05-Development Basics

Learning Outcomes

At the end of this lecture, you will be able to:

✓Articulate a development plan using the Theory of Change framework
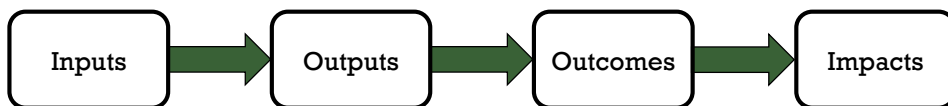
2

Planning Development—A brief overview

- Development projects/programs require careful upfront planning
- One method is to follow the "Theory of Change" (TOC) framework
- TOC describes "why" and "how" a change will occur
  - Used in many fields in addition to development

3

3

Theory of Change


```
Inputs → Outputs → Outcomes → Impacts
```

Each step is separately defined, often starting at the "Impacts" and working backwards.

See: Engineering for Change

4

4

Theory of Change

- Inputs: tasks and resources that a project is expected to undertake or leverage to produce outputs
- Outputs: a fit-for-service solution and any additional deliverables related to its use or maintenance
- Outcomes: changes that occur within an underserved community, or among individuals in that community, as a result of a project's outputs
- Impact: total benefit(s) to society

5

5

Approach

- Start with a very concise answer to the question "*What is the problem you are trying to solve*?"
- Then answer "*What is the impact you want to achieve*?"
- List solutions, general constraints and context
- Re-write the problem statement
- Complete the TOC framework elements

6

6

Example

- A village in Sudan has lower than average student scores on the national exam.

What is the problem you are trying to solve?

The village has lower than average tests scores and needs to be improved.

What is the impact you want to achieve?

Improved educational achievement by students.

7

Example

- Context:
  - Community is under-served and impoverished
  - No electrical connection; poor sanitation
  - Children cannot study in the evening
- Solutions:
  - More teachers; better-trained teachers
  - Improved school supplies
  - Tuition assistance
  - Evening lighting
- Constraints:
  - Must be low-cost (up-front and on-going)
  - Must be available to all children in the village
  - Must be reliable
  - Must be delivered in one year at a budget of $10,000

8

Example

- Impact: The solution will increase educational achievement by students in the village as measured by the national exam.
- Outcome: Students are able to study an additional three hours in the evening.
- Output: An inexpensive, reliable and available solar-powered lantern
- Input: Seed funding, design, community feedback, etc.

9

9

(TOC) Exercise

Work in small groups and use the TOC framework to write the impact, outcome, output and input statements for one of the following problems:

Medical clinics in rural areas are unable to store certain medicines and vaccines because they cannot be kept cold.

Villagers are injured or killed because they are sometimes attacked by crocodiles when they wash their clothes and dishes in the river.

10

10

Discussion

Medical clinics in rural areas are unable to store certain medicines and vaccines because they cannot be kept cold.

• Context:

• Solutions:

• Constraints:

11

11

Discussion

Medical clinics in rural areas are unable to store certain medicines and vaccines because they cannot be kept cold.

   • Impact
   • Outcome
   • Output
   • Input

12

12

Discussion

Villagers are injured or killed because they are sometimes attacked by crocodiles when they wash their clothes and dishes in the river.

- Context:

- Solutions:

- Constraints:

13

13

Discussion

Villagers are injured or killed because they are sometimes attacked by crocodiles when they wash their clothes and dishes in the river.

- Impact
- Outcome
- Output
- Input

14

14

Viewing for Next Class

- Engineering For Change Global Development Course (online)
  - Module 1
  - https://www.engineeringforchange.org/what-we-do/intro-to-egd/
  - Important: Take notes for reference for the project

15

15

Contact Information

Henry Louie, PhD

Associate Professor

Fr. Wood Endowed Research Chair

Seattle University

@henrylouie

hlouie@ieee.org

www.drhenrylouie.com

Office: +1-206-398-4619

Henry Louie

Off-Grid Electrical Systems in Developing Countries

Springer

16

16