

## Module 2: Results Chain

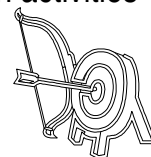
 © 2007. The World Bank Group. All rights reserved.



### *Learning Objectives*

At the end of this workshop, participants will:

- Understand the results chain and its use in M&E
- Be able to identify program outcome objectives for use in monitoring
- Be able to identify questions for evaluation
- Be able to recognize different types of evaluation questions and understand their significance for later evaluation activities



2

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Results Chain: Purpose

Results Chain help us ..... think more analytically about cause and effect, and

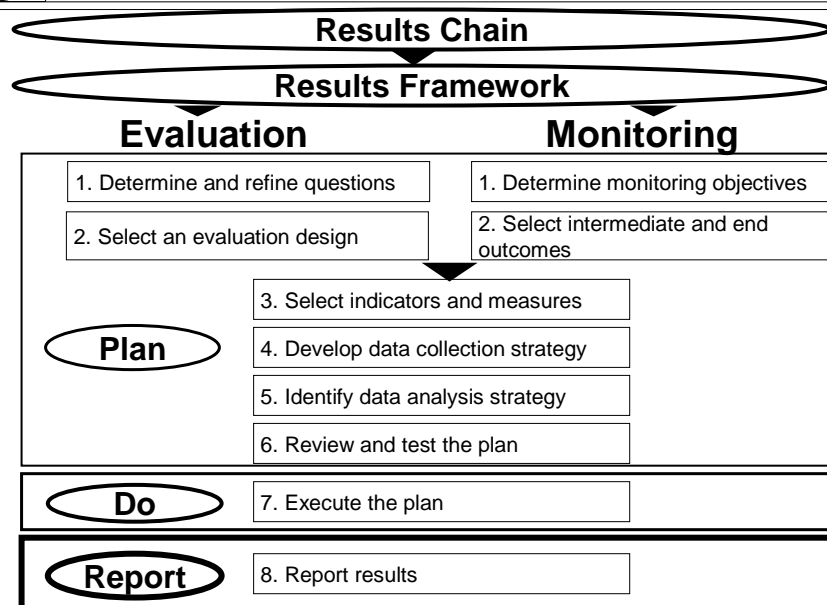
- identify relationships among program components (consider relationships internal to the program)
- clarify program objectives and long term goals
- identify key indicators for M&E
- identify key assumptions underlying the program
- develop our questions for evaluation
- visualize a program in context (consider factors in the social/physical environment that are external to the program but might influence program outcomes)

3

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Results Chain and M&E Process



4

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Results Chain in Projects/Programs

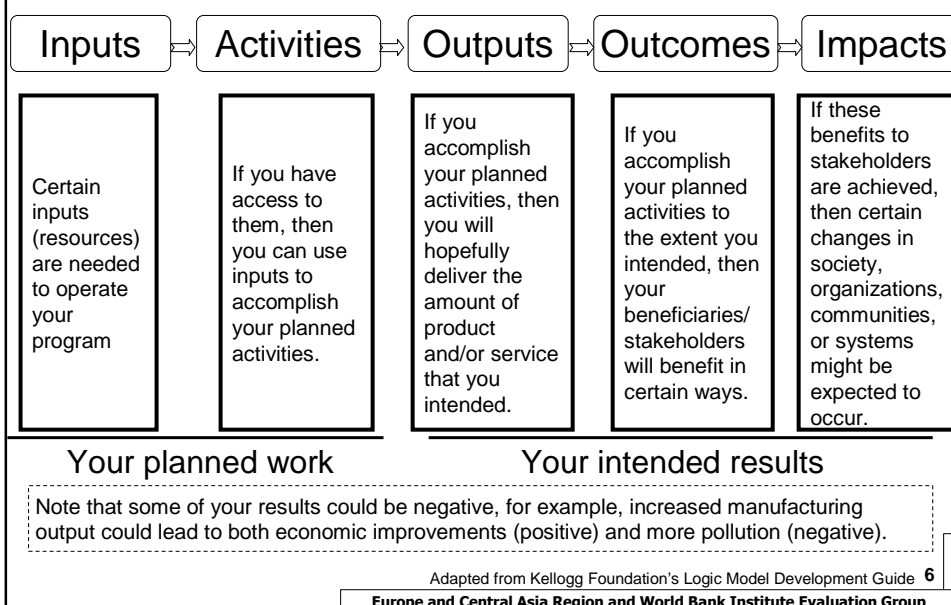
1. We implement projects/programs to pursue certain **objectives**
2. Projects use **inputs** and **activities** which result in
3. **Outputs**, which allow to obtain certain
4. **Outcomes**
5. In the longer term, outcomes will be reflected in **Impacts**
6. This is called the **Results Chain**
7. This is applicable to projects and **programs**

