

**FINAL REPORT**

# **CONSERVATION ASSESSMENT OF IBADAN MALIMBE IN SOUTH-WESTERN NIGERIA**

**CLP Project ID: 01182914**



by

**Bunmi Jegede, Solomon Adefolu and Emmanuel Olabode**

*Km 19, Lekki-Epe Expressway, Lekki, Lagos, Nigeria*

[jegedeoluwabunmi@gmail.com](mailto:jegedeoluwabunmi@gmail.com)

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We are also grateful to Dr Taiye Adeyanju a resident ornithologist in Ibadan area, the primary range of Ibadan Malimbe, for his time and effort with the team. He is also keen on the species and presently monitoring within the area.

To the Forest Unit of International Institute of Tropical Agriculture, Ibadan for access to the forest to collate data and Nigerian Conservation Foundation, Lagos for assisting with logistics during the period of data collection.

Special appreciation to the Conservation Leadership Programme for proving funds for project and also creating an opportunity for the team to build their capacity.

## **SECTION 1:**

### **1.1 Summary**

Forest degradation and fragmentation is a major threat to Ibadan Malimbe within its range in the south-western region of Nigeria. We attempt to estimate the species density and also empower communities within its range to discourage activities that contribute to the shrinking of the species habitat and range. The team detected Ibadan Malimbe in only 2 sites from the 15 surveyed, with an estimated density of 0.16 hectare<sup>-1</sup>. We observed that most of the sites within the species range have been heavily degraded and some even totally lost since the last assessment in early 2001. Awareness on the species and its significance were achieved in 5 communities, while conservation clubs were also initiated in same. Simple birding tips was given to volunteers in 10 communities to provide fulcrum for basic monitoring of the species across the area. Overall, the project was able update information on the species as well as impact on the community who now are more aware of the significance of reducing their impact on the natural resources around them. Findings from the study also contributes to an action plan being compiled on forest regeneration and recovery in the region.

### **1.2 Introduction**

The distribution of Ibadan Malimbe (IBMA) in south-western Nigeria overlaps with an area of high human population expansion and rampant degradation and fragmentation of forest covers (Manu *et al.*, 2005; Peach, 2005). Toham *et al.* (2006) identified the south-western forest zone of Nigeria as a region of high conservation priority, and harbours some of Nigeria's flagship species including the Nigerian-Cameroon Chimpanzee (*Pan troglodytes ellioti*) and the African Forest Elephant (*Loxodonta africana cyclotis*). It has numerous priority sites including three Important Bird Areas (IBA), of which one i.e. International Institute of Tropical Agriculture (IITA) is a stronghold for the Ibadan Malimbe. However, the widespread logging, and clearance of forests for subsistent

agriculture by smallholders in surrounding communities have undermined ecological integrity in the area.

Ibadan Malimbe (*Malimbus ibadanensis*), endemic to Nigeria, is listed under the IUCN Redlist (2015) as Endangered. Within the last decade, little has been recorded on *Malimbus ibadanensis*. The last official record of the species was in 2008, in Ifon forest reserve, about 140km from its closest previously known site (Ajagbe *et al.*, 2009) in Ife. Our project focused on assessing the conservation status and distribution of the species within the current range (Manu *et al.*, 2005), promote awareness through environmental education and setting-up of basic monitoring for the species within communities.

We estimated that the population of *Malimbus ibadanensis* have decreased within its current range by 27%. Forest conversion and degradation were observed as major drivers for the continuous shrink and loss of its habitat. Through promoting awareness and educating the locals, we were able to transfer knowledge on the need to conserve the habitats not only for the benefits of endangered species but also for general biodiversity and sustenance of the people. Locals, particularly farmers and hunters, remained our key contacts in these communities as we engaged them to follow up with monitoring of the species.

Apart from elders in each community who played key role in facilitating the implementation of project activities, the team also benefited from liaising with local educational authority, mostly school teachers, in each community who gave the project team permission for working with their schools as beneficiaries of School Conservation Club (SCC) programme.

