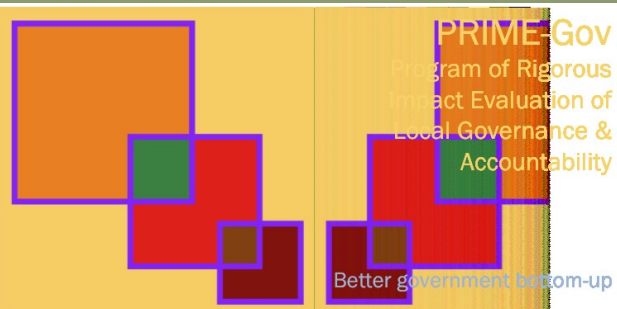


Implementation Challenges

Malte Lierl

Africa Impact Evaluation Initiative
World Bank

April 14, 2009

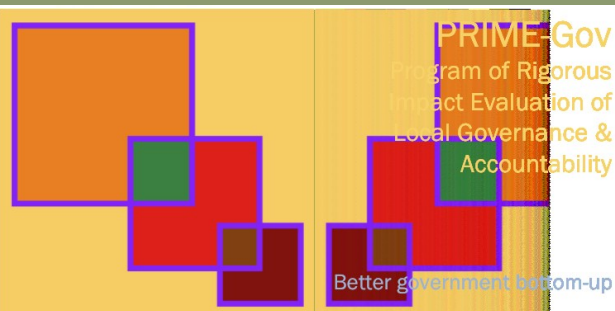


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Problems in implementation can invalidate the evaluation

- Given the costs of the evaluation, should avoid any second best solutions
- Key steps
 - The best remedy is prevention – do we really have a program design which is politically and administratively feasible, in the short and long run?
 - Monitor the roll-out carefully – demand high standards of compliance with the original design (small details make a difference); e.g.: accessibility of communities
 - Make adjustments immediately as needed



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Implementation Steps

DESIGN

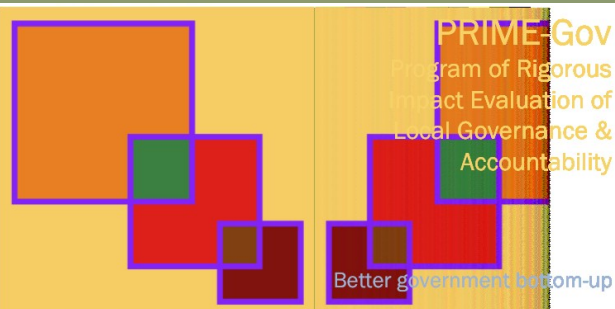
- Identify learning priorities
- Determine priority interventions
- Think about the level of analysis
- Decide on evaluation design and roll-out plan, given operational realities

IMPLEMENTATION

- Collect and analyze baseline data
- Roll out the intervention
- Collect follow-up data

UTILIZATION

- Learn from the results, improve operations

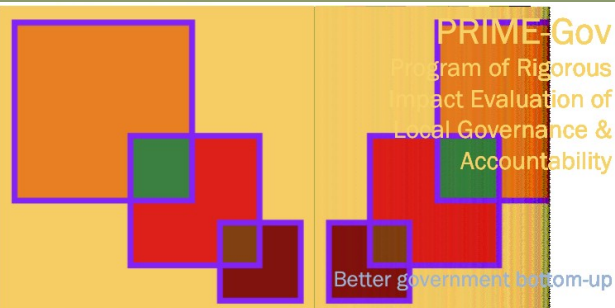


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Design: Identify learning priorities

- Testing new strategies:
 - Weak links in the results chain? Assumptions donors might challenge?
 - Ex.: Is CDD more effective than capacity building for local administration
- Improving performance of existing programs
 - Ex.: Does competition for grants between villages in a commune lead to the best targeting or is a fixed allocation to each village better?

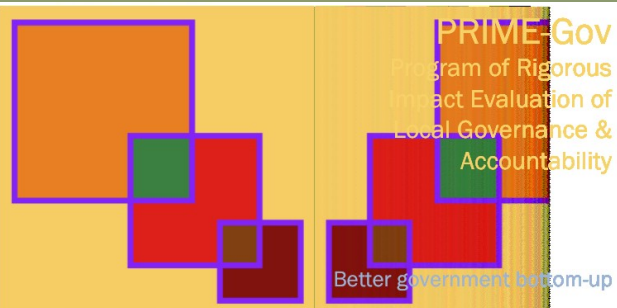


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Design: Identify priority interventions

- Priority interventions:
 - Unknown benefits
 - Costly intervention
 - New intervention
 - National or regional priorities
- Priority outcomes of interest
 - Intermediate
 - Final
- Feasible evaluation question

