CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

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PROGRESS IN THE IMPLEMENTATION OF MIKE IN AFRICA

This report covers the period from June 2007 to June 2008 and was compiled by the MIKE Central Coordination Unit with input from the MIKE Sub-regional Support Units.

1. MIKE developments in Africa

Administrative and institutional matters

Information on the methodology, structure, preliminary findings, data analysis and funding of the MIKE programme has been provided to the meetings of the Conference of the Parties and the Standing Committee since 2000. The most recent briefings were presented in 2007 in documents SC55 Doc. 10.2 (Rev. 1) (containing the MIKE baseline information) and CoP14 Doc. 53.3.

The structural organization of the MIKE programme results from the implementation of Resolution Conf. 10.10 (Rev. CoP14) on *Trade in elephant specimens* and decisions by the Standing Committee.

During Phase I (mostly 2001-2005), the MIKE monitoring programme has been set up in 69 sites in 40 elephant range States on two continents. MIKE sites were equipped with computers, software and GPS; MIKE Site and National officers were trained in MIKE monitoring methods, computer database and GPS use, and Law Enforcement Monitoring; population surveys were supported; a MIKE database developed; etc. Funding for Phase I totalled around 4,000,000 USD (multiple donors). A transition Phase (2006) was covered with bridging funds.

An important goal has been to collect MIKE baseline information from these sites as defined by the Standing Committee. This involved: (1) the geographical scope of the baseline expressed in number of MIKE sites in the elephant range in African and Asia – the size of the sample; (2) the nature of the data to be collected from each of these sites, i.e. the status of elephant populations; observed elephant mortality and causes of death; efforts to collect details about elephant mortalities and law enforcement; and a description for each site of some 30 biogeographical, socio-economic and political factors that may influence its elephant situation; and (3) a preliminary statistical analysis of all this information. This was accomplished in 2007 for a total of 51 sites in Africa and 20 in Asia, and the MIKE baseline was accepted by the Standing Committee in May 2007, allowing MIKE to become fully operational.

Phase II of the MIKE programme runs from 2007 to 2011. A new MIKE Central Coordination Unit (CCU) started in April 2007 within the offices of UNEP's Division of Environmental Conventions (DELC) in Gigiri, Kenya. All administrative and financial services are provided by the Division of Administrative Services of UNON, including human resources and fund management, accounting, procurement, and other general support services. The CCU is staffed by the MIKE Coordinator, the Data Analyst and a Programme Assistant. A Financial Assistant is being recruited.

In March 2007, a general agreement was reached between the CITES Secretariat and IUCN regarding the placement and logistical support for the four African MIKE Sub-regional Support Units (SSUs) and the provision of administrative services to the SSUs. Subsequently, four separate project agreements were concluded with IUCN's sub-regional offices for Central, East, Southern and West Africa. The MIKE SSUs are operational in West, Central and East Africa, located in Ouagadougou, Yaoundé and Nairobi respectively. The recruitment of staff for SSU-Southern Africa, based in Pretoria, has been initiated.

Most funding for the African component of MIKE Phase II was secured until 2011 thanks to a grant from the European Commission. Phase II builds on achievements, strengths and evaluations of the preceding Phase. It should allow the MIKE monitoring programme to significantly develop and to show its full benefits, particularly now that a baseline was established, such as operating as an early warning system that identifies problem hot spots, and being an indicator of success for elephant conservation actions.

Phase II activities for Africa to which the European Commission grant can contribute include training at site, national and sub-regional level; equipment for MIKE sites; support to elephant population surveys, and elephant meat and ivory trade studies; technical and scientific improvements of the MIKE analytical and reporting framework; facilitating the operations of the MIKE National and Site Officers; collaboration with ETIS and IUCN; regular meetings for MIKE stakeholders and decision makers, including the Sub-regional Steering Committees; and continuous support to range States through the MIKE CCU and the four SSUs.

The MIKE staffing is completed in three of the four SSUs as follows: SSU-West Africa: a Sub-Regional Support Officer (SSO), a Deputy SSO and an Administrative Assistant; SSU-Central Africa: a SSO, a Deputy SSO and an Administrative Assistant; SSU-East Africa: a SSO and an Administrative Assistant. Still to be recruited for SSU-Southern Africa are a SSO and an Administrative Assistant.

