



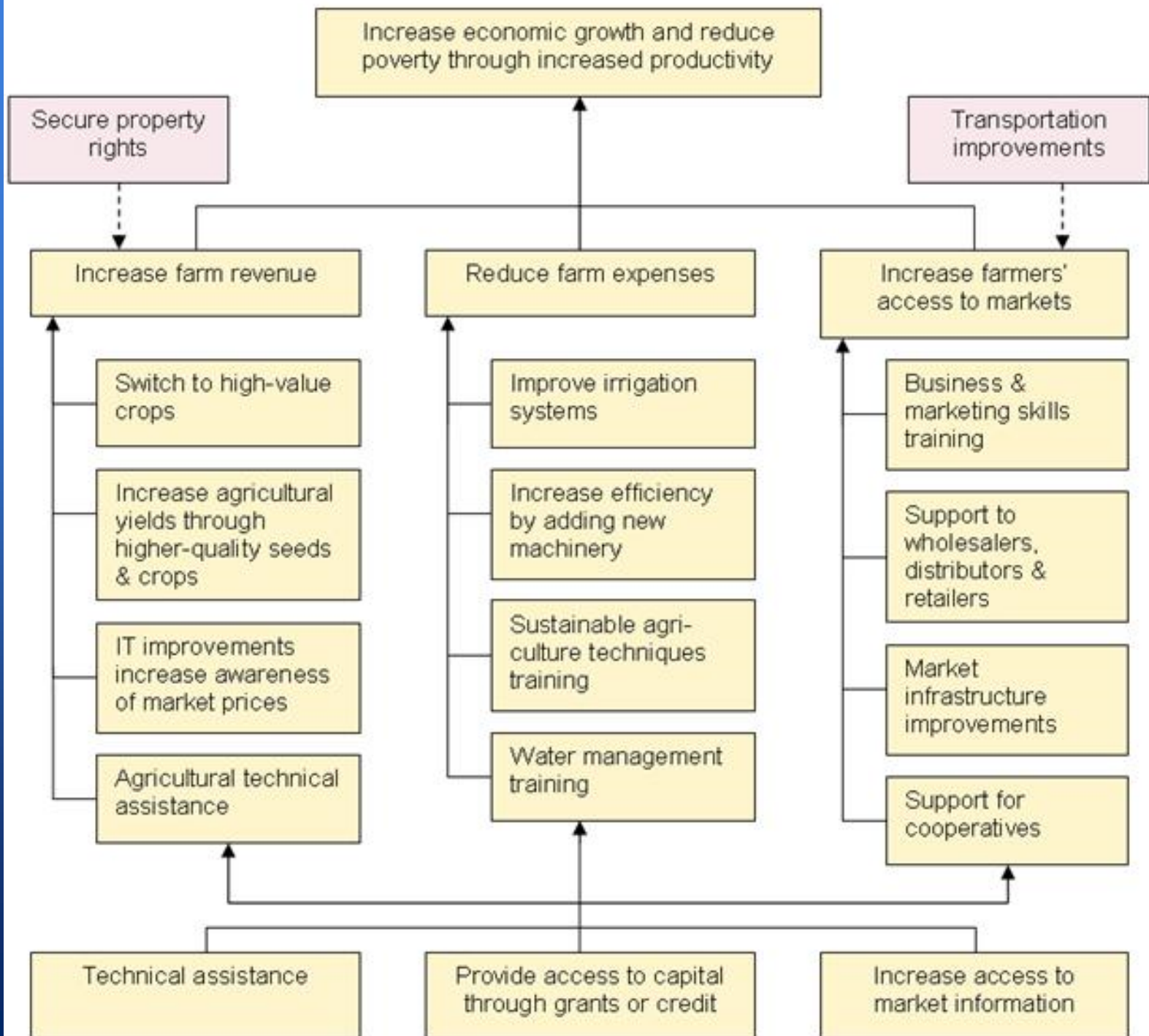
Impact Evaluations of Agriculture Assistance

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MCC Agriculture Assistance





- Direct assistance to farmers
 - Training and technical assistance
 - Access to capital through grants and credit
 - Access to market information
 - Irrigation improvements
- Complementary investments
 - Agricultural R&D
 - Land tenure systems
 - Infrastructure, including rural roads, highways, and ports
 - Financial markets, including developing new products



Evaluating Assistance to Farmers

- MCC commitment to rigorously identifying impacts
- MCC and partner countries contract independent organizations (Poverty Action Lab, NORC, IPA, Mathematica, etc.)
- Of the nearly \$900 million committed to ag. projects in 12 partner countries:
 - All but \$35 million will have an IE
 - ~IEs covering \$495 mil already underway

IEs of Agricultural Assistance

<i>Country</i>	<i>Project</i>	<i>Question</i>	<i>Methodology</i>
Armenia 	Water-to-Market Activity	What is the impact of on-farm water management training on farming practices, agricultural productivity, and the income of rural farming households?	Randomized control trial
Georgia 	Agribusiness Development Activity (ADA)	How does the provision of ADA grants to farmers and farm-related businesses impact household income, poverty levels, and job creation?	Randomized control trial
Ghana 	Development of Agricultural Productivity and Value-Added Project	Does the training program encourage farmers to adopt new technologies and techniques? What is the magnitude of spillover from trained farmers on proximate farmers and social networks? Does the FBO training program cause farmers to expand yields and sales?	Randomized control trial
Honduras 	Rural Development Project	What is the impact of increased productivity and business skills on incomes?	Randomized control trial

Key Questions

- Because MCC's focus is on income generation, all IEs measure impact on ag output, productivity and incomes
- Take-up of trained techniques and switching to higher value crops
- Spillovers of adoption to untrained farmers within co-op organizations, social networks, and more generally others in communities

Methodologies

- Randomized Control Trials
 - Typically randomized phase-in (roll-out) over the 5-year projects
 - Randomization is typically at the village or cluster level to address and capture spillovers
 - In some cases, individual randomization based on over-subscription of qualified applicants
- Regression discontinuity and propensity score matching under consideration where RCTs are not feasible

Lessons

- Projects are often “demand-driven”, with specific participants undetermined when designing evaluation
 - Identifying control group problematic; rely on selection or approval criteria of implementers
 - Evaluations can be sidelined when implementers demand flexibility
 - Sample sizes difficult to calibrate given that crop mix, MDE, and take-up are all very uncertain
 - Almost always have to create a new sampling frame
- Only randomizing over the sample needed to identify effects; remaining population can be treated early

Lessons

- Capturing spillovers can be very important but difficult
 - Crucial when project justification involves both direct participants and other adopters
 - Sample sizes become very large and costly
- Unpacking effects of package of interventions remains a challenge
- Interested in looking further at effects on vulnerability/risk and interaction with insurance