

Meeting 2

Needs Assessment and Example

Program Theory / Theory of Change

Logic Models

Example: education needs in a village

- Looks at one village, Kabwata, Zambia.
- Eventual goal to set up model community school.
- But first, what are needs?
- Needs and goals / targets are intertwined. Goals:
 - to increase enrolments;
 - to reduce disparities between urban, peri-urban and rural areas;
 - to achieve gender and socio-economic equity in access to, continuation and
 - performance in education, and
 - to enhance actual learning acquisition

Kabwata, continued

- Used secondary and primary data collection.
 - Secondary:
 - Population, age /gender mix, accessibility, parental education
 - Primary: baseline survey
 - Gauge perceptions of needs of parents (160), teachers, kids.
 - Determine barriers (physical, economic, gender).
 - Determine availability of teachers.

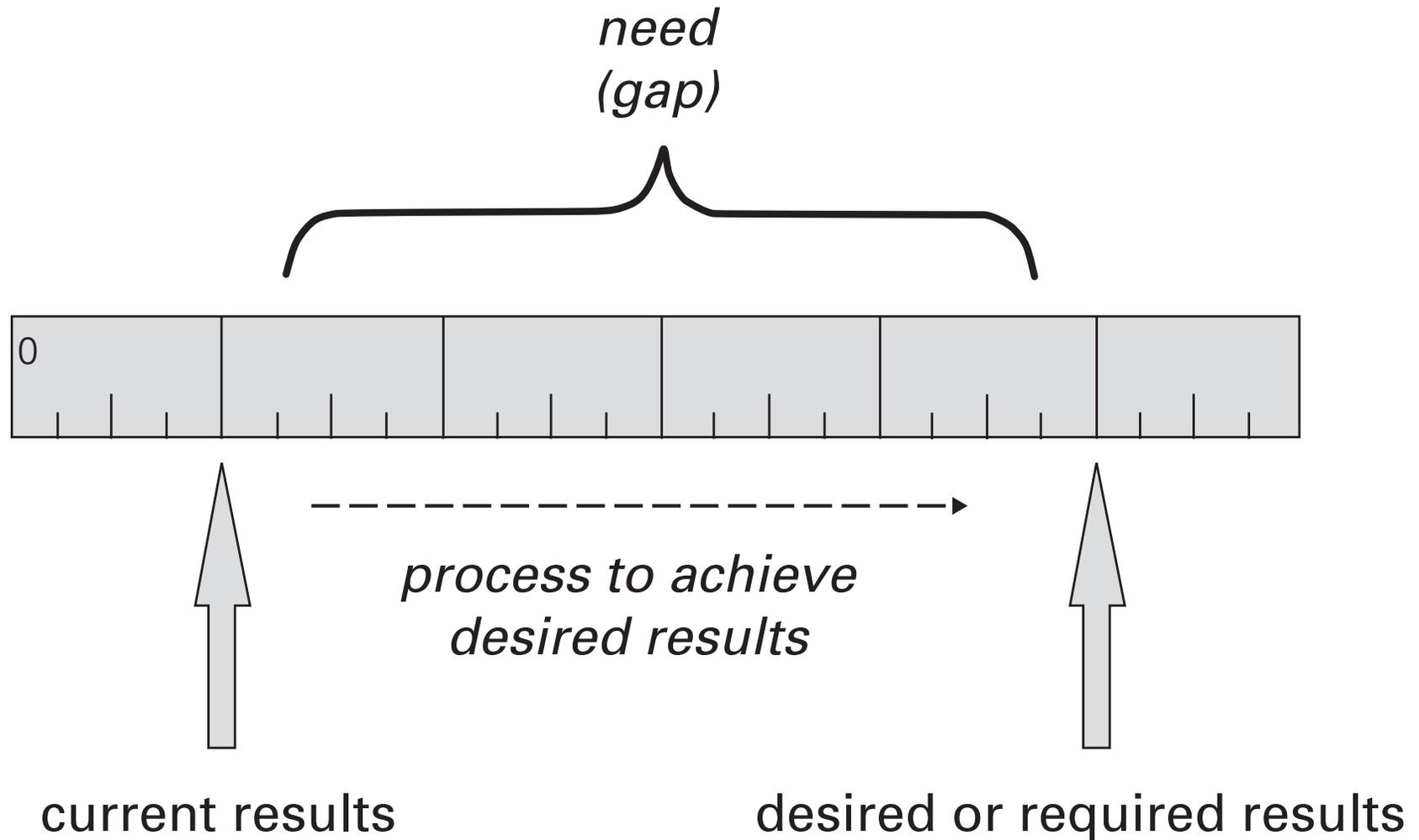
Needs assessment

- Goal of Program: Alleviate a problem
- Goals of Needs Assessment:
 - Describe the nature, magnitude, distribution of problem
 - Describe the extent to which intervention needed
 - No interventions at all vs
 - Current interventions not meeting needs
 - “gauge the appropriateness of proposed and established intervention programs”
 - Extent to which needs (social problems) are being addressed
 - “assess effectiveness of these programs for improving the social condition”

Steps in needs assessment

- Identify audience and purposes for analysis
 - Users and uses
- Fully describe needs
 - Define target population
 - What are their needs?
 - What is the existing service environment?
- Identify gaps between expected/ideal and actual
- Evaluate identified needs
 - Prioritize (relevance, importance)
- Communicate back to audience

Needs assessment



Defining the target

- Usually individuals, could be families, firms, communities, houses...
- Direct vs. indirect
 - E.g., those affected vs those at risk
- Provide a clear definition in terms of age, gender, other observables, geography, time (?), and some key marker (e.g., homeless, landless)
 - But defining target can be tricky.
 - Involves defining boundaries of target.
 - E.g., Drug user=used drugs in last year (vs ever)
 - Children 5-14 for child labor.

Models of need (McKillip)

Discrepancy Model

- This model is the most straightforward and widely used, especially in education.
- This model emphasizes normative expectations and involves the three phases:
 - Goal setting: identifying what ought to be
 - Performance measurement: determining what is
 - Discrepancy identification: ordering differences between what ought to be and what is

Models of need (McKillip)

Marketing Model

- This model defines needs assessment as a feedback process used by organizations to learn about and to adapt to the needs of their client populations.

