Government of the People's Republic of Bangladesh
Ministry of Local Government, Rural Development and Cooperatives
Local Government Division
Local Government Engineering Department

Guidelines for
Small Scale Water Resources Development Project

G9   Monitoring and Evaluation

November 2017

I. Objective

1. The objectives of evaluation are to confirm the results (including outcome, benefit, impact) of the project, to utilize evaluation results in a decision-making process for better project management, to feed lessons learned from evaluation back into subsequent project and formulating new project, and to disclose evaluation results to the public to ensure transparency and accountability.

2. The objectives of monitoring are to watch and check a situation of subproject area in order to see how it changes from time to time and to contribute to a provision of necessary information and data for evaluation.

3. Monitoring and evaluation will be conducted consistently throughout a "PDCA Cycle" which consists of four steps; i) Plan, ii) Do, iii) Check, iv) Action. See Attachment-xx

4. This guideline is made to guide the ways to monitor and evaluate completed subproject.

II. Methodology
2.1 Monitoring Operation and Maintenance

5. The situation of operation and maintenance (O&M) of developed system and facilities by the WMCA will be monitored by Upazila Engineer through joint walkthrough and regular discussion between them basically in every year.

6. The database system called IWRMU Management Information System (MIS) comprised the following modules; (i) Planning; (ii) Design & Construction; (iii) Institutional Development; (iv) O&M during Project Period; and (v) Training. It is maintained jointly by the project and LGED staff and records project implementation. Recently the new database module has been developed by the JICA TCP and they have been merged into one new database system. The new database uses MS-SQL software for enhanced security, and allows direct entry of data and printing out of data reports by local offices as well as the HQ.

7. The Upazila Office needs to input the data and information including the O&M grading assessment into the MIS, and then they should discuss with the WMCA how to resolve the current issues and improve the performance through "Interactive Approach" which was introduced by the JICA TCP. The Interactive Approach aims at assuring more close and interactive communication and discussion between LGED local office and WMCA, not a one-way "trainer-trainee" relationship, in consultation of financial and technical issues and/or sustainable service provision of income generating activities. District office, Regional Office and IWRM Unit in HQ need to review and instruct proper action to the Upazila Office as necessary.

