

Monitoring the Illegal Killing of Elephants

Report on the MIKE Database Training Workshops

Executive Summary

Introduction

The first MIKE Database Development and Training Workshop (Module 1) was held in Windhoek in December 2002 to further the MIKE implementation programme in regard to getting the MIKE DB ready for use at the site and national levels and to outline the training programme for the MIKE DB. This meeting was attended by the MIKE staff (Director and Subregional Support Officers), together with the MIKE Data Development Support Officer (DMSO), Rene Beyer, MIKE DB Programmers, Anthony Robertson and Alice Jarvis, and the MIKE Data Management Training Officer (DMTO), Karen Beardsley of the Information Center for the Environment at the University of California Davis.

A further workshop (Module 2) for reviewing progress and finalizing the preparation of the MIKE DB training modules was held in Accra in April 2003. Module 4 provided training for the MIKE Subregional Support Officers in terms of strengthening their GIS skills.

The MIKE DB training curriculum was therefore organized into two modules : Modules 3 and 5. The purpose of the Module 3 workshops was to familiarise the range States' MIKE National and Site Officers with the MIKE DB and to review the overall MIKE data entry and transfer procedures. This included a detailed review of the MIKE Field Forms in the database, and a complete description of the MIKE data entering and data transfer protocols.

The purpose of the Module 5 workshops was to review changes in the MIKE DB since Module 3 training, to teach National and Site Officers how to update and upgrade the MIKE DB, to assist Officers in entering their own data into the MIKE DB, and to demonstrate how GIS will be used to link the MIKE DB and view data.

Module 3 training was held between May and July of 2003. The follow up Module 5 training was held between January and April 2004. This summary report presents the outcome and recommendations of both Module training workshops.

A. Module 3 Training Workshops

A1. Goals and Objectives

The Module 3 workshops were held in each of the four MIKE Sub-regions in Africa in various cities (Accra, Kampala, Windhoek, Ouagadougou, Nairobi, Douala and Kigali). They were taught by a team of instructors led by the DMTO and the Sub-regional Support Officers (SSOs) using a standardised training curriculum developed specially for the MIKE Officers.

The goal of Module 3 training was to introduce the range States' MIKE Site and National Officers to the MIKE DB so that they could begin to enter patrol and carcass data into the Database. The goal was also for these Officers to be able to effectively use Antivirus software, data compression software, and CD writing software to manage the MIKE data in a safe and secure computing environment.

Additionally, Site and National Officers need to understand how MIKE data are collected, backed up, and transferred securely on a regular schedule from one level to another (Site, National, Sub-regional, Central Coordinating Unit).

Because the MIKE DB was still under development at the time of the Module 3 training, some aspects of the Database could not be fully covered during Module 3, so the overall goals were not intended to provide all necessary training for use of the MIKE DB. With the release of Version 1.0 of the MIKE DB in September 2003, the curriculum was further developed for Module 5 (to be taught between January and April of 2004) to review and reinforce concepts covered in Module 3, and to teach the additional capabilities of the final Version 1.0 of the MIKE DB.

The objectives of Module 3 were to:

- Review MIKE field forms and data entry process.
- Resolve questions MIKE Officers may have about MIKE field form data in the MIKE DB.
- Know how to use AntiVirus, CD burning, and unzipping software.
- Learn how to enter patrol, carcass, and monthly report data into the MIKE DB.
- Practice loading the MIKE DB Training version and entering field data into the Database.
- Allow MIKE Officers to provide feedback regarding the MIKE DB to the trainers, sub-regional support officers, and database developers.

The Agenda for the Module 3 workshop is annexed hereto in Annex I.

A2. Summary of Module 3 Issues and Results

The reports describing the training workshops in detail are available from the MIKE Central Coordinating Unit (MCCU) in Nairobi. The main issues which arose from the Module 3 training workshops can be grouped into the following areas :

- MIKE forms,
- MIKE database development,
- GIS and Basemaps,
- Data flow protocol, and
- Computer management requirements.

A2.1 MIKE Forms

The review of the MIKE forms in each training session clarified the many questions range States had about the recording of data on the Patrol Report, Patrol Movement Forms, Carcass and Live Observation Forms, as well as the Debriefing Summary and Results.

Many items on the field forms were defined (e.g. what constitutes a new patrol leg in the Patrol Movement form, encountered vs. confronted vs. arrested on the Observations form). It was vital that Carcass reports be distributed and used to report elephant deaths outside of MIKE sites for such elephant mortality data could be fed into the MIKE DB which could then provide early warning indicators to the range States on illegal killings.

