U N
D P

Independent
Evaluation
Office

United Nations Development Programme

GEI
Global
Evaluation
Initiative

Theory-Based Evaluation in Practice

2022 NEC Conference
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/undp_evaluation

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Introduction

Objectives of the workshop

After this workshop, participants have developed an initial sound understanding of the role of program theory in evaluation and how to apply theory-based evaluation in practice. More specifically, participants will have a greater understanding of:

- Different purposes and uses of program theory in evaluation
- Principles for reconstructing a program theory
- Applications of theory-based evaluation in practice

Outline

- 9.00 – 10.30: Principles of Theory-Based Evaluation

coffee/tea

- 11.15 – 12.30: Reconstructing a Program Theory (exercise)

lunch

- 14.00 – 15.15: Reconstructing a Program Theory (continued and plenary discussion)

coffee/tea

- 15.45 – 17.00: Using Program Theory as a framework for evaluation

Principles of Theory-Based Evaluation

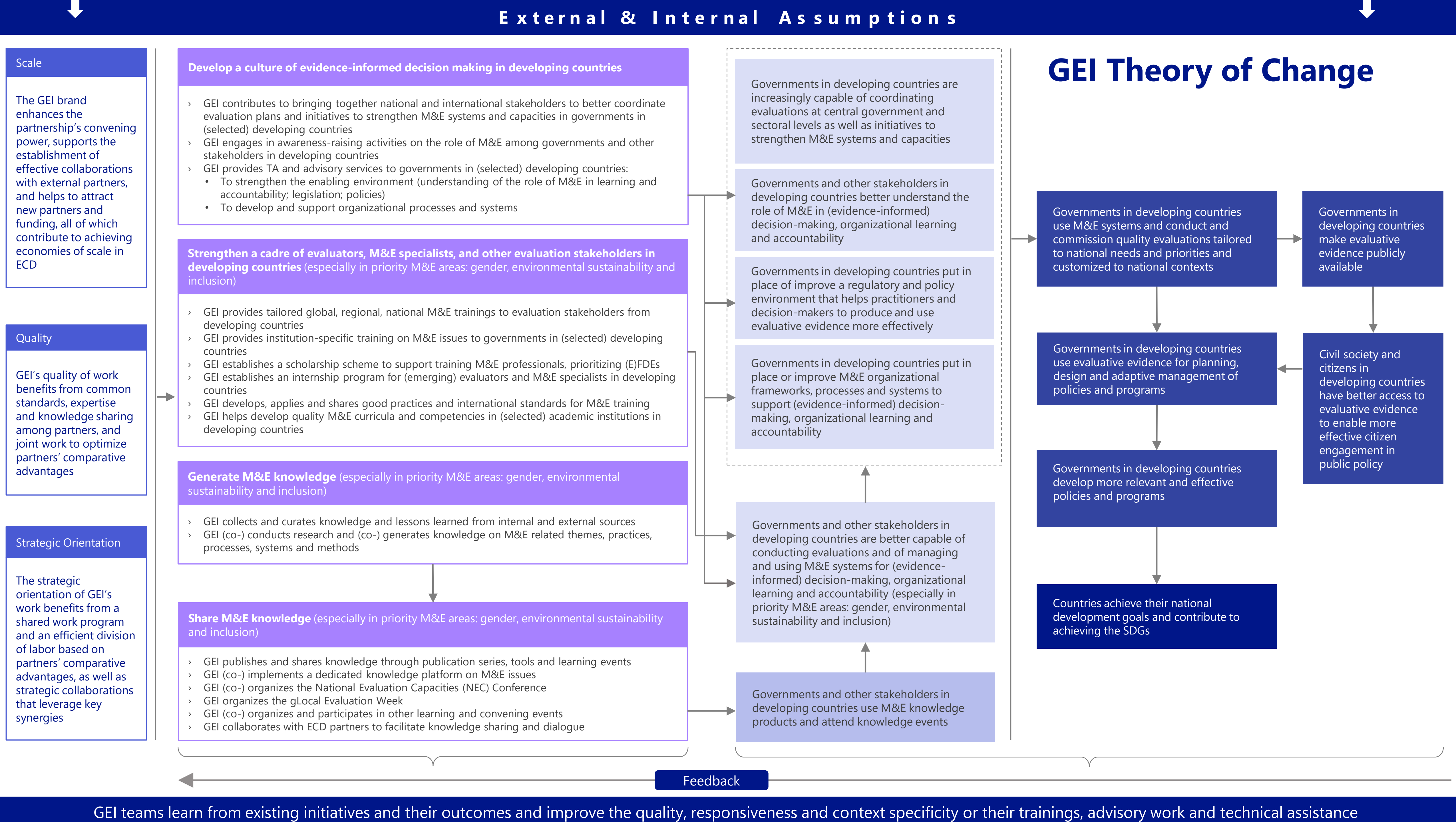
Definitions

“[Program theory] is a set of hypotheses upon which people build their program plans” (Weiss, 1998:55).

“[TBE] consists of an explicit theory or model of how the program causes the intended or observed outcomes and an evaluation that is at least partly guided by this model” (Rogers et al., 2000:5).

Program theory cannot be simply ‘observed’ but most be reconstructed.

GEI Theory of Change



External & Internal Assumptions

Scale

The GEI brand enhances the partnership's convening power, supports the establishment of effective collaborations with external partners, and helps to attract new partners and funding, all of which contribute to achieving economies of scale in ECD

Quality

GEI's quality of work benefits from common standards, expertise and knowledge sharing among partners, and joint work to optimize partners' comparative advantages

Strategic Orientation

The strategic orientation of GEI's work benefits from a shared work program and an efficient division of labor based on partners' comparative advantages, as well as strategic collaborations that leverage key synergies

Develop a culture of evidence-informed decision making in developing countries

- GEI contributes to bringing together national and international stakeholders to better coordinate evaluation plans and initiatives to strengthen M&E systems and capacities in governments in (selected) developing countries
- GEI engages in awareness-raising activities on the role of M&E among governments and other stakeholders in developing countries
- GEI provides TA and advisory services to governments in (selected) developing countries:
    - To strengthen the enabling environment (understanding of the role of M&E in learning and accountability; legislation; policies)
    - To develop and support organizational processes and systems

Strengthen a cadre of evaluators, M&E specialists, and other evaluation stakeholders in developing countries (especially in priority M&E areas: gender, environmental sustainability and inclusion)

- GEI provides tailored global, regional, national M&E trainings to evaluation stakeholders from developing countries
- GEI provides institution-specific training on M&E issues to governments in (selected) developing countries
- GEI establishes a scholarship scheme to support training M&E professionals, prioritizing (E)FDEs
- GEI establishes an internship program for (emerging) evaluators and M&E specialists in developing countries
- GEI develops, applies and shares good practices and international standards for M&E training
- GEI helps develop quality M&E curricula and competencies in (selected) academic institutions in developing countries

Generate M&E knowledge (especially in priority M&E areas: gender, environmental sustainability and inclusion)

- GEI collects and curates knowledge and lessons learned from internal and external sources
- GEI (co-) conducts research and (co-) generates knowledge on M&E related themes, practices, processes, systems and methods

Share M&E knowledge (especially in priority M&E areas: gender, environmental sustainability and inclusion)

- GEI publishes and shares knowledge through publication series, tools and learning events
- GEI (co-) implements a dedicated knowledge platform on M&E issues
- GEI (co-) organizes the National Evaluation Capacities (NEC) Conference
- GEI organizes the gLocal Evaluation Week
- GEI (co-) organizes and participates in other learning and convening events
- GEI collaborates with ECD partners to facilitate knowledge sharing and dialogue

Governments in developing countries are increasingly capable of coordinating evaluations at central government and sectoral levels as well as initiatives to strengthen M&E systems and capacities

Governments and other stakeholders in developing countries better understand the role of M&E in (evidence-informed) decision-making, organizational learning and accountability

Governments in developing countries put in place of improve a regulatory and policy environment that helps practitioners and decision-makers to produce and use evaluative evidence more effectively

Governments in developing countries put in place or improve M&E organizational frameworks, processes and systems to support (evidence-informed) decision-making, organizational learning and accountability

Governments and other stakeholders in developing countries are better capable of conducting evaluations and of managing and using M&E systems for (evidence-informed) decision-making, organizational learning and accountability (especially in priority M&E areas: gender, environmental sustainability and inclusion)

Governments and other stakeholders in developing countries use M&E knowledge products and attend knowledge events

Governments in developing countries use M&E systems and conduct and commission quality evaluations tailored to national needs and priorities and customized to national contexts

Governments in developing countries make evaluative evidence publicly available

Civil society and citizens in developing countries have better access to evaluative evidence to enable more effective citizen engagement in public policy

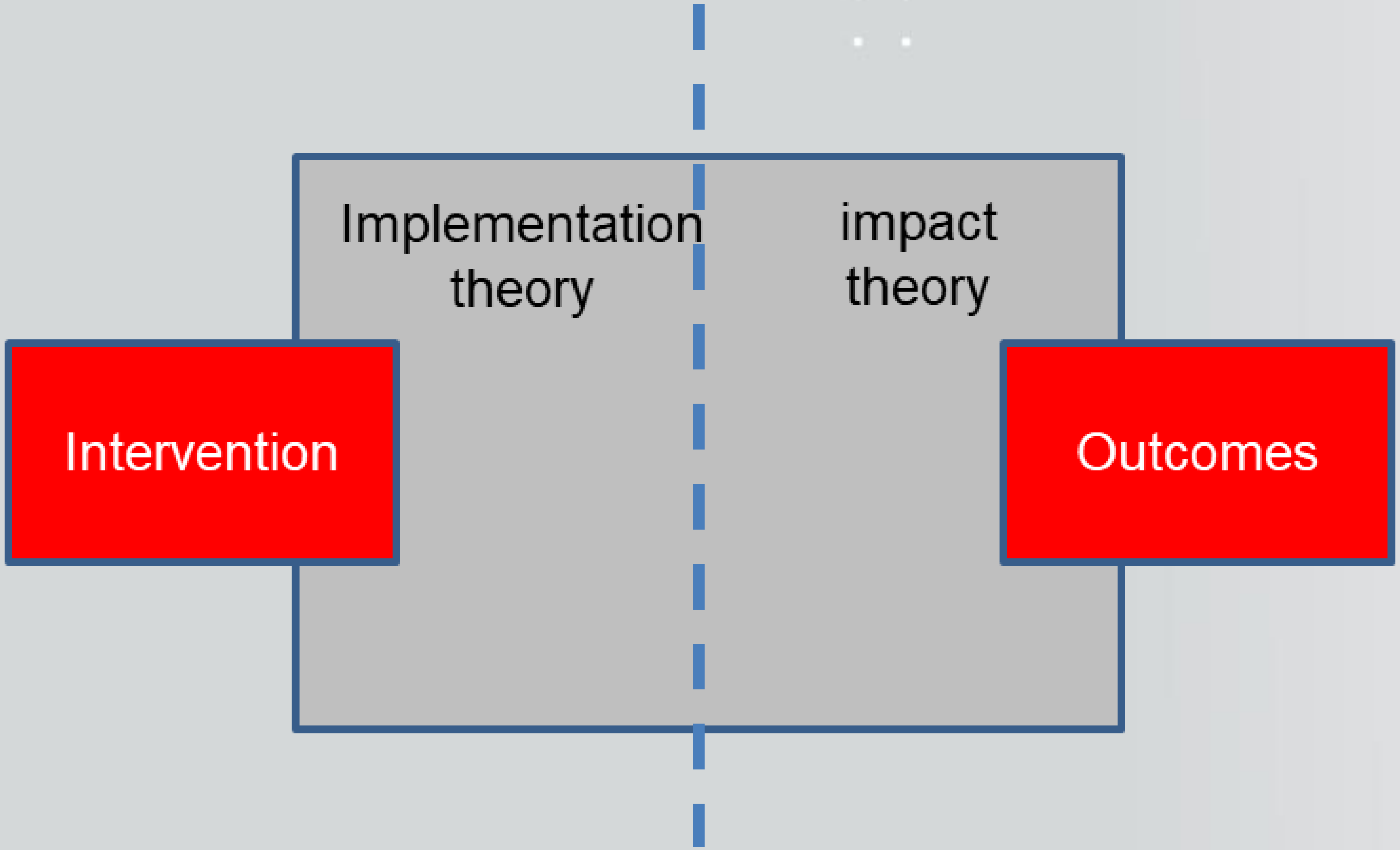
Governments in developing countries use evaluative evidence for planning, design and adaptive management of policies and programs

Governments in developing countries develop more relevant and effective policies and programs

Countries achieve their national development goals and contribute to achieving the SDGs

Feedback

GEI teams learn from existing initiatives and their outcomes and improve the quality, responsiveness and context specificity or their trainings, advisory work and technical assistance



Theory failure vs. implementation failure

Purpose of program theory in evaluation

- **Understanding why** interventions do or do not work (implementation versus theory failure)

- **Generating a consensus** on what the intervention is intended to achieve and how (formative use)

- Program theory as an overall **sense-making framework**

- Using program theory as **a basis for data collection and analysis** or M&E system

- Dealing with **causality**

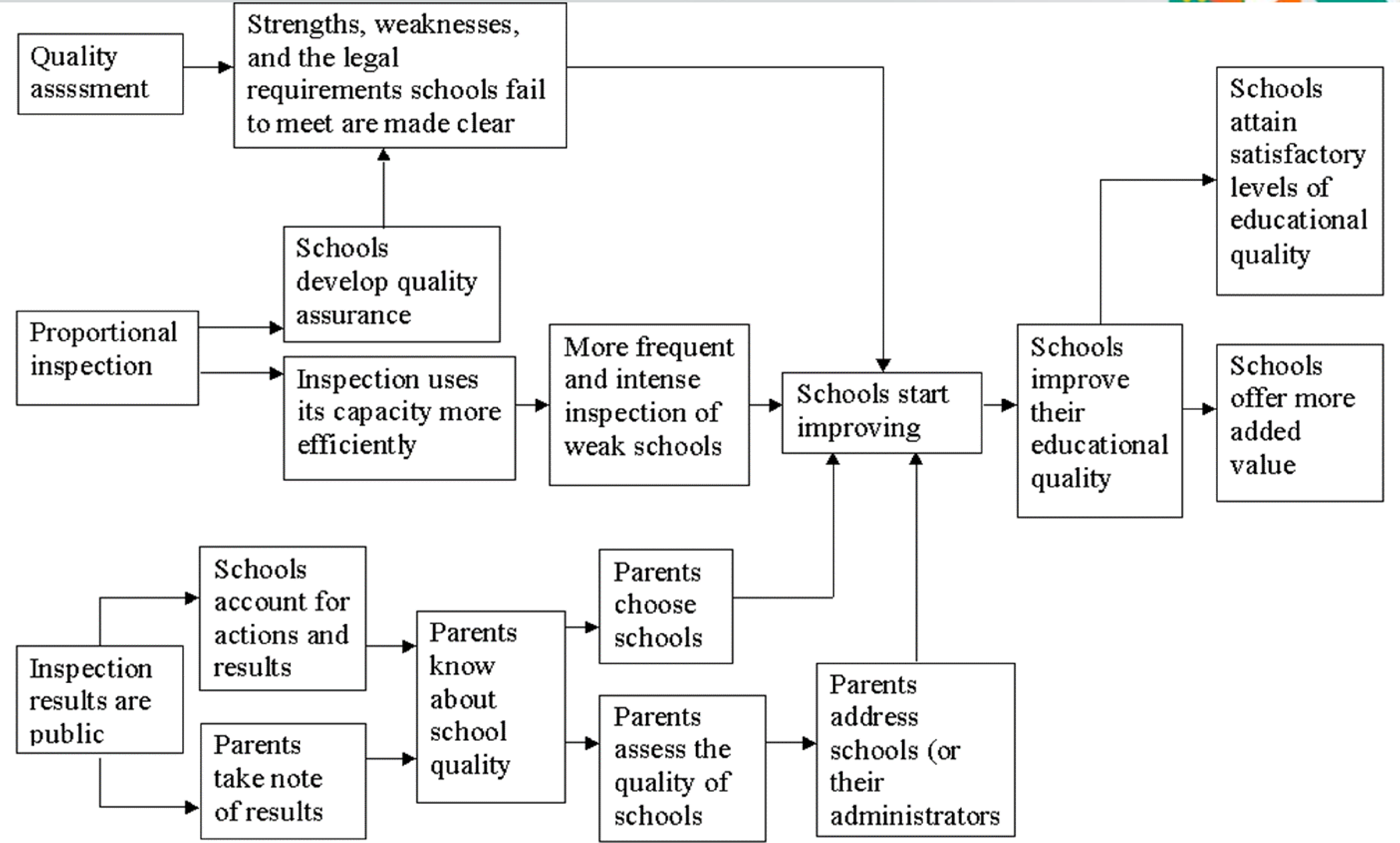
Exercise – "good" program theory

- You will be given a particular representation of a program theory

- Please respond to the following question:

1. Do you find this a convincing program theory?
2. Which purpose(s) of PT in evaluation would this theory support? (e.g. mention 1 or 2)?
3. What do you consider to be strong aspects of this program theory?
4. What do you consider to be weak aspects of this program theory?