### 1.3 Project members

- (a.) **Oluwabunmi Jegede** holds a BSc (Hons) degree in Wildlife Management from University of Ibadan, Nigeria. He has over 5years working experience with the Nigerian Conservation Foundation (NCF) as a team member of the Technical Programmes department. Bunmi is currently an MPhil Conservation Leadership student in the University of Cambridge, UK. He led the team, coordinated collation and analysis of field data, and compiled the report.
- (b.) **Solomon Adefolu** has an MSc in Natural Resources Conservation from University of Lagos, Nigeria following a BSc (Ed.) in Biology from Obafemi Awolowo University, Ile-Ife, Nigeria. He has well over 5years of experience with the Environmental Education unit of NCF. Solomon coordinated the conservation and education campaign of the project and also contributed to report writing.
- (c.) **Emmanuel Olabode** is a Wildlife Management graduate (BSc) from University of Ibadan, Nigeria. He worked as a Field Researcher at the International Institute of Tropical Agriculture (IITA) for more than 2years before joining the Paignton Zoo funded project in Omo Forest Reserve as their Field and Environmental Officer. Emmanuel was key in our field activities within the communities and served as the project's liaising contact. He also made inputs to this final report.



**Plate 1:** CLP project team members (1<sup>st</sup> left, 2<sup>nd</sup> left and 1<sup>st</sup> right) with NCF staff members (*middle*) and NCF-GIS coordinator (2<sup>nd</sup> left) during the soft-GIS training

## **SECTION 2:**

### **2.1 Aim and objectives**

The aim of the project was to update status of the species and identify changes in the habitats that may affect its population, and possibly drive a favourable change in the IUCN status of the species. Specifically we focused on the following objectives;

1. Information gathering on status and distribution of Ibadan Malimbe in south-western Nigeria
2. Collate and correspond knowledge on Ibadan Malimbe via an environmental education and awareness campaign to the local communities
3. Facilitate a voluntary monitoring scheme for Ibadan Malimbe around its habitat

### **2.2 Changes to original project plan**

The project did not really encounter any serious change that may have influenced us to deviate from the initial objectives and activities of the project. However, we did have to postpone the timing of the second phase of our field work due to the prevailing political situation; that is the 2015 General Elections in Nigeria. The elections were moved from an initial date of February 14<sup>th</sup> & 21<sup>st</sup>, 2015, before holding on March 28<sup>th</sup> & April 15<sup>th</sup>, 2015. Based on the security advice we got from around, the project activities had to wait until after the official handing over on May 29<sup>th</sup>, 2015 to allow dusts of political tension settle before resuming field work. Thus, this did not actually change the objectives of the project but elongated the project duration and completion time.

### **2.3 Methodology**

*Preliminary efforts:* Prior to field work, a soft-GIS training for team members was facilitated by the GIS specialist of the Nigerian Conservation Foundation (NCF). The training focused on how to take GPS coordinates, create waypoints and mark interest



spots. A reconnaissance visit to project sites was done to help the team establish survey sites for the project, identify contacts within local communities and facilitate logistics for field work.

Field survey: We covered 15 forest patches from the 20 within the current range of *Malimbus ibadanensis* (Manu *et al.*, 2005; Ajagbe *et al.*, 2009) in 30 days between November/December 2014 and July 2015. The survey employed the use of line transects (Bibby *et al.*, 2000) between 06:45hours to 10:30hours, listening, looking for and recording all bird species encountered (Manu *et al.*, 2005). Bird species were confirmed by sight (aided with an 8x42 Viking Binoculars) and calls. Playbacks of recorded bird calls were also used to further identify the bird species where necessary. In all the sites where the locals could identify the Malimbe family, we requested they lead us to their congregating locations and potential breeding locations. We combined this approach with the systematic data collection to maximise detection of species. Notes were also taken of any bird species that was not identified in the field at first and the *Birds of Africa: South of the Sahara* field guide (Sinclair & Ryan, 2010) was later consulted for proper identification. GPS coordinates of the sites and other important features encountered during the survey were also taken. DISTANCE 6.2 software was used to estimate the density and abundance of IBMA in the study area.

Awareness and species monitoring: In each community we visited, the team tried to recognise the hierarchy and different groups. We also got direct contacts of some key individuals, like farmers and hunters, from some of the community elders. An interactive session (group discussion) was then held with them to inform them of our activities in and around their forest patch. Structured questionnaires was used to collate information on livelihood activities, threats to the forest and knowledge of the species. Sensitization focused on selected communities groups, while the farmers and hunters were engaged to monitor the species. Most hunters and farmers within each community had good knowledge of the birds to the taxonomic family level but not the species level. They could recognise group of species e.g. the Malimbés, Hornbills or Sunbirds, but cannot distinguish between the species. Our basic monitoring training then focused on how to

