Introduction to Health Planning Tools

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In today's presentation

• Introduction to some health planning tools

• Brain storming
• Nominal group process
• But why ? Technique
• Delphi technique
• Problem and needs tree
• Logical framework
• Prioritization Tools
Brain storming
A brain storming session
Brain storming

• Uses
  – To generate ideas
  – An interactive group process
  – Most “informal” technique of soliciting information from a group
  – Used practically in all planning methods
  – Get broad spectrum of responses
  – 2-50 participants can take part in Brain Storming sessions.

• Method
  – A person asks a question and all the answers are recorded on a piece of paper or (for better visualization) on a white/black board, flip charts, cards, transparencies, etc.
  – After no more responses are obtained, the responses are analyzed and ordered according to arbitrary headings and subheadings.
Brain storming

• Weaknesses
  – Quality of responses dependent of knowledge level of participants regarding issue.
  – Owing to direct interaction – does not work in hierarchical settings

EXAMPLE
• What is a good quality in health care service
• Why the people don't use bed net for malaria
• How we can control diarrhea among children
Brain Storming Rules

Suspend Judgments
Be visual: pictures, diagrams and models
Go for quantity
Do not take notes
No criticism is allowed
Crazy ideas also essential
All ideas short and snappy
Nominal Group Process
Nominal Group Process

Uses

• A systematic Group process
• All participants given the opportunity to voice their views
• Diversity of responses; no idea gets lost
• Anonymity can be assured; overcomes power imbalances
• Immediate visualization
• 6-12 participants can join in
• Used for eliciting information and reaching group consensus
• Used in all stages of Planning cycle (a tool of planning)

Method

• Convener selected on request
• Issue or question described
• Cards distributed to all
Nominal Group Process

- **Stage-1**: Each Participant writes down anonymously on a card without inter-participant discussion (*only 1 idea per card*)
- **Stage-2**: Moderator collects cards and pins/copies, without any comments
- **Stage-3**: With group consent, cards discussed, combined, some re-worded and some eliminated (to avoid duplication)
- **Stage-4**: Additional cards are requested by the moderator, if group feels need for more information
- **Stage-5**: (optional) Problems are prioritized using ranking method: e.g. every group member can distribute points anonymously
Nominal Group Process

Limitations

• Quality of responses dependent on Knowledge, attitude and training of participants
• Takes more time than brain storming
• Requires some material
• Convener/moderator can affect quality of responses
• Everybody do not participate equally
• Unorthodox views are usually left out or oppressed
“But-Why” Technique?
“But Why?” Technique

Uses

• Useful means to arrive at presumed reasons for a given situation(s) through means of a “guided” Brainstorming and Nominal group process of a group of people.

Process

• A moderator formalizes a given problem, writes it down on a blackboard or piece of paper which he pin to a board, Asks the audience to give the main reason directly under deriving the problem

• The moderator may ask the audience to do so through direct verbal exchange
“But Why?” Technique

- Alternatively he/she may request respondents to print/write their statements on pieces of paper and hand them to the board, or copying them on the blackboard (if anonymity is desirable).

- Arranges them on the blackboard, or pin board in a logical and sequential manner and then asks the audience to repeat the process, now using the reason for the first problem as the new problem, and finding a or more reason(s) for the new problem. i.e. “But why is ……(i.e.) the reason)?”

- This process is repeated until no longer logical or sensible answers are obtained.

- An example of such “dead-end” reason may be, e.g. “because God wants it so”. Or “because that’s the way it is”. Or “because that is our fate”, etc.
Limitation

- If used in any context where injustice or negative social behavior prevail, e.g., where poverty, exploitation, special privileges, or, alternatively, corruption, indolence, nepotism are major reasons, the technique powerfully visualizes the problem sequence, at times not without (perceived and or real) threat to the reigning establishment, and, in a repressive society, danger to the participants.
Verbalized (1st) Problem

Verbalized reason 1

Not enough land

But why?

Verbalized reason 2

Too poor to buy more

But why?

Verbalized reason 3

Too low prices for agric. Goods

But why?

Verbalized reason 4

Govt does not pay enough

But why?