1 - school inspection



Quality assssment

Strengths, weaknesses, and the legal requirements schools fail to meet are made clear

Proportional inspection

Schools develop quality assurance

Inspection uses its capacity more efficiently

More frequent and intense inspection of weak schools

Schools start improving

Schools improve their educational quality

Schools attain satisfactory levels of educational quality

Schools offer more added value

Inspection results are public

Schools account for actions and results

Parents take note of results

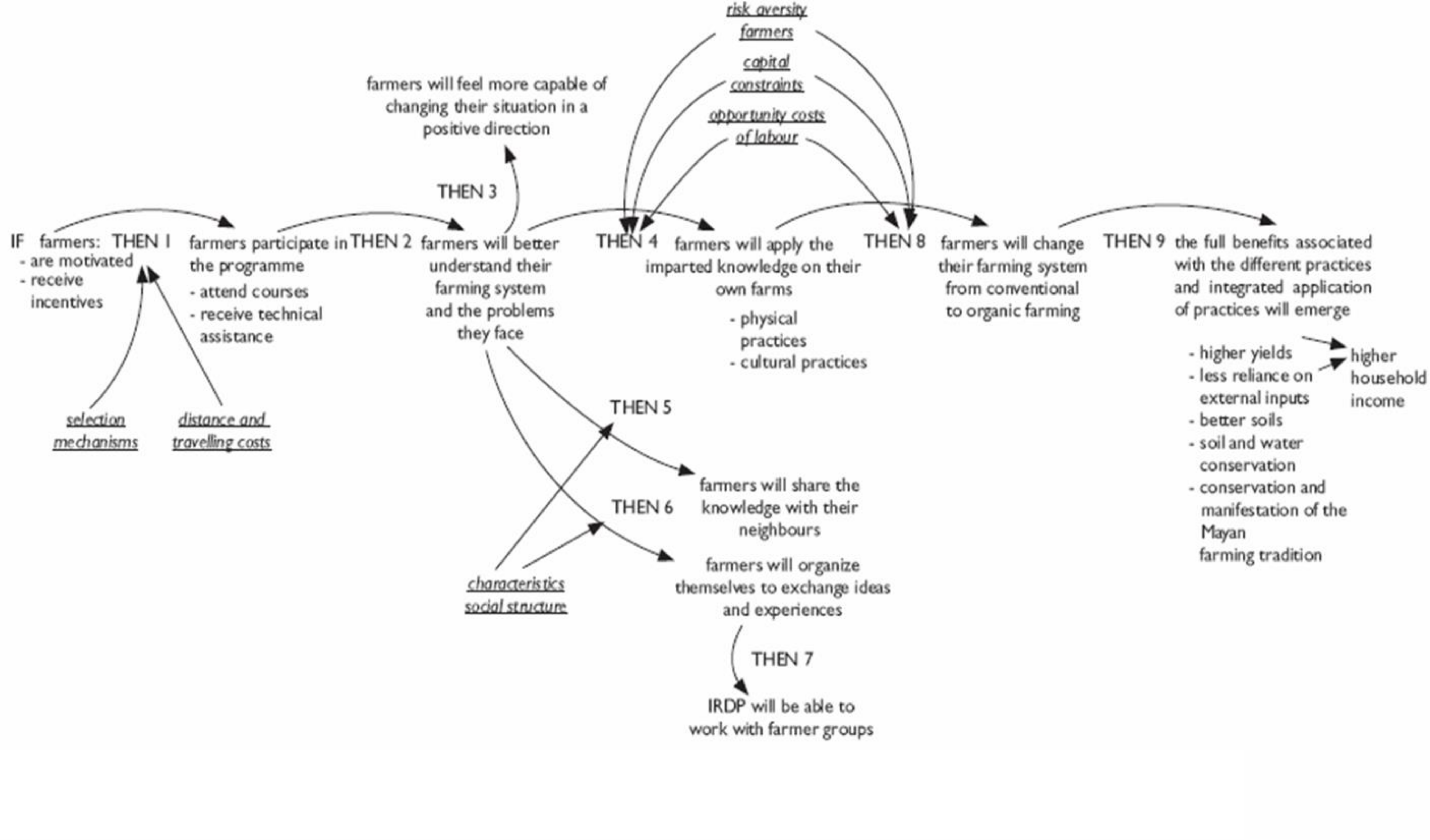
Parents know about school quality

Parents choose schools

Parents assess the quality of schools

Parents address schools (or their administrators

2 - organic agriculture



IF farmers:
- are motivated
- receive incentives

selection mechanisms

distance and travelling costs

THEN 1 farmers participate in the programme
- attend courses
- receive technical assistance

THEN 2 farmers will better understand their farming system and the problems they face

THEN 3 farmers will feel more capable of changing their situation in a positive direction

risk aversity farmers

capital constraints

opportunity costs of labour

THEN 4 farmers will apply the imparted knowledge on their own farms
- physical practices
- cultural practices

THEN 5 farmers will share the knowledge with their neighbours

THEN 6 farmers will organize themselves to exchange ideas and experiences

characteristics social structure

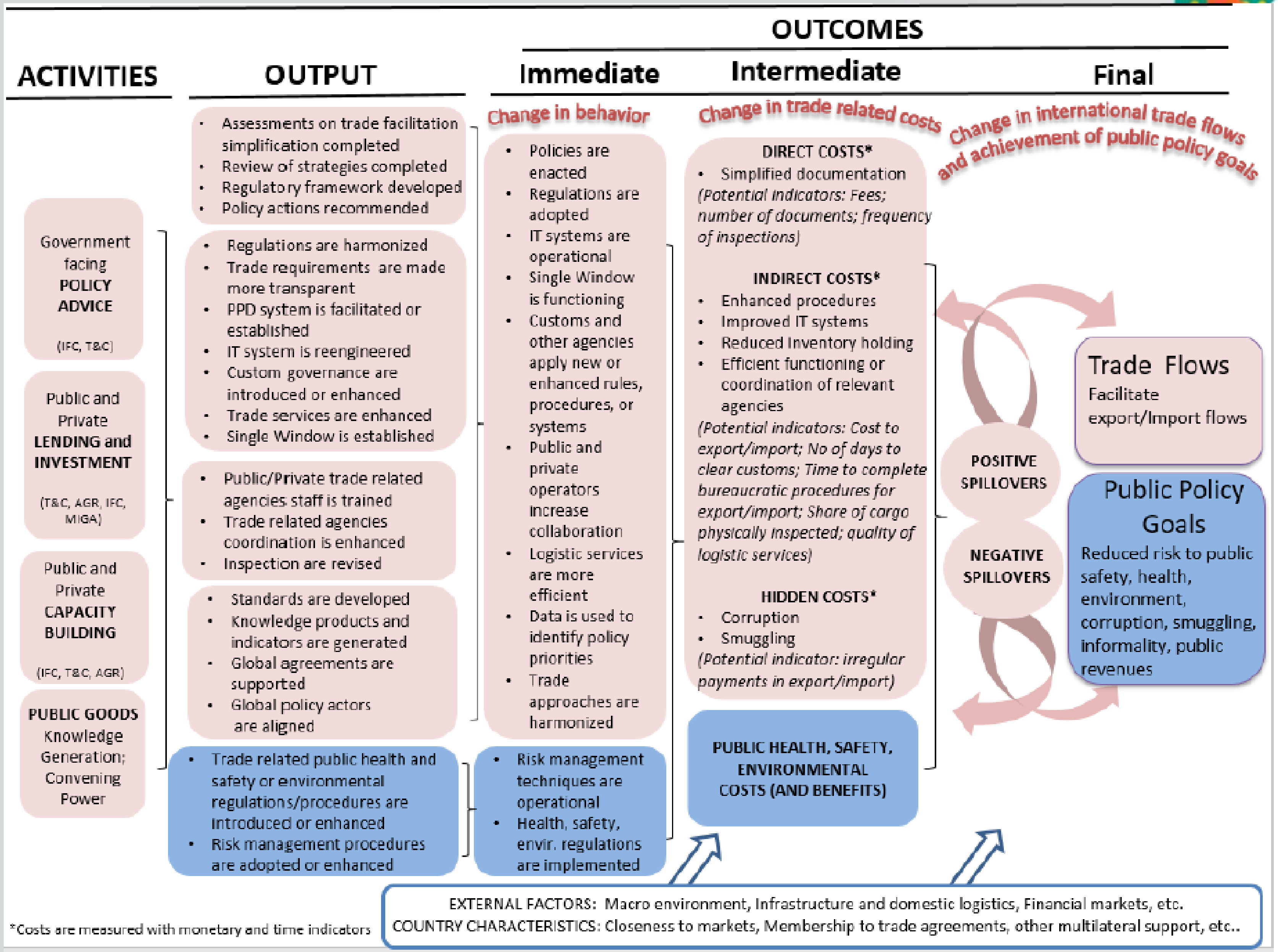
THEN 7 IRDP will be able to work with farmer groups

THEN 8 farmers will change their farming system from conventional to organic farming

THEN 9 the full benefits associated with the different practices and integrated application of practices will emerge
- higher yields
- less reliance on external inputs
- better soils
- soil and water conservation
- conservation and manifestation of the Mayan farming tradition

higher household income

3 - trade facilitation



OUTCOMES

ACTIVITIES

OUTPUT

Immediate

Intermediate

Final

Change in behavior

Change in trade related costs

Change in international trade flows and achievement of public policy goals

Government facing **POLICY ADVICE**

(IFC, T&C)

Public and Private **LENDING and INVESTMENT**

(T&C, AGR, IFC, MIGA)

Public and Private **CAPACITY BUILDING**

(IFC, T&C, AGR)

PUBLIC GOODS Knowledge Generation; Convening Power

- Assessments on trade facilitation simplification completed
- Review of strategies completed
- Regulatory framework developed
- Policy actions recommended

- Regulations are harmonized
- Trade requirements are made more transparent
- PPD system is facilitated or established
- IT system is reengineered
- Custom governance are introduced or enhanced
- Trade services are enhanced
- Single Window is established

- Public/Private trade related agencies staff is trained
- Trade related agencies coordination is enhanced
- Inspection are revised

- Standards are developed
- Knowledge products and indicators are generated
- Global agreements are supported
- Global policy actors are aligned

- Trade related public health and safety or environmental regulations/procedures are introduced or enhanced
- Risk management procedures are adopted or enhanced

- Policies are enacted
- Regulations are adopted
- IT systems are operational
- Single Window is functioning
- Customs and other agencies apply new or enhanced rules, procedures, or systems
- Public and private operators increase collaboration
- Logistic services are more efficient
- Data is used to identify policy priorities
- Trade approaches are harmonized

- Risk management techniques are operational
- Health, safety, envir. regulations are implemented

DIRECT COSTS*

- Simplified documentation

(Potential indicators: Fees; number of documents; frequency of inspections)

INDIRECT COSTS*

- Enhanced procedures
- Improved IT systems
- Reduced Inventory holding
- Efficient functioning or coordination of relevant agencies

(Potential indicators: Cost to export/import; No of days to clear customs; Time to complete bureaucratic procedures for export/import; Share of cargo physically inspected; quality of logistic services)

HIDDEN COSTS*

- Corruption
- Smuggling

(Potential indicator: irregular payments in export/import)

PUBLIC HEALTH, SAFETY, ENVIRONMENTAL COSTS (AND BENEFITS)

POSITIVE SPILLOVERS

NEGATIVE SPILLOVERS

Trade Flows

Facilitate export/Import flows

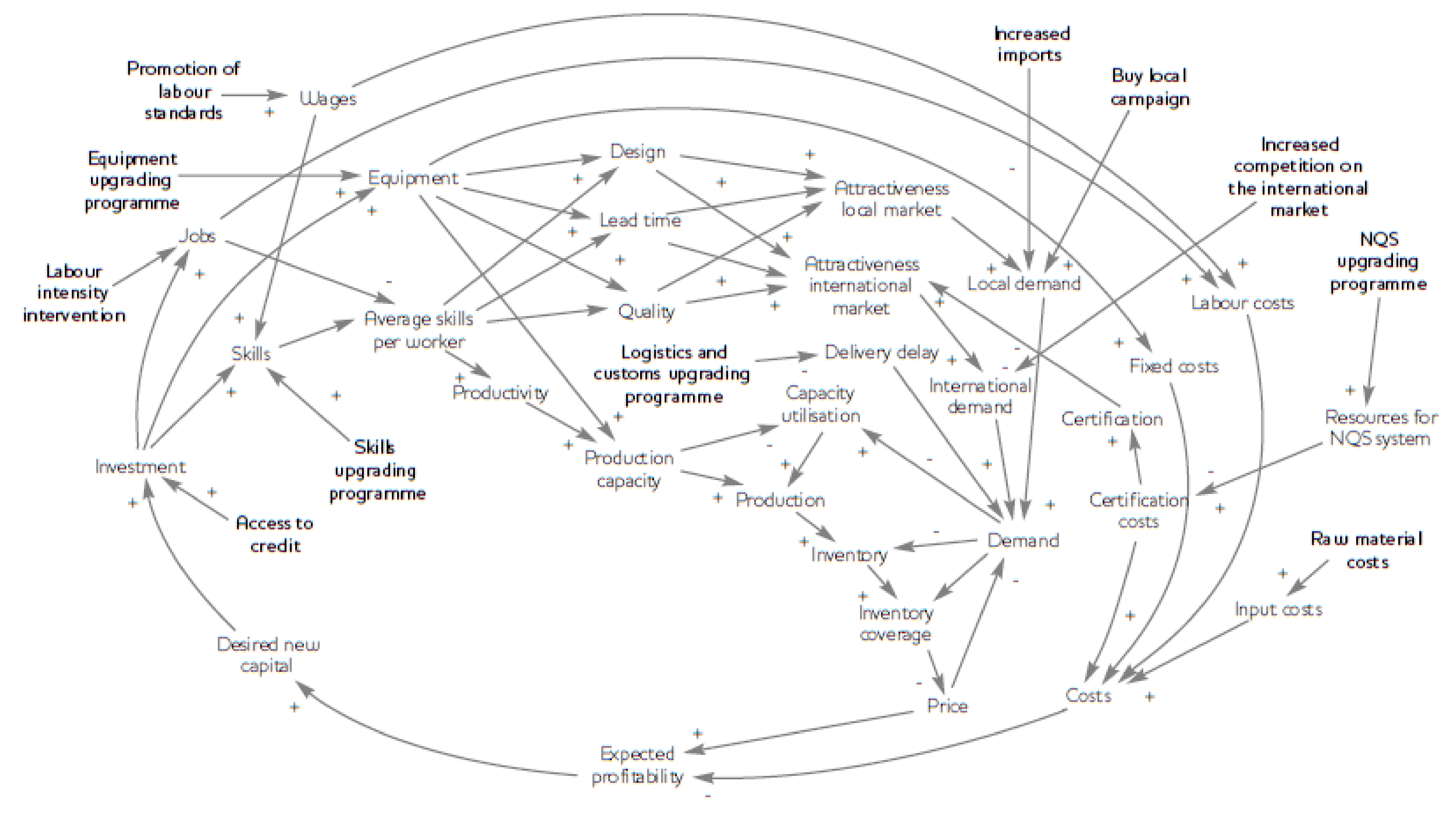
Public Policy Goals

Reduced risk to public safety, health, environment, corruption, smuggling, informality, public revenues