5

Europe and Central Asia Region and World Bank Institute Evaluation Group



## How to read a Results Chain

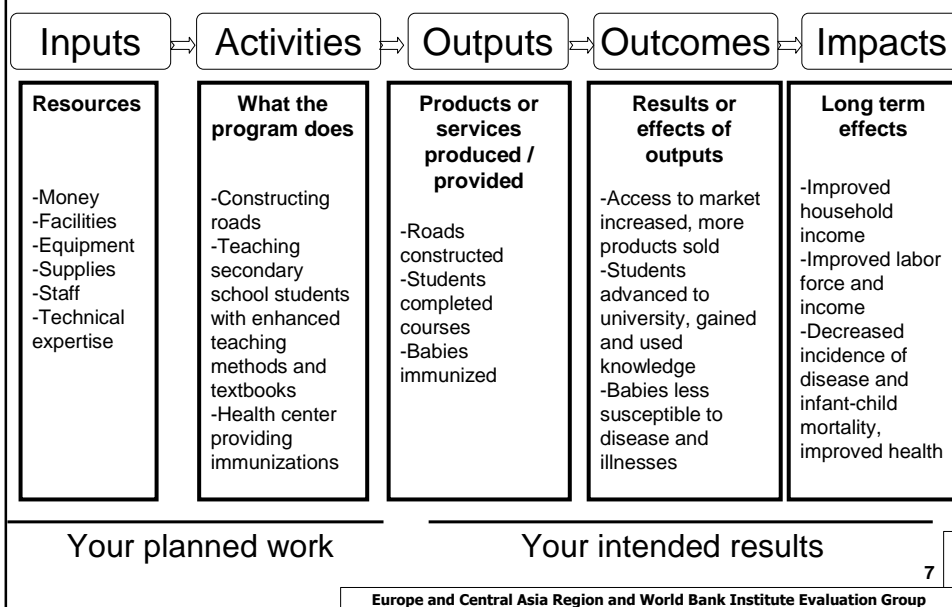


Adapted from Kellogg Foundation's Logic Model Development Guide 6

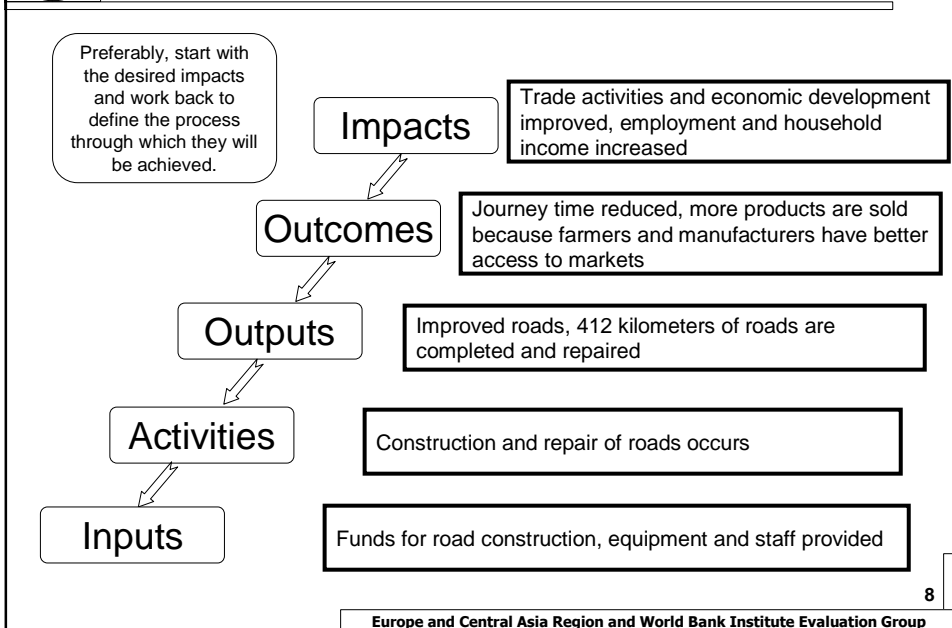
Europe and Central Asia Region and World Bank Institute Evaluation Group