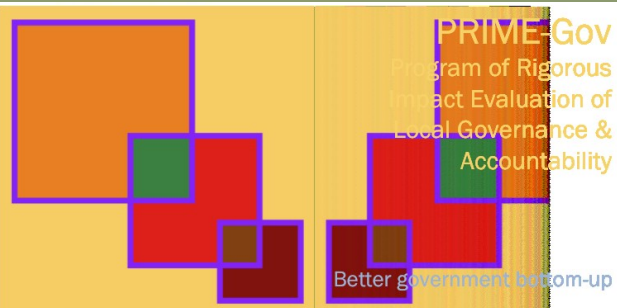


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Design: Level of analysis

- Individuals
 - Behavior (citizens, elites)
 - Welfare (vulnerable groups,...)
- Community dynamics?
- Public services/microprojects?
 - Implementation performance (short-term)
 - Sustainability, maintenance (long-term)
- Institutions?

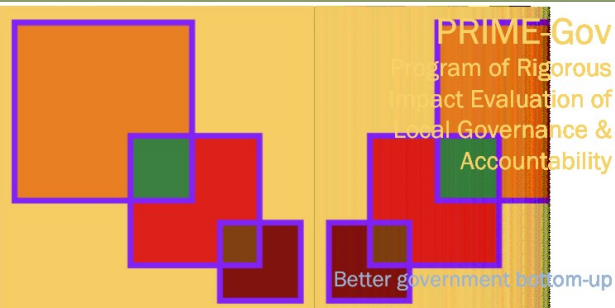


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Design: Evaluation Strategy

- How do we obtain a good counterfactual at our level of analysis?
 - Randomization (small samples)
 - Need to convince stakeholders
 - Matching, diff-in-diff (large sample, good baseline data)
 - Politically less difficult
 - Discontinuities (need lots of data points around the discontinuity)



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Design: Roll-out plan

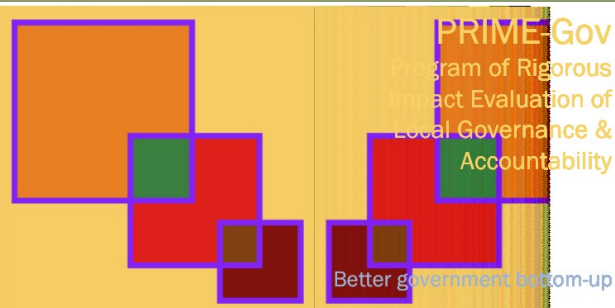
Is random assignment (or random phase-in) feasible?

- At what level? The unit of intervention often simplest

Trade-off: higher level means bigger sample

Alternative assignment strategies?

- If the intervention must be targeted, use clearly defined criteria, and if feasible, phase in randomly within eligible population / villages / regions

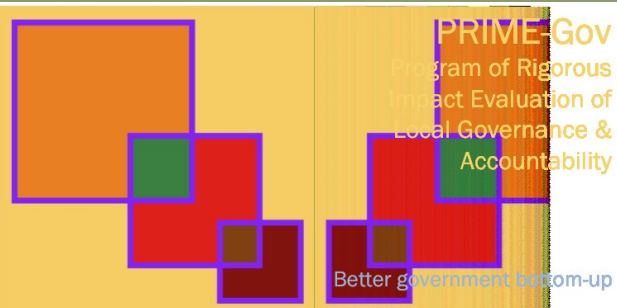


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Summary: Impact Evaluation Design

- Identify learning priorities
 - Determine priority interventions
- Think about the level of analysis
- Decide on evaluation design and roll-out plan, given operational realities



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Implementation

- Collecting baseline data
- Rolling out the intervention
- Collecting follow-up data

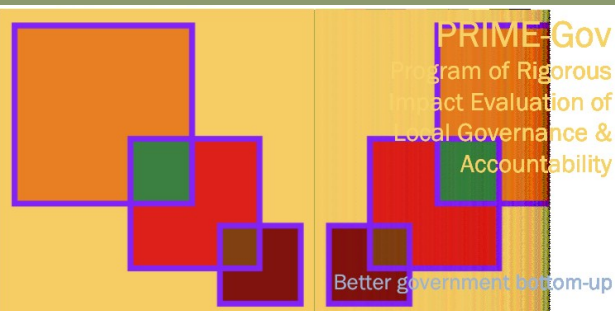


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Implementation: Baseline data

- Why collect baseline data?
 - Ensure that treatment and control group are well balanced
 - Non-experimental approach: Baseline data is needed to construct counterfactual
 - Calculate sample size for follow-up
 - Feed into the program's MIS
 - Analyze targeting of the program