Decision Model

- Identify need, transform needs to reflect decision maker's values and interests, synthesize and rank options.

Prioritizing needs (McKillip)

- System levels (points of view)
 - Primary
 - Level 1: Direct service recipients (Targets)
 - Secondary
 - Level 2: Service Providers
 - Level 3: Resources (Need for Solutions)

Identification vs. assessment

- Needs Identification
 - Defining needs: assess need as discrepancy between what exists at Level 1 (for targets) and what is desirable.
 - Develop estimates of extent and distribution.
 - Population at risk = probabilistically have or will develop the condition the program addresses
 - At-risk assessment
 - Population in need = currently manifest the condition of interest.
 - Demand assessment
 - Definition needs to be implementable given limits of data and privacy.
 - Incidence = number of new cases
 - Prevalence = number of existing cases.
 - Both can be rates.
 - Describe how problem is experienced.
 - Perceptions / barriers / difficulties with /demand for existing services
 - Why the problem exists and linked problems

Identification vs. assessment

- Needs Assessment (Prioritizing Needs)
 - Level 1 needs in relation to Level 2 and 3
 - More of a focus on Level 2 and 3
 - Incorporates practical and contextual aspects
 - Time, money, mission, political goals
 - Process of describing problems of a target population and possible solutions to those problems

Methods and strategies for implementing needs assessments

- Quantitative and qualitative
- Use existing data sets
- Analysis of social and health indicators (i.e., regularly occurring measures)
- Existing services and resources in the community
- Utilization of existing services / agency records
- Surveys and censuses of targeted population(s)
- Key informant interviews
- Focus groups
- Community forum

Pitfalls in needs assessment

- Sampling
 - Not getting data from the right sources
 - e.g., missing primary target populations
- Measurement
 - Not gathering the right information to measure the relevant dimensions of need
 - Confounding means (solution strategies) with ends (outcomes) or needs with wants
- Conclusions
 - Using inappropriate methods to justify conclusions

Example of a needs assessment

- Purpose (Haq and Hafeez)

Background: Primary health care is a set of health services that can meet the needs of the developing world. Community health workers act as a bridge between health system and community in providing this care. Appropriate knowledge and communication skills of the workers are key to their confidence and elementary for the success of the system. We conducted this study to document the perceptions of these workers on their knowledge and communication needs, image building through mass media and mechanisms for continued education.