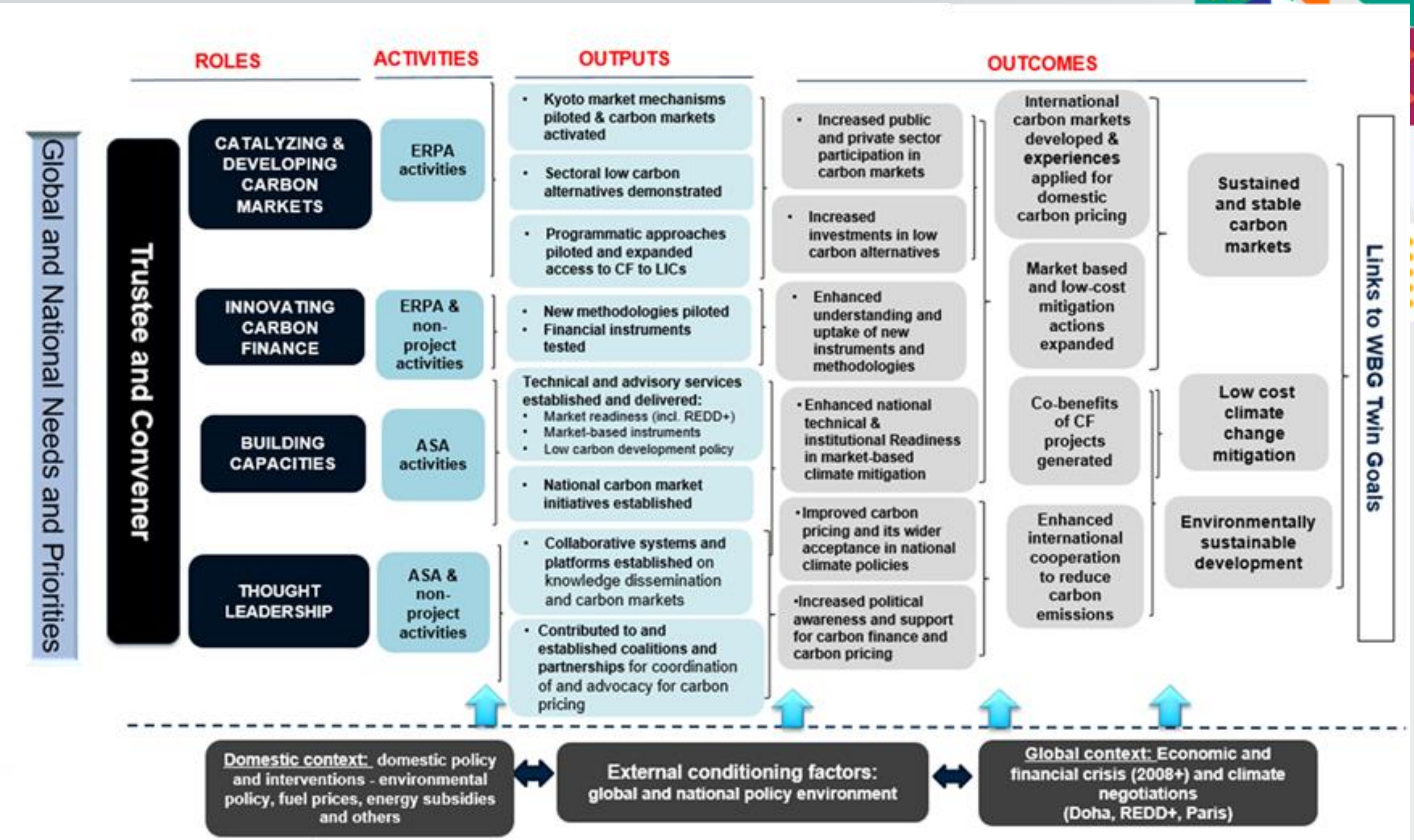
*Costs are measured with monetary and time indicators

EXTERNAL FACTORS: Macro environment, Infrastructure and domestic logistics, Financial markets, etc.
COUNTRY CHARACTERISTICS: Closeness to markets, Membership to trade agreements, other multilateral support, etc..

4 - leather shoe industry



Program theory as a sense-making framework



ROLES

ACTIVITIES

OUTPUTS

OUTCOMES

Global and National Needs and Priorities

Trustee and Convener

CATALYZING & DEVELOPING CARBON MARKETS

INNOVATING CARBON FINANCE

BUILDING CAPACITIES

THOUGHT LEADERSHIP

ERPA activities

ERPA & non-project activities

ASA activities

ASA & non-project activities

- Kyoto market mechanisms piloted & carbon markets activated
- Sectoral low carbon alternatives demonstrated
- Programmatic approaches piloted and expanded access to CF to LICs
- New methodologies piloted
- Financial instruments tested

Technical and advisory services established and delivered:
- Market readiness (incl. REDD+)
- Market-based instruments
- Low carbon development policy

- National carbon market initiatives established
- Collaborative systems and platforms established on knowledge dissemination and carbon markets
- Contributed to and established coalitions and partnerships for coordination of and advocacy for carbon pricing

- Increased public and private sector participation in carbon markets
- Increased investments in low carbon alternatives
- Enhanced understanding and uptake of new instruments and methodologies
- Enhanced national technical & institutional Readiness in market-based climate mitigation
- Improved carbon pricing and its wider acceptance in national climate policies
- Increased political awareness and support for carbon finance and carbon pricing

International carbon markets developed & experiences applied for domestic carbon pricing

Market based and low-cost mitigation actions expanded

Co-benefits of CF projects generated

Enhanced international cooperation to reduce carbon emissions

Sustained and stable carbon markets

Low cost climate change mitigation

Environmentally sustainable development

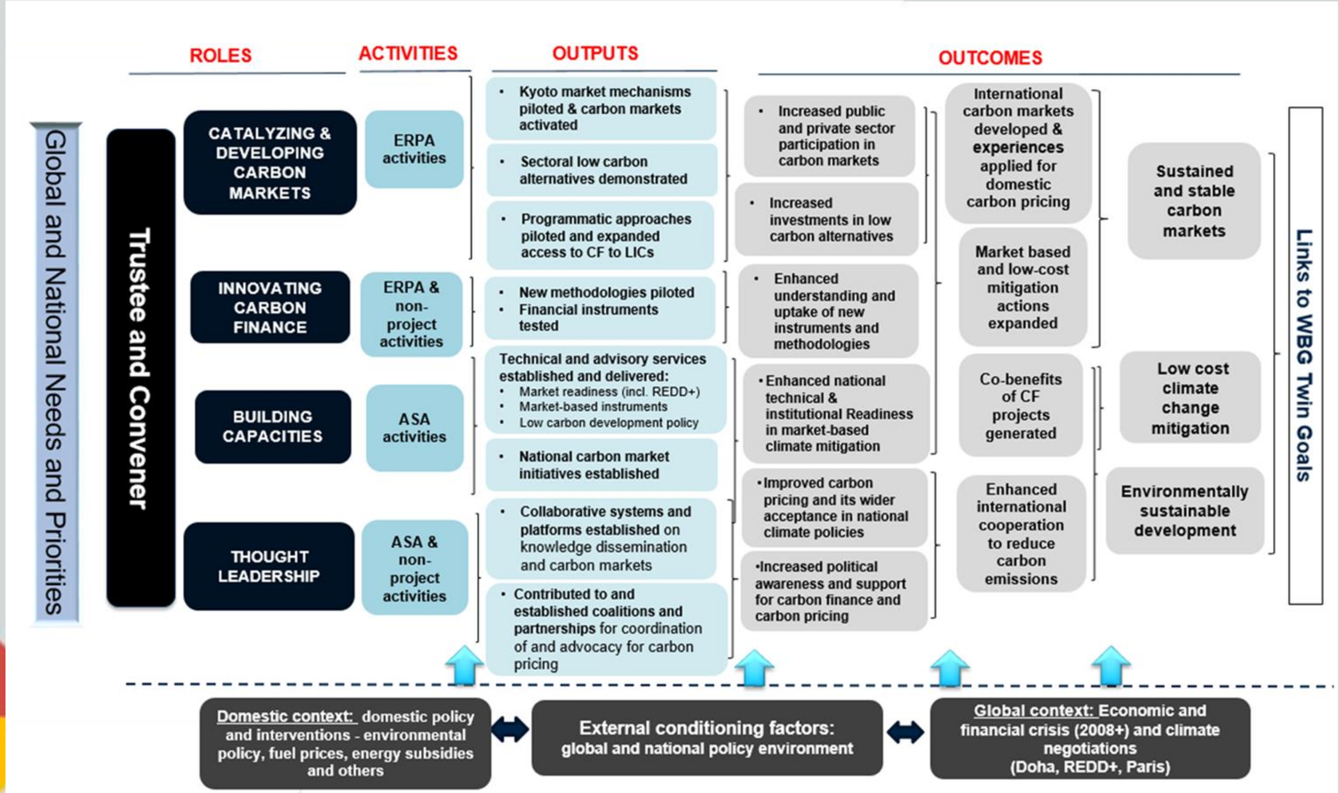
Links to WBG Twin Goals

Domestic context: domestic policy and interventions - environmental policy, fuel prices, energy subsidies and others

External conditioning factors: global and national policy environment

Global context: Economic and financial crisis (2008+) and climate negotiations (Doha, REDD+, Paris)

Nested theories



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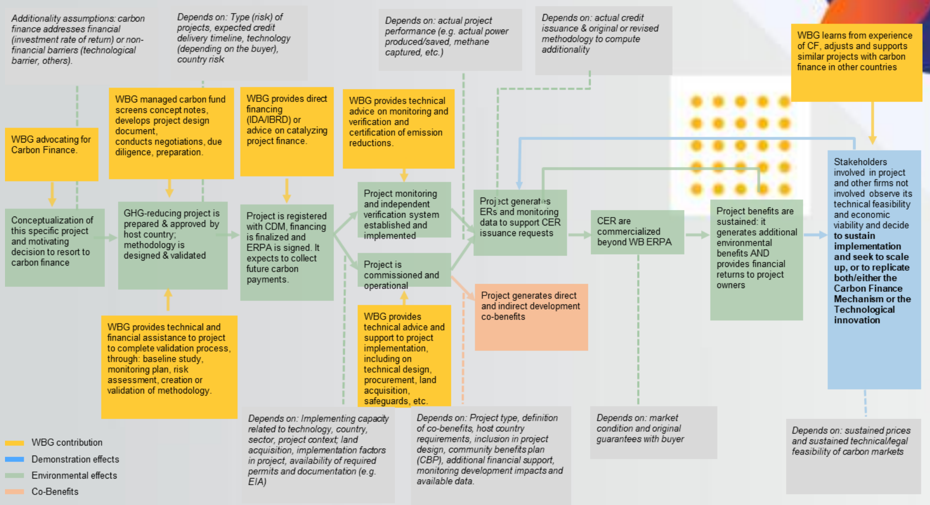
Synthetic ‘high-level’ ToC



Additionality assumptions: carbon finance addresses financial (investment rate of return) or non-financial barriers (technological barrier, others).

Depends on: Type (risk) of projects, expected credit delivery timeline, technology (depending on the buyer), country risk

Depends on: actual project performance (e.g. actual power produced/saved, methane captured, etc.)

Depends on: actual credit issuance & original or revised methodology to compute additionality

WBG learns from experience of CF, adjusts and supports similar projects with carbon finance in other countries

WBG advocating for Carbon Finance.

WBG managed carbon fund screens concept notes, develops project design document, conducts negotiations, due diligence, preparation.

WBG provides direct financing (IDA/IBRD) or advice on catalyzing project finance.

WBG provides technical advice on monitoring and verification and certification of emission reductions.

Conceptualization of this specific project and motivating decision to resort to carbon finance

GHG-reducing project is prepared & approved by host country; methodology is designed & validated

Project is registered with CDM, financing is finalized and ERPA is signed. It expects to collect future carbon payments.

Project monitoring and independent verification system established and implemented

Project is commissioned and operational

Project generates ERs and monitoring data to support CER issuance requests

CER are commercialized beyond WB ERPA

Project benefits are sustained: it generates additional environmental benefits AND provides financial returns to project owners

Stakeholders involved in project and other firms not involved observe its technical feasibility and economic viability and decide **to sustain implementation and seek to scale up, or to replicate both/either the Carbon Finance Mechanism or the Technological innovation**

Project generates direct and indirect development co-benefits

WBG provides technical and financial assistance to project to complete validation process, through: baseline study, monitoring plan, risk assessment, creation or validation of methodology.

WBG provides technical advice and support to project implementation, including on technical design, procurement, land acquisition, safeguards, etc.

Depends on: Implementing capacity related to technology, country, sector, project context; land acquisition, implementation factors in project, availability of required permits and documentation (e.g. EIA)

Depends on: Project type, definition of co-benefits, host country requirements, inclusion in project design, community benefits plan (CBP), additional financial support, monitoring development impacts and available data.

Depends on: market condition and original guarantees with buyer

Depends on: sustained prices and sustained technical/legal feasibility of carbon markets

🟨 WBG contribution

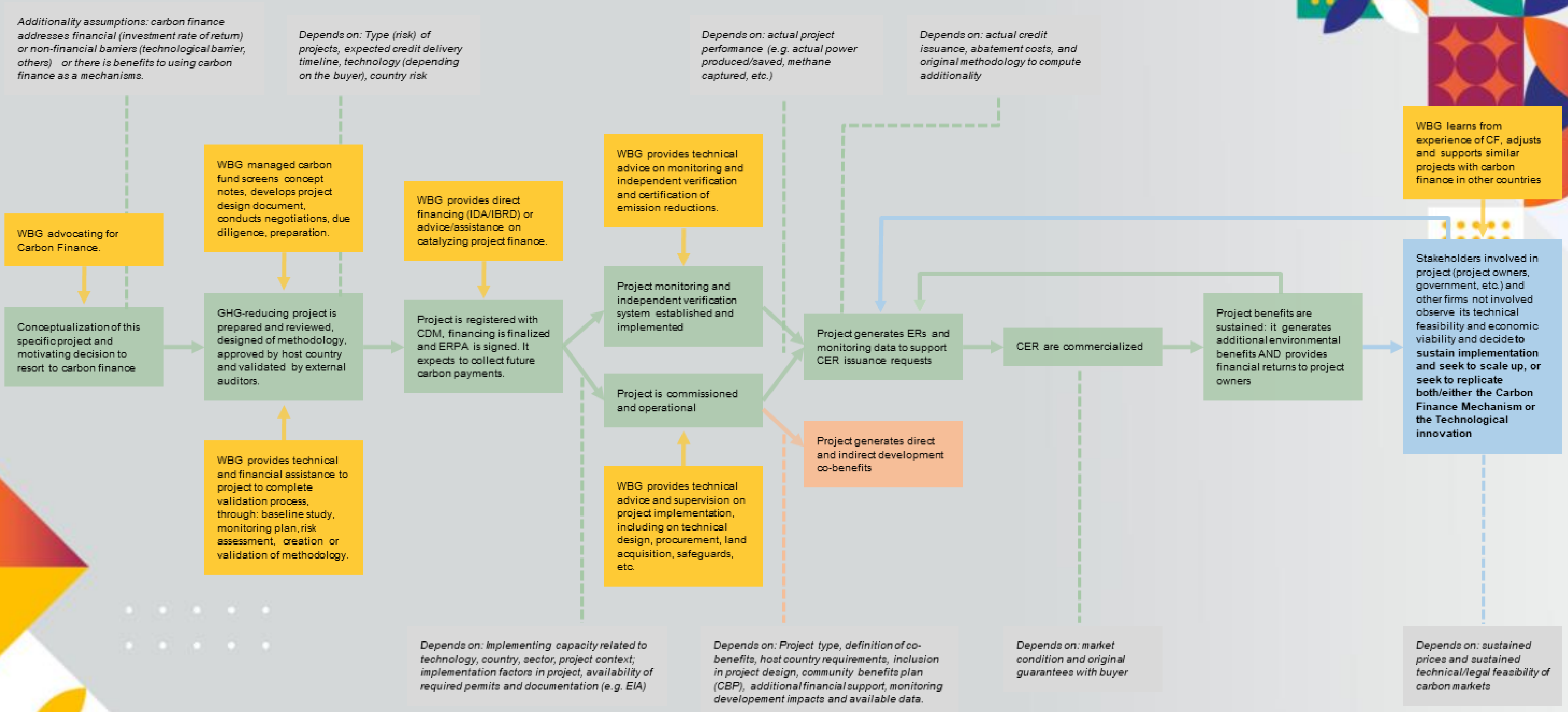
🟦 Demonstration effects

🟩 Environmental effects

🟧 Co-Benefits

Nested ‘detailed’ ToC

Testable program theory



Additionality assumptions: carbon finance addresses financial (investment rate of return) or non-financial barriers (technological barrier, others) or there is benefits to using carbon finance as a mechanisms.

Depends on: Type (risk) of projects, expected credit delivery timeline, technology (depending on the buyer), country risk

Depends on: actual project performance (e.g. actual power produced/saved, methane captured, etc.)

Depends on: actual credit issuance, abatement costs, and original methodology to compute additionality

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“Good” program theory

- What is “good” program theory depends on the purpose of the program theory in the evaluation

- Good principles of a *testable* program theory in evaluation:
  - Be specific
  - Be consistent in formulations
  - Think about the warrants (i.e. is it logical to expect that a contributes to b)
  - Think about the underlying assumptions (i.e. under what conditions is a likely to contribute to b)

Two broad strategies for reconstructing program theories

- ‘Right to left’: from objectives (or “problems”) to underlying causes to activities/outputs

- ‘Left to right’: from activities/outputs to direct outcomes to indirect outcomes (objectives)

- Or combination

Program theory reconstruction for evaluation (main sources)

- Intervention-related documents (policy, strategy, project ; design, monitoring, supervision, research,…..)
- Interviews with stakeholders (funders, implementing agencies, beneficiaries,…..)
- Existing knowledge (documentation) about similar (types of) interventions (broader literature ; policy/grey literature, academic literature,…..)