In 2007, the new structure and operations of MIKE during Phase II were presented and discussed at Sub-regional Steering Committee meetings in Central (N'djamena, May 2007), East (Murchison Falls, July 2007) and West Africa (Ouagadougou, August 2007). These concluded *inter alia* on Terms of Reference for Sub-regional Steering Committees and on priority interventions, concerns and expectations that hopefully can be addressed during Phase II.

The CCU organized a meeting for the MIKE and ETIS Technical Advisory Group in March 2008 to agree on the technical and scientific aspects of the MIKE programme for the years to come. It also assisted the CITES Secretariat in convening a meeting for African elephant range States.

The CCU organized meetings for the MIKE-ETIS Subgroup of the Standing Committee in the course of 2007, until the 14th meeting of the Conference of the Parties (CoP14) in June. The (new) Standing Committee may decide at its next meeting in July 2008 to re-establish this MIKE-ETIS Subgroup (see document SC57 Doc. 33.5).

Technical matters

In the last twelve months, a comprehensive review of all the technical aspects of MIKE operations has been undertaken. Guided by recommendations made by an external evaluation of MIKE Phase I, conducted in 2004, as well as by the need to put MIKE in a firmly sustainable basis, the review has focused on aspects such as database design and development, choice of computer platforms, hardware and software, allocation of resources to population surveys, reporting frameworks and forms, etc. The findings of this review were extensively discussed at the sixth meeting of the MIKE Technical Advisory Group (TAG), held in Entebbe, Uganda, on 3-5 March 2008 (TAG6). The major findings of the review and the recommendations emanating from TAG6 are summarized below.

Site software

One of the problems affecting the dataflow from MIKE sites through National Offices, Sub-regional Support Units and on to the MIKE CCU for analysis is the irregular use of the MIKE database at the sites. In order to enhance the usefulness of the MIKE system to the range States and provide incentives for more thorough data collection and consistent data flow, MIKE is planning to deploy a more comprehensive information system that can be useful to wildlife authorities and protected area managers well beyond the requirements of MIKE. The proposed system will allow wildlife authorities and park managers to manage, analyze and display information on other types of illegal activities (such as illegal harvesting, charcoal production, etc) and other species in addition to elephants.

Designed as an integrated database management system, MIST (Management Information SysTem) is a powerful and user-friendly information system designed to service protected area and park management needs. Originally developed for the Uganda Wildlife Authority and under continuous development for over 10 years, MIST has since been adopted by a number of wildlife authorities, including those of Ghana, Rwanda, the Democratic Republic of Congo and Cambodia. The Wildlife Conservation Society (WCS), an important MIKE partner, also uses it as the information system of choice in all the sites where it works.

The following points summarize the salient features of MIST:

- GIS (geographical information system) mapping interface with data entry and data analysis for ground patrols, air patrols, park visitors, local resource use, aerial survey estimate calculation, research activities, and occasional observations.

- Data entry forms with global positioning system (GPS) Downloading of waypoint data directly into the database.

- Visual report and query generator with user-selectable options that can be added or changed to suit specific needs.

- Annual operations planning database for accounting and management of local projects and operations.

- Partner projects database to track and manage donors grants and externally funded projects.

- Library database for accessing physical and virtual library materials, reports and documents, as well as a contact and address database.

- Automated and secure synchronization of data to the wildlife authority headquarters, where Internet connectivity is available, to provide timely and up-to-date information. Where no Internet connection is available, synchronization is accomplished by means of replication files copied on USB sticks or CD-ROM.

- Vastly simplified data collection forms.

The TAG recommended that, provided a pilot trial of MIST proves successful, the system be deployed to replace the existing MIKE database at all MIKE sites. Several countries have expressed an interest in being part of the pilot phase recommended by the TAG. A presentation by Uganda on its experiences with the MIST system will be made in the course of this meeting.

In order to maximize the benefit to range States of adopting the MIST system, MIKE plans to work with Wildlife Authorities and Wildlife Training Colleges to integrate MIST training into the regular training curricula.