- Standard: Primary Health Care = "Essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation, and at a cost that community and country can afford".
- But wait, this is about the community health workers. Hence the standard is: "Appropriate knowledge and interpersonal communication expertise, in addition to basic clinical skills, supplies and supervision, are a key to the work of CHWs"

Example of a needs assessment

- Literature Review
 - Long-standing view that community-health workers play an important role in health outreach in developing countries.
- Mary & Rosemary have described how CHWs enable health programmes to achieve three interconnect goals:
 - building a relationship between the health care provider and laypersons in the community;
 - improving appropriate health care utilization; and
 - educating people to reduce health risks in their lives

Methods

- Sample
 - A multi-stage, stratified, random sampling for this study.
 - Selected only those districts where no donor-funded project was being implemented
 - In each district, the sample comprised all “Lady Health Workers” (LHWs) and supervisors who were aged 20 to 50 years, based at their respective villages, married or unmarried, willing to participate in the study and having at least one year of work experience.
- 64% response rate

Measurement

- Stated goal:
 - [Assess...] communication expertise, in addition to basic clinical skills, supplies and supervision... of CHWs

It was a cross-sectional study consisting of two components. Component 1 comprised focus group discussions (FGDs) with LHWs and their supervisors; in component 2, information from the same LHWs and their supervisors was obtained through a self-response questionnaire.

Identification of needs

Table 2: Responses to the questions regarding communication skills

Question		LHW	LHS
Are they sufficient?	Response	Moderate (4/5) Insufficient (1/5)	Sufficient (1/5) Moderate (4/5)
	Additional comments	There is room for improvement	LHWs with education < 10 grades, not married, or those having low SES face more difficulty
How you deal with barriers perceived by individuals?	Response	By talking about child's future, using religious teachings, using help of influentials	Talking about child & family's future, using religion, using local leaders
	Additional comments	Using fear appeal and using help of LHS mentioned by some	Positive examples & using IEC materials, helping with own hand
What are your specific suggestions on the communications capacity building of LHW?	Response	Refresher training, role plays on common difficult scenarios, better IEC materials should be provided	Refresher training, role plays on common difficult scenarios, better IEC materials should be provided
	Additional comments	Adequacy and timeliness of the supply of IEC materials should be improved	Quality of basic training should also be improved

Identification of needs

Table 3: Respondents' views on adequacy of technical knowledge

Question	Response	
	LHW	LHS
What are the topics on which you have sufficient knowledge?	FP, MINCH, nutrition, malaria, EPI & common childhood diseases	FP, MINCH, nutrition, malaria, EPI, common childhood diseases & National Immunizations Days
What are the topics on which you have insufficient knowledge?	Emerging diseases, medicinal issues, questions on repeated weighing and polio immunization of babies are difficult topics	Emerging diseases, e.g. dengue fever, Congo fever, avian influenza, etc.

Evidence for conclusions

Conclusion

CHWs may seem elementary in high-resource settings, but they have a valuable role to play in developing countries. Some basic steps are required to facilitate them in improving their efficacy and effectiveness. A continued process should be ensured by primary health care programmes whereby opportunities are provided to community health workers to update their knowledge, sharpen communication skills and bring credibility to their persona as health educators.

- What is good about this evaluation?
- What is missing?

Recap: needs assessment questions

- How great a need?
 - What data is needed?
- How available/effective are existing solutions?
- How does this approach compare with existing and/or alternative approaches?
 - How feasible?
 - How acceptable?
 - How much of a demand? (pay for?)
- What is the underlying theory of this approach?
 - Why do we think this program would work?

Program theory

- Theory of Change
 - Programs, policies, interventions seek to change [something]
 - Changing something requires knowing how to achieve change
 - What ideas and assumptions link inputs to goals
 - How can you bring about change?
- Program Theory
 - Specific articulation of theory of change in a specific program.
 - Why the program does what it does and why doing so should achieve desired results.
- Causal Model (Rossi: Program Impact Theory)
 - Underlying all programs – Causal model: A causes B (impact)
 - Both ToC and PT are causal models.

