## Session 3.

# Fundamental Skills of Environmental Impact Assessment (EIA)

## Technical presentation and dialogue

## **Summary**

This session will define Environmental Impact Assessment (EIA) as a formal process for identifying the *likely effects* of activities/projects on the environment, and on human health and welfare; and the *means and measures to effectively mitigate* these impacts.

Fundamental skills of the EIA process will also be introduced and explained, including:

- 1) characterizing the baseline situation;
- 2) identifying (and evaluating) the potential adverse **impacts** of planned development activities (issues of concern); and
- 3) developing a mitigation strategy to address these impacts.

The session will further illustrate how the EIA process aligns with ESDM and establish that this process is the internationally accepted standard framework for achieving ESDM in project-based development. The linkage between EIA and USAID environmental procedures will also be established.

#### Discussion of Fundamental EIA Skills

This session addresses the essential EIA skills of baseline characterization, impact identification and mitigation design. (A fourth "core" skill—monitoring—is addressed in a subsequent session). These skills will be put to practice in the workshop's field-based activities.

### **Baseline Characterization & Identifying Impacts of Concern**

This portion of the session explains the basic, logical process behind baseline characterization and identifying impacts (or issues) of concern. An example from a real and typical small-scale irrigation project will illustrate why the fundamental EIA skills of baseline characterization and issue identification are directly relevant to effective mitigation and achieving ESDM.

Depending on the size, complexity and context of the activity, sophisticated environmental models and other tools *can* be required to evaluate impacts in the context of a comprehensive EIA study. But for most small-scale activities and preliminary assessments (or USAID-mandated IEEs), the simple, logical process described here—supported by good judgment and the information contained in the *Sector Environmental Guidelines* or similar resources—is sufficient.

#### Mitigation Design

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 or offset.

As such, mitigation is a critical part of ESDM and the EIA process. Monitoring (addressed in a subsequent session) is its essential complement, required to verify whether the mitigation measures are sufficient, effective—and actually implemented.

This portion of the session:

- Defines mitigation
- Provides examples of basic mitigation approaches
- Explains the principles behind good mitigation design and practice

## **Objectives**

- Achieve a basic understanding of the EIA process and how it is implemented
- Become familiar with core EIA skills and the technical approach to EIA activities

- Promote the EIA framework as the internationally accepted standard process for achieving ESDM in project-based development
- Establish EIA as the basis of USAID Environmental Procedures

## **Key Resources**

- The "Underlying EIA concepts and skills" page on the GEMS project Web site (available at: <a href="http://www.usaidgems.org/underlyingEIA.htm">http://www.usaidgems.org/underlyingEIA.htm</a>) provides additional background and context on the EIA process and includes links to other training and reference materials.
- The individual chapters of the Sector Environmental Guidelines are a key resource for: (1) identification of potential adverse environmental impacts; and (2) design of specific mitigation and monitoring measures.