

Monitoring & Evaluation

Including communities in M&E programs facilitates consensus building, enhances the willingness of stakeholders to implement decisions, and improves the effectiveness of the conservation program.

Monitoring can be defined as “the periodic collection and evaluation of data relative to stated project goals, objectives, and activities.” (Margoluis and Salafsky 1998, 351) Establishing and implementing such a program in biodiversity conservation projects enables project managers or policymakers to assess the effectiveness and impacts of project interventions. Without an effective monitoring program, it is difficult to make any conclusive statements about outcomes of biodiversity conservation projects and virtually impossible to assess changes in the ecological character of ecosystems and trends in species populations.

People living in or around biodiversity conservation project sites are often those who are most affected by project activities; therefore, monitoring programs should be of inherent interest to local people. Community-based monitoring involves project communities in deciding what to monitor, in collecting and analyzing data, and in interpreting the results. Advantages in involving local communities in monitoring programs include creation of program ownership, cost effectiveness, and development of local skills and expertise. Monitoring programs that involve project communities facilitate consensus building, provide communities with valuable information about the changing state of natural resources, enhance the willingness of all stakeholders to implement the decisions resulting from the outcomes of the monitoring process, and improve the chances of the program being sustained.



Involving communities in monitoring and evaluation, as seen in this example of measuring thatch grass, makes them stewards of their natural resources.

Observations from the Field

The **LIFE** and **MASOALA** projects provide good examples of effective monitoring programs. The **LIFE** project in East Caprivi employed men from the project community to work as Community Game Guards to monitor wild animal populations and women to work as Resource Monitors of grass, water lilies, and palms. These natural resources were key sources of livelihood for the rural communities in the project area. The project had also commissioned the Social Sciences Division of the University of Namibia to undertake research on the changing socioeconomic status of four communities

within the project area. It was expected that the data obtained would provide a basis for longer-term monitoring of socioeconomic parameters of the communities in the project area. Although a comprehensive socioeconomic monitoring program was not in place at the time of the BIOME analysis, the project management team had a set of indicators which they believed could be used to evaluate the project's performance with regard to project impacts on communities. These indicators included the following:

- ▣ Numbers of people attending project-related meetings (measure of level of participation and interest),
- ▣ Initiatives by villagers in the project area to organize and run meetings (e.g., when the people take over the running of such meetings from project management), and
- ▣ Villagers in the project taking over the responsibility of managing wildlife resources.

The **MASOALA** project in Madagascar has a monitoring and evaluation (M&E) unit responsible for gathering, analyzing, and communicating both ecological and socioeconomic information to project staff, local communities, and project appraisers. The project identified the specific threats to natural resources in the targeted area, such as using rain forest trees destructively for firewood, construction, handicrafts, food, and dugout canoes. The main question being addressed was how the **MASOALA** project influenced the distribution and abundance of the species concerned (Kremen, Razafimahatratra, and Ratsisompatrarivo 1999). It was also recognized that local people use many of

The Masoala project, located on a peninsula in the northeastern part of Madagascar, is one of the few regions on the island where lowland tropical forest still remains. The project is coordinated by CARE, WCS, and The Peregrine Fund—three international NGOs. The project's goals are to

- ▣ conserve biodiversity and natural resources on the Masoala Peninsula
- ▣ identify human pressures on protected areas
- ▣ reduce illegal resource use and environmental degradation and
- ▣ promote sustainable socioeconomic development through land use planning, natural resource use and conservation, and ecotourism.

To learn more about the **MASOALA** project, see page 86.



these species for subsistence. Therefore, the way the species were used and the subsequent influences on the local economy were also monitored.

Monitoring programs in the **DZANGA-SANGHA** project focused primarily on systematically censusing wildlife, with particular emphasis on three species: gorilla, chimpanzee, and elephant. The program was expected to yield reliable long-term data on animal numbers to guide species conservation actions.

For The Peregrine Fund's **MADAGASCAR WETLANDS** project, research activities included ecological studies on the country's wetlands. These studies focused on the behavior, breeding habitat requirements, and population dynamics of the Madagascar Fish Eagle, which involved regular monitoring of the eagle's populations in the project area. Thus, over a long period, it is hoped that the data will enable assessment of trends in the populations of the Madagascar Fish Eagle.

A major component of the **KENGO** project involved research to identify and document indigenous fruit and vegetables and determine the present status of such species. However, these data were not initially intended to provide a basis for M&E.

Conclusions

B IOME participants observed that most conservation projects jumped into implementation with broadly and sometimes vaguely defined goals, without much planning or assessment of baseline information to facilitate project evaluation later in the project life cycle. In addition, most programs focused on the monitoring of one or a few parameters, mostly related to wild animal populations (e.g., **DZANGA-SANGHA** or **CAMPFIRE**), which has limited value for measuring impacts of the project as a whole. In contrast, few monitoring programs focused on the socioeconomic status of the people living with the wildlife.

An effective monitoring program does not have to be expensive and complex. It is possible to design simple, relatively inexpensive programs that focus on and address the relevant issues and deliver data required to guide management actions and policy decisions (Margoluis and Salafsky 1998). However, BIOME participants observed that, for project communities to want to invest time and effort in monitoring, it must be clear why the information is being collected and how it relates to the communities' own interests. What is being monitored must be carefully chosen so that these indicators of project success relay relevant information that can be used to provide insights into social and economic, as well as ecological, implications of project activities.

Another observation from the field is that, often, monitoring data from a particular component of a project may be left to accumulate over long periods without being analyzed. This situation should be avoided since, in terms of influencing project direction, not analyzing collected data is as useless as not collecting the data at all. Without analysis and interpretation of the data and reporting of the findings in a usable form, the value of monitoring in enabling review of management decisions and activities and revision of goals, strategies, and project focus is lost.