Site hardware and data capture equipment

A number of MIKE sites have experienced problems with the computer equipment supplied under Phase I. Most problems are related to the electrical power infrastructure at the MIKE Sites, with viral infections also playing a role.

Many sites are not connected to the electricity grid and depend on generators for their electricity needs. In a number of sites, generators are only switched on after dusk, forcing the MIKE Site Officers and their assistants to enter MIKE data after working hours. More frequently than not, this problem results in MIKE data not being entered into the MIKE database at all.

Several machines have suffered viral infections since they were provided. This is usually caused by careless use and insufficiently frequent updating of the antivirus software provided with the machines. The effects of computer viruses can range from mere annoyance to data loss and even hardware malfunction. While updating the antivirus software is the responsibility of the sites themselves, with the assistance of National Officers, the difficulty of doing so at the required frequency (daily) is recognized.

In order to mitigate power problems in a cost-effective and sustainable manner, MIKE plans to progressively replace the supplied computers by solar-powered workstations. In order to do so within the available budget, computers will be replaced on a needs basis, following objective criteria.

The solar powered computers under consideration are ultra-low-power and fully functional desktop computer engineered for use in challenging environments. It incorporates existing, proven hardware products from leading manufacturers with open source software into a single compact unit that more than meets the needs of operating in remote locations.

Key design features include:

- Very low power consumption (total power consumption of 18 watts at peak operation including LCD monitor) allows the units to operate efficiently from solar or other power sources.

- Solid state design (fanless, driveless) improves durability in hot, humid and/or dusty environments.

- Computer mounted on the LCD to reduce dust collection and improve security.

- Flexible use as networked or standalone computer for a variety of use case scenarios.

- Easy-to-use environment enables novice users and administrators to be productive with a minimum of training.

- Open source operating system (Ubuntu Linux) virtually eliminates viruses and does not require bandwidth-intensive online protection services.

- Easily replaceable components – USB mouse, keyboard, standard laptop style RAM and storage memory – in case of breakage or loss.

MIKE database development

An important MIKE mandate is to analyze trends in levels of illegal killing at the sub-regional and continental levels. In order to accomplish this task, a data management system is required to integrate data from the different MIKE sites. Such a system is also required to perform effective quality control tasks, and prevent the circulation of multiple, asynchronous data sets within the system.

Currently the MIKE data management system consists of a collection of Microsoft Access databases, one in each site. As data flows from the site to the national, sub-regional and continental/global levels, copies of the site database are transferred up the chain. The site database provides a somewhat cumbersome method of manually exporting data to a spreadsheet format, which can then be transferred to the CCU for integration into a larger database. However, there are currently no provisions for integrating the data in a larger meta-database although this is contemplated to happen during Phase II.

At present, data are not flowing smoothly from the site level up to the national, sub-regional and continental/global levels. Obtaining data from a site often requires the SSO to travel to the site, collect the data, bring it to the National MIKE Officer for quality control (QC) and approval, and take it back to the SSU for transfer to the CCU. It is not realistic to expect this to happen more than once per year per Site, and in fact the actual frequency might be lower.

In view of the need to establish a central database and in light of the foregoing, MIKE plans to develop an integrated system based on MIST, with site databases that automatically synchronize their data with a central database hosted on a web server. MIKE National Officers, Sub-regional Support Officers and the Data Analyst access the central database to perform their duties. This would involve connecting all MIKE Site and National Officer computers to the Internet, but the costs of doing so are bound to be considerably lower than visiting each site at the required frequency. This plan has been reviewed and endorsed by the TAG.

Survey Priorities

The design of the MIKE system requires that elephant population surveys be regularly conducted at all MIKE sites. Several range States already conduct recurring, high quality surveys as a matter of routine, whereas in other range States elephant population surveys are seldom conducted and when they are, they tend to be of variable quality. In order to make the most effective use of limited resources and manpower, the TAG recommended at its sixth meeting that the MIKE programme concentrate its assistance to population surveys on those sites where it is needed the most. To that end, an objective survey priority-setting system has been developed which was endorsed by the TAG. Based on the quality and recency of previous surveys, the system is explained in detail in the minutes of TAG6, available from the MIKE website. The TAG also advised that a 5-year interval for elephant population surveys would be adequate for the purposes of the MIKE programme and would not affect the statistical validity of MIKE analyses, as it is not the objective of MIKE to monitor trends in elephant populations but rather trends in levels of illegal killing.