Verbalized reason 5

World market prices too low

But why?

Verbalized reason 6

Govt has no power to demand more

Etc
Delphi Technique

Problem
Is there a market opportunity for a non-contact ‘roundness’ measuring instrument?

Round 1 Questions
- What do you feel the benefits of a non-contact ‘roundness’ measuring instrument would be?
- Do you produce any components that would benefit from non-contact measurement? Why would they benefit?
- Are there any particular applications where non-contact measurement would be advantageous?
- What do you see as the obstacles in producing a viable non-contact measuring instrument?
- Assuming that a non-contact instrument is less versatile than a contact one, what functionality must it have?

Round 2 Questions
- Respondents indicated that a non-contact device must offer significant time savings to be of benefit. Do you agree (Y,N)?
- Several respondents also believed that non-contact measurement is only beneficial if combined with full geometry (straightness, cylindricity, dimension) measurement. Do you agree? Please explain your answer.
- It is believed that there are limitations in the ability of non-contact solutions to measure different materials. Do you think this will restrict the size of the market?

Round 3 Questions
- Which of the following markets do you believe offers the greatest opportunity for non-contact measurement - bearings, automotive, aerospace, optics, biotech, other?
- Please score out of 10 the importance of the following functionality: 1) roundness 2) straightness 3) cylindricity 4) flatness 5) dimension 6) surface finish
- Which of the following is most critical: 1) gauge repeatability 2) cycle time 3) reliability 4) price 5) robustness
Delphi: A brief history

• The Delphi, devised in the 1950s, was first used as a procedure for prediction.

• More recently, the Delphi has been used in a variety of different forums including land-use planning, regional policy making in areas such as transportation, social service programming in education and health care, and in organizational restructuring.

• These applications stem from one of the Delphi's main objectives-to obtain a reliable consensus of opinion from a group of "experts."
Delphi Technique: Benefits

• The Delphi is used when it is important to have pooled judgment, following the maxim "two heads are better than one."

• When expertise is needed for planning from outside, this tool helps planners to develop consensus. (*External source of information*)

• Planning team does not have adequate technical knowledge or experience in subject

• Sometimes to draw opinion of a group of participants on issue in which enough information does not exist

• Quality of responses is very good
The Delphi is used to bring participants together without bringing them into the same room, avoiding the costs and hassles of traveling to and from meetings.

Draws multiple viewpoints without damaging or intimidating one another.

Controlled feedback through several rounds of the procedure reduces direct confrontation and the disadvantages that conflict leads to—quickly accepting or dismissing other opinions, which focuses on personalities rather than the issues at hand.

Statistical group response, or the tallying of each participant's valuation of the Delphi responses, ensures that each person's opinion is reflected in the final response. This contributes to the shared responsibility for not only the outcome of the Delphi, but also in the process that eventually provides the outcome.
Delphi Technique

Method

- Question or problem to be discussed is defined
- 5-7 experts identified and contacted
- Experts write and send back their opinions / suggestions
- Planning team analyses the responses
- If all agree (rare) this is taken as the answer
- If all do not agree, the summarized results are sent again for review
- Done as many times as needed until consensus is reached
Delphi Technique

Examples

• The probability that a truly effective vaccine against HIV will be developed within next 5 years

• Conclusive factual information not available Yet not speculative either

• Enough information and expertise on subject exists

• The required probability is therefore a matter of opinion based upon experienced judgments
Limitation

• The first limitation is that participants must have written communication skills.

• Second, the Delphi is labor intensive and time consuming. If time is short, the Delphi cannot be used. The procedure, particularly if mailed questionnaires are used, can take 45 days to administer over a 12-week period from decision-to-go to the "final report."
Problem Tree / Needs Tree Technique
Problem Tree - Needs Tree

**Uses**
- Modeling of problems in a sequential mode
- Forces individuals and communities to think beyond immediate problem
- Results are only as good as the understanding, comprehension and willingness to participate of the group members
- Used extensively in situation analysis part of planning