Frameworks for reconstructing program theory

- **Policy instruments:** sticks, carrots, sermons (Bemelmans-Videc et al., 2003)

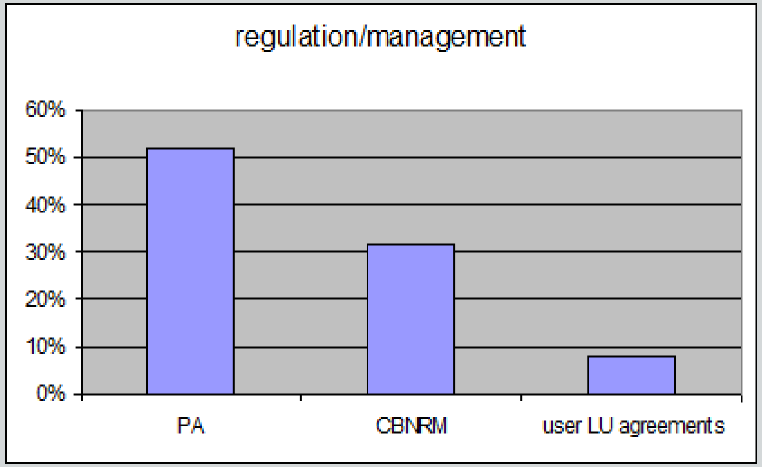
- **Behavioral mechanisms**: social norms, profit-seeking behavior, demonstration and copying behavior, peer pressure, etc.

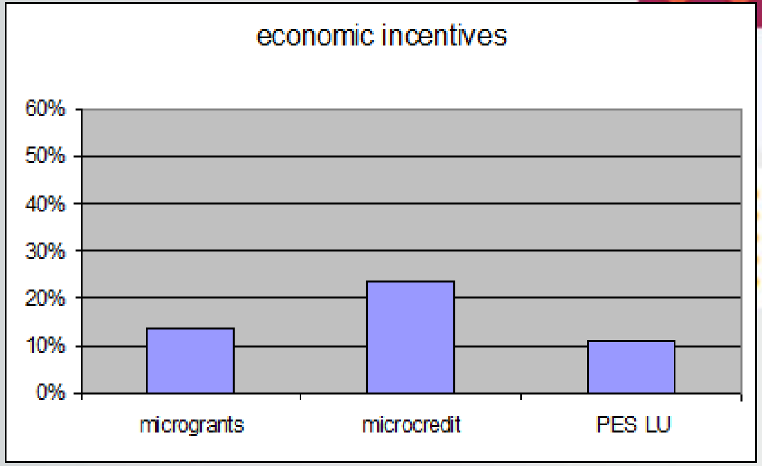
- Coleman's **Theory of Social Action** (1986)
    - Situational mechanisms
    - Action-formation mechanisms
    - Transformational mechanisms

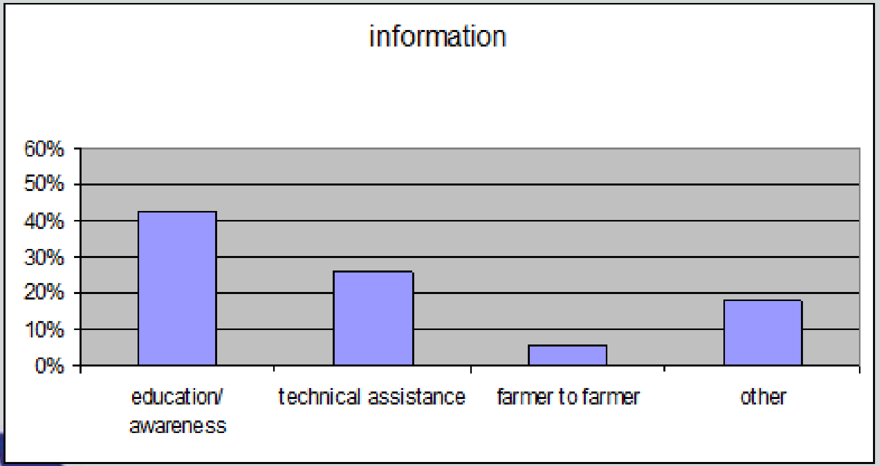
- **Intervention-specific** templates for program theory

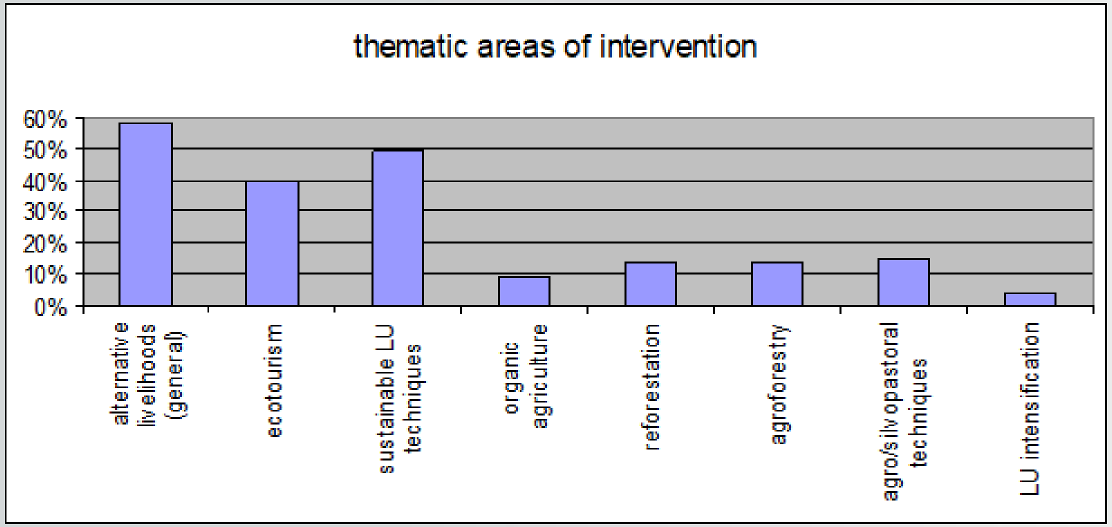
Looking at interventions across…

Portfolio-level: GEF-funded activities directed at rural landowners



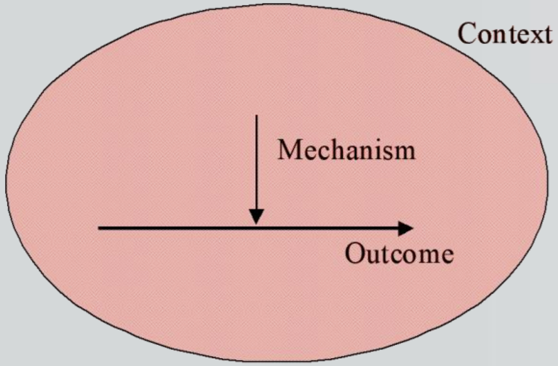






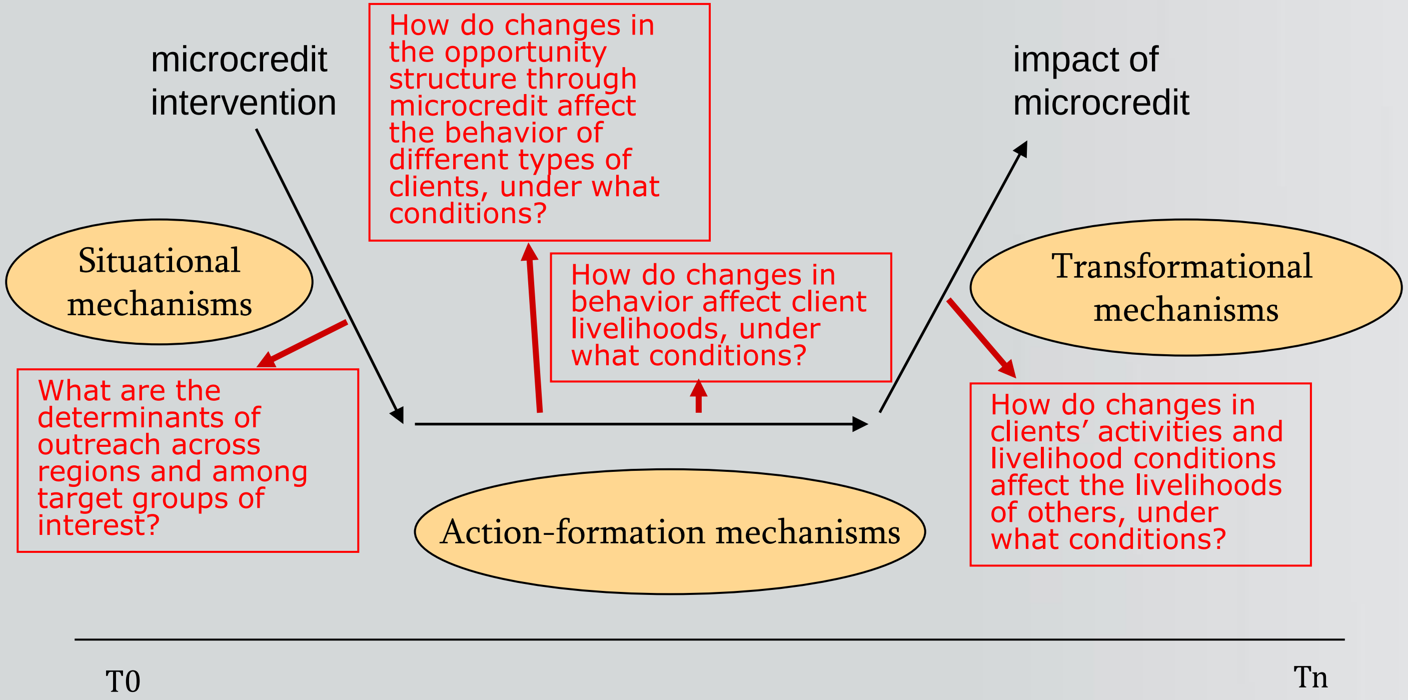
Focus on behavioral mechanisms

- There is no grand theory of social change, only **patterns of regularity** (Merton, 1967; Elster, 1989; Pawson and Tilley, 1997; Hedström and Swedberg,1998; Astbury and Leeuw, 2010)
- Describing patterns of change in terms of **mechanisms, contextual variables and outcomes**
- **Generative causality:** under what conditions does an intervention trigger a response (mechanism) that results in particular outcome



Impact theory - microcredit

Based on Coleman (1986, 1990); Hedström and Swedberg (1998), see also Leeuw (2008)



microcredit intervention

How do changes in the opportunity structure through microcredit affect the behavior of different types of clients, under what conditions?

impact of microcredit

Situational mechanisms

How do changes in behavior affect client livelihoods, under what conditions?

Transformational mechanisms

What are the determinants of outreach across regions and among target groups of interest?

Action-formation mechanisms

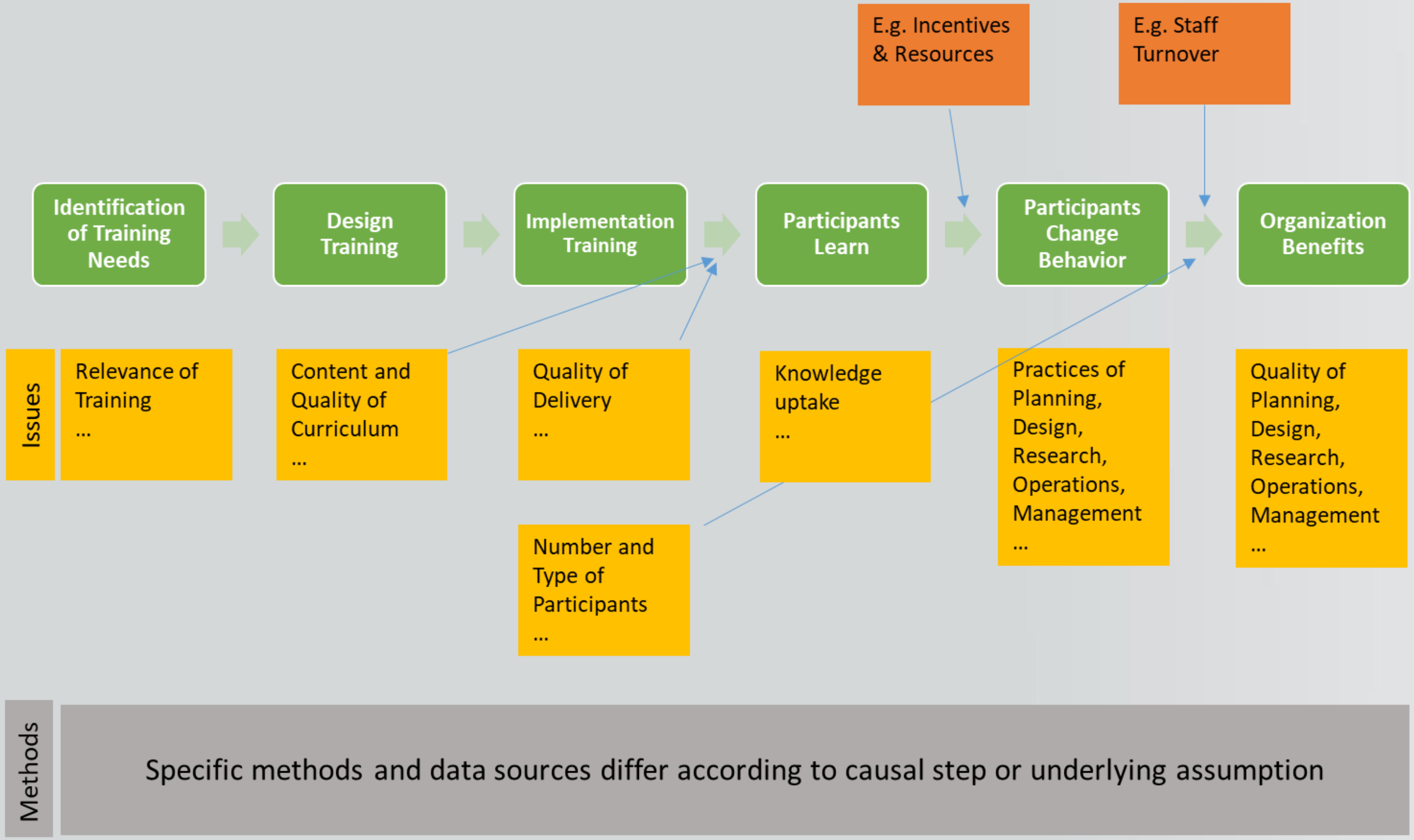
How do changes in clients’ activities and livelihood conditions affect the livelihoods of others, under what conditions?

T0

Tn

Intervention-specific templates for program theory

Simplified Theory of Change Training



Identification of Training Needs

Design Training

Implementation Training

Participants Learn

Participants Change Behavior

Organization Benefits

E.g. Incentives & Resources

E.g. Staff Turnover

Issues

Relevance of Training
…

Content and Quality of Curriculum
…

Quality of Delivery
…

Number and Type of Participants
…

Knowledge uptake
…

Practices of Planning, Design, Research, Operations, Management
…

Quality of Planning, Design, Research, Operations, Management
…

Methods

Specific methods and data sources differ according to causal step or underlying assumption

Whose theory?