MIKE analysis

Following the preliminary analysis of MIKE data which was undertaken in 2007 in the context of the MIKE Baseline definition by the Standing Committee, a new analysis has recently been undertaken in collaboration with the Statistical Services Centre at the University of Reading in the United Kingdom. This analysis uses carcass data from 47 MIKE Sites in Africa and ranging from the beginning of MIKE activities up to the present. Preliminary results suggest a strong relationship between the level of illegal killing of elephants in MIKE sites and the conservation effort invested by countries, and the prevailing levels of governance and social welfare. The results of this analysis are being presented separately as part of this meeting.

Influencing Factors

The MIKE system attempts to relate patterns of illegal killing of elephants to a suite of potentially influencing factors (covariates) in order to control for potentially spurious correlations and to highlight variables, or combinations of variables, that are significantly correlated with levels of illegal killing. A list of 28 potentially influencing factors, represented by country and site attributes, was presented in the MIKE baseline analysis in document

SC55 Doc 10.2 (Rev 1). These attributes largely consisted of qualitative categorical variables with 5 possible scores (1 to 5), ostensibly ranging from most elephant-friendly to least elephant friendly. In order to improve the robustness of the MIKE analyses and to reduce subjective bias wherever possible, it would be preferable to identify a number of objective, quantitative and statistically relevant variables. Ideally, this information should be obtained from external sources or from quantitative data collected by the MIKE programme itself in the course of its work. Recognizing this need, a TAG working group on influencing factors is being established to develop a suite of quantitative proxy variables (spatially explicit wherever possible). These could include, among others, the following:

Variable	***Proxy***	***Source***
Ecosystem type	% Tree cover	GIS - satellite imagery
Levels of Human-Elephant Conflict (HEC)	HEC complaints as % of all Human-Wildlife Conflicts in buffer zone	African Elephant Specialist Group/HEC Working Group; MIKE data
Illegal Killing History	Average level of illegal killing in previous 5 years	MIKE data
Adjacent land use	% Elephant range in buffer	African Elephant Database
Land use within Site	% Area devoted primarily to human use (agriculture, etc.)	NASA - Global land cover
Human population pressure	Human population density	Landscan
Water availability	Surface water / area	GIS / satellite imagery
International border proximity	Distance to nearest international border	GIS
Cross-border poaching incursions	% Foreigner arrests	MIKE data
Civil / military conflict	Estimated number of troop/militias per unit area	MIKE Site officer (annual report)
Tourist activity	Tourist beds per unit area (and occupancy rates)	Wildlife or tourist authorities; MIKE National Officers
Research activities	Researcher days per unit area	Wildlife authority; MIKE National Officers
Management	Annual management budget per unit area	Wildlife authority; MIKE National Officers
Law Enforcement Monitoring (LEM) cover	Average LEM cover and variance	MIKE data
Ivory markets	ETIS market scores (scale and regulation)	ETIS data and analysis
Meat trade	Scores from quantitative studies?	MIKE bushmeat study? TRAFFIC?

Corruption / Governance	Corruption perception index; Good Governance indicators	Transparency international; World Bank
Judicial severity	Rate of application of maximum penalties	Wildlife authority; Ministry of justice; law society?
Illegal arms	Estimated weapons per 1,000 inhabitants	Small arms surveys?
Elephant population	Elephant population density from surveys	African Elephant Database

2. The MIKE Sub-regional Support Unit for Central Africa

Training and capacity building

The SSU provided ongoing on-site training to MIKE Site Officers as well as to other staff at the site that were involved in the collection of MIKE data, law enforcement activities or general large mammal research. This was to reduce the impact of the high staff turnover. While the sites in DR Congo could not yet been visited, most Site Officers have benefited from this training over the last 12 months. MIKE National Officers from the Central African Republic and Gabon were trained in computer use and data management, and the one from DR Congo in the extraction of information from other available databases for input into the MIKE database. This should improve their management of the MIKE databases and ensure the routine production of monthly reports. But despite these training efforts, data is still not as regularly provided to SSU-Central Africa as required.