**Method**
- Problems are identified by means of guided Brainstorming, Nominal Group Process or Delphi
- Problems are prioritized to provide one or several problem “priorities”
- Various hierarchies identified are then arranged in sequential layers below the main problem (trunk) and inter-connecting lines are used to show their relationship with trunk and each other (roots)
Mothers interested in the health and nutrition of their young children

- Too many children to feed and care for, no time for women to generate income or rest
- Abstinence is not a popular practice with either men or women
- Most people in the village do not know how to prevent pregnancies
- Many do not understand what the family planning doctor suggests
- Women become ill and tired after too many pregnancies
- Too many pregnancies, abortions, and deliveries
- Too many women die because of abortion and delivery
- One person from the village be trained as a mother and child health nurse
- Mothers and child health nurse seldom available
- Men do not like their wives to attend the family planning clinic because the doctor may have to touch their ‘sex’
- A woman doctor be placed in charge of the family planning clinic

Solution

A ambulance be made available for emergencies
Problem Tree

- Economic loss
- Social problems
- Poor child health

High Maternal Mortality

- Severe Anemia
  - Insufficient Food Intake
- High fertility
  - No Family Planning
  - Untrained Birth Attendants

Poor Obstetric Care

- Delayed Decision Making
- Delay in reaching the facility (Transport)
- Delay in provision of care
  - Lack of transport
  - Lack of staff/services at THQ

Poor Postpartum Care

- Poor Compliance
- Ignorance
# Logical Frame Work

## Logical Framework for Summarizing Project Design

<table>
<thead>
<tr>
<th>Descriptive Summary</th>
<th>Objectively Verifiable Indicators</th>
<th>Means of Verification</th>
<th>Important Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program goals:</strong></td>
<td>Measures of goal achievement:</td>
<td>Routine reports</td>
<td>Regarding project to</td>
</tr>
<tr>
<td>Broader aims to</td>
<td>reduction of infant and child</td>
<td>Baseline and</td>
<td>program goals</td>
</tr>
<tr>
<td>which this project</td>
<td>mortality by 30%</td>
<td>follow-up surveys</td>
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<td>contributes</td>
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<tr>
<td><strong>Project purpose:</strong></td>
<td>Measured Results of Services:</td>
<td>Epidemiologic</td>
<td>Regarding impact of</td>
</tr>
<tr>
<td>Intended results</td>
<td>zero cases of measles in</td>
<td>surveillance</td>
<td>services</td>
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<td>from services</td>
<td>designated 12-months period</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outputs:</strong></td>
<td>Magnitude of Service Activities:</td>
<td>Service records</td>
<td>Regarding conversion</td>
</tr>
<tr>
<td>Service activity</td>
<td>80% of defined target</td>
<td></td>
<td>of resources into</td>
</tr>
<tr>
<td>provided by resources</td>
<td>population immunized</td>
<td></td>
<td>services</td>
</tr>
<tr>
<td><strong>Inputs:</strong></td>
<td>Levels of Effort or Expenditure:</td>
<td>Personnel records</td>
<td>Regarding availability</td>
</tr>
<tr>
<td>Resource needs</td>
<td>specified personnel, supplies,</td>
<td>Stock records</td>
<td>of resources on</td>
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<tr>
<td></td>
<td>equipment for above</td>
<td>Expenditure reporting</td>
<td>schedule</td>
</tr>
</tbody>
</table>

Vertical Logic

Horizontal Logic
The logical framework approach

Broad programs are often made up of several interrelated projects, each of which must be planned to contribute to the overall effort. LFA is an analytical, presentational and management tool which can help planners and managers:

- analyze the existing situation during project preparation;
- establish a logical hierarchy of means by which objectives will be reached;
- identify the potential risks to achieving the objectives;
- establish how outputs and outcomes might best be monitored and evaluated;
- present a summary of the project in a standard format;
- monitor and review projects during implementation.
Description of each terminology

- **Project description** provides a narrative summary of what the project intends to achieve and how.

- **Goal** refers to the sectoral or national objectives to which the project is designed to contribute in a sustainable way, e.g. increased incomes, improved nutritional status, reduced crime. The goal describes the long-term impact that the project is expected to **contribute** towards.

