
MIKE implementation in Botswana

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Botswana currently holds Africa's largest population of elephants, and the present count of 120,000 (DWNP 1999) is increasing at 5% per year. They are mainly found in northern Botswana, occupying a range of approximately 80,000 km². A smaller population estimated at 800 in 1995 occurs in the Tuli Block in eastern Botswana. The total elephant range accounts for 14% of the country's surface area, but only 12% of the range is in protected areas.

As a signatory to the Convention on International Trade in Endangered Species (CITES), Botswana is committed to implementing the resolutions and decisions that are made by the Parties to the Convention. At the 10th meeting of the Conference of Parties held in Harare, Zimbabwe, on 9–20 June 1997, Botswana, Namibia and Zimbabwe presented a proposal to downlist their elephant population from Appendix I to Appendix II, and to undertake a one-off sale for non-commercial purposes of government ivory stockpiles. The proposals were acceded to on condition that these countries would agree to and participate in an international reporting and monitoring system for legal and illegal international trade through an international database maintained by the CITES Secretariat and TRAFFIC International.

Monitoring the Illegal Killing of Elephants (MIKE) is the monitoring system that CITES uses to assess the impact of its decisions on illegal hunting of elephants in range states. MIKE objectives as stipulated in Resolution Conf. 10.10 (rev.) are

- to measure and record levels and trends of illegal hunting in elephant range states and in trade entrepots
- to assess whether and to what extent observed trends are related to changes in the listing of elephant populations in the CITES Appendices and/or the resumption of legal international trade in ivory
- to establish an information base to support the making of decisions on appropriate management, protection and enforcement needs
- to build capacity of personnel in range states.

MIKE officially got under way in Botswana in Sep-

tember 2000. The official MIKE site for Botswana is Chobe National Park in the northern part of the country. With an area of 10,566 km², Chobe National Park accounts for about 45% of the district in which it is located. As more activities related to elephants are outside the protected areas than within, the Department of Wildlife and National Parks (DWNP) has extended the MIKE activities to other elephant range areas: Chobe East and West surrounding the park, the Okavango area north of the buffalo fence, and the northern Tuli Block.

To collect and record data, four forms are being used: elephant carcass report, ground patrol report, monthly report and annual report. Maps and reports have been produced and data compiled only for Chobe National Park, the official MIKE site. For the other areas, similar information has been collected from the field but is yet to be entered into the database.

The annual report for 2000 and reports for January to April 2001 have been submitted to the MIKE regional coordinator in Namibia and the CITES Secretariat. Reports for May to December 2001 and the annual report for 2001 are in preparation.

Progress in implementation

In accord with MIKE resolutions, Botswana has appointed a MIKE national coordinator, who is based at DWNP headquarters in Gaborone, and site coordinators at Kasane, Mathathane and Maun. Consultation and basic training through workshops have been extended to other patrolling units that are taking part in MIKE. Two training workshops were conducted for patrol teams in November 2000 and July 2001.

Patrol teams that come to Chobe District on rotation are briefed on MIKE and how to collect and use data. The briefings are conducted by the Kasane site coordinator. To date, the outside patrol teams have provided most of the data from the field while little has come from DWNP patrol teams, who are short of staff and resources. Currently there are 100 staff for the whole of Botswana and only about 18 are available for patrolling the Chobe District including Chobe

National Park, making a regular monthly patrol of the site impossible.

Information on elephant carcasses and patrols conducted in Chobe National Park has been presented to the CITES Secretariat and to the CTIES southern Africa regional coordinator in Namibia.

Twenty-four carcasses have been reported, 13 resulting from natural causes. The department was faced with poaching problems in April and May 2001 when 11 elephants were poached around Nogatshaa area and Maikaelelo Forest Reserve. An aerial patrol and more intensive ground patrols were conducted in the area.

A CITES MIKE delegation consisting of the newly appointed director of the MIKE programme (Africa-Asia), the MIKE subregional support officer for southern Africa, and four national coordinators from Eritrea, Kenya, Tanzania and Uganda recently visited Botswana to learn how MIKE was being implemented in the country.