2.2 Effect Monitoring and Evaluation (EME)

8. During implementation of the Project, the Effect Monitoring and Evaluation (EME) will be conducted annually to document the changes in agricultural and fisheries production that have occurred as a result of the intervention in water management infrastructure in subprojects completed under SSWRD Projects. The annual EME Reports provide monitoring information about the project's benefits to higher authority and development partners who support the projects. The EME will also focus on overall institutional strength of the WMCA and the operation status of these subprojects.
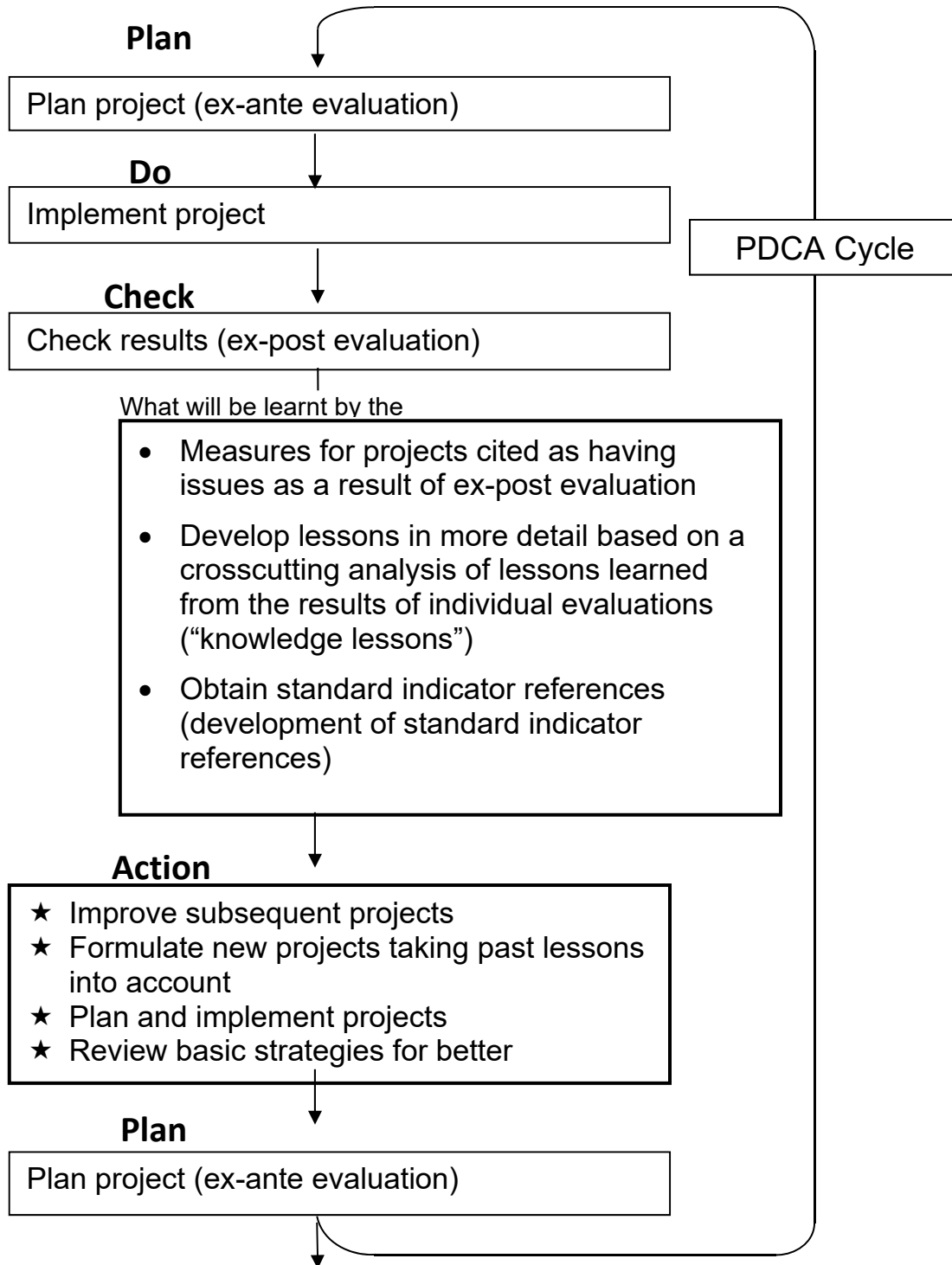
2.3 Benefit Monitoring and Evaluation (BME)

9. After completion of SSWRD Projects, Benefit Monitoring and Evaluation (BME) study will be conducted for each Project, usually after a period of 5 (five) years after completion, to document the changes in agricultural and fisheries production that have occurred as a result of the Project over a longer period. The BME study will be done on the subprojects for which Bench Mark data were surveyed and recorded (usually at least 10% of the subprojects are considered) during implementation of the Project. The BME will provide useful information for higher authorities and development partner agencies in future development planning.

2.4 Ex-post Evaluation

10. After the completion of the SSWRD Project in certain years, the ex-post evaluation will be conducted by the development partners such as ADB and JICA. They will evaluate the Project in accordance with the international standards such as ""Five Evaluation Criteria and Associated Perspective by the Development Assistance Committee (DAC)" which shows the typical criteria of i) Relevance, ii) Effectiveness, iii) Efficiency, iv) Impact and v) Sustainability. The information obtained from the MIS and BME study will contribute to these evaluations.

Image of the PDCA Cycle

Plan

Plan project (ex-ante evaluation)

Do

Implement project

PDCA Cycle

Check

Check results (ex-post evaluation)

What will be learnt by the

- Measures for projects cited as having issues as a result of ex-post evaluation
- Develop lessons in more detail based on a crosscutting analysis of lessons learned from the results of individual evaluations ("knowledge lessons")
- Obtain standard indicator references (development of standard indicator references)

Action

★ Improve subsequent projects ★ Formulate new projects taking past lessons into account ★ Plan and implement projects ★ Review basic strategies for better

Plan

Plan project (ex-ante evaluation)

DAC Criteria for Evaluating Development Assistance

When evaluating programmes and projects it is useful to consider the following criteria. The criteria were first laid out in the DAC Principles for Evaluation of Development Assistance and later defined in the Glossary of Key Terms in Evaluation and Results Based Management. The following further explains the criteria and provides some sample questions to illustrate how they may be used in practice:

Relevance: The extent to which the aid activity is suited to the priorities and policies of the target group, recipient and donor.
In evaluating the relevance of a programme or a project, it is useful to consider the following questions:
  - ➢ To what extent are the objectives of the programme still valid?
  - ➢ Are the activities and outputs of the programme consistent with the overall goal and the attainment of its objectives?
  - ➢ Are the activities and outputs of the programme consistent with the intended impacts and effects?