- **Purpose** refers to what the project is expected to achieve in terms of sustainable development outcome at the end, or soon after, the project life. Examples might include increased agricultural production, higher immunization coverage, cleaner water, or improved legal services.

- **Component Objectives**. Where the project or program is relatively large and has a number of components (output/activity areas) it is useful to give each component an objective statement. These statements should provide a logical link between the outputs of that component and the project purpose.
Description of each terminology

- **Outputs** refer to the specific results and tangible products (goods and services) produced by undertaking a series of tasks or activities. Examples might include: children immunized, buildings or other infrastructure built, policy guidelines produced, and staff effectively trained.

- **Activities** refer to the specific tasks undertaken to achieve the required outputs. Examples for a new community water supply might include: further design, establishing water users committee and maintenance procedures, site preparation, collection of local materials, tank construction and pipe laying, digging soak pits, and commissioning. However, the Log frame matrix should not include too much detail on activities otherwise it becomes too lengthy and potentially prescriptive.

- **Inputs** refer to the resources required to undertake the activities and produce the outputs, e.g. as personnel, equipment, and materials.
Description of each terminology

- **Assumptions.** Assumptions refer to conditions which could affect the progress or success of the project, but over which project managers have no direct control, e.g. price changes, rainfall, land reform policies, non-enforcement of supporting legislation. An assumption is a positive statement of a condition that must be met in order for project objectives to be achieved. A risk is a negative statement of what might prevent objectives being achieved.

- **Indicators.** Indicators refer to the information we need to help us determine progress towards meeting stated project objectives.

- **Means of verification (MOVs).** Means of verification should clearly specify the expected source of the information we need to collect. We need to consider how the information will be collected (method), who will be responsible, and the frequency with which the information should be provided.
The hierarchical relationships and the basis for quantification have been incorporated into a matrix known as the **logical framework** shown.

The hierarchic **vertical logic** of the framework clarifies why and how a project is to be undertaken.

The **horizontal informational logic** depicts the evidence to be used to signal project success and to make explicit important assumptions, some of which may be so shaky that they deserve to be tested before the project starts.

A project to immunize pre-school children against measles is used to illustrate these features of the matrix.
The project purpose must first be placed within the context of broader organizational aims.

The immunization project, for example, may be part of a maternal and child health effort designed to reduce mortality and morbidity among infants and pre-school children.

The direct purpose of the project itself might be the elimination of measles from the target community. Achievement of this result is presumably contingent upon the mobilization of certain resources to produce a targeted level of service coverage (assumption).

Specifically, the output should be immunization of 80 percent of the target population of 10,000 pre-school children. This level of coverage is expected to require inputs of two person-months of physician effort, five person-months of nurse time, and ten person-months of input from health auxiliaries. Other input requirements for vaccines, transport, and so on, should also be specified.
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<th>IMPORTANT ASSUMPTIONS</th>
</tr>
</thead>
</table>
| **Program goals:** Broader aims to which this project contributes | • Measures of goal achievement: reduction of infant and child mortality by 30% | • Routine reports  
• Baseline and follow-up surveys | Regarding relevance of project to program goals |
| **Project purpose:** Intended results from services | • Measured Results of Services: zero cases of measles in designated 12-months period | • Epidemiologic surveillance | Regarding impact of services |
| **Outputs:** Service activity provided by resources | • Magnitude of Service Activities: 80% of defined target population immunized | • Service records | Regarding conversion of resources into services |
| **Inputs:** Resource needs | • Levels of Effort or Expenditure: specified personnel, supplies, equipment for above | • Personnel records  
• Stock records  
• Expenditure reporting | Regarding availability of resources on schedule |
Prioritization Tools

Voting
- When options are fairly straightforward
- Time is limited

**Straight Voting**
- All options listed
- 1 person 1 vote (equally weighted)
- Counting made

**Multi-voting**
- Each person given multiple (but limited) votes
- e.g. each person rank top 3 or 5 choices
- used when desire is to pick more options than one

**Weighted voting**
- Each person given a possibility to assign values to options
- Totals are counted
- Overall scores give prioritized ranks
Have a nice day