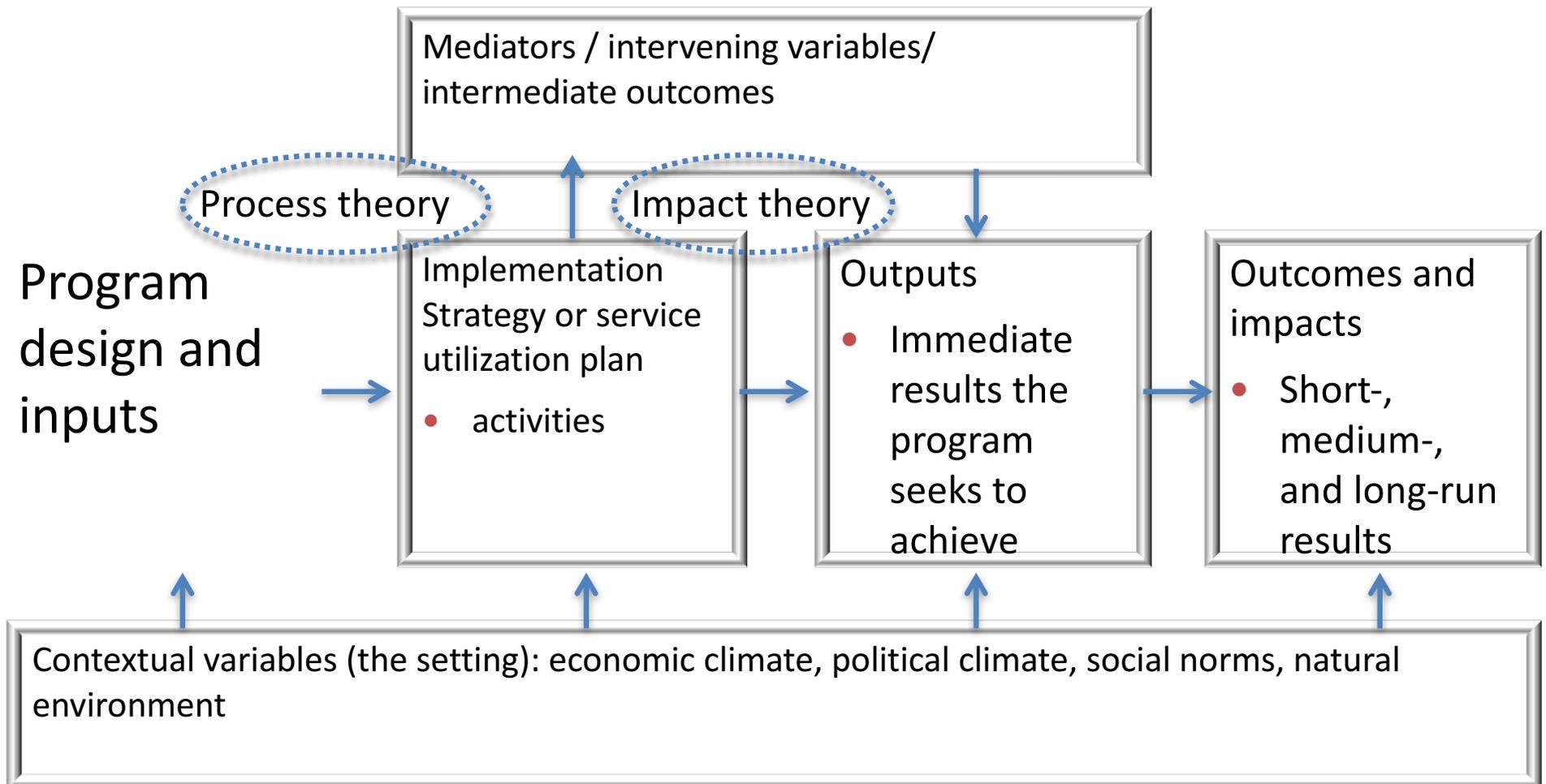
Example: microcredit

- Theory of change: creating access to small loans allows households to borrow to invest in transformational income generating activities.
- Program theory: Micro loans targeted to women through joint liability lending circles will be taken up, repaid, and create sustained improvements in living standards for the poor.
- Causal model: credit access → investment → ↑ income for women → ↑ education and health for children