- Government, implementing organizations, beneficiaries (etc.) may have different expectations and assumptions regarding how an intervention is intended to work and what it may achieve

- Reconstructing different stakeholder theories is helpful in understanding the different views and beliefs of stakeholder groups

- Generating consensus on how an intervention is intended to work can be helpful in improving stakeholder relations and may benefit the intervention implementation process and subsequent benefits

How you reconstruct program theory also depends on:

- The purpose of the evaluation (and the theory *of* evaluation)

  - ➢ Goal-oriented (objectives-based) evaluation

    versus

  - ➢ Goal-free evaluation

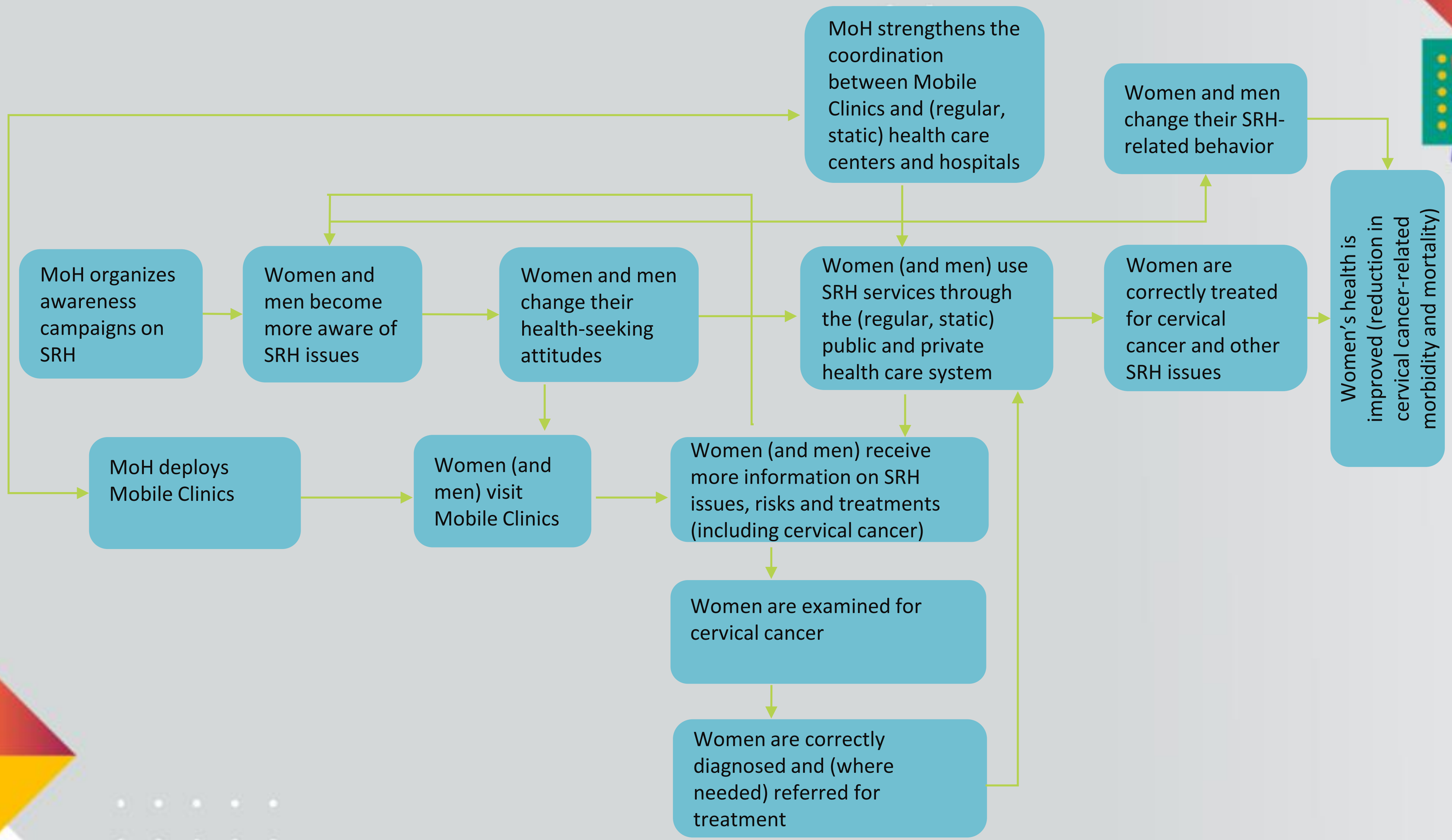
Reconstructing a Program Theory (exercise and plenary)

Group exercise

Read the case on the health sector intervention. You are then requested to work with your group on two tasks:

- Develop a program theory of the intervention.
- Identify to the extent possible (measurable) indicators relating to the different causal steps in the program theory.

- The necessary elements for the program theory are in the text. Indicators are not mentioned in the text but logically flow from the causal steps in the program theory. After the group work there will be a plenary discussion where each group will present its findings.



MoH organizes awareness campaigns on SRH

Women and men become more aware of SRH issues

Women and men change their health-seeking attitudes

MoH strengthens the coordination between Mobile Clinics and (regular, static) health care centers and hospitals

Women (and men) use SRH services through the (regular, static) public and private health care system

Women and men change their SRH-related behavior

Women are correctly treated for cervical cancer and other SRH issues

Women's health is improved (reduction in cervical cancer-related morbidity and mortality)

MoH deploys Mobile Clinics

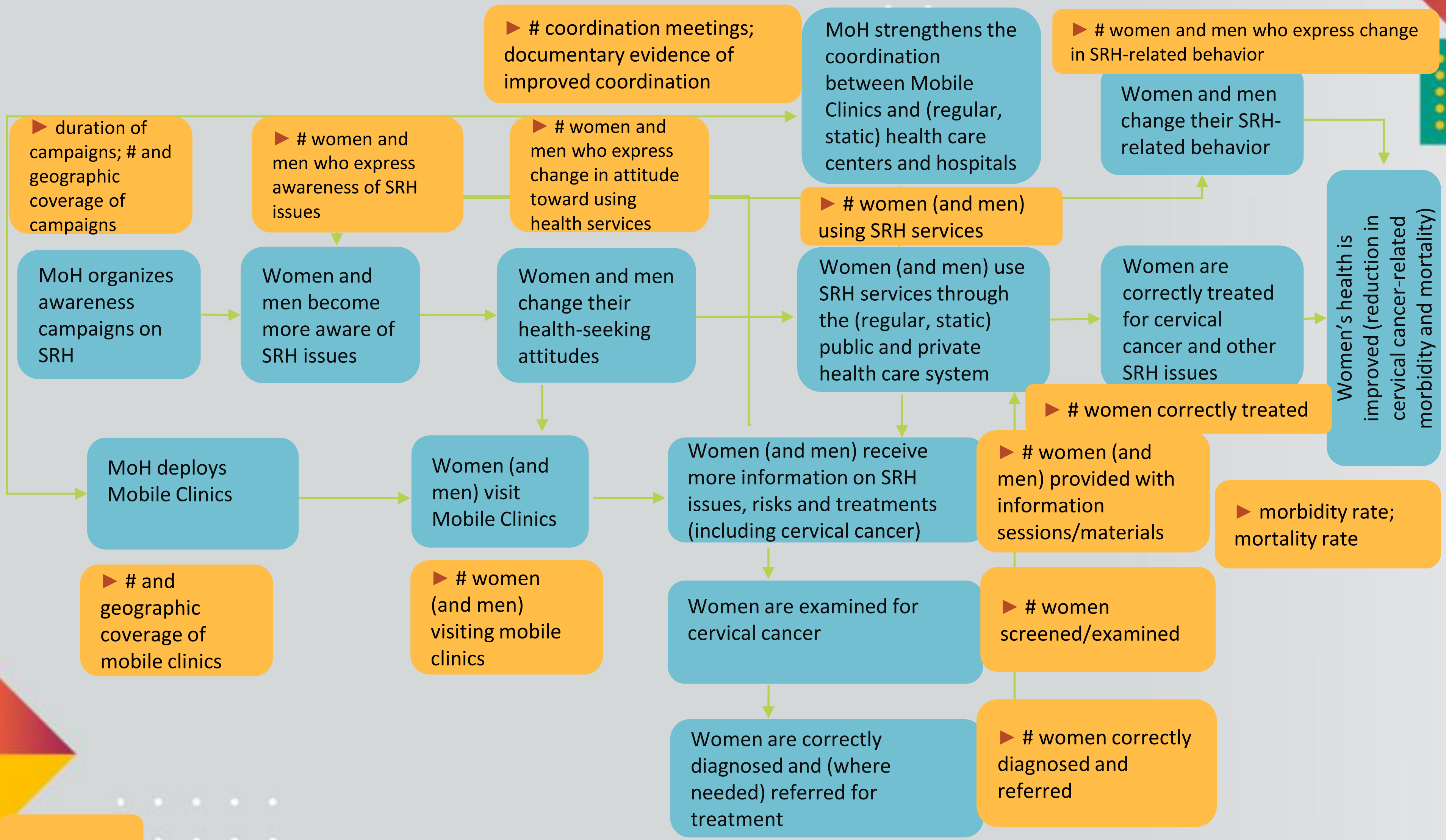
Women (and men) visit Mobile Clinics

Women (and men) receive more information on SRH issues, risks and treatments (including cervical cancer)

Women are examined for cervical cancer

Women are correctly diagnosed and (where needed) referred for treatment

Assumptions: Socio-economic/economic/demographic factors (age, income, education, social integration, religion, family size); geographical factors; attitudes and beliefs (fear, aversity to risk); gender dimensions; political affiliation; sexual behavior (age of first sexual encounter, number of sex partners); influence of partners; seasonal influence.



▶ # coordination meetings; documentary evidence of improved coordination

MoH strengthens the coordination between Mobile Clinics and (regular, static) health care centers and hospitals

▶ # women and men who express change in SRH-related behavior

Women and men change their SRH-related behavior

▶ duration of campaigns; # and geographic coverage of campaigns

▶ # women and men who express awareness of SRH issues

▶ # women and men who express change in attitude toward using health services

▶ # women (and men) using SRH services

MoH organizes awareness campaigns on SRH

Women and men become more aware of SRH issues

Women and men change their health-seeking attitudes

Women (and men) use SRH services through the (regular, static) public and private health care system

Women are correctly treated for cervical cancer and other SRH issues

Women's health is improved (reduction in cervical cancer-related morbidity and mortality)

▶ # women correctly treated

MoH deploys Mobile Clinics

Women (and men) visit Mobile Clinics

Women (and men) receive more information on SRH issues, risks and treatments (including cervical cancer)

▶ # women (and men) provided with information sessions/materials

▶ morbidity rate; mortality rate

▶ # and geographic coverage of mobile clinics

▶ # women (and men) visiting mobile clinics

Women are examined for cervical cancer

▶ # women screened/examined

Women are correctly diagnosed and (where needed) referred for treatment

▶ # women correctly diagnosed and referred

▶ Indicator

Assumptions: Socio-economic/economic/demographic factors (age, income, education, social integration, religion, family size); geographical factors; attitudes and beliefs (fear, aversity to risk); gender dimensions; political affiliation; sexual behavior (age of first sexual encounter, number of sex partners); influence of partners; seasonal influence.

Using Program Theory as a framework for evaluation

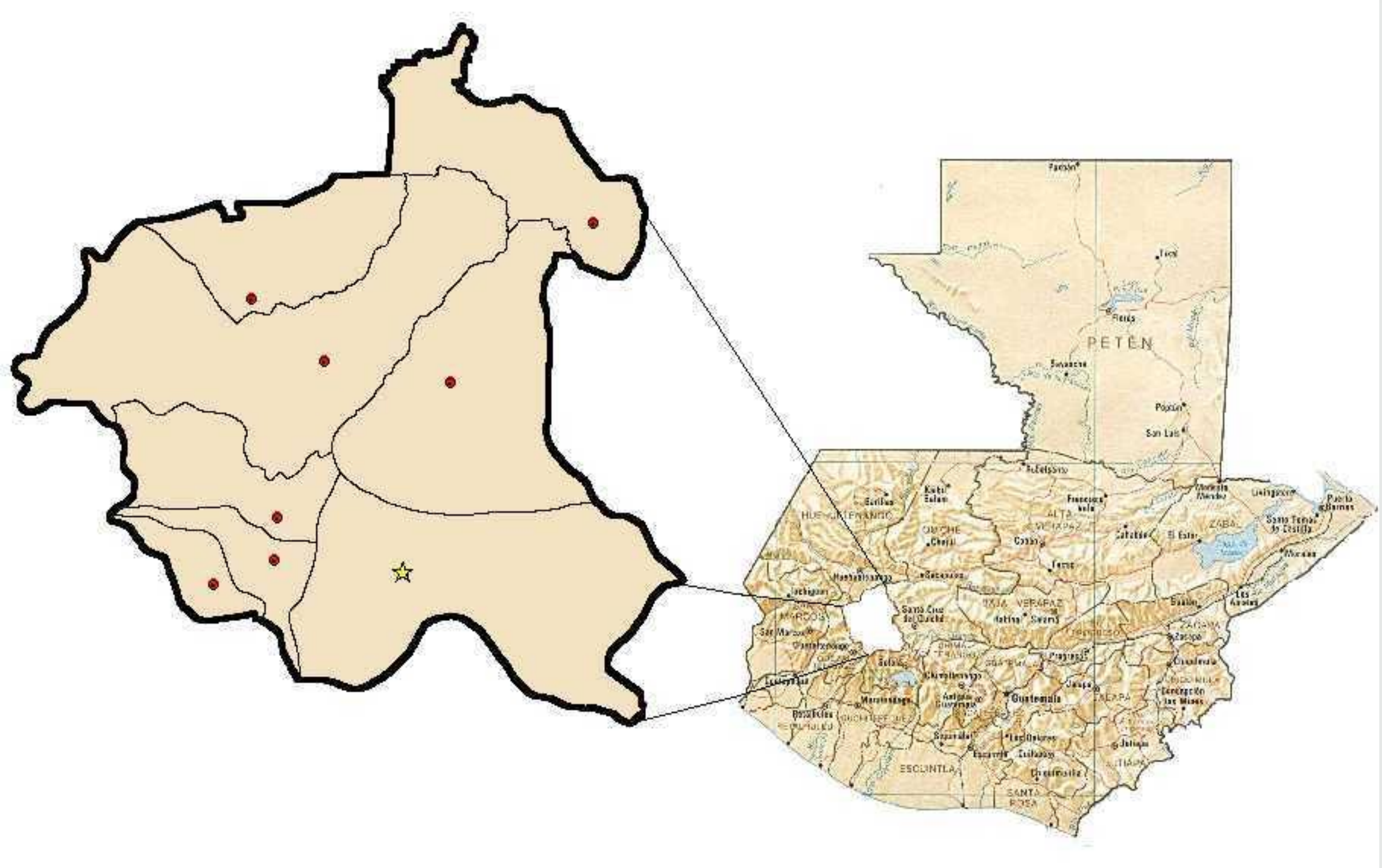
Using program theory as a framework for evaluation

- Program theory is not ‘method-specific’

- Program theory as a framework for particular assumptions being tested / refined, using:

  - (Quasi-)experimental techniques
  - Regression-based techniques
  - Descriptive and inferential statistical techniques
  - (Advanced) modelling approaches
  - Participatory techniques
  - Semi-structured interviews, open interviews, focus group interviews, discourse analysis, unobtrusive measures, etc.
  - Etc. etc.

Evaluation of training in organic agriculture



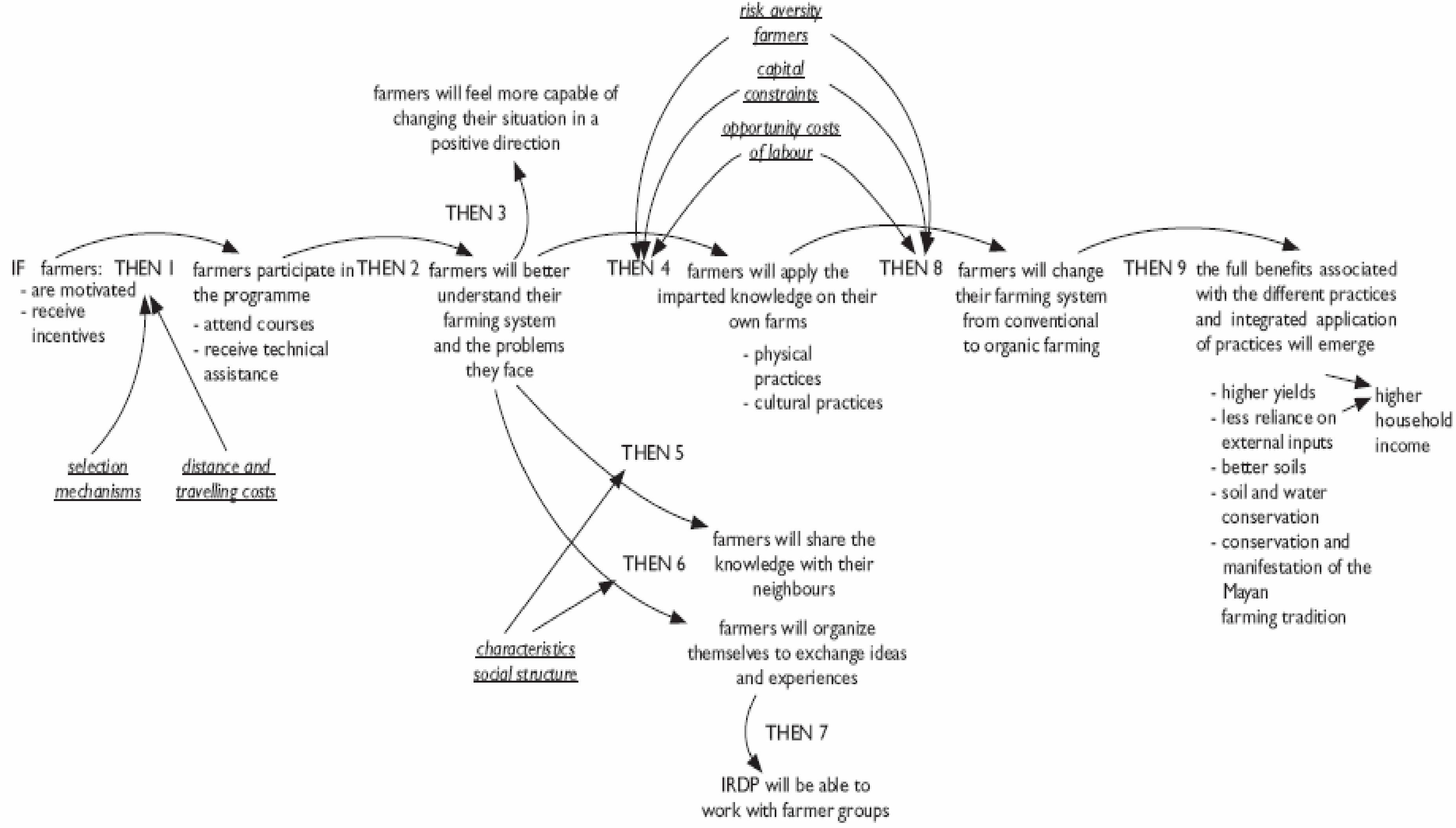
Evaluation of training in organic agriculture