No training at regional level was undertaken during the period. Following the recommendations emanating from TAG6 with regarding new MIKE database routines and protocols, new accompanying capacity building tools will need to be developed. Relevant sub-regional training might therefore only be envisaged by late 2008 when these are ready.

MIKE data collection, analysis and dissemination

New MIKE data was collected from a number of sites. These data were usually picked by SSU staff in the course of their site visits. Some sites, like those in DR Congo, compiled information in datasheets but these could not yet be computerized for automated transmission. ICCN (Institut Congolais pour la Conservation de la Nature; CITES Scientific Authority) explained that this had different reasons, including broken down computers, no electricity, no staff on site that could input data, lack of motivation, etc.

At the moment, there is little capacity for analyzing MIKE data at the sub-regional level, but this is expected to improve when the modified MIKE databases and analytical tools are deployed.

Infrastructure, hardware and software

A complete inventory of the status of the MIKE hardware and software in the sub-region was undertaken. All the computers that had been given to the Site and National Officers were having problems (site computers were not working in Chad and Gabon, and only partially in DR Congo). Some problems could be fixed, such as the computer of Nouabale-Ndoki. Unfortunately, it was only by physically visiting the sites that the status of the computers became clear. Site Officers usually did not inform the SSU about malfunctioning computers. One of the major causes of these breakdowns was viruses. All computers had AVG installed, which needs regular updating. The AVG license that is presently being used expires in July 2008.

There was no hardware procurement during this period. The Sangha Site still has no computer.

Population surveys

A successful survey was carried out in Waza by WWF CARPO. WWF CARPO also initiated a large mammal survey in Boumba-Bek. The SSU was informed and participated in the first part of the surveys. The number of transects increased with new ones added to the 47 original MIKE transects. This was necessary because WWF wanted to meet up with the recommendation in Cameroon's national plan. The fieldwork should be completed by July 2008, and the data analysis finished in August 2008.

Assistance to MIKE Officers and MIKE sites

Assistance to the National Officers and the sites has mostly been in the way of training and technical support (see above). Further assistance will be provided to Site and National Officers, including financial support to facilitate their communications and MIKE data collection and reporting activities. This has already benefited the National Officers for Cameroon and Chad, and the Site Officers from Boumba Bek and Chad. Officers from other sites and range States are to follow once that transfer modalities and funding justifications are clarified.

Local, national or regional meetings

In Cameron, the new SSU-Central Africa team was presented to the former Director of Wildlife for Cameroon and his intervention for conducting field work at MIKE sites in Cameroon was solicited. Two meeting were organized with the present Director, one in his capacity as the acting President for the MIKE Sub-regional Steering Committee and another in his capacity as the new Director of Wildlife. He was requested to name new Site Officers for all Cameroonian MIKE sites, resulting in new appointments in two sites, and briefed on the Terms of Reference of the Sub-regional Steering Committee. Also Chad has a new Director of Wildlife who was met with to fully brief him on the MIKE programme.

In DR Congo, a meeting was held with ICCN, the agency that manages the country's National Parks and thus all MIKE sites, to address the problems regarding transfer of data from Site Officers to the National Officer. While there had been patrols (from monthly reports from sites), data had not been reaching the National Officer or entered into the MIKE database.

After the successful meeting of the MIKE Sub-regional Steering Committee in N'djamena, Chad, in May 2007, the next one is planned to be held in Cameroon later this year.

Outreach and communications

A flyer on the MIKE programme in the Central African sub-region was produced and distributed during the Central Africa Moist forest conference that took place in Libreville in November 2007. The distribution of these flyers is ongoing to range States, partners and general public. The MIKE SSU stayed in touch with all MIKE sites through regular emails and phone calls were available.