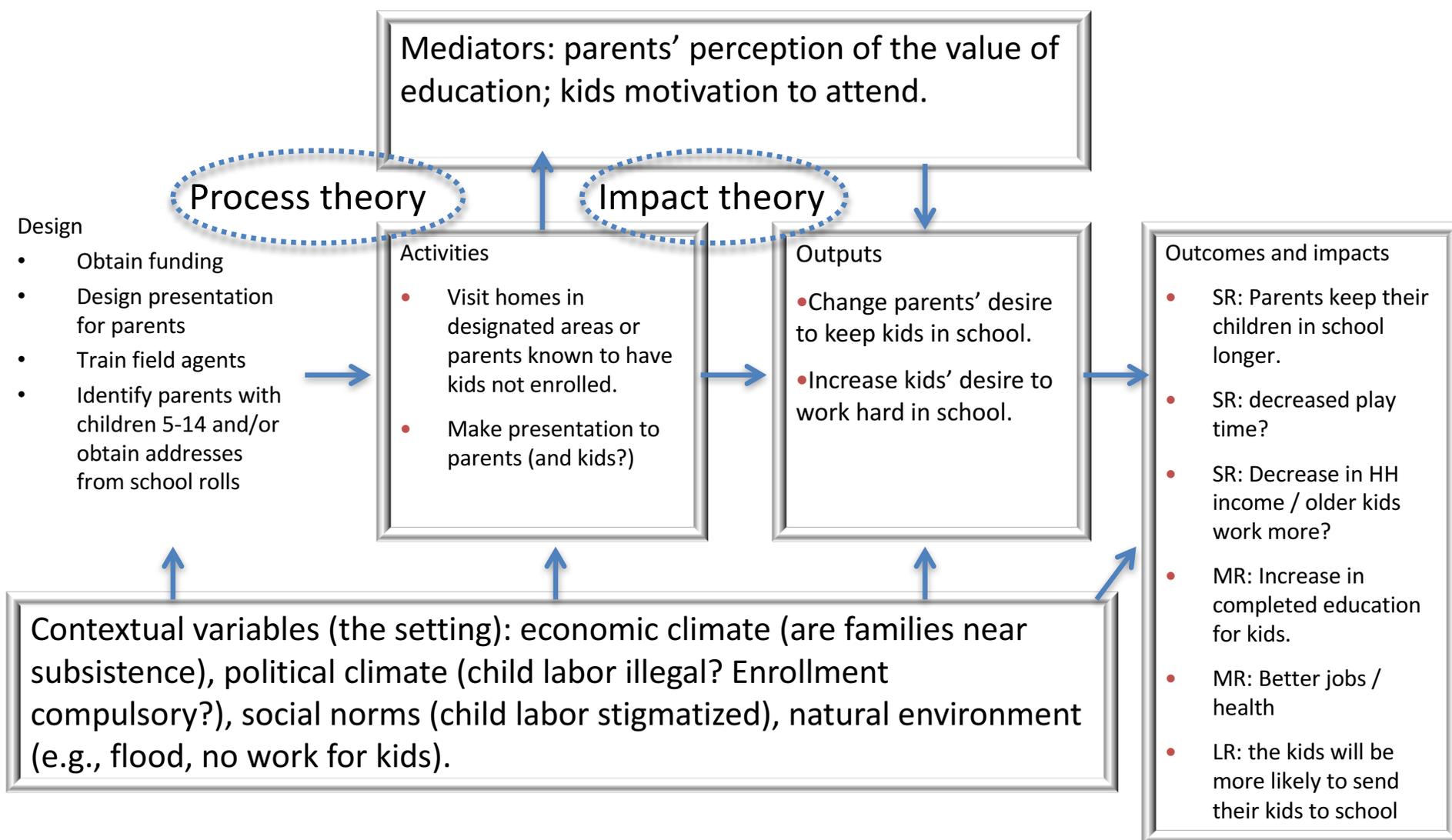
Logic models

- Logic models depict assumptions about the resources needed to support program activities and produce outputs, and the activities and outputs needed to realize the intended outcomes of a program .
- Depict the theory of change and program theory.
 - <http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html>
 - http://www.uwex.edu/ces/lmcourse/interface/coop_M1_Overview.htm

