



**UNDERSTANDING MOVEMENT PATTERNS AND RESOURCE NEEDS OF  
KAMUKU ELEPHANTS ALONG MIGRATION ROUTES IN NIGERIA**

**BEING A PROGRESS REPORT**



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## **Summary**

The current project aims to contribute information on the movements of elephants and their resource needs along migration routes in and around the Kamuku National Park, Nigeria. This is with a view to assisting wildlife managers in developing practical and effective management strategies to ensuring the viability and continuous survival of elephants in the area. We carried on from the earlier work in order to ensure a long-term approach to research and understanding of elephant's movement. Working on the success of initial capacity building exercise, the Kamuku National Park now have a long-term data bank regarding ecological details on elephant sighting, GPS coordinates of area traverse by the elephants, information on their numbers; including number of adults and young ones as well as time of the day or night elephants were sighted. The above initiative is also aided by the initial elephant monitoring committee and recruited survey corps from local communities (during the last elephant studies) who have continued to provide the Park with reports on elephant sighting, movement and activities in and around their communities. We have also initiated collaborations with other protected areas of close proximities with Kamuku National Park. These include: Kuyambana Game Reserve (Zamfara State), Alawa Forest Reserve (Niger State) and Mando Forest Reserve (Kaduna State).

However, it is important to state that the security challenges in the northern States of Nigeria, including the project area, has been a major constraint and an impairing factor in the smooth conduct of the present project. Two members of staff of the Kamuku National Park (Saidu Danjuma and Lawal Aliyu) were killed in a major raid on one of the Rangers posts by armed robbers in June, 2012. The Kamuku-Kuyambana axis identified as a strong hold of elephants in the project area is for now a hotspot of armed banditry. We have been very mindful of the current security situation, hence project delivery seem to be progressing slowly compared to initial plan and earlier exercise.

This report covers activities between May – August, 2012.

## **Review of Project Activities**

### **Advocacy visit/Sensitization/Recruitment of survey and monitoring corps**

The project begins with an advocacy visit to the management authorities of Mando Forest Reserve (Kaduna State), and Alawa Game Reserves (Niger State) with a review of need assessment for the project. This was followed by sensitization and planning meetings with community stakeholders to enlist their support and ownership of project.

At the office of the Kaduna State Forestry Department, which has jurisdiction over the control and management of Mando Forest Reserve, and identified as one of the key migratory routes of the elephants, meeting was held with top management officials of the Department including: Project Manager- Alh. Aminu Sarki Dalhatu; Director of Forestry (Field Service)- Mr. Alhamdu Akau; Director of Administration- Mr. Lawrence Tanko; Director of Finance- Alh. Sanni Aliyu and; Director of Engineering- Alh. Ali Buhari. The aims and objectives of the elephant conservation project were thoroughly discussed with the management officials. They were fascinated and expressed great enthusiasm. They also demonstrated their readiness to provide all necessary supports at their disposal towards contributing to the success of the project. As revealed by the forestry officials, the Mando Forest Reserve presently has no management plan. However, a committee was recently inaugurated with the responsibility of coming up with one. Furthermore, some communities (adjoining Mando Forest Reserve) serving as elephants ranging areas were jointly identified. These include Kiriyoqi, Layin MaiGwari and Kurebe communities.

Furthermore, the project team also visited the Alawa Game Reserve. The office and officials of Alawa Game Reserve are based in Pandogari town in Rafi Local Government Area of Niger State. On arrival at the office, the project team had meeting with officials of the Game Reserve on the project aims and objectives. The officials showed serious interest and readiness to support the project. It was gathered that Alawa Game Reserve has contiguous boundary with some community forests such as Kongoma and Ringa Districts which all together make up the Alawa Game Reserve. Three communities were also identified as key elephant ranging areas around Alawa Game Reserve. These are: Mangoro, Ringa and Gyaramiya. Currently, Alawa Game Reserve also does not have a management plan.

In the meantime, the team was unable to visit Kuyambana Game Reserve due to the earlier stated security concerns in the area.

