Module 6: Monitoring and Evaluation and Capacity Building

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Unit 1: The Logical Framework Approach

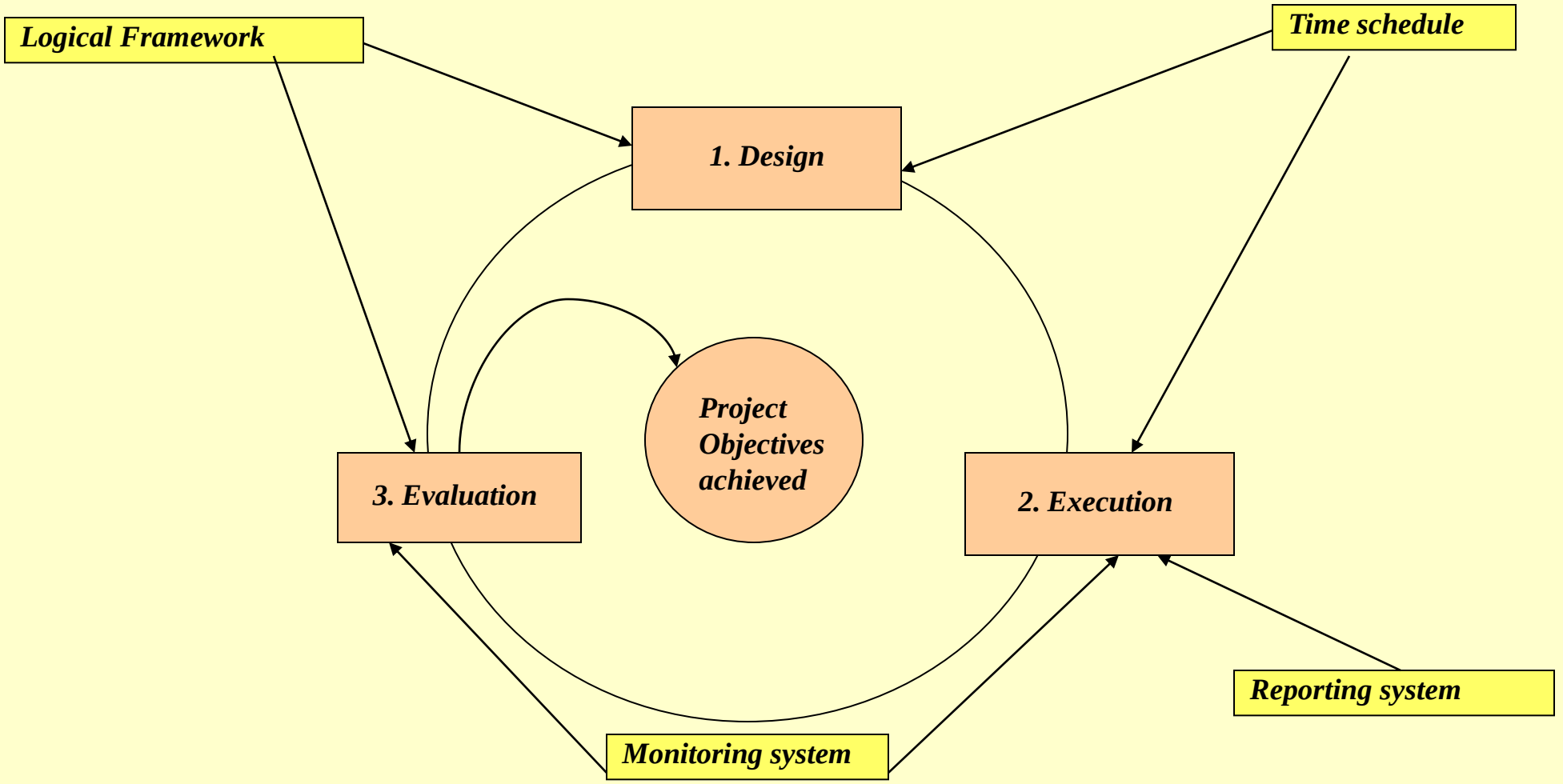
Monitoring and evaluation of PIM national programs

PIM plans are like working hypotheses which need to be tested and modified in practice.

The M&E system is part of the PIM programme and essentially tries to provide information on how efficiently the program is executed.

The design of an M&E system for a PIM program is specific to the country where it is executed because objectives of PIM can be different.

The project Cycle



What is the Logical Framework Approach (LFA)?

- The Logical Framework Approach is an 'aid to thinking', not a substitute for creative analysis.
- It can help planners and managers in:
  - Analysing the existing situation during project preparation;
  - establishing a logical hierarchy
  - identifying the potential risks
  - establishing how outputs and outcomes might best be monitored and evaluated;
  - presenting a summary of the project in a standard format; and
  - monitoring and reviewing projects during implementation.

The history of LFA

It was first formally adopted as a planning tool for overseas development activities by the USAID in the early 1970s.

It is now used by many international and national development agencies: USAID, UNDP, IAD, IFAD, CIDA, OECD, (ISNAR), Aus-AID, GTZ and others.