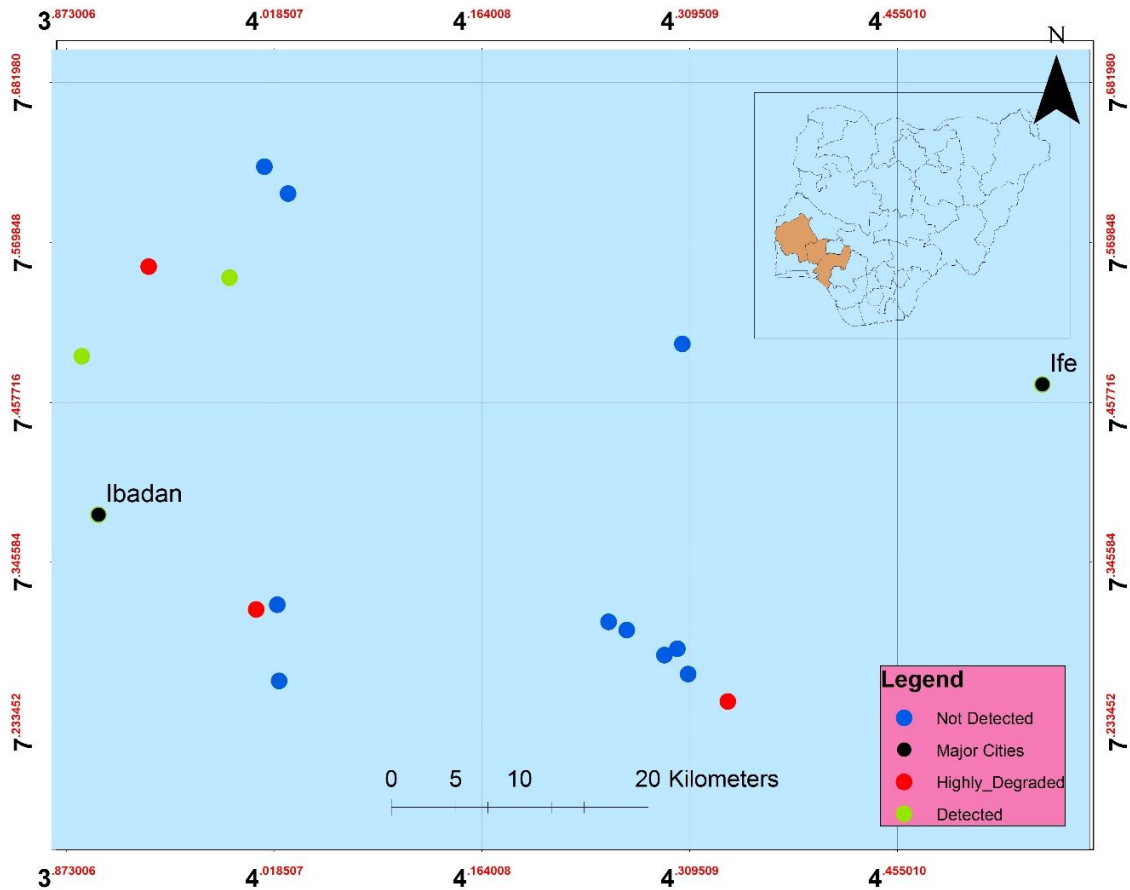
identify species in a group and also collate information on the Ibadan Malimbe. Their contacts were also collected to allow follow-up by the project team.

## 2.4 Outputs and Results

**Objective 1:** *Gather information on status and distribution of Ibadan Malimbe in south-western Nigeria to bridge gap in scientific knowledge*

From the 15 forest patches visited, *Malimbus ibadanensis* was sighted in only 2 (Table 1) with an estimated density of 0.16 ha<sup>-1</sup> (Table 2). This might be due to the short period of data collection and does not preclude the species from other sites. In Kuku, the species was spotted on an African Nutmeg Tree (*Pycnanthus angolensis*) in flock of other species of Malimbe (*M. scutatus*, *M. rubricollis* and *M. nitens*) and non Malimbos (*Terpsiphone rufiventer* and *Dicrurus adsimilis*). *Malimbus ibadanensis* and its active nesting was then observed in IITA on a *Daniella ogea* tree.

Meanwhile, in 3 of the sites visited from the current range i.e. Moniya, Akanran and Orile-Owu, the forest patches had either been significantly degraded or completely lost. In Moniya for example, most of the forest patch had given way to residential development with small commercial shops springing up around it. Concisely, all the sites visited, excluding IITA, were characterised by threats to the habitat including clearance for farming, hunting and collection of forest resources, but on a subsistence level.



