## The control function (evaluation and monitoring)

 Monitoring; A process of measuring, recording, collecting and analyzing data on actual implementation of the programme and communicating it to the programme managers so that any deviation from the planned operations are detected, diagnosis for causes of deviation is carried out and suitable corrective actions are taken

- Monitoring process
- Detecting deviations from plans.
- Diagnosing causes for deviations.
- Taking corrective action.

#### **Definition**

Evaluation is defined as the systematic attempt to determine the degree to which means (programmes) achieve intended (predefined) objectives and the factors that contribute to or hinder this achievement.

### Reasons for carrying

- To contribute to water health planning.
- To document results achieved by a project funded by donor agencies.
- To know whether desired health outcomes are being achieved and identify remedial (corrective) measures
- To render health activities more relevant, more efficient and more effective.
- To improve health programmes and the health infrastructure.

- Allocation of resources in current and future programme
- Tools of evaluation
- Review of Records
- Monitoring.
- Case studies.
- Qualitative studies.

- Controlled experiments and intervention studies
- Sample surveys.
  - Who is performing evaluation?
- The planner.
- Adhoc research group.
- Those responsible for health development.

- Those responsible for implementation.
- By the Community.

#### **Evaluation may be performed:**

1. Prior to implementation of programme or action plan (preliminary evaluation). The question is "Will the programme or plan achieve intended objectives or desired results?

- 2. During implementation (monitoring or concurrent evaluation). Is the programme achieving its intended objectives?
- 3. At the end of implementation (final or feedback evaluation Has the programme or plan achieved intended objectives or desired results?

- 1. What to evaluate?
- Structure or preconditions of the care process (Adequacy): The relation between recognized need and allocated resources.
- Process to be carried out to deliver care
- Outcome Intermediate indicators.
  - Ultimate indicators.
- Impact: The overall effect of a programme on targeted and adjacent systems or components of the socioeconomic sectors. (Malaria control, health and agriculture)

- -Opinion of consumers and providers.
- -The following aspect are also considered
- Relevance: Is the health care needed?
- Accessibility: The easiness with which people can use services when they are in need to do so
- Acceptability: The degree of accommodation between client and provider characteristics
- Effectiveness: The extent to which planned objectives are attained.

Efficiency: The extent to which given resources (costs) are utilized to maximize achievable objectives (benefits).

## Thus the process of evaluation involve basic steps:

- 1. Determining what to evaluate
- 2. Establish standards and criteria (The use of checklists)
- 3. Plan the methodology to be used
- 4. Gather information
- **5.** Analyze the results
- 6. Take action
- 7. Re-evaluate

#### The main approaches to evaluation

#### A. Structure approach (structure analysis)

Structure refers to the conditions that surround process of care including such factors as:

- Number and qualification of staff.-Characteristics of resource inputs (buildings, equipment, drugs... etc.
- Organizational and environmental framework.

The question is how adequate the structure is in a given institution, town, area?

The available structure in any institution is compared with a standard checklist containing the ideal structure to be available in such institution.

The assumption is that if the structure is available in adequate and functioning state, then process of care is expected to be optimal and objectives are achievable.

# Adequate structure Adequate process Desired objectives

#### B. Process approach (process analysis)

- \* Process is the combination of procedures and activities that are carried out and intended to produce the desired ends or outcomes.
- \* A comparison is made between an ideal list of what is required for a given disease or situation (usually this list represents the consensus of medical experts) and what is actually done.
- \* The deficient procedures and activities are identified and action to overcome these is undertaken.

- \* The method is time consuming, of doubtful accuracy, and it is difficult to prove connection between process and outcome.
- \* Sometimes, it might be difficult to attribute the deficiency in process of care to the individual providers or to the health care setting where such providers are working.

\* For example, a chest x-ray indicated for a given patient might not have been done either because the provider (doctor) did not make a request to do it or the x-ray machine was not operating at the time that patient was seen by the provider. Anyhow, this is a necessary process item, which was missing and represented a deficient process of care.

#### C. Outcome approach (outcome analysis)

- \* Outcome refers to what is expected from a programme, a therapy, an educational activity or any other measure that is intended to improve individual or population health.
- \* In this approach the status of individuals or population after the application of "treatment" is compared to the status before the treatment.

- \* A successful treatment is expected to produce desired results (outcomes) which can be measured by:
- Either intermediate indicators (e.g. coverage rate)
- Or ultimate indicators measuring the reduction in ill health such as reduction in infant mortality rate and incidence rate

\* In general, a good quality care is expected to lead to reduction in the following indicators of ill- health:

Disease incidence.

Death rate.

Discomfort.

Dependency on family and on the health cares system.

Disruption.

Dissatisfaction.

Disability.