Relationship with range States, NGOs and other stakeholders

There was good collaboration with the NGO's working in MIKE sites, which professed their continuous support for MIKE activities. They included WWF, WCS and recently ECOFAC which had taken over the management of some sites in the Central African Republic. The relationship with IUCN, which houses SSU-Central Africa, remained excellent, also after IUCN's internal restructuring whereby the IUCN Regional Office of Central Africa (ROCA) was taken over by a Programme Office for West and Central Africa (PACO). The headquarters of PACO is Ouagadougou although there is a Cameroon Programme.

The relationships with the range States in the sub-region were generally good although interactions with Equatorial Guinea were sometimes a bit tense. The Director of Environment of Equatorial Guinea had been informed that the situation whereby the MIKE National and Site

Officers were from two different ministries had caused significant problems which had been brought to the attention of the CCU and TAG and needed resolving.

During SSU's site visits, it was noticed that MIKE was more and more appreciated by the range States. The MIKE programme was gradually being known by the general public and this was good. At the same time, there were a lot of expectations from MIKE in terms of training, regular meetings and support. Ranges states have asked for renewed equipment and/or regular maintenance of old material. Motivation (i.e. payment to government staff for undertaking MIKE routine activities) was still brought although it had repeatedly been pointed out that this was neither the purpose nor the mandate of the MIKE programme.

Fundraising

A pre-proposal for undertaking large mammal inventories in the Central African sub-region had been submitted to the office of the US Embassy Regional Environmental Office for West and Central Africa at Accra.

3. The MIKE Sub-regional Support Unit for East Africa

Administrative and institutional issues

Following the signing of an over-arching MoU between the CITES Secretariat and IUCN, a scaled-down, adapted version was concluded on 4 April 2007 between the CITES Secretariat and the East African regional Office of IUCN about the administrative assistance that IUCN provided to MIKE SSU-East Africa. The implementation of this MoU is currently ongoing.

MIKE SSU-East Africa was relocated from Nairobi to Kampala in April 2008 under the terms of the agreement with the IUCN Regional Office for East and Southern Africa (IUCN ESARO). The move to Kampala was decided because it was cost-effective, resulting in the reduction of a number of operational expenses (rent, travel, etc.) and increased the geographical presence of the MIKE programme in the region (CCU already being based in Nairobi). The office arrangements agreed between IUCN, CITES/MIKE and the Uganda Wildlife Authority should also enhance the integration of the MIKE programme into national government institutions. The new arrangements were expected to benefit the effectiveness and sustainability of the MIKE programme in East Africa.

Meetings

The Sub-regional Steering Committee meeting for Eastern Africa was held at the Murchison Falls MIKE site in Uganda on 19-20 July 2007. The meeting was attended by delegates from Eritrea, Kenya, Rwanda, Tanzania and Uganda. In addition to the range States delegates, the CCU and a representative of the European Commission participated. The meeting agreed on a set of goals to be achieved in the next coming years and a set of intervention actions to achieve those goals.

Frequent meetings with MIKE National Officers have taken place throughout the period to target training needs for Site Officers and enhance data flows, and are ongoing.

SSU-East Africa helped to organize the 6th meeting of the MIKE and ETIS Technical Advisory Group Entebbe, Uganda in March 2008.

Procurement

A complete inventory of the status of the MIKE hardware and software in the sub-region was completed. No major procurements have been conducted recently but the purchase of computer systems, GPS units etc is planned for the second half of 2008. An internet connection modem was procured for the Akagera National Park (Rwanda) to ensure that the site computer was regularly updated to avoid viruses.

Training

Training continued to form one of the major activities of MIKE, aimed at building institutional capacity within the range States.

MIKE SSU-East Africa collaborated with the Tanzania Wildlife Research Institute (TAWIRI) to train 13 participants from Cameroon, Uganda, Rwanda and Tanzania in aerial elephant surveys methodologies. The training included both theory and practical sessions and was aimed at providing skills necessary for conducting aerial surveys in savannah ecosystem, based on the MIKE aerial survey standards manual. Survey design, execution, analysis and reporting were covered in an intensive course that lasted 7 days from 3 to 10 October 2007 in Arusha, Tanzania.