## Examples of components



## The stages in designing a project





## Examples of Output, Outcome and Impact

Outputs	Outcomes	Impacts
<b>Health Project</b> Provided preventive health services to underserved patients	Increased visits to regular health facilities by underserved patients  Reduced emergency room visits by underserved patients	Reduced health costs for underserved patients
<b>Road Project</b> Completed repairs of main and secondary roads  Improved road condition quality	Increased use of main and secondary roads, decreased journey time  Increased access to markets and sale of products, short-term improvements in household welfare	Trade activities and economic development improved, increased employment, increased household income
<b>Water Supply Project</b> Rehabilitated water system to increase production of potable water	Increased availability and use of potable water by households  Reduced consumption of unsafe water	Reduced water-related illnesses, healthier citizens, reduced health costs

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Example of the Project Results Chain

### Moldova: Trade and Transportation Support Project

- ✓ **Input:** \$ 1.37 million will be used for
- ✓ **Activity:** technical assistance to the customs service for simplification of customs procedures and operations
- ✓ **Output:** amendments to the customs legislation (introduction of random checks), redesigning of customs procedures and establishment of the integrated system for customs procedures and information system
- ✓ **Outcome:** time required for customs procedure had reduced fourfold, trading volume per one officer had increased by 37%...
- ✓ **PDO:** trade and transportation related non-tariff costs reduction had been achieved
- ✓ **Impact:** assistance to the development of trade/economic activity (generally, this part of the chain has a longer-term period, beyond the life of the project)

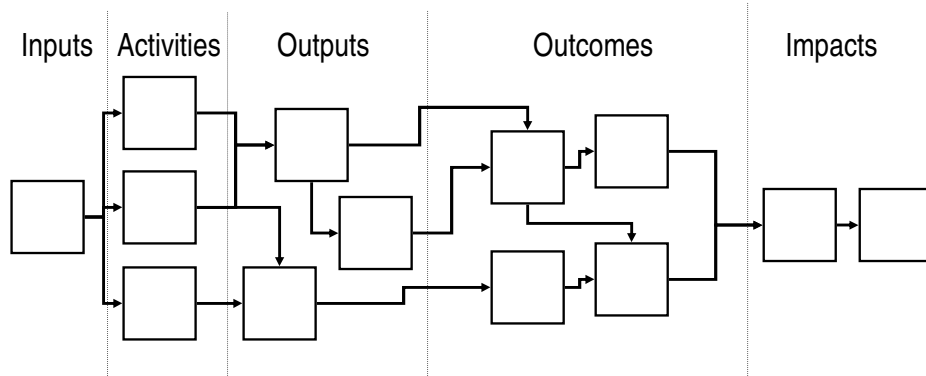
10

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Results Chain

Sample layout  
(without text)



11

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Exercise 2-A and 2-B: Construct Results Chain

- Review the instructions on the handout. Construct the project Results Chain by identifying:
  - Inputs
  - Activities
  - Outputs
  - Outcomes
  - Impacts

12

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Determining and Refining Evaluation Questions***



13

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Question***

**Where do you live?**

14

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Determining Your Evaluation Questions***

