Session 7.
Principles of Environmental Mitigation and Monitoring
Technical presentation and dialogue

Summary

The session offers an overview of environmental mitigation and monitoring, defines these critical topics and provides examples from USAID-funded projects. It discusses simple strategies to incorporate environmental monitoring into project implementation and M&E systems. It also explains what an environmental indicator is and what information it provides for the project manager and USAID.

Mitigation

The purpose of the EIA process is not simply to identify and assess potential environmental impacts, but to change project design and implementation so that these impacts are *mitigated*—that is, avoided, reduced, compensated or remediated. Impact assessment should be performed early in the project design stage so that mitigation measures can be incorporated more easily into work planning. However, mitigation measures can be adjusted for improvement or added to project implementation at any point during the project cycle.

Different types of mitigation measures can be considered to address the same risk. For example, a project manager can decide to:

- Alter technical approach or modify the design of some elements of the project (PREVENTATIVE MITIGATION)
- Change the project site (PREVENTATIVE MITIGATION)
- Offset adverse impact in one area with improvements elsewhere, OR
- Restore the environment after damage is done.

However, it is almost always easier and less costly to carry out **preventative mitigation**. Performing compensatory or remedial mitigation after the impact occurs should only be considered as a secondary strategy, and often incurs greater costs to the project.

Monitoring

Monitoring is the essential complement of mitigation, required to verify whether the mitigation measures have been implemented, and if they are sufficient and effective. Environmental monitoring systematically measures key environment indicators over time within a particular geographic area to measure the effects of project implementation.

Mitigation measures are monitored through indicators that provide facts, information and indication of achievement of specific standards on project's environmental performance and compliance, environmental health and wellbeing. 'SMART' indicators (Specific, Measurable, Achievable, Realistic and Time limited) are those that are designed in such a way that allows for objective data collection following clearly elaborated methods.

Key Resources

- The USAID Global Environmental Management Support (GEMS) website contains a page on **Mitigation, Monitoring and Reporting** with several resources under the *Life of Project Compliance & ESDM* tab.
- The Sector Environmental Guidelines are a key resource for the design of specific mitigation measures and monitoring indicators.
- The Visual Field Guides are a tool for M&E specialists who are not familiar with environmental indicators to take into the field during monitoring visits. Each visual field guide includes a checklist with descriptive images.

Discussion Questions

Participants will meet in groups of 6 to discuss the following questions, drawing from their professional experience. Each member of the small group who works for a USAID Implementing Partner should take 2-3 minutes to describe to the other group members the responses to the following three questions.

Each group will select a group leader to present a response utilizing the most interesting or relevant anecdotal evidence that was shared during the discussion.

1. What are some of the potential environmental impacts of your project? Group members are encouraged to focus on one particular sector of their project (i.e. WASH, Agriculture, Health, Roads, Fisheries, etc).
2. How does your project plan to mitigate negative, unintended environmental impacts of its activities?
3. What are the main challenges/difficulties that projects face in the implementation of mitigation measure? And in the measurement of environmental indicators?