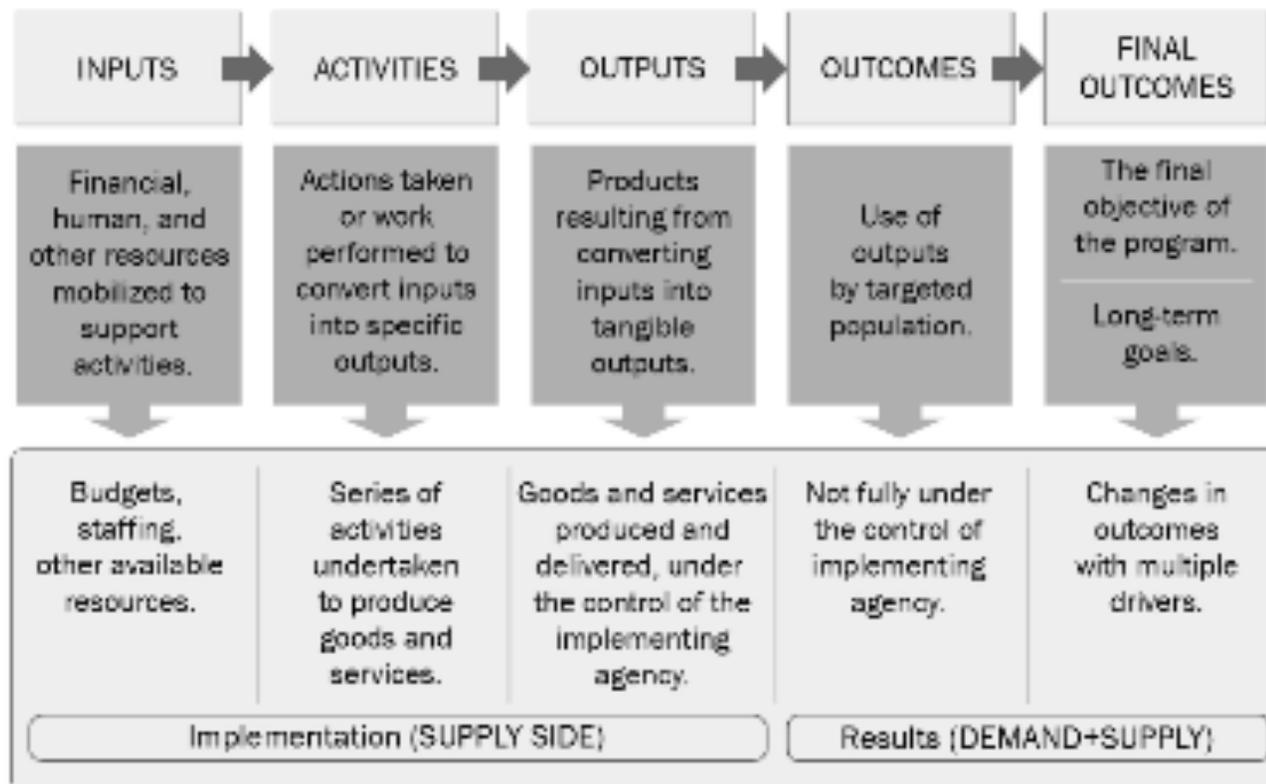
Logic model



Logic model for an education program for parents to reduce child labor



Results chain



Source: Authors, drawing from multiple sources.

Assessing program theory

- Is the program theory valid?
 - Does it address social needs (from needs assessment)?
 - Is it logically plausible?
- Is the operationalization of the program theory valid?
 - Did the program do what it's supposed to do in order to achieve outcomes?
- How do we design an outcome evaluation so that we can be sure that positive results can be attributed to the program we're evaluating?
 - Use Program Theory to figure out what to measure, how to design evaluation
- *Practice* thinking about, if evaluation results are positive, how sure we can be that it was the program that led to those outcomes (caused them)

Why do programs & research designs fail?

- If a program doesn't work...
 - Program (impact) theory flawed
 - Process (implementation) theory flawed
 - Actual implementation flawed
 - Evaluation flawed
- Why could a research design fail?
- Credit constraints affect occupation choice; test via opening of bank branches.
 - Theory is flawed
 - Occupation choice not affected by credit constraints
 - Process (implementation) theory flawed
 - Opening branches does not loosen credit constraints for all, only those with access
 - Actual implementation flawed
 - Branches didn't in fact open or they did but didn't lend to anyone
 - Evaluation flawed
 - Omitted variable bias / selection.