The question of how to capture information supplied by non-patrol personnel was discussed. Ranchers, villagers, park staff, many people can serve as informants. In the case of East Africa, some ranchers may actually be running their own patrols and reporting from those. The level of community effort would need to be assessed if the programme is to compare effectiveness of funds spent on additional patrols versus funds spent on community programs.

Due to the confidential nature of Operation Budget information, many National officers raised the concern that they would not be able to provide the data required by section A7 of Monthly reports without contravening internal procedures. A decision was subsequently taken by the programme to remove the budget component completely from the Monthly report. The budget component would be filled by Site Officers with their National Officers in the Annual Reports.

A manual with instructions on sexing and aging of elephants and carcasses, and assessing herd composition is currently being developed and would form part of future training curriculum for the patrol staff.

In all the training sessions, the range States raised their concerns over Human Elephant Conflicts (HEC) and recommended the possible inclusion of a HEC form in the field forms. They saw that this would serve the objective of having MIKE as a management tool to help guide management decisions. The form would be developed

to collect conflict data broadly, not just in the MIKE sites alone. It could give human-elephant interface on the maps and guide management decisions on early warning system, advice on land-use type for example.

In a subsequent SSO meeting held with the MIKE Director in Nairobi in July 2003 to review the outcome of the Module 3 training, those issues raised on the MIKE forms were addressed and resolved. The new versions of the field forms were distributed to the range States.

It was also decided that the field forms be printed in reduced A5 size to facilitate their usage in the fields.

A2.2 MIKE Database Development (Training version)

A Microsoft Access database (Training version) has been developed by the MIKE programming team comprising of Rene Beyers, Antony Robertson and Alice Jarvis. The database, which has been written in English and French, will facilitate data entry, management and retrieval of the LEM patrol data, and will be linked to Arcview 8.x to facilitate the GIS analysis required.

Many of the technical bugs in the MIKE DB that were identified and the modifications requested during Module 3 were resolved and incorporated into version 1.0 of the MIKE DB. Version 1.0 was subsequently launched and distributed to the range States in September 2003.

A suggestion was made to determine the UTM projection parameters for all sites in Africa that would allow each site to use UTM (or Degrees decimal minutes) if they so choose. The algorithm to convert from Degrees decimal minutes and UTM could be coded into either Access or Excel once it has been determined. The reprojection to another view should be feasible at the GIS level and a routine to enable UTM/Lat Long conversion could be developed in conjunction with the GIS spatial routes and basemaps development.

As the MIKE DB is undergoing work-in-progress, it was recommended to adopt software development protocols and a structured way to cope with the changes in the MIKE forms and the MIKE DB. It was recommended that field forms be given version numbers that parallel the current version of the database.

A2.3 GIS and Basemaps

The physical maps that are available at some sites are outdated and there is need to produce maps for each site. Also, in some cases, the boundaries of the sites are not always known. It would be best to define bounding coordinates of each site and include these in the MIKE DB once, in the Site section of the database .

The digitization of basemaps with 5km x 5km grid, ideally to coincide with UTM grids and Decimal Minutes need to be produced. These site maps will be used on field

maps to help patrols with mapping their routes when they do not have a GPS (majority of patrols will not have such). The digital site maps would include if possible the following features such as ecosystem variation, elephant range, human-elephant conflict occurrence, adjacent land use planning, settlement patterns, protected area zones and boundaries, protected area infrastructure, rivers and lakes, road networks and MIKE site boundaries. The outputs of the digitised maps will be produced in ESRI shapefiles using ArcView 3.x or ArcView 8.x.

Each range State was requested to send their existing data/shape files to the SSOs to enable the GIS component of the database to be development as soon as possible.

A2.4 Data Flow Protocol

The MIKE Information Handling and Data Handling, Access and Release Policy and Protocols (Annex II), which have been approved by the elephant range States in Africa and Asia, was disseminated to the participants. It was important for the MIKE Officers to understand that the property rights to the data being collected under the MIKE protocol belong to the range States. This is critical because the range State have voted for the MIKE programme at the CoP and MIKE data is being demanded by the governments. The programme is therefore part of the range States' expectations in regard to their staff duties and responsibilities.