The MIKE CCU planned a redesign of the MIKE database in order to conform to range State requirements and meet TAG recommendations. Consequently, database training was undertaken sparingly to avoid misallocation of resources. However, four staff from the Akagera National Park (Rwanda) were trained in the MIKE database version 1.06, as well as in direct spatial data download into MIKEDB using GPS utility software Version 4.20.1. During the same trip, the MIKE computer was re-installed and reconfigured, and partial databases were integrated into one main site database. 10 staff from the Tanzania Wildlife Division were also trained in the use of MIKE database v1.06 as well as GPS data download using GPS utility software.

Population surveys

Uganda conducted two surveys in Murchison Falls and Queen Elizabeth National park using their own resources, while Kenya conducted a survey in Tsavo ecosystem in 2008 using their own government resources. Earlier in 2006, Tanzania had conducted surveys in all its four MIKE sites using their own resources. This showed that range States were incorporating certain MIKE activities into their routine budgets, which was an important milestone to ensure sustainability of the programme. The limited MIKE funding available to support elephant population surveys during the second phase of MIKE implementation shall be objectively allocated based on priorities agreed to at TAG6.

Opportunities

In Eastern Africa, the majority of the staff engaged in MIKE activities are well-trained and clearly understand the importance and value of monitoring towards the achievement of conservation objectives. As long as range States engage in ensuring that such staffs remain committed in undertaking MIKE activities, the programme implementation will be successful.

There is potential in strengthening existing synergies with other conservation NGOs working in line with the MIKE objectives. Existing collaboration with IUCN, WWF, WCS, FFI, etc. has helped MIKE where resources (human or financial) were required. It is therefore important that such collaboration is strengthened through sustainable strategic partnerships.

The MIKE programme continued to benefit from the commitment, trust and goodwill of the participating countries. The MIKE programme, through its SSUs, needs to ensure that is sustained and encouraged over the long term. A harmonious working relationship is therefore key. An example of this is Tanzania's request to have 240 staff trained in MIKE practices, using their own government resources.

Currently, a vast array of collaborative arrangements exists between range States. The MIKE programme should continue to support and encourage such arrangements by providing a facilitation role that can foster continued dialogue on issues of mutual benefit. In Eastern Africa, this could be achieved through the East Africa Community (EAC), the tri-partite agreement between Uganda, Rwanda and DRC Congo on the management of the Albertine rift, and through promoting cross-border collaboration (e.g. the KSW/UWA collaboration between Kenya and Uganda on joint patrols in Mount Elgon National Parks).

In the last two Sub-regional Steering Committee meetings, the range States from Eastern Africa continued to express interest in bring Sudan and Ethiopia on board as far as MIKE implementation is concerned. While the recommendation was welcomed, the lack of funding to support activities in the two countries was also acknowledged because the two countries were not included in the design of the current phase. However, should the two countries offer to engage in MIKE using their own resources, it would be possible for SSU-East Africa to provide training on all relevant aspects related to MIKE implementation. Another possibility would be to work with other partners and solicit support that can roll out MIKE activities in Ethiopia and Sudan.

Challenges

The progress of MIKE, especially at site level, has been marred by frequent staff turnover. Only one (1) staff out of the 25 trained at the initial implementation workshop for MIKE in 2002 still works on MIKE. It is not uncommon for certain sites to have changed site officers more than five times over the last 6 years. This largely affected the continuity of the programme at site level as well as compromises data quality because new officers needed to be trained each time this happens. Integrating MIKE training into normal wildlife curricula would go a long way in solving these turnover problems.

Population surveys are very expensive in general, regardless of the method used. It is important for range States to consider allocating some of their own resources to population surveys as dependency on donor funds will not be sustainable. Good progress has been made over the last two years in which countries have conducted surveys using their own resources for MIKE sites e.g Tanzania (4 surveys in 2006), Uganda (2 surveys in 2007) and Kenya (1 survey in 2008)

Most sites are located in remote areas and this largely affects the flow of data from sites to the National Officers and consequently to the sub-region. This affects the time during which feedback and high level quality control can be achieved. Indeed, some of the actions required as a result of the facts may get time-barred because of the delay in data flow from sites across the different levels. With technology, this needs to be changed in the near future to allow real-time responses and data quality control when necessary.