- Models (Results Chain) help identify and clarify evaluation questions
- What is the purpose of your evaluation? Consider the
  - goals and objectives of the program, in light of sectoral and macro-level objectives
  - stakeholders
  - program logic

15

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Sources of Questions***

### **Where might we get our questions?**

- Project/program model (Results Chain)
- Project/program documents
- Government, NGO officials, other stakeholders
- Program beneficiaries
- Experts
- Other studies



16

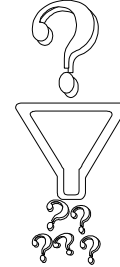
Europe and Central Asia Region and World Bank Institute Evaluation Group



## Defining and Refining Questions

### Defining your questions

- What is it you want to know?
- Who wants to know?
- Why do they want to know?
- How will the results be used?
- What's most important?



### Refining (Operationalizing) your questions

- Moving from general to specific.
- *“Operationalizing” involves breaking down broad questions into sub-questions to make them answerable.*

17

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Types of Evaluation Questions

### 1. Descriptive Questions:

“What is?”

### 2. Normative questions:

“What should be?”

### 3. Outcome/Impact or Cause-Effect Questions:

“What difference does it make?”

18

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Descriptive Questions***

- Seek to understand or describe a program or process.
- Provide a snapshot of **what is**
- Can be used to describe...inputs, activities, outputs
- Journalist's questions:
  - who, what, when, where, why, how, and how much?
- Examples:
  - Who receives the program?
  - What are the characteristics of the program?
  - Where is the program delivered?
  - When was the program implemented?
  - How do the participants feel about the program?
  - How much did the program cost?

19

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Normative Questions***

- Examine **what is...**and compare it to **what should be**
- Are we doing what we are supposed to be doing?
- Are we hitting our target?
- Examples:
  - Did we spend as much as we had budgeted?
  - Did we reach our goal of admitting 5,000 students per year?
  - Did we vaccinate 80% of children as planned?
  - Did we drain 100,000 hectares (ha) last year?

20

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Outcome/Impact or Cause-Effect Questions***

- Examine the **effects** of a program.
- Focus on the **outcomes and impacts** of a particular program.
  - Has the program made a difference?
  - Is the change a result of the program? (Attribution)
- Examples:
  - Has school performance improved as a result of the teacher education program?
  - Has the program resulted in an increase in the output of middle-level skilled workers to meet the needs of the modern market?

21

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Causality***

- When we want to know if a program (intervention) caused a change, we want to establish causality.
- An impact is a consequence of project/program.
- Can the change be **attributed** to the project/program and not to some other factor(s)?
- This issue is often referred to as “attribution” or the “counter-factual.”

22

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Impact or Cause-Effect Questions***

### **Social Science Terms:**

The **program**

is the **independent variable**

which is expected to **cause changes**

in the **dependent variable**

23

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***What Other Explanation?***

### **Discussion:**

- There was a program to increase crop production to eliminate poverty. It was found that family income increased.
- What is a counterfactual argument?



24

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Why Type of Question Matters***

- All need to be answered accurately and objectively
- All follow the same evaluation steps
- **BUT: Impact questions** present unique challenges
  - Design is important to rule out rival explanations.
  - Impact questions are the hardest to answer!

25

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Questions: Summary***

**When preparing evaluation questions, it is important to:**

- Define your questions
- Operationalize questions to make them answerable and measurable
- Be clear about types of questions (descriptive, normative or impact)

26

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Evaluation Plan – Exercise

- Refer to the evaluation plan.
- Based upon the information you have from the case(s) identify what you believe are important evaluation questions for this program.
- Develop both the general questions and sub-questions, as needed.
- Classify each question or sub-question as **descriptive, normative** or **impact**.

27

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Evaluation Plan

			Type of Design	Indicators & Measures	Data Sources	Data Collection & Sampling	Data Analysis

28

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Determining Objectives for Results Monitoring***

29

Europe and Central Asia Region and World Bank Institute Evaluation Group



## ***Identifying your project outcome objectives***

- In **results monitoring**, we focus on outcome objectives to help develop our indicators.
- We must be able to distinguish between output, outcome and impact objectives.