One of the major obstacles to data flow that was raised at the training workshop was the level of staff turnover at the site level. The constant transfer of personnel after being trained in MIKE implementation could affect the continuity and sustainability of the programme. To overcome this obstacle, it is necessary that the SSOs regularly handle the training of new staff during their site visits. A training manual would have to be developed whereby the training of Site Officers on MIKE data protocol and GPS handling could be incorporated as part of the training programme of the wildlife departments. At the same time, it is important that MIKE Officers understand the nature of the programme and be adequately empowered to provide the raw data.

Whilst the personnel turnover is inevitable in some of the range States, the SSOs will monitor the staff movement of Site Officers for the next 18 months and how the range States get on with the MIKE DB. They will also need to work with each country individually to determine the most reliable and safest method for transferring the monthly MIKE CDs from one location to another.

A policy of supplying MIKE Site and National Officers with blank CD-R's and the budget for this to be made available by the programme was discussed. As the MIKE DB is finalized, Site and National Officers need to be given explicit directions for performing backups and transferring monthly and annual reports and data from one level to the next. The procurement and distribution of high quality CDs to the range States need to be handled by the SSOs.

A2.5 Computer Management

While all MIKE Officers have undergone basic computing literacy skills prior to attending the workshop, it became apparent during the course of the training that a strict policy on the proper management of MIKE computers was needed in the follow up training workshop. For instance, the management of password controls and the update of antivirus software on a regular basis (at least monthly) at each MIKE site is necessary. A policy on how to handle site computer repairs and breakdowns also need to be made explicit.

The training facilities in each subregion were variable, and in many cases inadequate. In the future, all training facilities must have each computer checked well ahead of time for the correct operating system, correct software versions, and enough memory for the training course. Once GIS training begins, the requirements for computer facilities will be even more rigorous.

It worked very well to get people to work together (in pairs) through a round of the data entry component of Module 3 and the accessory software training.

A2.6 Results

The goals and objectives of Module 3 were met satisfactorily in all nine training workshops. Most, if not all, of the workshop trainers faced difficulties with computer facilities and database bugs during Module 3. Despite these hurdles, the MIKE Site and National Officers gained the knowledge, skills and abilities required for them to return to their offices with the training version of the MIKE DB on a CD and begin entering data.

A3. Recommendations for Module 3 follow-up and Module 5 preparation

From the training workshops in each subregion, the following recommendations were made by the team of instructors as a follow up and preparation to the Module 5 :

- Teach the updated version of the MIKE DB, including password controls, monthly and annual reports, etc.
- Request that all participants bring real data to the training to practice inputting data from the field into the MIKE DB.
- Include additional computer management training in Module 5 (managing logins and passwords, working with anti-virus software, backing up data, burning CDs, organising data, practicing secure, safe computing).
- Develop a set of questions to ask Module 3 participants in order to assess the success of the training and better prepare for Module 5 training. Review feedback and incorporate suggestions/comments into Module 5 curriculum as needed.
- Train participants to use the new MIKE anti-virus program, AVG.
- Allow 5 days for the training.

- Consider having 2 participants per computer so they can work together and learn as a team.
- Ensure that all training laboratories are fully equipped to be compatible with the MIKE DB (including MS Windows 2000 operating system, Access 2000).
- Ensure that a MIKE computer is available for each Module 5 training session.
- Develop a training manual whereby the training of Site officers on MIKE data protocol and GPS handling could be incorporated as part of the training programme of the wildlife departments.
- Develop a manual with instructions on sexing and aging of elephants and carcasses, and assessing herd composition which would form part of future training curriculum for the patrol staff.
- Adopt software development protocols and a structured way to cope with the changes in the MIKE forms and the MIKE DB. Field forms be given version numbers that parallel the current version of the database.
- Commence digitization of basemaps with 5km x 5km grid to coincide with UTM grids and Decimal Minutes. The outputs of the digitised maps need to be produced in ESRI shapefiles using ArcView 3.x or ArcView 8.x.

B. Module 5 Training Workshops

The follow up workshops were held in each of the four MIKE Sub-regions in Africa in various cities (Douala, Niamey, Kampala, Windhoek, Nairobi and Kampala) and led by a team of instructors and the SSOs using a relatively standardised curriculum developed by the DMTO.

B1. Goals and Objectives

The goal of Module 5 training was to reinforce the training provided by Module 3. It also provided an opportunity to review changes in MIKE Database and Field Forms since Module 3 training. The goal was also for National and Site Officers to learn and review how to use AVG (AntiVirus) and DLA (CD copying) software. Additionally, Site and National Officers should understand how to update and upgrade the MIKE DB, review loading the MIKE DB (Version 1.0), practice entering their own data into the MIKE DB (with instructors and SSOs helping with quality control), and see a demonstration and understand how GIS will be used to link to the MIKE DB and view data.