In spite of some criticism, it continues to be used as a standard summary of the project and the logic behind its formulation and is essential for defining the M&E system

The Logical Framework approach and the Logical Framework Matrix

When applied correctly the **approach** implies the following steps:

- problem analysis,
- stakeholder analysis,
- developing a hierarchy of objectives
- Identifying the risks and
- selecting an implementation strategy.

The product of this analytical approach is the **matrix** (the Logframe), which summarises what the project intends to do and how, what the key assumptions are, and how outputs will be monitored and evaluated.

Logframe Matrix

Project Description	Indicators	Means of Verification	Assumptions
1. Higher Development goals			
2. Project development objectives (PDO)			
3. Project components outcomes or results			
4. Outputs			
5 Activities			

Type of Monitoring and Evaluation.
2. Performance Monitoring

The performance of the project can be assessed in terms of the effectiveness and efficiency of the processes used to produce the planned outputs.

This can be usefully referred to as ‘implementation monitoring’ or performance Monitoring **.**

Implementation monitoring or **performance monitoring** is essentially done through a management information system,

tracking the day-to-day implementation of the project.

Unit 2 . Main principles of M&E systems

Conventional and participatory M&E

1. What is participatory M&E?

The World Bank defines Participatory Monitoring and Evaluation (PME) as *" It is a process that leads to corrective action by involving all levels of stakeholders in shared decision making"*

2. Main differences between Participatory M&E and conventional M&E

	Conventional M&E	Participatory M&E
Who plans	Senior managers, outside experts	Primary stakeholders
Role of stakeholders	Provide information only	Design and adapt methodology
How success is measured	Externally defined	Internally defined

Indicators

1. Definition of indicators
2. Different types of indicators (impact and outcomes indicators, output, inputs and process indicators , … qualitative and quantitative). Relation among indicators and the LF Matrix
3. Criteria for selecting indicators (DOPA)
   - **a) Direct (**closely measure the intended change).
   - **b) Objective (** unambiguous about what is being measured and which data to be collected).
   - **c) Practical (** reasonable in terms of data collection cost, frequency, and timeliness for decision-making purposes).
   - **d) Adequate (** the minimum number of indicators necessary to ensure that progress towards the output is sufficiently captured.

Source: USAID TIPS Number 12, 1998.

Indicators (2)

4. Common problems in defining indicators:
   - Activities, outputs, outcomes and objectives not well defined;
   - There is no base line to compare with;
   - Too many indicators. They take time and results are not clear;
   - Vague definition of the indicator leading to different interpretations;
   - Vague definition of the processes for collecting and processing information;
   - Lack of understanding of the purposes of indicators and the whole M&E system;
   - Indicator is difficult to measure.

Standard steps for establishing a M&E system

1. Conduct a readiness assessment
2. Establish the purpose and scope of the M&E
3. Agree on outcomes and objectives
4. Select indicators
5. Baseline survey and data collection plan
6. Select results targets
7. Plan monitoring, data analysis, communication and reporting
8. Plan critical interim evaluations
9. Implement results of evaluation

Unit 3 Aplying the principles of the LFA and M&E to PIM Programmes

Why the evaluation of performance of irrigation projects remains of limited use?

- Most of the performance evaluation systems were developed for comparative purposes
- Any monitoring system requires the compilation of considerable information and this always has a cost
- Managers often see monitoring systems as a tool aimed at evaluating their own performance
- It is difficult that any monitoring system may be satisfactory for all types of irrigation systems

M&E systems for national PIM programs

The first distinction to be made is whether we want to monitor the performance of the process of establishing the WUAs or we want to assess the achievement of results and impacts or both.

For this reason the first step is to establish the relations of the LFA. Table 1 is an example of such relations

Results and Impact monitoring

Table B.2 Typical implementation and results framework for interventions to establish and support Water Users Associations

Assessment level	Examples
Project development objective	Effective and sustainable water users' institutions and organizations established
Project outcomes	1. Responsibility for management, operation and maintenance and financing of I&D systems effectively transferred from government to water users 2. Government effectively regulating WUAs and Federations of WUAs 3. Irrigation water delivery is reliable, adequate, timely and equitable 4. Systems are adequately and sustainably maintained 5. Water users are satisfied with water service provision 6. Agricultural production is not constrained by (lack of) irrigation and drainage service provision 7. Adequate fees are recovered from water users to cover MOM costs

Results and Impact monitoring (2)

Project outputs	1. Legal framework for WUAs formulated or revised and in use 2. Effective and functioning WUA Support Units 3. WUAs legally formed and functioning effectively – democratic, representative, efficient and effective in work functions 4. WUA Federations legally formed and functioning effectively 5. National WUA Association formed and functioning effectively 6. WUA Regulatory Unit formed, staffed and functioning effectively 7. WUA offices established, equipped and functioning effectively 8. WUA personnel trained and effective in their job functions 9. Water users contacted and made aware of roles and responsibilities 10. Relevant government agency staff identified and made aware of roles and responsibilities for WUAs and themselves

Results and Impact monitoring (3)