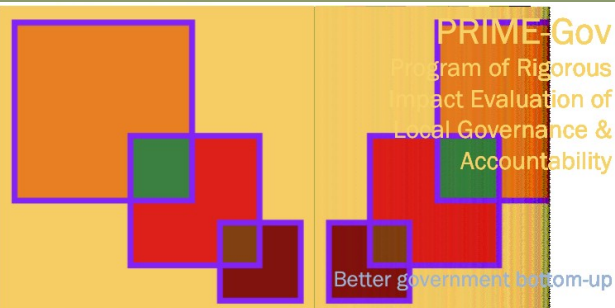


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Implementation: Baseline data

- Take advantage of existing data
- Take design of data collection instruments seriously
 - Discuss, get advice
 - Test the instruments in the field
- Who collects it?
 - Bureau of Statistics: integrate with existing data
 - Program: integrate with operational logistics
 - Private agency: Sometimes quality monitoring is easier

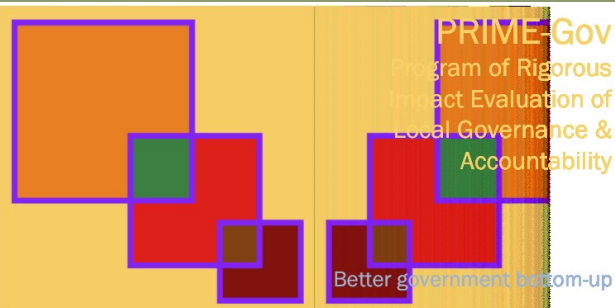


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Implementation: Program roll-out

- Experimental or quasi-experimental evaluation: Deviation from roll-out plan can invalidate the evaluation strategy
- Stick to roll-out plan as much as possible
- Carefully monitor program roll-out
 - Plan ahead to link MIS and impact evaluation data

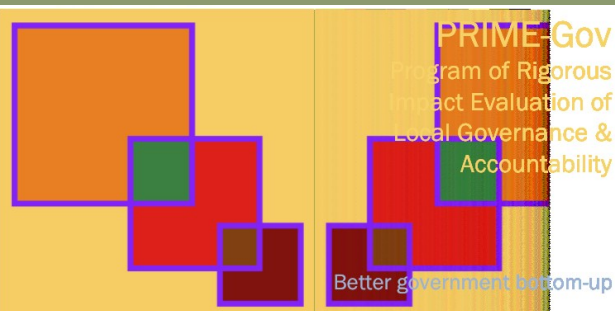


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Gather information on roll-out

- Who, in reality, receives which benefits when?
 - This could affect the impacts measured: variation in exposure to treatment
 - Example: a local NGO operator does not deliver
- Does the intervention involve something other than initially planned?
 - Example: Learn that local NGO operators use assemblies to provide sanitation information
 - Program impact now includes the village sanitation intervention

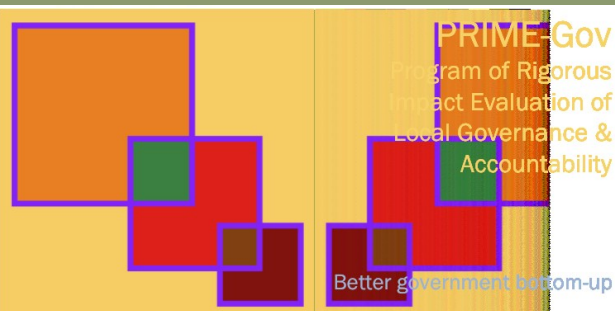


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Challenge: Access to Treatment and Control Areas

- Because of new constraints, or constraints that were not planned for, some of the communities in the study are not fully accessible, either for treatment, for data collection, or both.
- Randomized evaluation: If randomization is compromised then the whole impact evaluation strategy is compromised.
- If sample is compromised, use statistical correction
- Carefully plan for it (and to avoid it), and make an effort to stick with original design.

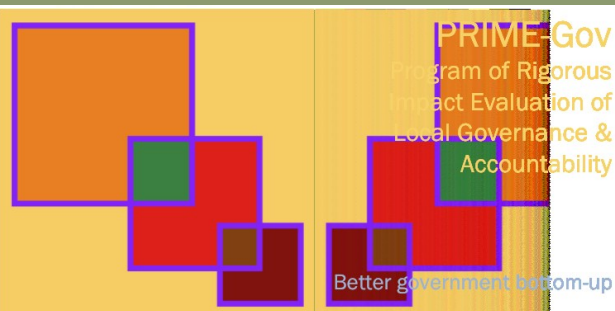


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Challenge: Contamination

- What if some of the benefits are shared with the control group?
 - CDD Example: a treatment community decides to build a road which connects it to a control community
- What if all the control group receive some *other* benefit?
 - Example: NGO targets control communities to receive similar program
- Solutions
 - If contamination is small, can still estimate effect of being assigned to treatment group – will estimate different parameter, which may still be of interest.
 - If control communities received benefits but less / or different, then measure impact of additional (redefine question – but make sure it is still relevant).