The objectives of Module 5 were to:

1. Receive feedback from MIKE DB version 1.0 and launch version 1.02.
2. Know how to properly enter Site, Patrol and Carcass data into the MIKE DB
3. Be able to produce Monthly and Annual Reports electronically and send on the reports to the National Officers and SSOs
4. Keep the MIKE computer maintained and free of viruses
6. Demonstrate the GIS link to the database and other spatial queries, routes and maps development, UTM/Lat Long conversion

The Agenda for the Module 5 workshop is annexed hereto in Annex I.

B2. Summary of Module 5 Issues

The reports describing the Module 5 training workshops in detail are available from the MCCU.

The participants had been trained on a training version of the MIKE DB during the Module 3 workshops. For the Module 5 training, the participants were trained on MIKE v 1.0 and were requested to bring actual data on field forms for practice and input.

Site databases of version 1.0 were upgraded to v1.02 during this training session. The MIKE DB v.1.02 was distributed to the participants at the end of the training workshop in February 2004. Details regarding the programming bugs encountered in the MIKE DB v1.0 prior to the launch of v1.02 will not be included in this summary.

B2.1 MIKE Database Development

Major changes to the MIKE DB were undertaken from the training version (May 2003) to version 1.0 (September 2003) and through to version 1.02 (Feb 2004). A summary of these changes are as follows :

Structure

The database was split into Front End, Back End and the Opener database, i.e. MikeSI, MikeST, and MikeDB.

This split structure of the MIKE DB was necessary to satisfy security requirements as the Opener database sends a second password to the interface when opening the actual database. The creation of the Opener database is important for compacting both interface and database tables, thus avoiding the problem of users being requested for password on closure of the database each time.

The split structure also allows a simple updating or upgrading of the interface. Preliminary work on the GIS link (MikeSQ) to allow querying of the database was incorporated and would soon be completed for subsequent versions.

Back up

A routine back up mechanism was set up to automatically store a backed up copy of the database in a set location on the computer. Two backups of at least 7 days apart will be kept under this routine/facility.

Editing

The Database was set up to allow a 72-hour grace period for data entry or re-edit where required. Beyond this grace period, the field staff would be prompted to provide the reason for any edit required by means of a pop up form which displays date, time, person, reason for editing, original value, changed value etc. The flagging of incomplete data entry of records for patrols/months was also incorporated in the Database.

Permissions/Password form

The Database was further structured to have default passwords at different administrative levels :

- Site Officer
- National Officer
- Sub-regional Support Officer

An overall administrator's password to override and reset default passwords is available to the SSO.

Beta Testing the MIKE Database

As the MIKE DB was still being beta tested during Module 5, this made it difficult for some participants to be confident in their abilities to master data entry. For future workshops, a possible solution would be to plan one or two training sessions (one French and one English) about 10 days before any of the others. The trainees brought to those sessions could be selected from the more advanced users, and could run through the next version with enough time to give the programmers time to fix the programme bugs before the next version is 'released' at the trainings.

Upgrade of the MIKE Database

This was an important element of the database development as the MIKE DB will continually be upgraded. A patch had been developed by the database developers to allow data entered into previous versions of the database to be transferred to the upgraded version of database.

B2.2 GIS and Basemaps

As part of the training curriculum for Module 5, the GIS link with the MIKE DB as well as the UTM/Lat Long conversion were developed by the GIS Programmers (Michael Thomas Group Inc.) for demonstration purposes at the training workshops.

The aim was to demonstrate a link between the MIKE DB in Access and ArcGIS, ArcView 8.2 that would create a geodatabase with the following layers : patrol waypoints, patrol observations, live observations, carcass observations from both patrol and non-patrol sources. These layers are to be displayed in a customized ArcView map window and appropriately symbolised. The source data would be provided by the MIKE DB programmers through a query and/or table in MS Access. The user should be able to start a program from within the MIKE DB that creates and displays the layers in ArcView. The user would have the option to save the ArcMap document and its layers for future use, and also to create a patrol track from patrol waypoints and put this in a separate layer in the geodatabase.

The GIS programmers also developed a simple basic interface in ArcView 8.x that displays the cartographic output of the geodatabase, that enables the user to turn layers on and off, and that provides the user with a basic toolbox for adding existing layers, zooming in an out, panning, identifying, finding and measuring features and printing the map. The ArcView interface will be a subset of the full ArcMap

functionality so that the user, who has not received any GIS training, only needs to know a few basic commands to view the MIKE data before he returns to the MIKE DB.