Basic research model (black box)

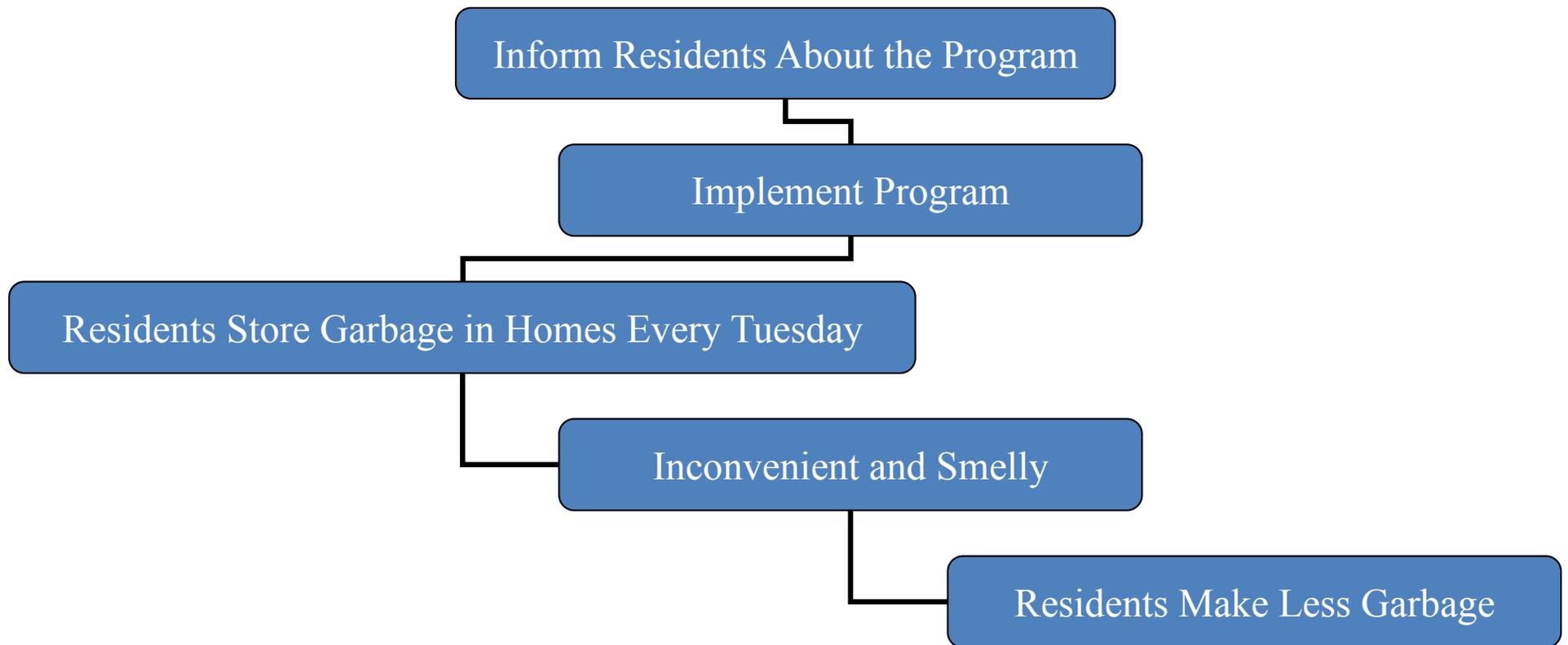
- Independent Variable (IV)
 - Predictor (What causes/predicts the outcome)
 - Manipulated by researcher or nature.
- Dependent Variable (DV)
 - Outcome (Dependent on the IV)
- Next week...

Process Evaluation = Investigating the IV

- Did IV happen? How strongly? For how long?
- Does not look at effects of program (the DV)

Garbage In/Garbage Out

- Chen, Wang & Lin (1997). Evaluating the process and outcome of a garbage reduction program in Taiwan. *Evaluation Review*, 21(1): 27-42.



Impact or Implementation?

Jamaica Path Program

- “The main objectives of the initiative, which is operated by the Ministry of Labour and Social Security (MLSS), are to achieve better targeting of welfare benefits to the poor and to increase human capital by conditioning receipt of the benefits on participants meeting certain requirements for school attendance and health care visits.”