- EU-supported rural development projects in 8 provinces
- In each of the provinces a national NGO provided training in organic agriculture
- In-depth evaluation (case study) of 1 out of 8 provinces
- Objective: assess implementation (participation), delivery of trainings and TA to farmers and outcomes

Multi-method approach

- Review of project implementation reports
- In-depth interviews with EU project staff, NGO staff, farmers
- Review of training curriculum
- Observation of training sessions
- Farms visits to inspect land use practices
- Quasi-experimental design based on baseline and ex post survey

Program theory



IF farmers:
- are motivated
- receive incentives

selection mechanisms

distance and travelling costs

THEN 1

farmers participate in the programme
- attend courses
- receive technical assistance

THEN 2

farmers will better understand their farming system and the problems they face

THEN 3

farmers will feel more capable of changing their situation in a positive direction

risk aversity farmers

capital constraints

opportunity costs of labour

THEN 4

farmers will apply the imparted knowledge on their own farms
- physical practices
- cultural practices

THEN 5

farmers will share the knowledge with their neighbours

THEN 6

farmers will organize themselves to exchange ideas and experiences

characteristics social structure

THEN 7

IRDP will be able to work with farmer groups

THEN 8

farmers will change their farming system from conventional to organic farming

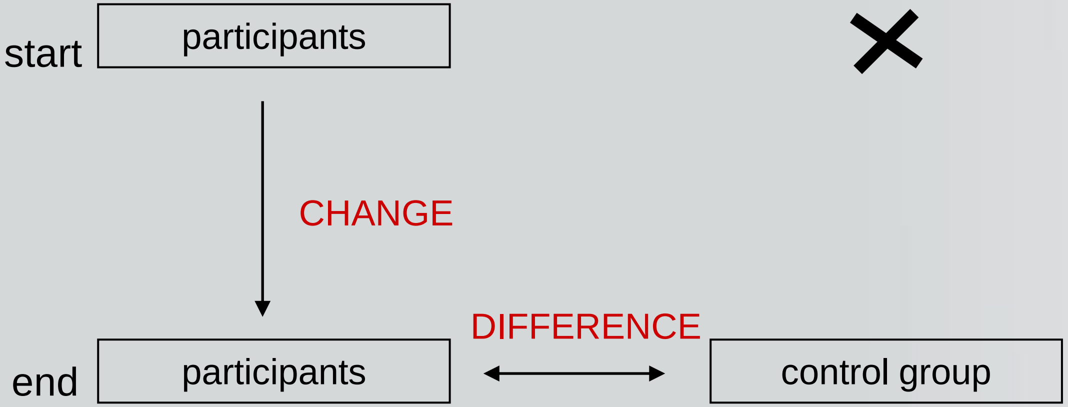
THEN 9

the full benefits associated with the different practices and integrated application of practices will emerge
- higher yields
- less reliance on external inputs
- better soils
- soil and water conservation
- conservation and manifestation of the Mayan farming tradition

higher household income

Where do the data fit into the theory?

Addressing the attribution issues: a quasi-experiment



start

participants

✕

CHANGE

DIFFERENCE

end

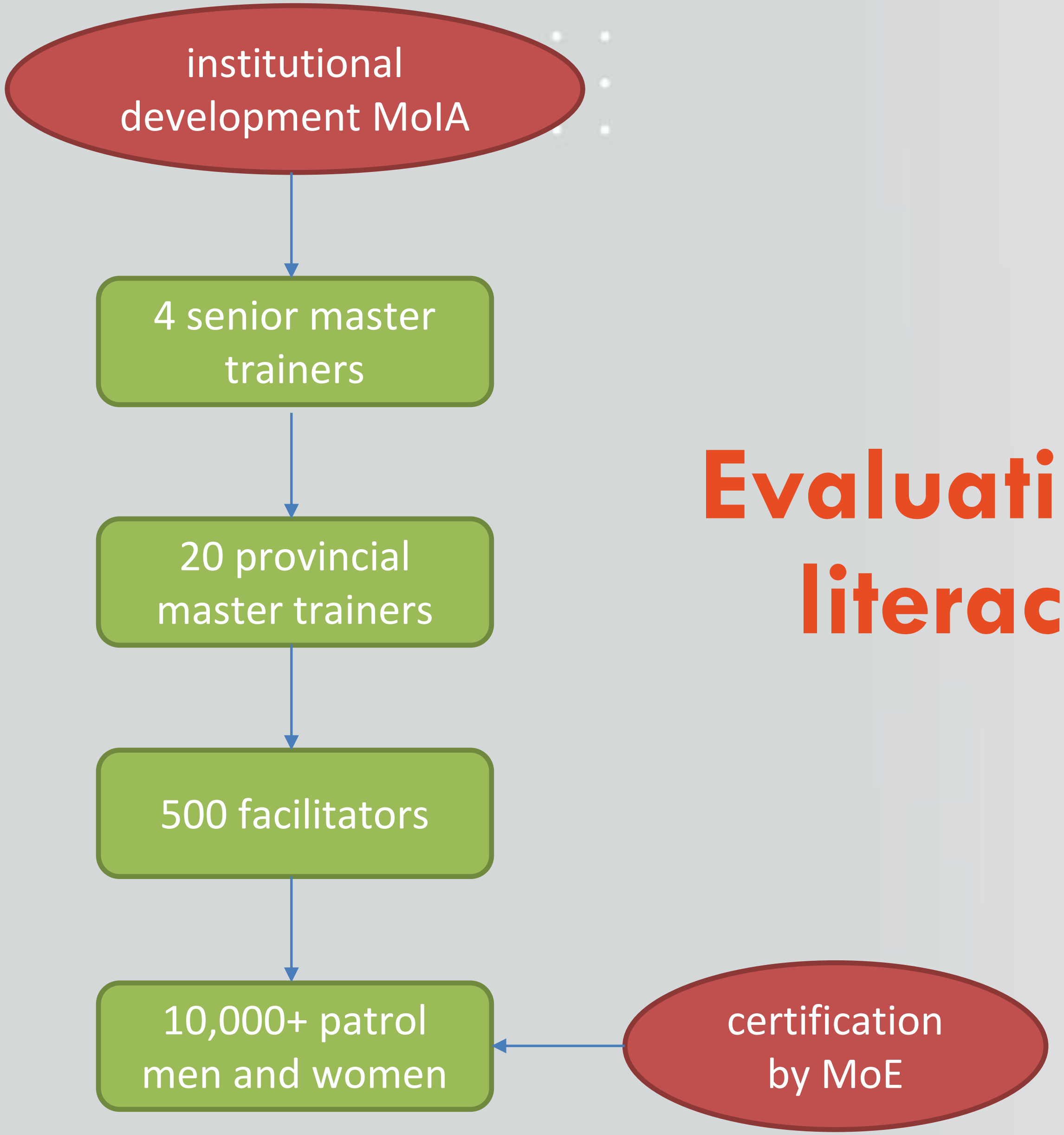
participants

control group

Data - outcomes

practice	participants start	participants end	control group end
burning crop residues (%)	27 % **	2 %	29 % **
applying green material (%)	25 % **	63 %	18 % **
‘chemical’ fertilizers (%)	96 % *	79 %	97 % *
‘organic’ fertilizers (%)	79 % [a]	83 %	18 % **
ditches (%)	56 % [a]	73 %	24 % **
barriers (%)	44 % [a]	58 %	21 % **
minimum tillage (%)	nihil [b]	54 %	nihil [b]
latrines (%)	15 % **	56 %	8 % **
furnaces (%)	60 %	69 %	34 % **
pig sties (%)	42 %	60 %	45 %
nurseries (%)	33 %	44 %	3 % **
medicinal plants (no. plants)	3.2 (5.3) **	8.7 (7.0)	3.2 (3.5) **
crop diversity (no. crops)	4.3 (1.7) *	4.9 (2.4)	3.2 (1.4) **
fruit tree diversity (no. trees)	4.8 (2.9) *	6.2 (3.2)	4.6 (2.3) **

Evaluation of police literacy training


institutional development MoIA
4 senior master trainers
20 provincial master trainers
500 facilitators
10,000+ patrol men and women
certification by MoE

Evaluation focus

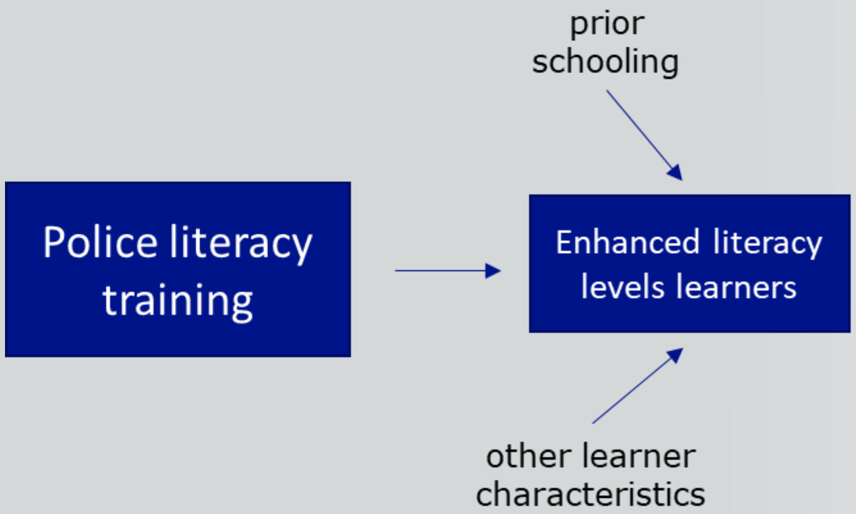
- Initial focus: effectiveness (of different facilitator incentives on quality)
- Initial (local) purpose: to inform donor, to inform process of harmonization and improvement of the effectiveness and sustainability of police literacy training in MoIA
- Revised focus: ‘impact’ (of participation in literacy training on literacy levels)
- Revised (local) purpose: to inform donor, to inform other offices with ongoing or potential projects on police literacy training
- Slightly different stakeholder audience

APLS

Data collection:
National police literacy survey with literacy assessments

Data analysis:
descriptive statistics, multinomial logistic regression

n = 8883 patrol men and women in 27 provinces



Police literacy training

Enhanced literacy levels learners

prior schooling

other learner characteristics

APLS: ‘piggy-backing’ on recently collected data

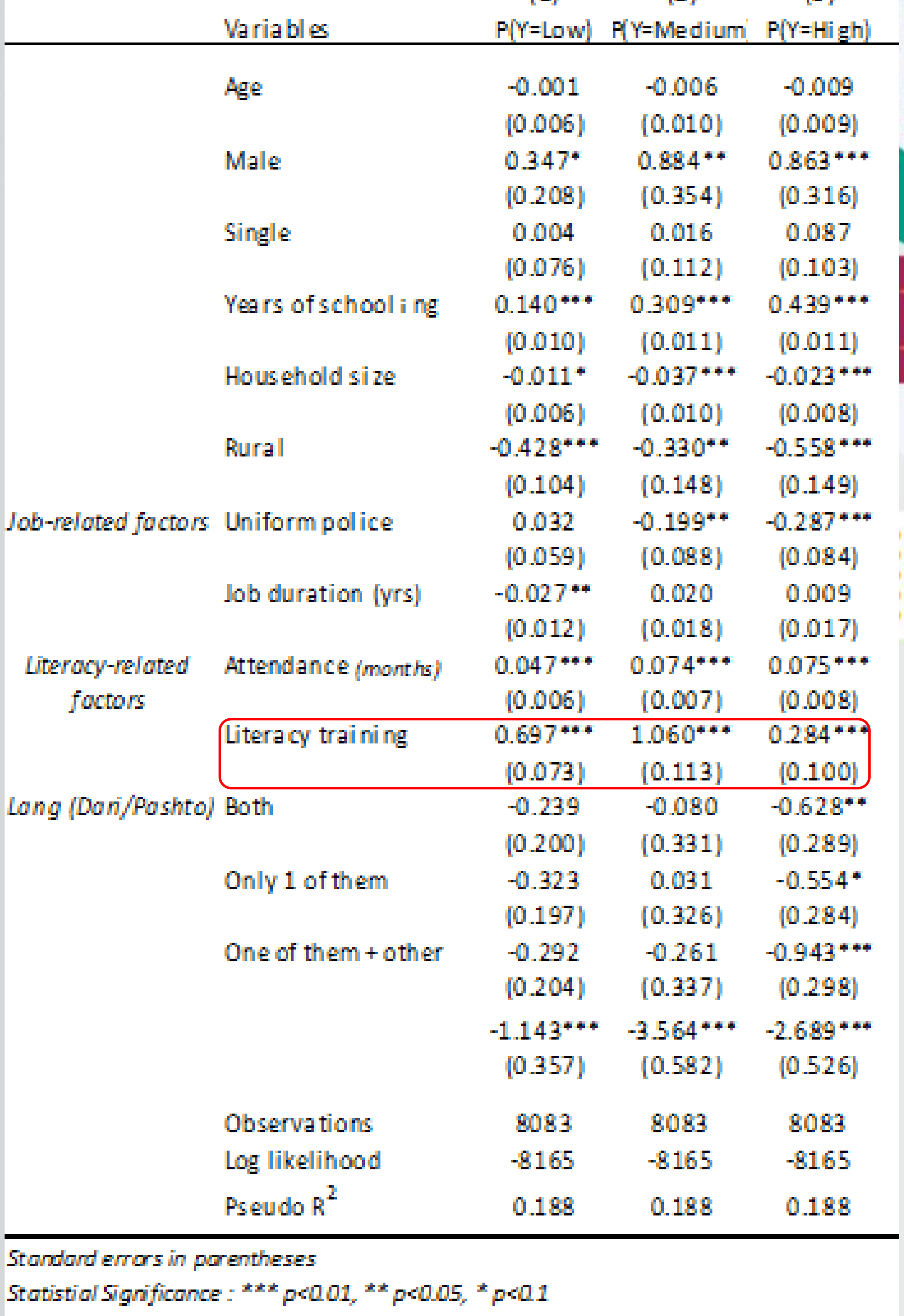
- Construction of indices of numeracy, writing and reading skills based on the results of several tests administered to respondents
  - Numeracy: counting, number recognition, basic maths
  - Writing: dictation, form filling
  - Reading: ability to read, comprehension, speed

- Independent variables: literacy training, prior education, other individual and regional characteristics

- Insufficient explanatory variables for statistical matching → imperfect explanatory regression model: multinomial logistic regression model

APLS impact analysis

Illustration of results: multinomial logit regression – dependent variable reading literacy