### **Sensitization and Community Consultations**

Kiriyoyi and Layin MaiGwari Communities possess forests that are used by elephants as their migratory routes. Leaders and stakeholders in these communities were visited and sensitized on the need for elephant protection in their area. The community leaders were very receptive to the sensitization and provided further useful information that could guide in the implementation of the project. From the interaction with the community leaders it was gathered that:

*In May, 2012, a group of elephants numbering about thirteen (13) individuals including two young ones came to the community forests and destroyed some sugarcane farms at the boundaries of the forests.*

This revelation agrees with the results of our previous work on participatory survey of elephants in the project area.

After much deliberation with stakeholders, two project volunteers were recruited from Kiriyoyi and LayinMaiGwari. They are: Ilyasu (Kiriyoyi) and Mall. Abdullahi (LayinMaiGwari).

Sensitization meeting was also held with the district head and other stakeholders in Ringa. It was also gathered that:

*A group of four elephants including one young one were seen in the Wulga area in June 2012 spending more time in Mangoro village.*

We are not sure whether the elephants reported here are parts of the main group earlier identified or a completely different group in the area.

The project team could not visit Kurebe and Gyaramiya communities also due to security concerns in the area

## **Locating the Migration Routes of Elephants**

### Description of Elephant Movement Pattern in the Project Area

Assessing the movement behaviour of the Kamuku elephants and interviews with villagers of adjoining protected areas have provided some insights into the movement patterns of elephants in the area.

Elephants usually move from Kamuku National Park (particularly around Gwaska and Goron dutse communities) to an old settlement called Kewaye where they browse on plants such as *Borassus aethiopicum*, *Cussonia barteri*, *Adansonia digitata*, and *Detarium microcarpum*. They stay there for few days and migrate to another old settlement called Gwaifata, where they stay for weeks depending on the season. On leaving Gwaifata they move to Tsohon Garin Gayam, where they also stay for some days and then move to Rafin Gora where they stay for over two weeks excavating the roots of *Cochlospermum tinctorium* and browsing on such plants as *Entada africana*, *Cussonia spp* as well as eating *Vitellaria paradoxa* fruits. Seasonal rivers in the area help in keeping the animals for weeks. When they leave Rafin Gora they also progress to Chidago area for some days browsing on plant resources in the area. Afterwards they migrate to Tundun bage. On leaving Tundun bage they sometimes return to Kamuku National Park via the same route. Alternatively, they may decide to migrate to Alawa through Kurebe area (around Udawa) in Kaduna State.

The movement of elephants from Mando (Kurebe area) to Alawa Game Reserve goes thus:

Elephants on reaching Mando Forest Reserve (through Kurebe) from Birnin Gwari, move to Kwaki community forest in Niger State. They then pass through to old Kwangwama settlement where they stay for some days. Thereafter they move to Wulga area (in Ringa) where they also stay most time before moving to Gwadogwado area in Alawa Game Reserve. Anytime the elephants are in Alawa, they spend most of their times around Ringa and Mangoro where they browse in old settlement.

The elephants also migrate to Kuyambana through Dansadau and Tureta to Mallamawa Grazing Reserve in Bukkuyum Local Government Area of Zamfara State. All these movements are done by the elephants using cattle migratory routes.

Elephants migrate at anytime of the day and night once the atmosphere is seen to be conducive. More often, however, they prefer moving at night to avoid human disturbances. They destroy farm crops along their migratory routes.

## **Summary of Achievements**

1. Preliminary identification of ranges and movement pattern of Kamuku elephants.
2. Identification of important resource needs (including food/plant species/trees, shrubs, water points/rivers/streams) of the elephants along migration routes.
3. Stimulating further conservation awareness for the elephants through advocacy and community sensitization.

## **Next Line of Activities**

The next line of activities are to: organise a capacity building program/workshop on elephants movement, monitoring and reporting for recruited survey corps as well as park rangers (recruitment of survey corps is still ongoing); conduct more village level interviews; further identify elephants pathways in the project area; mark the pathways on the GPS and data analysis and GIS mapping.