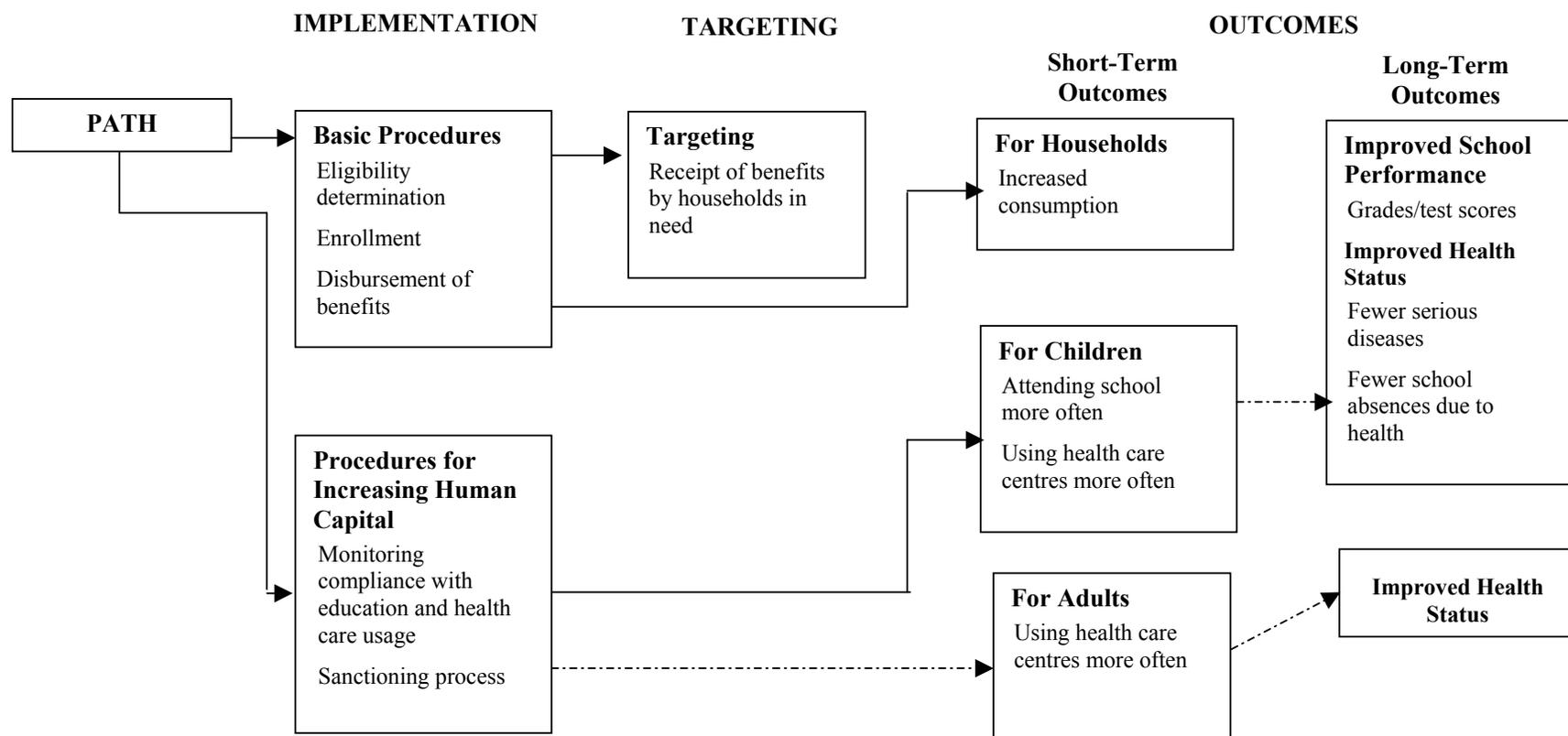
Jamaica Path Program

- PATH identifies poor households through a scoring formula that ranks households from poorest to best off. Households scoring below a predetermined threshold level are eligible for programme benefits.
- PATH is organized around two components:
 - Child assistance grants provide health and education grants for eligible poor children through age 17. The receipt of health grants is conditioned on children through age 6 (not enrolled in school) visiting a health clinic (every two months during the first year and twice a year thereafter). The receipt of education grants is conditioned on regular school attendance (at least 85 percent of school days) by poor children age 6 through 17. The average monthly benefit per child receiving a health or education grant in 2005 was about US\$6.50.

Jamaica Path Program

- PATH is organized around two components:
 - Social assistance grants to adults provide grants to poor pregnant or lactating mothers, elderly poor (over age 65), and poor, disabled, and destitute adults under age 65. Initially, the receipt of benefits was conditioned on adults making regular health clinic visits. However, this changed shortly after the programme was launched and benefits for adults are no longer conditional. The average monthly benefit per person is the same as the benefit in the child assistance grants.

Path's logic model



What is missing here?