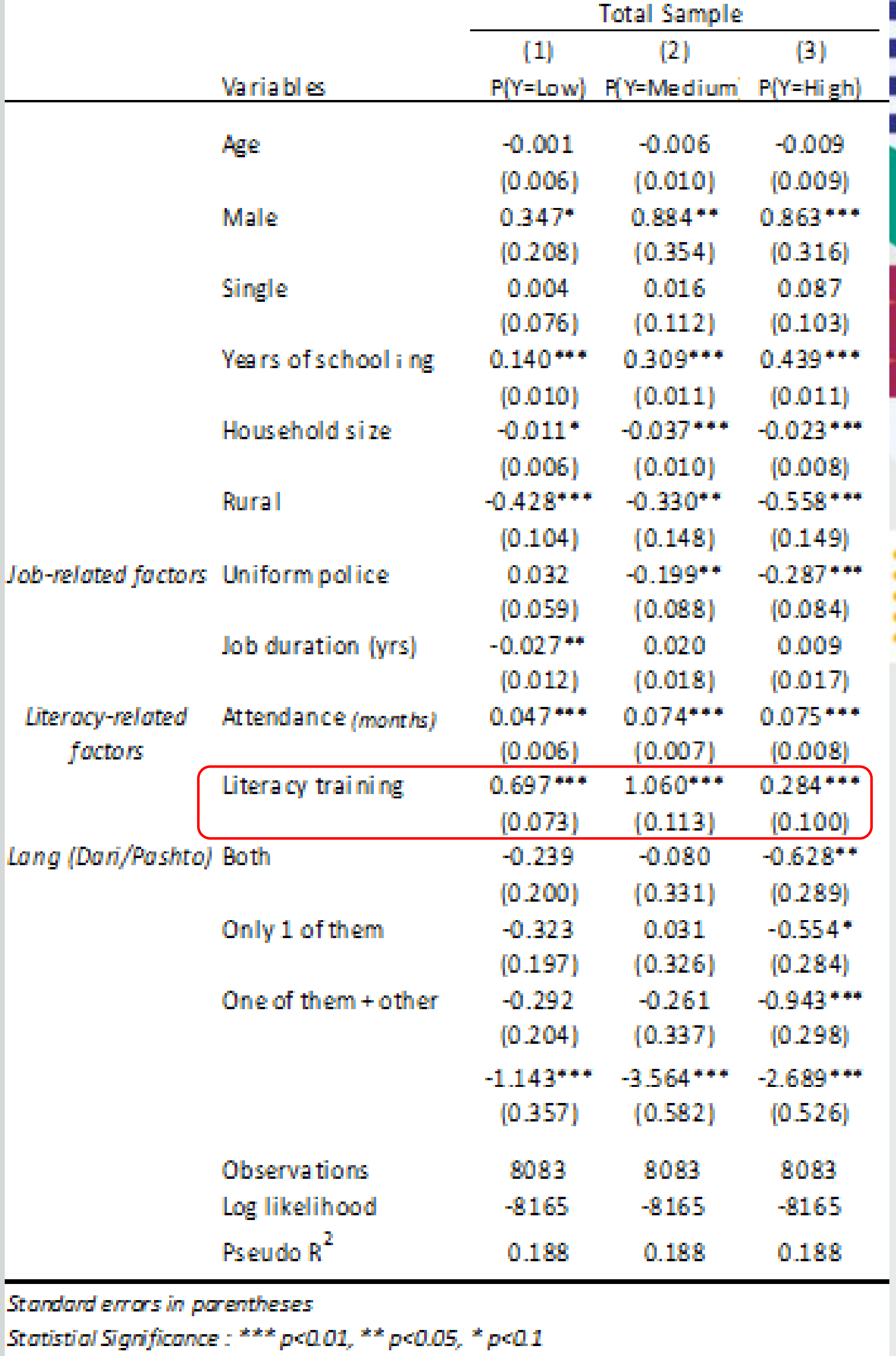
	Variables	P(Y=Low)	P(Y=Medium)	P(Y=High)
	Age	-0.001	-0.006	-0.009
		(0.006)	(0.010)	(0.009)
	Male	0.347*	0.884**	0.863***
		(0.208)	(0.354)	(0.316)
	Single	0.004	0.016	0.087
		(0.076)	(0.112)	(0.103)
	Years of schooling	0.140***	0.309***	0.439***
		(0.010)	(0.011)	(0.011)
	Household size	-0.011*	-0.037***	-0.023***
		(0.006)	(0.010)	(0.008)
	Rural	-0.428***	-0.330**	-0.558***
		(0.104)	(0.148)	(0.149)
Job-related factors	Uniform police	0.032	-0.199**	-0.287***
		(0.059)	(0.088)	(0.084)
	Job duration (yrs)	-0.027**	0.020	0.009
		(0.012)	(0.018)	(0.017)
Literacy-related factors	Attendance *(months)*	0.047***	0.074***	0.075***
		(0.006)	(0.007)	(0.008)
	Literacy training	0.697***	1.060***	0.284***
		(0.073)	(0.113)	(0.100)
Lang (Dari/Pashto)	Both	-0.239	-0.080	-0.628**
		(0.200)	(0.331)	(0.289)
	Only 1 of them	-0.323	0.031	-0.554*
		(0.197)	(0.326)	(0.284)
	One of them + other	-0.292	-0.261	-0.943***
		(0.204)	(0.337)	(0.298)
		-1.143***	-3.564***	-2.689***
		(0.357)	(0.582)	(0.526)
	Observations	8083	8083	8083
	Log likelihood	-8165	-8165	-8165
	Pseudo R^2	0.188	0.188	0.188

Standard errors in parentheses

*Statistial Significance : *** p<0.01, ** p<0.05, * p<0.1*

APLS impact analysis

Illustration of results: multinomial logit regression – dependent variable reading literacy



		Total Sample		
		(1)	(2)	(3)
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	One of them + other	-0.292	-0.261	-0.943***
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Standard errors in parentheses

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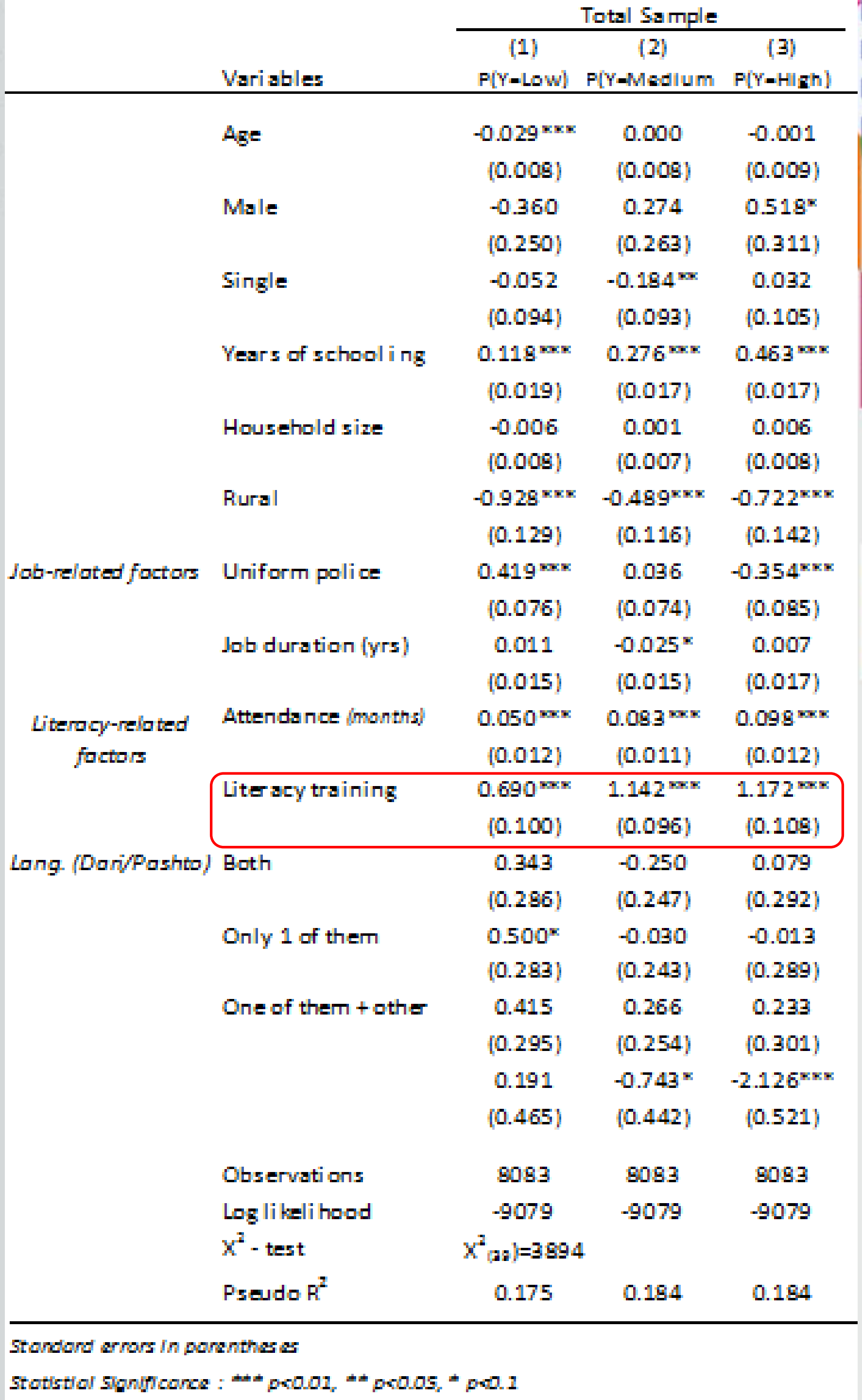
APLS impact analysis

Illustration of results: multinomial logit regression – dependent variable numeracy literacy



		Total Sample		
		(1)	(2)	(3)
	Variables	P(Y=Low)	P(Y=Medium	P(Y=High)
	Age	-0.029***	0.000	-0.001
		(0.008)	(0.008)	(0.009)
	Male	-0.360	0.274	0.518*
		(0.250)	(0.263)	(0.311)
	Single	-0.052	-0.184**	0.032
		(0.094)	(0.093)	(0.105)
	Years of schooling	0.118***	0.276***	0.463***
		(0.019)	(0.017)	(0.017)
	Household size	-0.006	0.001	0.006
		(0.008)	(0.007)	(0.008)
	Rural	-0.928***	-0.489***	-0.722***
		(0.129)	(0.116)	(0.142)
Job-related factors	Uniform police	0.419***	0.036	-0.354***
		(0.076)	(0.074)	(0.085)
	Job duration (yrs)	0.011	-0.025*	0.007
		(0.015)	(0.015)	(0.017)
Literacy-related factors	Attendance *(months)*	0.050***	0.083***	0.098***
		(0.012)	(0.011)	(0.012)
	Literacy training	0.690***	1.142***	1.172***
		(0.100)	(0.096)	(0.108)
Lang. (Dari/Pashto)	Both	0.343	-0.250	0.079
		(0.286)	(0.247)	(0.292)
	Only 1 of them	0.500*	-0.030	-0.013
		(0.283)	(0.243)	(0.289)
	One of them + other	0.415	0.266	0.233
		(0.295)	(0.254)	(0.301)
		0.191	-0.743*	-2.126***
		(0.465)	(0.442)	(0.521)
	Observations	8083	8083	8083
	Log likelihood	-9079	-9079	-9079
	X^2 - test	$X^2_{(38)}$=3894		
	Pseudo R^2	0.175	0.184	0.184

Standard errors in parentheses

*Statistical Significance : *** p<0.01, ** p<0.05, * p<0.1*

Key conclusion

Despite some limitations in the data, the findings of the APLS impact analysis suggest that police literacy trainings have significantly improved literacy levels among the Afghan Police in all three dimensions of literacy (numeracy, reading, writing), controlling for other factors such as prior education and other individual and regional explanatory variables

Is that enough?

QLTS

Data collection: class observation, facilitator and commander surveys, learner focus groups

Data analysis: descriptive statistics, qualitative synthesis, OLS

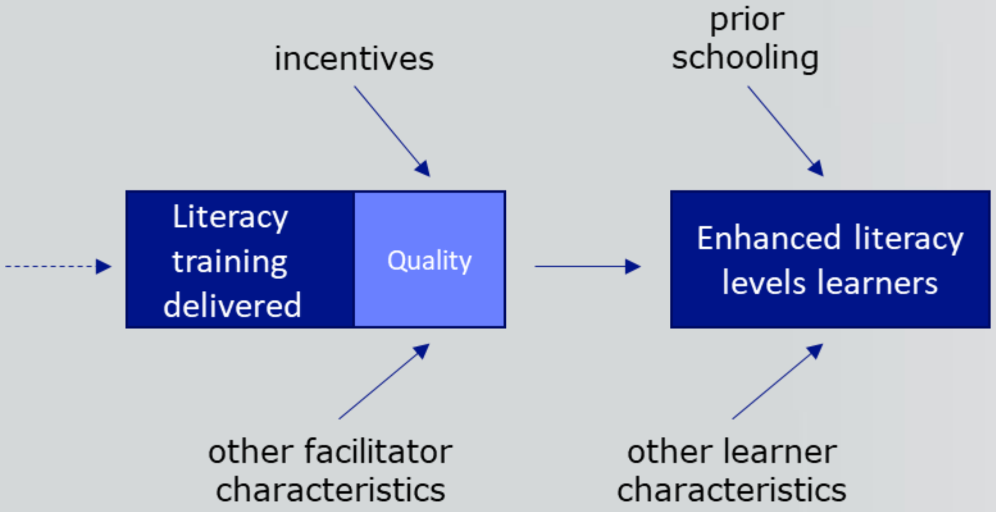
n = 274 trainings in 8 provinces

APLS

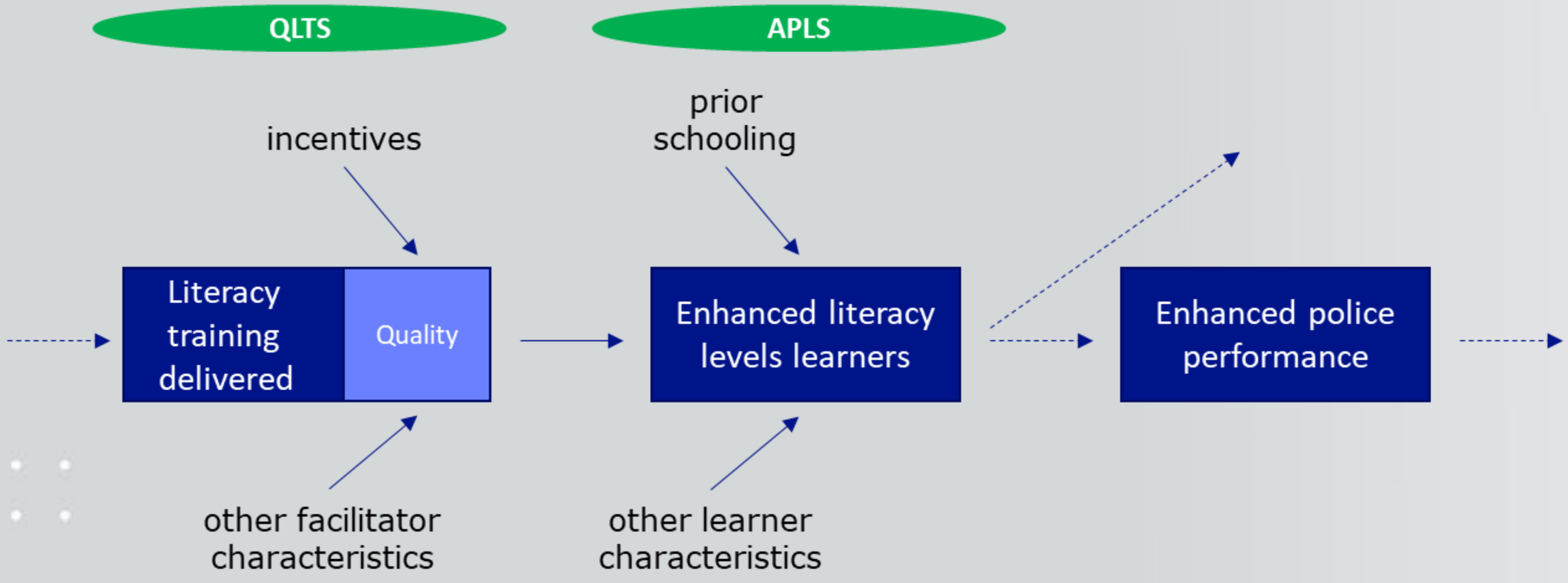
Data collection: National police literacy survey with literacy assessments