**Figure 1:** Distribution map of Ibadan Malimbe in study site. (<sup>1</sup>Green dots = detected locations; <sup>2</sup>Blue dots = not detected; <sup>3</sup>Red dots = highly degraded habitats)

**Table 1:** Sites where IBMA was observed

Site name	N-Lat	E-Lon	No of IBMA	No of visits
Kuku	7.5454	3.9871	1	3
IITA	7.4905	3.8836	2	2

**Table 2:** Density ha<sup>-1</sup> and abundance estimates of IBMA

Half-normal/Cosine	Estimate	%CV	df	95% Confidence Interval	
D	0.15727E-03	4.57	22.00	0.14305E-03	0.17291E-03
N	9.0000	4.57	22.00	9.0000	10.000

**Table 3:** Observed threats to habitats of IBMA

SITES	THREATS		
	Farming	NTFP Harvest	Residential development
IITA			
Akanran	X	X	X
Oosa	X	X	
Bolarinwa (Ojebode)	X	X	
Moniya	X		X
Ayepe	X	X	
Jakankan	X	X	
Motako	X	X	
Monye	X	X	
Alade	X	X	
Faritosa	X	X	
Kuku		X	
Arikoko		X	
Orile-Owu	X	X	X
Onarinde/Sooko	X	X	

**Objective 2:** *Collate and correspond knowledge on Ibadan Malimbe via an environmental education and awareness campaign to the local communities*

Information on Ibadan Malimbe was collated through the use of structured questionnaire in 10 communities, from which 5 were strategically selected to participate in the environmental awareness and sensitization. These include Kuku, Faritosa, Onarinde, Bolarinwa (Ojebode) and Arikoko. Basic information on Ibadan Malimbe was produced in posters and fliers distributed during the community sensitization. The 5 communities that participated in the environmental awareness can be said to have good knowledge on the endangered Ibadan Malimbe and associated threats and conservation measures to address its disappearance within their community.



**Plate 2:** CLP team member enlightening locals

In schools, sensitization was carried out through public lecture. 100 posters and fliers each on Ibadan Malimbe were distributed among the students to further create the awareness. The students were also introduced to basic techniques in bird watching which encourage their interest in the endangered species. All of the school were interested in continuing a

school's conservation club (SCC) that was initiated by the project in order to enable them sustain the interest among their student and also contribute to the future monitoring of the species.

**Table 4:** List of sites visited including sites where IBMA was observed, local monitoring setup, community interview and environmental awareness & schools conservation club.

<b>Sites &amp; Communities visited during field work</b>	<b>IBMA was observed</b>	<b>Local monitoring</b>	<b>Interview of communities</b>	<b>Environmental Awareness &amp; Schools Conservation Club</b>
IITA	✓	✓		
Akanran		✓	✓	
Oosa				
Bolarinwa (Ojebode)		✓	✓	✓
Moniya			✓	
Ayepe				
Jakankan		✓	✓	
Motako				
Monye		✓	✓	
Alade		✓	✓	
Faritosa		✓	✓	✓
Kuku	✓	✓	✓	✓
Arikoko		✓	✓	✓
Orile-Owu				
Sooko (Onarinde)		✓	✓	✓

**Objective 3:** *Facilitate a voluntary monitoring scheme of Ibadan Malimbe around its habitat*

A basic monitoring training and setting up of locals monitoring units were done in 10 communities (Table 4). We focused on hunters and farmers, who knew the forest well to monitor the species. Thanks to donations from the Royal Society for the Protection of Birds (RSPB UK), support binoculars were also given to a few of them to assist with identification.



**Plate 2:** A farmer in one of the communities during the bird identification guiding

## 2.5 Communication & Application of results

Project results have been leveraged on social media. The result is contributing to the available information required in the development of a Conservation and Monitoring Plan for Ibadan Malimbe in southwest Nigeria. We are also working on submitting a manuscript for publication in journals while doing more to share findings from the project in national and regional conferences.

## 2.6 Monitoring and Evaluation

The project set up a voluntary site monitoring units in communities to enable the sustainability of the project and will help monitor and evaluate its long term effectiveness. This will be followed up with regular communications and site visits as the need arise.

