...

For a single technology or practice...

1. Evaluate which extension approach better facilitates learning/adoption
2. Compare different extension approaches
 - Training & Visit vs. Farmer Field Schools vs. Mother-Baby Trials vs. Chalk-and-Talk
3. Measure the cost-effectiveness of each extension approach
4. Open the door to evaluation of learning approaches, not just technologies

...to affect policy change





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Thank you

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