Data analysis: descriptive statistics, multinomial logistic regression

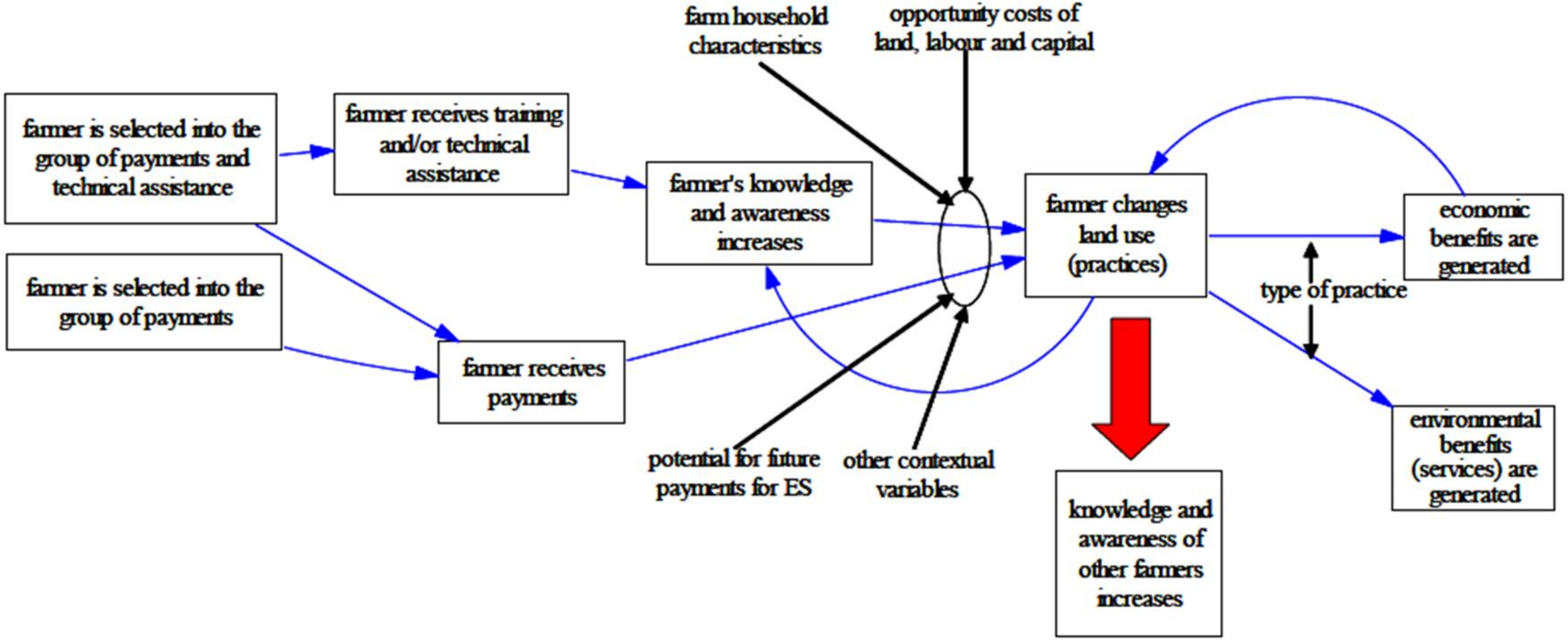
n = 8883 patrol men and women in 27 provinces


incentives
prior schooling
Literacy training delivered
Quality
Enhanced literacy levels learners
other facilitator characteristics
other learner characteristics

Analysis shows how two complementary inquiries on two steps in the causal chain can enhance validity of causal claim


QLTS
APLS
incentives
prior schooling
Literacy training delivered
Quality
Enhanced literacy levels learners
Enhanced police performance
other facilitator characteristics
other learner characteristics

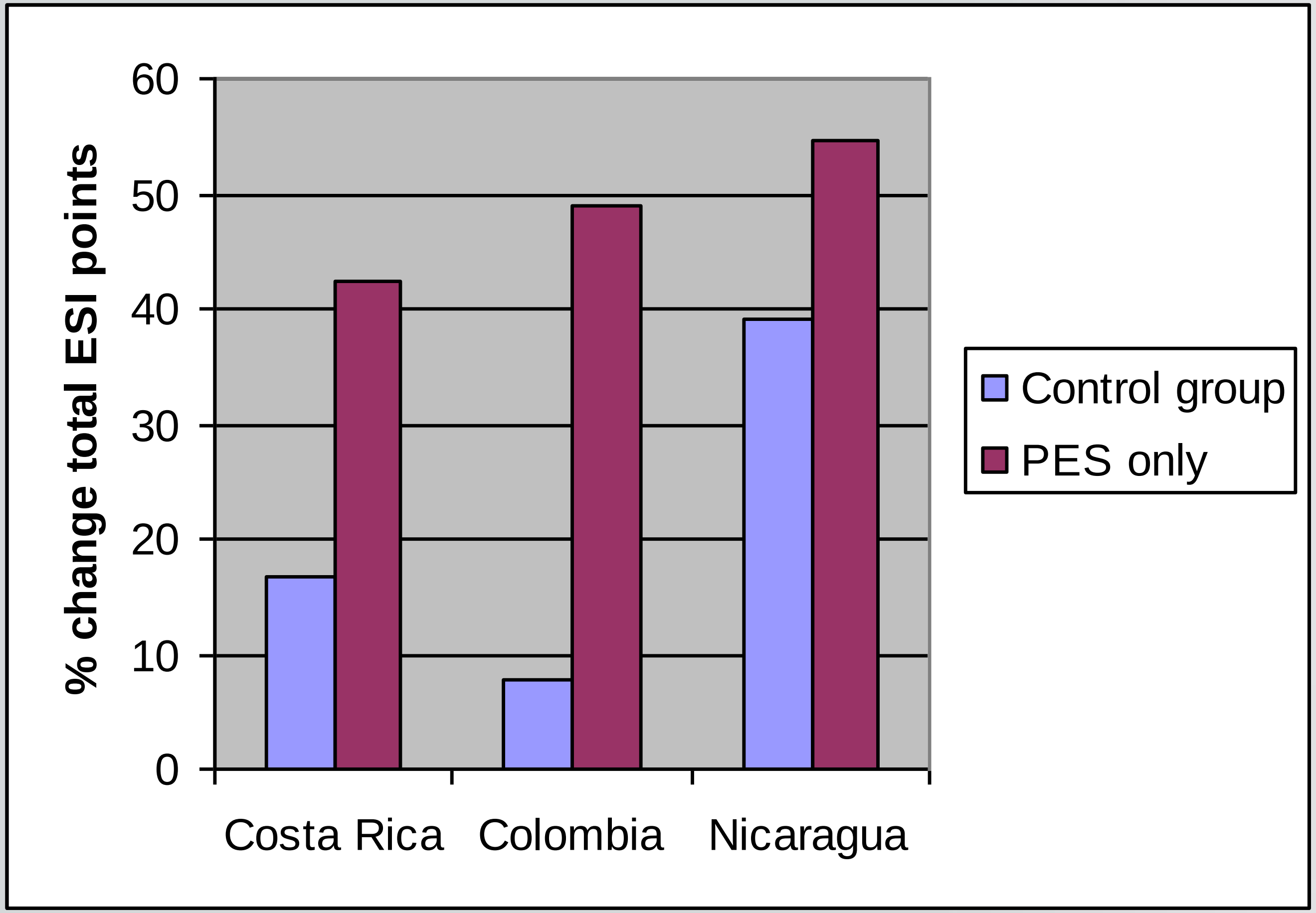
PES regional project


farm household characteristics
opportunity costs of land, labour and capital
farmer is selected into the group of payments and technical assistance
farmer receives training and/or technical assistance
farmer's knowledge and awareness increases
farmer changes land use (practices)
economic benefits are generated
farmer is selected into the group of payments
farmer receives payments
type of practice
environmental benefits (services) are generated
potential for future payments for ES
other contextual variables
knowledge and awareness of other farmers increases

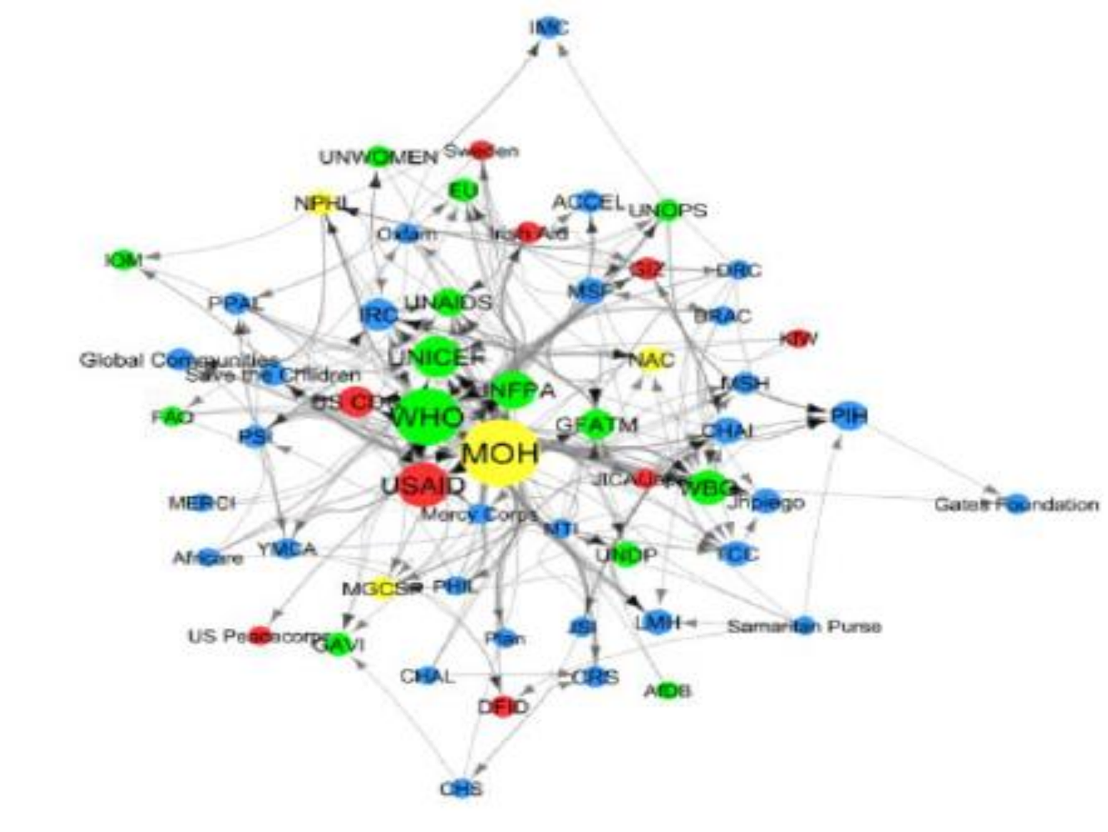
Importance of a mixed methods approach: the logic of comparative advantages

- The randomized experiment can test the effectiveness of different incentives (PES and TA) on LU changes (from remote sensing data) and subsequently the environmental (from ES index calculations, remote sensing data) and socio-economic (from survey data) effects of these changes *(internal validity)*
- Survey data ('sub-group') analysis and case studies can tell us how incentives have *different* effects (knowledge, adoption) on *particular types* of farm households *(strengthens internal validity and increases external validity of findings)*
- Direct observation in selected sites, semi-structured interviews and focus group conversations can tell us more about the nature of effects in terms of production, consumption, poverty alleviation, etc. *(internal validity and construct validity)* as well as possible unintended effects (e.g. spillover effects, displacement effects)

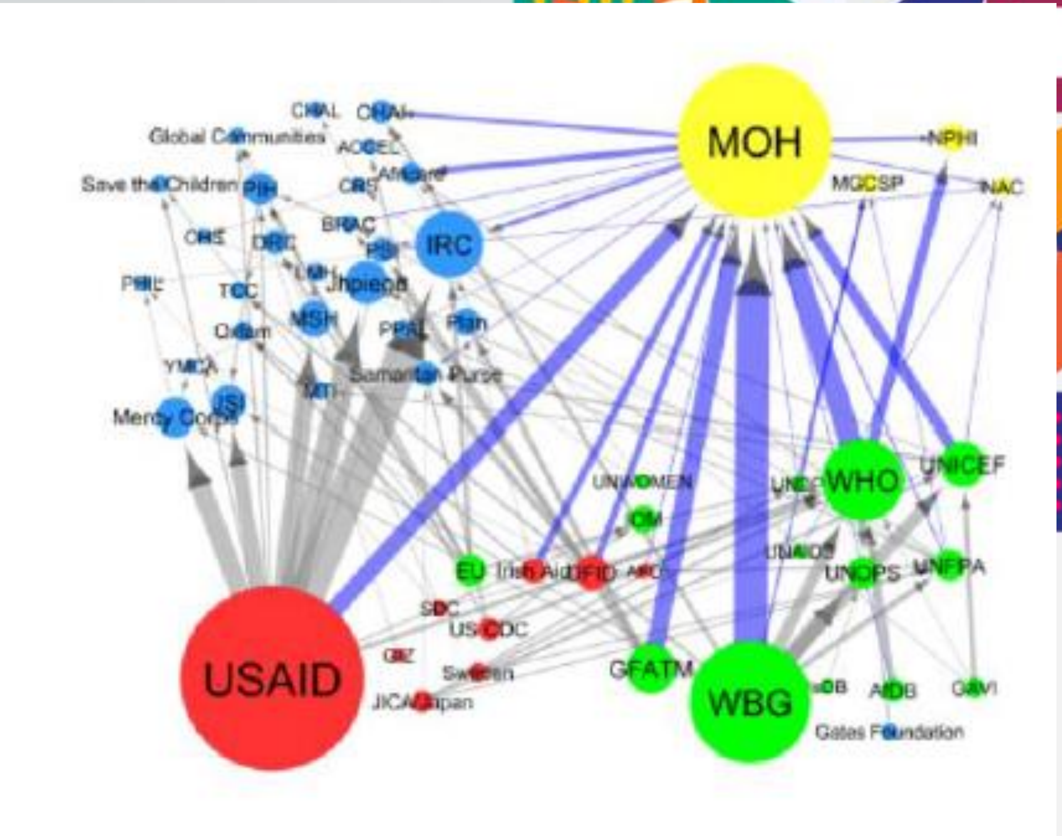
Some results: PES group – control group



Grounded theory using social network analysis

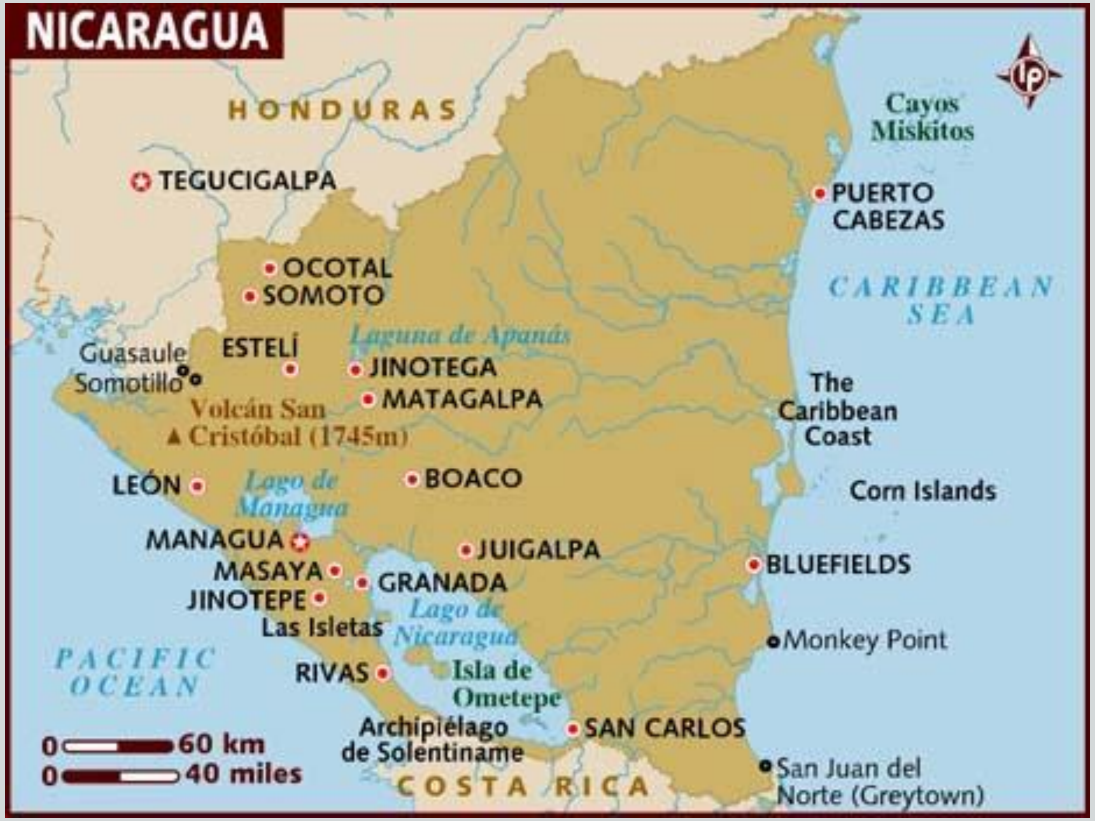


Knowledge leadership in the Health Sector in Liberia



Financial Flows in the Health Sector in Liberia

Deductive and inductive approach



1. How did outreach evolve? Was there increased outreach among the rural poor?

2. What are the factors that explain outreach/access?

3. What are the implications for poverty alleviation?

Keep in mind the following:

- Fit for purpose
- Sources of theory
- Principles for developing a *"testable"* program theory
- Objectives-based evaluation and unintended effects
- Intervention-centric bias
- Confirmation bias

THANK YOU

https://nec.undp.org | /undp_evaluation | /Indep. Evaluation Office | ieo.nec@undp.org