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Challenge: Heterogeneous treatment

- Sometimes the quality of the intervention is not the same across all recipients.
 - Example: Different NGO operators in different areas
- If quality differences are not randomly assigned this may require some reinterpretation of results, even if the differences are observed.
- At the end of the day we have to focus on the question of interest and direct the evaluation towards that question: what type of quality can we deliver in practice?

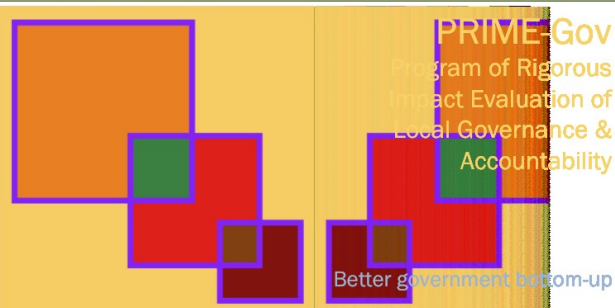


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Challenge: Timing of benefits and Multiple Treatments

- Multiple treatments:
 - Treatment 1: CDD only
 - Treatment 2: CDD + Information for accountability
- Interventions should be rolled out at same time.
- Suppose program rolls out to Group 1 in June but to Group 2 in December, with a follow-up survey in January
- Now measured effect is different treatment + different time with treatment.



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Implementation: Follow-up data

- Collect follow-up data for *both* the treatment and control groups
- Appropriate intervals
 - Consider how long it should take for outcomes to change
 - Short-term outcomes (social dynamics, behavior, citizen-authority relations) → adjust program
 - Medium-term (impact of local investment projects)
 - After end of program: Do effects endure?
 - What happens once the community support has phased out?

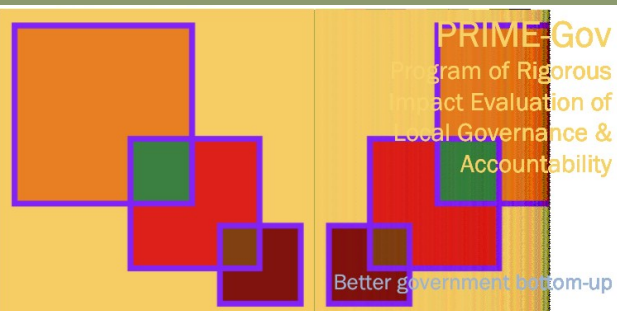


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Challenge: Timing and delays

- Problem: Program expected to roll out in January but it doesn't roll out until August; Delay in funding
- Concerns
 - Seasonality effects: Baseline and follow-up data collection should take place at the same time of the year

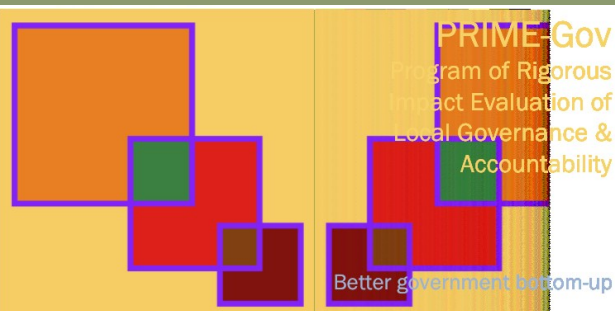


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Summary: Implementation Challenges

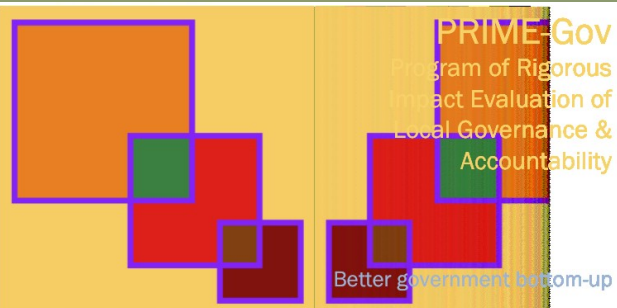
- Collecting baseline data
 - Accessibility of treatment and control areas
- Rolling out the intervention
 - Contamination
 - Heterogeneous treatment
 - Timing of treatment/Multiple interventions
- Collecting follow-up data
 - Delays, seasonality



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Thank you!



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