4. The MIKE activities in Southern Africa

Institutional arrangements and staff

The Southern Africa Sub-regional Support Unit has remained unstaffed and closed throughout this reporting period. After a number of administrative challenges were overcome, a Memorandum of Understanding between the CITES Secretariat and the newly established IUCN Regional Office for Eastern and Southern Africa (IUCN ESARO) was concluded, paving the way for the reopening of SSU-Southern Africa, to be hosted by IUCN in Pretoria (South Africa), and the recruitment of a Sub-regional Support Officer.

Meetings

An informal meeting between the MIKE Coordinator and representatives from the Southern African range States was held in Pemba, Mozambique, coinciding with the Africa Wildlife Consultative Forum in November 2007. The MIKE Coordinator briefed the delegates on the new MIKE institutional arrangements and the plans for the revival of the Sub-regional Support Unit.

Missions

The MIKE Data Analyst visited Botswana, Mozambique, South Africa, Zambia and Zimbabwe in April-May 2008. As well as briefing the Southern African range States on plans for the further development of MIKE in the Sub-region, the main objective of the trip was to collect data for a new MIKE analysis.

Training

A national training event on MIKE database management was held in Gaborone, Botswana, in April 2008. The workshop was attended by the National Office and field staff, and covered all aspects of data entry, form-filling, data management and reporting. The training workshop was rated as very useful by its participants.

Procurement

A new computer workstation was purchased for the Chobe MIKE site, to replace the previously donated computer, which had been reported as stolen some time before.

5. The MIKE Sub-regional Support Unit for West Africa

Institutional mMatters

An MoU with IUCN BRAO was concluded about its logistical and administrative support to MIKE SSU-est Africa. This allowed the continued implementation of MIKE in West Africa, involving 11 African elephant range States. The SSU team has increased with the recruitment of a Deputy Sub-regional Support Officer, Mr. Boafo Yaw, and an administrative Assistant, Mrs Aline Barry, in January 2008. Unfortunately, Mrs Barry had to leave the SSU after only four months for family reasons. Recruitment of a new Administrative Assistant to replace her is currently underway. In order to facilitate the work of the SSU, new computer equipment has been purchased.

Meetings

A meeting of the Sub-regional Steering Committee for West Africa was organized in Ouagadougou, Burkina Faso, on 30-31 August 2007. The new phase of the programme was presented at the meeting, and the range States expressed their views on what was working well and what needed improvement. This meeting was also the place to review the Terms of Reference and *modus operandi* of the Sub-regional Steering Committee. The next meeting of the Sub-regional Steering Committee is to be held in Ghana later this year.

Training

The various recommendations of the range States, which were further discussed by the African MIKE team, led to the immediate organisation of a regional training workshop conducted in Côte d'Ivoire involving 10 staff from five range States. Further site-based training was organised in Nigeria, Niger and Ghana mainly as a direct consequence of the transfer of Site Officers.

Relations with range States and other institutions

SSU-West Africa represented the CITES-MIKE programmer in the sub-region by keeping high level contacts with the wildlife authorities of the range States. Briefing meetings were held constantly with the Chair of the Sub-regional Steering Committee. The visits to the Minister of Benin, the Permanent Secretaries of Benin, Burkina Faso and Niger, the Steering Committee members of Benin, Burkina Faso, Niger and Ghana had as fruitful outcomes the nominations of Sub-regional Steering Committee members, National Officers, Site Officers and the involvement of Ghana in the organisation of the next Sub-regional Steering Committee meeting, which is to be held in late November 2008 in Accra.

SSU-West Africa developed partnerships with other organisations in the sub-region for the conduct of priority activities, such as CI and FFI for the elephant survey in Sapo National Park (Liberia) and WWF for the survey in Tai National Park (Cote d'Ivoire).

Outlook

With the political will of the range States and the availability of field staff and their eagerness to learn, it is hoped that the difficulties encountered during the initial years of implementing MIKE, namely frequent change of staff, conflict of competences between divisions in the same country, unavailability of certain directors, lack of communication between range States and lack of equipments and other support, will be overcome.