Project activities	1. Enact new or upgrade existing legal framework for establishing WUAs and Federations 2. Formation of WUA Support Units 3. Formation and establishment of WUAs 4. Publicity, communication and awareness campaigns 5. Training and capacity building programmes 6. Development of management capability, including record keeping and performance monitoring 7. Development of financial management capability 8. Development of technical management capability (system operation and maintenance) 9. Support for the purchase of maintenance machinery and equipment 10. Development of processes and procedures for WUA Regulatory Authority 11. Formation and establishment of Federations of WUAs 12. Formation and establishment of National Association of WUAs
Project inputs	1. Specialist inputs – legal specialists, WUA specialists, institutional development specialists, training specialists 2. Beneficiary participation 3. Offices, machinery, equipment, vehicles and materials

Source: Toolkit for Monitoring and Evaluation of Agricultural Water Management Projects WB, 2008

Performance monitoring

No.	Activity	Indicators
1	Enact new, or upgrade existing, legislation for establishing WUAs and Federations	Status of legislation (drafted, enacted, in use)
2	Formation of WUA Support Units	• Number of Support Units formed (each quarter, year) • Number and types of staff • Training events carried out (for Support Unit staff)
3	Formation and establishment of WUAs	• Number of WUAs formed (each quarter, year) • Milestone achieved (formed, staff hired, O&M plan prepared, etc.) • Area covered by WUAs (area and as a percentage of the total irrigable area in the country) • Number of WUAs formed in each Region • Assets transferred from government to WUA account
4	Publicity, communication and awareness campaigns	• Status of campaigns (needs identified, material produced, campaign started, activities done, etc.) • Number and types of people, communities, agencies, etc. contacted through the campaigns • Impact evaluation (pre- and post campaign awareness assessment)
5	Training and capacity building programmes	• Status of programmes (needs identified, training plan produced, training material produced, trainees identified, training course run, etc.) • Number and types of training courses carried out • Number and types of people trained • Training evaluation (pre- and post-training knowledge tests, pre- and post-training assessment of understanding, knowledge and skills)

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Unit 4: Human resources development. Assessing training needs

Human resources development (HRD) in PIM

- Human resources development is the main component of any PIM programme. It represents an important cost but even more important the activities must be well structured and have clear objectives.
- Many activities can be included under HRD, such as training, country information visits, professional upgrades by specialized courses, technical visits, internships in other institutions, communication and dissemination programmes and several others.
- Unfortunately HRD does not receive the necessary attention in many PIM programmes.

Training programmes in PIM

- Training programmes are the larger component of HRD activities.
- In PIM, many types of training courses and activities are required. The main ones are:
  1. Training of the staff (government agencies) that will promote the PIM programme
  2. Training of the trainers that will train the members of the Constituent Committees.
  3. Training on the responsibilities and functions of the Management Committees.
  4. Training of the WUAs staff in technical aspects of the Operation, maintenance, administration and management.
  5. Training of water users

The cost of training

Little information is available about the cost of training in PIM programmes, but even when available they are rarely comparable since they cover many different aspects.

Nevertheless the order of magnitude of the institutional component in some projects financed by the WB is given below:

- Mexico: 6,0 $/ha
- Peru: 200,0 $/ha
- Bosnia& Herzegovina: 150,0 $/ha

Methods of training

It is very important to ensure the uniformity of messages. For this reason the "training of trainers" that will train the final participants is fundamental.

For the training of staff of WUAs the most effective method is the in- service training. (The trainer trains on the day to day task of the trainee.

On-line training has not been used much due to the lack of access of end–users to computer facilities.

Walk –through the physical facilities of irrigation system is very useful to make farmers understand some of the operation and maintenance problems

Assessing the training needs

- Too many training programmes are carried out without knowing the training needs of the beneficiaries of the training activities.
- A proper assessment of the needs of the target groups is essential to draw the programme of the training activities.
- Use of questionnaires is highly appropriate for assessing the training needs. When the target group is very large, representative samples should be used

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Unit 5: Trade- offs between services to be provided to WUAs and training programmes

Trades- off between provision of services and training (1)

- The critical issue in defining training programmes within PIM context is to decide which services will be provided by external persons (water services providers) and which will be undertaken by the members of the WUAs.
- For instance, if the maintenance is going to be undertaken mostly by external contractors, the need for training the staff of the WUAs will decrease much and change the type of training needed.
- The size of the WUA has much importance in this decision. It is obvious that small WUAs have little economic capacity to hire external services and therefore they need much more training

Trades- off between provision of services and training (2)

- It is very important to define what services will be provided by the WUA and correlate the training programme with the services to be carried out.
- External services commonly provided to WUAs , and to any other farmer, include: technical assistance, agricultural markets information, agricultural credit facilities, and few others.
- Adding other services related to agricultural production like: provision of agricultural inputs (fertilizers, seeds,etc), common use of agriculture machinery, processing of agricultural products, and marketing have the characteristic that not all farmers of the WUA may be interested in them. Therefore the corresponding training should be selective.

Thank you again for your attention!