After their visit the MIKE director made the following recommendations for the Botswana group:

- Establish and maintain subregional dialogue, to be handled by the subregional coordinator. Representatives should be selected for a meeting on data management and procedures to be held in 2002.
- Analyse and summarize MIKE data collected by Botswana and use this to develop a system for analysing the data.
- Establish an 18-month work plan incorporating the funding applied for from the Botswana Wildlife Conservation Trust Fund in conjunction with funds currently available for MIKE.
- Identify training needs for Botswana and the southern Africa subregion and plan a training schedule for 2002.
- Link Botswana's initiative on GIS development into the overall MIKE data management system.
- Find solutions to the human–elephant conflicts along the borders of Chobe National Park.

The director of the MIKE programme, Nigel Hunter, agreed to initiate a meeting with the CITES Secretariat for the elephant range states in September 2002 in preparation for the CITES (COP12) meeting in Santiago, Chile in November, but with MIKE progress as the central theme.

Problems faced implementing MIKE

Patrol team forms incomplete. Most of the information that is missing is because of the need for secu-

urity. Other missing information, such as the coordinates and exact locations of the carcasses or patrol routes, is because of the lack of GPS. The information is crucial for plotting the patrols and carcass locations.

Shortage of GPS and cybertrackers for recording geographical positions of the patrol routes, carcasses and illegal activities. It is important to record these GPS coordinates as they show the department the areas where more continuous patrolling is needed. Presently, there are only a few GPS in use; most park staff do not have the equipment as funds for purchasing it are not available.

Lack of training in implementation of MIKE such as use of GIS ArcView mapping in plotting maps, and analysis of data using a spreadsheet. Staff should be trained in mapping and in using databases to compile and analyse the available data. Such training would guide management in assessing the project and enable it to see where more effort is needed. Also it is important to give the patrol teams the results of the data analysis to show them that their efforts are appreciated.

Shortage of vehicles for continuous patrol teams in the field. DWNP patrols lack vehicles to conduct patrols and must depend on vehicles from outside.

Shortage of manpower to conduct MIKE activities. As MIKE is an additional activity for the department, it was not budgeted for. Staff at Kasane can provide only three teams for patrolling the whole district. It is impossible for them to patrol the site area monthly as they have other areas to cover as well. There is also a shortage of manpower and resources to conduct aerial patrols, as emergency issues frequently arise that need to be covered urgently.

Data collection problems such as recording teeth, hind foot and shoulder measurements. There are problems in recording the teeth as it takes time for the jaws to rot and loosen so that measurements can be taken. Sometimes the carcass is found at a place so distant that it is not economical to go back just to measure the teeth.

Lack of current updating on MIKE issues and the implementation programme in other countries and regions.

Lack of feedback from the CITES Secretariat and regional coordinator for southern Africa on reports submitted to them. Staff are not sure if they are recording what MIKE needs. Since MIKE was implemented in Botswana, no feedback has been received

on quality or adequacy of data collection. This has discouraged the patrol units.

Recommendations

The Department has submitted a proposal to the Board of Wildlife Conservation Trust Fund requesting funds to purchase equipment needed for the implementation of MIKE and also for

- training in basic and advanced Arcview and Access in 2002
- training in the use of GPS and cybertrackers
- standardization and supplemental training of field staff in 2002
- development of practical ways to determine carcass age

- setting of guidelines on ivory storage and cataloguing

The Department should conduct quarterly aerial patrols in addition to the ground patrols in the site area. The aerial patrols should cover remote parts of the park not accessible by vehicle.

Data collected for the MIKE programme should be at the site and national levels. Training in storing data and improving its analysis needs to be developed at the site area. Implementers will then be able to appreciate and value their own efforts.

Procedures need to be set up as a general MIKE guideline for testing carcasses for anthrax, using experience from Etosha National Parks, Namibia, as well as from Botswana.