Other programming included the creation of a legend in the map window and printout that explains the symbols used on the map for selected layers. The programme developed will only use objects from the ArcGIS 8.3, ArcView module and not those that are restricted to either ArcEdit or ArcInfo. The code in VBA was also programmed to convert UTM coordinates to geographic lat-long on the fly in the MIKE DB.

With the initial development of this GIS link, there is now an urgent need to prepare and finalise base maps for sites to facilitate the completion of the GIS linkage.

B2.3 Data Flow

The trainees were requested to bring real data on forms from their respective sites to input on the MIKE DB. However, not all Site Officers brought their data on CD. When actual data was brought, there were discrepancies in the quality of data in terms of completeness, accuracy and consistency in filling out the forms. This presents the need for the SSOs to maintain quality control of the raw data which is required before any analysis of the data can be made. Feedback will be expected from the Data Analysts on the best way to tackle this process.

The range States were informed that MIKE has budgeted for the printing of A5 sized Field Forms and binders that will be distributed to the sites for use in the fields. It is expected that these reduced size forms may facilitate the ease of patrol teams to record patrol and carcass data. The first batch of these A5 forms and their binders will be printed and despatched under the MIKE MCCU budget. Subsequent batches of these forms will need to be under individual subregional budgets.

There is a need to consider provisional budgets to support maintenance of MIKE equipment given to the range States for an initial phase until governments are able to absorb these budgets into their recurrent expenditure.

B2.4 Integration of MIKE DB to the MIST (Management Information System)

The curriculum for the MIKE/MIST training differed from the other workshops. Since the Uganda Wildlife Authority uses MIST (a different database) for storing all their data, the MIST and MIKE programmers had to develop a way to enter MIKE data (including information about illegal activities and carcasses) into the MIST Database, then have it imported into the MIKE DB with as little duplication of data entry as possible. Day 1 and 2 of this training mainly concentrated on the curriculum that has been used for training module 5 in other areas, mainly focusing on computer maintenance issues, CD burning, virus management, MIKE forms and data entry cycle and backups. Day 3 focused on working and navigating in the MIKE DB, while day 4 and 5 concentrated on working with both MIST and MIKE, backing up both databases, GPS download under MIST and the Import / Export routine.

Although the MIST and MIKE DBs have been modified to “talk” to each other, there is need to further harmonise the MIST data collection protocols to take good care of the data required by MIKE and more so on the recording of illegal activities. Participants were of the view that MIKE Carcass Forms be kept as they are since encountering carcasses was not a common phenomenon and would therefore not pose a serious burden for field people.

B2.5 Computer Management Issues

The trainees were given intensive handout materials on computing management protocol - how to navigate and copy, file naming conventions, MIKE users and administrative rights, password creation and management, back up and anti-virus procedures and computer failures.

While the skill level of some delegates (especially in Southern Africa) was quite high and these found the computer management discussions to be somewhat redundant, most delegates in other subregions did need the in-depth training on computer management skills.

In some workshops, participants could not burn data to CDs. It was felt that this could be due to the CD burning software (Drive Letter Access) currently used by the MIKE computers which does not have a user friendly interface. It was recommended that an evaluation of a new CD burning software to replace the current DLA software be undertaken to overcome this obstacle.

Trainees were more responsive to practical exercises than to lecture style presentations. The handout materials covered all the relevant material, but were not detailed enough. A case in point was the installation of AVG anti-virus programme. Trainees were far more able to accomplish the installation with every click of the mouse detailed in the handout. It is recommended that future trainings have handouts for various tasks at that level of detail (particularly for the GIS portions planned).

Many of the trainees wanted to know when MIKE would commence with GIS training.

The availability of a dedicated FTP site for the transfer of datasets between the trainers and the Database programmers was invaluable.

At the end of the training workshop, trainees were left with a CD with their data entered in the MIKE DB version 1.02 on it, as well as file structures for them to install on their MIKE computers. All the materials were covered, and most participants left with a good ability to use the software packages indicated.

B2.6 Results

Although similar to the goals and objectives of Module 3, Module 5 served as a follow-up workshop (including review and upgrades of the MIKE DB, additional instruction on computer maintenance and security, and ample time for hands-on

facilitation with individual site data entry). Some of the workshop trainers faced difficulties with computer facilities and database bugs during Module 5, but these problems were not as prevalent as they were during Module 3.