Why distinguish between outputs and outcomes?

Because outputs do not reflect the changes in the beneficiaries as the result of utilizing goods and services (outputs).

Why distinguish between outcome and impacts?

Because impacts are usually too far in the distance to be very useful for your performance monitoring.

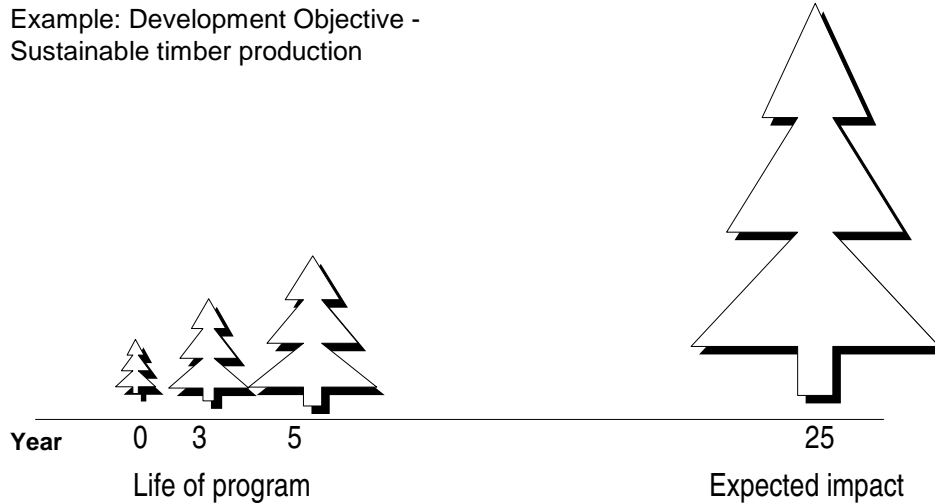
30

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Issue of Time

Example: Development Objective - Sustainable timber production



31

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Examples of Output, Outcome and Impact Objectives

Output Objectives	Outcome Objectives	Impact Objectives
1. Provide preventive health services to underserved patients	1. Reduce emergency room visits by underserved patients	1. Reduce health costs for underserved patients
2. Complete repairs of main and secondary roads	2. Improve road condition quality	2. Increase access to markets
3. Rehabilitate water system to increase production of potable water	3. Increase availability of potable water to households	3. Reduce water-related illnesses

32

Europe and Central Asia Region and World Bank Institute Evaluation Group



## Monitoring Results of the World Bank Projects

- ✓ **Project Development Objectives (PDOs)** are measured by outcomes: they are the PDO Indicators. Since it takes some time for project activities to be reflected in PDO Indicators ...
- ✓ ...progress *towards* achieving PDOs are measured by **Intermediate Outcome Indicators (IOIs)**. They capture
  - ✓ project outputs (i.e., km of roads built) or
  - ✓ intermediate outcomes (i.e., satisfactory road maintenance in pilot regions)

33

Europe and Central Asia Region and World Bank Institute Evaluation Group



## What Makes for a Good PDO?

- Objectives clearly stated
- Target groups are clearly identified
- Clear expressions of how performance will change; i.e. outcomes
- Outcomes can be observed and measured
- Outcomes can realistically be achieved by project's inputs and time span, subject to normal risks
- The cause-effect link between project activities and outcomes is clearly established

34

Europe and Central Asia Region and World Bank Institute Evaluation Group



## **Discussion: Arrangements for results monitoring**

### **Case Projects**

- Identify the PDOs of the project.
- Discuss whether the project has good PDOs, and restate them if needed.

35

Europe and Central Asia Region and World Bank Institute Evaluation Group



## **Exercise: Results Framework**

	<b>Project Outcome Indicator</b>	<b>Use of Project Outcome Information</b>
	<b>Intermediate Outcome Indicators</b>	<b>Use of Intermediate Outcome Monitoring</b>

36

Europe and Central Asia Region and World Bank Institute Evaluation Group