Effectiveness: A measure of the extent to which an aid activity attains its objectives. In evaluating the effectiveness of a programme or a project, it is useful to consider the following questions:
  - ➢ To what extent were the objectives achieved / are likely to be achieved?
  - ➢ What were the major factors influencing the achievement or non-achievement of the objectives?

Efficiency: Efficiency measures the outputs -- qualitative and quantitative -- in relation to the inputs. It is an economic term which signifies that the aid uses the least costly resources possible in order to achieve the desired results. This generally requires comparing alternative approaches to achieving the same outputs, to see whether the most efficient process has been adopted. When evaluating the efficiency of a programme or a project, it is useful to consider the following questions:
  - ➢ Were activities cost-efficient?
  - ➢ Were objectives achieved on time?
  - ➢ Was the programme or project implemented in the most efficient way compared to alternatives?

Impact: The positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators. The examination should be concerned with both intended and unintended results and must also include the positive and negative impact of external factors, such as changes in terms of trade and financial conditions. When evaluating the impact of a programme or a project, it is useful to consider the following questions:

➢ What has happened as a result of the programme or project?
➢ What real difference has the activity made to the beneficiaries?
➢ How many people have been affected?

Sustainability: Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be environmentally as well as financially sustainable. When evaluating the sustainability of a programme or a project, it is useful to consider the following questions:
➢ To what extent did the benefits of a programme or project continue after donor funding ceased?
➢ What were the major factors which influenced the achievement or non-achievement of sustainability of the programme or project?

MIS Development Vision for SSW Database

Present Database

Existing Database

Operated by IWRMU

O&M
- Yearly Allocation

Institution
- Quarterly Reports

Oprated by SSW-JICA & PSSWRSP

1. **Planning**
   - Proposal, Pre-screening
   - Reconnaissance & PRA, Appraisal
2. **Design & Construction**
   - SP Structures, Design, Land Use
   - Procurement & Progress
3. **O&M**
   - Handover and General Information
   - Agriculture, Fisheries, Water Quality
4. **Institution**
   - Monthly Reports
5. **Training**

Operated by PSSWRSP

6. **Enhancement**
   - Proposal, Grading & SP Structures

LIT Database

Operated by IWRMU

Gender Database

Operated by IWRMU
- Water Sector **(Operated by IWRMU)**
- Rural, Urban & LGED Core Sector

New Database

New Database for O&M

1. **General**
   - Basic Information
   - Institutional Information
   - Award Related Information
   - Agriculture & Fisheries
   - LIT Information
   - Env. Lab Information
   - Gender Information

2. **O&M**
   - Ranking of Subprojects
   - Drainage & Irrigation Canals
   - Flood Control Embankments
   - Water Control Structures & WMCA Office
   - Rubber Dams
   - Progress

3. **Enhancement** *(from ADB)*

Vision: Shift to SQL Base On-line Database & Connect Districts

MS Access

SQL Server

District

Accessibility & Security

District

Final Image

SSW Database

Handed Over SPs

1. **General**
   - Basic Information
   - Institutional Information
   - Award Related Information
   - Agriculture & Fisheries
   - LIT Information
   - Env. Lab Information
   - Gender Information
2. **O&M**
   - Ranking (grading) of Subprojects
   - Drainage & Irrigation Canals
   - Flood Control Embankments
   - Water Control Structures & WMCA Office
   - Rubber Dams
   - Progress
3. **Performance & Enhancement**
   - Idenitification, Assessment (grading) & PE Planning
   - PE Implementation
4. **EME**
   - Agriculture / Fisheries / Micro-credit

District

District

New SPs

1. **Planning**
   - Proposal, Pre-screening, GIS
   - Reconnaissance, Category, Clearance
   - Feasibiility, Administration

District

2. **Design & Construction**
   - Engineering Works Details
   - Procurement
   - Construction - structures, office, EWs

District

3. **Institutional Development**
   - Beneficiary Contribution & Member status
   - Accounts, micro-credit activity, Audits
   - Subcommittee status, meetings

Training