Some of the issues encountered in Module 5 were because trainers were not adequately informed in advance about new changes to the MIKE DB. Future training sessions would benefit from a consolidated, comprehensive Trainers Manual that includes all the information needed to properly conduct training.

Despite these hurdles, the MIKE Site and National Officers gained the knowledge, skills and abilities required for them to return to their offices with the MIKE DB (Version 1.02) on a CD and continue entering data.

B3. Recommendations for subsequent MIKE training workshops

The following recommendations were made by the team of instructors for subsequent MIKE training workshops:

- Plan one or two training sessions (one French and one English) about 10 days before any of the others to “beta-test” the software and ensure that the training materials and Database are stable for subsequent training sessions.
- Have trainees of different technical levels matched up so that training sessions can focus more on one group level rather than a mix of levels.
- There was a fairly high turn over rate of MIKE Officer positions in some countries. This was not anticipated when MIKE training schedule and curriculum were designed. A self-directed training manual should be developed to orient and assist new MIKE Officers in handling MIKE computers and data entry as part of the handover procedure.
- Develop a policy on quality control of raw data by National Officers and SSOs.
- Future trainings should provide handouts for various tasks at a very specific level of detail (particularly for the GIS portions planned).
- Ensure ALL sites have their MIKE computers before training begins and that all relevant softwares (Arcview 8.3 upgrades etc.) are properly installed and registered for running the GIS training components.
- Set out a list of technical requirements for training venues to be adequately equipped for GIS training components.
- Ensure that the digital basemaps of all sites are finalized ready for deployment to each trainee.

- Funds should be sought to allow individual training at each Site. Conditions vary dramatically from site to site, and individual, on-site facilitation may be necessary for successful data collection and Database entry across all MIKE Sites.
- VERY CLEARLY instruct participants in what type and format of data they should bring to the training workshops.
- Instruction about 'read only' vs. archive and a lesson on navigating windows explorer would be very useful to many of the trainees.
- The training curriculum should have a page of contents and page numbers, preferably compiled into a .pdf format as a single manual which the trainees can then print and refer to for reference. The French translation of the training curriculum should be proof-read and corrected by SSOs.
- Develop and distribute a Trainer Manual for each instructor (and SSOs) that details all the information to adequately teach all components of the Module.
- Include detailed directions for instructors to cover any recent changes made to the MIKE forms.
- Include explicit instructions and a practice exercise on updating the MIKE DB. This could then be used by the trainees when they are back home to help them with future upgrades.
- Include additional exercises in these computer management topics:
 - Disc cleanup
 - Disc defragmentation
 - Inquire hard disc properties (check available free space)
 - Access Windows Help and search for and read topics by typing keywords from the Help Index interface
 - MIKE computer set up and take down
 - Web searching, downloading anti-virus updates, using a Web-mapping service
- Undertake an evaluation of a new CD burning software to replace the current DLA software.
- Set up a secure and dedicated FTP site for uploading and downloading of MIKE data.

Conclusion & Acknowledgement

This Executive Summary report has been prepared jointly by Karen Beardsley of the Information Center for the Environment at the University of California Davis as the MIKE Data Management Training Officer, and the MIKE Central Coordinating Unit, as a summary description of the goals, objectives, issues, results and recommendations that emerged from the MIKE DB training workshops held in the four African subregions.

The detailed issues, questions, and decisions that emerged from the separate training workshops are available in their entirety from the MCCU.

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The views expressed herein are those of the authors and can therefore in no way be taken to reflect the official opinion of the European Community nor the US Fish and Wildlife Service.

Annex I

Agenda for Module 3

Day 1:

- **Introductions**
- **Overview of Training Workshop**
- **Review of MIKE field forms**
- **Review of MIKE data entry process**
- **AntiVirus, CD Burning, file zipping/unzipping**
- **Introduce and demonstrate MIKE Database**
- **Load MIKE Database onto the computers from CD**

Day 2:

- **Field Forms in MIKE Database**
- **Switchboard**
- **Site**
- **Patrol Authorisation**
- **Patrol Debriefing**
- **Patrol Movements**
- **Patrol Observations**
- **Carcass Report (Patrol)**

Day 3:

- **Live Elephants Observations**
- **Carcass Report (non-Patrol)**
- **Monthly Report**
- **Additional MIKE Database sample data entry**

Day 4:

- **Demonstration of Annual Report, Extracting Data**
- **Working with the MIKE Database—enter forms brought by participants**
- **Workshop conclusion**

Agenda for Module 5

Module 5—MIKE Follow-up Database Training for National and Site Officers (Times given are guidelines only and may vary.)

Day 1:

- Welcome and Introductions (8:30-9:30am)
 - Begin Workshop
 - Review of current status for each participant
 - Each participant introduces self (Name, MIKE role, Country, Site) and gives status of MIKE Database at Site
 - Handout 1: Participant Status Questions
- Overview of training workshop (9:30-10:00am)
 - Agenda, facility, goals, objectives, expectations
 - Lecture (review of Agenda, MIKE Modules, goals, objectives, expectations)
- Break (10-10:30am)
- Computer Issues (10:30am-12:00noon)
 - File and Directory structure
 - Demonstration and review (using MIKE computer)
 - Naming conventions
 - Lecture and discussion
 - Handout 2: Hints for Naming Files
 - MIKE Users and Administrative Rights
 - Lecture
 - Handout 3: Users and Administrative Rights
 - Creating and removing computer accounts/passwords
 - Lecture and demonstration (using MIKE computer)
 - Handout 4: Changing passwords and adding/deleting accounts
 - Backing up data onto CD (using DLA software)
 - Lecture and demonstration
 - Handout 5: Using IBM DLA
 - MIKE Computer Failure
 - Lecture
 - Handout 6: If Your Computer Crashes
 - WinZip
 - Review
- Lunch (12:00-1:00pm)
- AntiVirus protection (Scanning for viruses, removing viruses, etc.) (1:00-3:00pm)
 - Lecture (review of viruses and importance of keeping virus-free)
 - Handout 7: Anti Virus measures
 - Handout 8: Updating AVG Procedures
 - Handout 9: Using AVG
- Break (3:00-3:30pm)
- Continue with AntiVirus protection (3:30-4:00pm)

- Upgrading MIKE Database (4:00-5:00pm)

- Prepare data for those participants bringing data that was entered using pre-Version 1.0 of MIKE Database
- Email this to Tony and Alice by end of day

Day 2:

- Review and Questions from Day 1 (8:30-9:00am)
- MIKE procedure (9:00-10:00am)
 - Roles and responsibilities for MIKE Officers
 - Lecture
 - Handout 10: Roles and Responsibilities
 - Review of MIKE Data Entry Process
 - Lecture
 - Schedule for computer and Antivirus updates, MIKE Database backups
 - Lecture
 - Handout 11: Recommended Schedule for Updates and Backups
 - Upgrading and Updating the MIKE Database
 - Lecture
 - Handout 12: Upgrading and Updating the MIKE Database
- Break (10:00-10:30am)
- MIKE Field Forms (10:30am-12 noon)
 - Review current forms and discuss any recent changes
 - Field Forms and Instructions (part of binder)
 - Emphasis on Monthly and Annual Reports (not covered extensively in Module 3)
- Lunch (12:00-1:00pm)
- The MIKE Database (1:00-3:00pm)
 - Review of Module 3 curriculum
 - Lecture
 - Handout 13: Module 3 Agenda
 - Demonstration of enhancements to MIKE DB in Version 1.0
 - Handout 14: Major changes in the MIKE Database since Module 3
 - Explanation and demonstrate new password functions
 - Lecture and demonstration
 - Handout 15: MIKE Password Functions
- Break (3:00-3:30pm)
 - Load current version (1.0) of MIKE DB onto computers and enter Site information
 - Lab Exercise 1: Installation and First Time Use of the MIKE Database
 - Review MIKE Database components
 - Lecture and Demonstration
 - Enter Sample Data for Odzala (same data that was used during Module 3)
 - Lab Exercises 2: Entering Patrol and Carcass data Using MIKE DB Version 1.0 (Odzala)

Day 3:

- Review and Questions from Day 2 (8:30-9:00am)
- Enter data into MIKE Database (Remainder of the day)
 - Begin entering own data
 - Use Sample Data provided (English or French) if no Site data available

Day 4:

- Review and Questions from Day 3 (8:30-9:00am)
- Continue entering own data (Remainder of the day)
- MIKE Database Upgrades (4:00-5:00pm for those who submitted Module 3 DB on Day 1)
 - If you provided old version of MIKE Database on Day 1, receive back upgraded data from Tony and Alice (from Module 3 DB) and continue entering additional data into current version
 - If available, install patch (update) to MIKE Database (Version 1.01 or 1.02)

Day 5:

- Review and Questions from Day 4 (8:30-9:00am)
- Continue entering own data (9:00-10:00am)
- Break (10:00-10:30am)
- Demonstration of MIKE GIS data and integration with MIKE DB (10:30-11:00am)
- Copy all completed data onto CD (or USB stick) for use back at the Site (11:00-11:30am)
- Complete workshop evaluation form and contact information update (11:30-12noon)
- Lunch (12:00-1:00pm)
- Workshop conclusion (by early afternoon to allow for travel)

Annex II

INFORMATION AND DATA HANDLING, ACCESS AND RELEASE POLICY AND PROTOCOLS

1. Policy

The principal objective of MIKE is to make monitoring information available to guide the conservation of elephants and to guide any decisions at the site, national, sub-regional and global levels that may impact on their long term future. It is inherent in that objective that the information be publicly available, be transparent, be objective and be trusted. By participating in MIKE, the Range States undertake to support and uphold these principles. Nevertheless it is important that there be protocols that guide the implementation of this policy.

2. Protocols

2.1 Definitions

- Information is here defined as the outcomes of the analysis of the data, including the presentation of trends and relationships, among others.
- Data is here defined as the facts gathered under MIKE processes. This covers data collected in the MIKE forms, spatial data, survey data and any other data that have been primarily collected under MIKE auspices to facilitate MIKE analyses. Data that are provided voluntarily will be governed by the decisions of the data provider. Data collected under collaborative arrangements will respect the needs of the collaborator. Data already available in the public domain are excluded from this definition, but not from possible use in any analysis
- Public domain in the MIKE context refers to information and data provided in published reports or placed on the CITES web-site. Included in this context in regard to Asian population surveys, is information and data available in the Asian Elephant Action Plan of the IUCN Asian Elephant Specialist Group and in regard to African population surveys, information and data provided to the African Elephant Database (AED). In this latter context, it is also agreed that the AED will continue to be the repository of all African population estimates produced for MIKE sites.

2.2 Handling

- The raw data will be made available on a monthly basis by the site officer to the national officer. The national officer will in turn submit the raw data on a quarterly basis to the Sub-regional Support Officer (SSO), who will also pass it on to the MIKE Central Coordinating Unit (MCCU). The SSOs and MCCU will be bound by the access and release protocols in regard to such data. Access to the raw data, as described above, will facilitate the quality control of any analysis.
- The initial analysis of the data will be undertaken at the MIKE site level on a quarterly basis with an annual reanalysis. This information will then be passed on to the MIKE National Officer, who will undertake further analysis, particularly where more than one site occurs in a Range State on the quarterly and annual cycle.
- The National officer in turn will pass on this information to the SSO. The SSO will undertake the Sub-regional analysis on a quarterly and annual basis and submit it for consideration to the Sub-regional Steering Committee members. This latter process will

normally be undertaken by correspondence on a quarterly basis and by a specific meeting on an annual basis.

- The SSO will in turn send on the information to the Director/Data Manager in the MCCU. The MCCU will undertake to put together the information in a Regional context on an annual basis and consult the members of the Steering Committees.
- In preparation for the CoP, another data analysis effort will be required over the inter CoP time period and this will be presented in draft form to a regional meeting.

2.3 Access and Release

- The MIKE data and information belongs to the Range States. Until such time as the data and information pertaining to any Range State is in the public domain, any requests for access to and use of such data and information will be made to the designated MIKE contact for that purpose in that country - normally the MIKE National Officer. In this context, the Range State concerned may continue to place some restriction on data, after information is made public. Under these circumstances, any request for data must continue to be made to that Range State. For any data and information relating to a particular range state, then, once the authority has been given, the National Officer will provide the data and information. A country may decide at any time to release information and data into the public domain
- Following review and acceptance by the Sub-regional Steering Committee, information synthesised at the Sub-regional level will become public. For any information relating to the Sub-regional level, then the SSO will make such information available.
- Following review and acceptance at the Regional level, such information will be provided to the MIKE sub-group, the CITES secretariat, the public domain and when so required to the CoP.
- The MIKE staff will maintain the confidentiality of the data and information at all times, until such information is placed in the public domain

2.4 Technical Advisory Group (TAG)

- The MIKE Technical Advisory Group will oversee, *inter alia*, the design, testing, modifications and improvements to the analytical framework and the analytical process.
- In the event of any challenge being offered to any analysis and production of information, the TAG will further review such analysis and information and provide written comments.