## 2.7 Achievements and Impacts

(a.) Species density, distribution and threats to habitat: We were able to estimate the species density to  $0.16\text{ha}^{-1}$ , which is a 27% reduction from the estimate ( $0.22\text{ha}^{-1}$ ) in 2005 by Manu and colleagues. Major factors affecting the shrink and fragmentation of forests in the region is clearing for farming and habitat destruction for hunting and collection of non-timber forest produce. Thus, we tried to sensitize the locals and persuade them on the importance of reducing the impacts of these activities on the natural habitat. However, we suspect this alone might not make a lasting impact as it needs to be complemented with conservation interventions that will help curb depletion of forest resources either through a form of conservation enterprise, alternative livelihood or incentives.

(b.) Environmental education and awareness: In addition to sensitizing the communities and creating awareness, we were able to set-up School Conservation Clubs (SCC) in 5 schools around the area. This will go a long way in enlightening the younger generation on the dangers and impacts of everyday livelihood activities and also activate their consciousness on the need to protect the habitat for not only IBMA but also other fauna and flora in the area. The brief bird watching session we had with the pupils also opened their eyes to the *treasure* around them and subsequently stir their interest in the environment.



(c.) Long-term monitoring of the species is imperative for adequate conservation planning for the species and habitat. The project tried to achieve this through the network of local monitoring units initiated around 10 communities in the area and these will champion the cause of the species in their respective communities.

## **2.8 Capacity Development and Leadership capabilities**

The project provided opportunity for us to build our chemistry as a team, as well as share knowledge because each member was involved in each and every step of project activity. Corresponding with more experienced experts also allowed us overcome some obstacles during project planning. The exposure to basic knowledge of Geographical Information System (GIS), picking coordinates, map generation and use of GPS device was also a good opportunity for us. Our technical skill on the field was also developed especially in the area of bird identification, environmental awareness and community liaison. Concisely, the project built our capacity in project management (including planning and implementation), environmental communication skills and scientific data collection.

## **SECTION 3:**

### **3.1 Conclusion**

The few observations of Ibadan Malimbe (Kuku and IITA) was insubstantial for us to arrive at a conclusion on its population status and perhaps habitat distribution in the area. This was due, in part, to the short period of data collection. Thus, we could not conclude that the species have completely disappeared from some sites in its current range. However, we were able to collate information on threats to species and its habitat around range in areas surveyed. In all the sites, they were records of habitat degradation except IITA where there is a significant effort at protecting the forest through the Forest Project programme.

Through the project, we were able to penetrate rural communities, get their buy-in and provide good landing for subsequent conservation efforts in the region. Through the sensitization campaign in 5 communities, majority of the locals saw and understood the need for the protection of these species and indeed their local forests, being a major source of their own livelihood. Furthermore, many were willing to collaborate efforts to work on the species and other similar conservation interventions.

We also established a network of local monitoring team around 10 local communities with plans for follow-up through correspondence and site visits. These locals know the forests well, being hunters and farmers, and coupled with the basic training on bird identification, they should be able to provide substantial feedbacks on any sighting of the species. In addition, Dr Taiye Adeyanju, a resident ornithologist with the department of Wildlife Management, University of Ibadan, Nigeria is also monitoring the species in IITA and some of the sites within the range.

### **3.2 Problems encountered and lessons learnt**

In some few sites, they were high expectations of immediate impacts in terms of financial rewards from the project. The team was able to rely on experience of some of the team members to quell belief and involved them in the planning and implementation of activities in their community. By and large, it did not really pose a threat to the project as we eventually relied on the hunters and farmers within the sites to navigate through the forest to collect data.

Another problem, though with mild impact on the project, was the appointment of a team member on a new job which necessitated him to change location away from his primary location which we envisaged as strategic in liaising with and following up with the communities. We were able to circumvent this by timing effort and being strategic with project activities.

Lastly, the inability of the team's representative to attend the 2weeks International training was a major problem. This was due to inability to secure a Canadian VISA for the participant despite submitting substantial documents as evidence on purpose of trip and funding for the trip. We believe this created a gap in management of project activities on the assumption that valuable information will have been learnt from the training.

### **3.3 In the future**

Regular information will be generated on Ibadan Malimbe through the established community monitoring units. This information will feed into the pool of data useful to develop the action plan for the conservation of species in the region. We will also make effort to secure other small grants to sustain other activity in the sites.

We also have the following recommendations based on information from the project:

- i. More rigorous surveys within range of IBMA. Subsequent research should also try to understand the drivers of population decline and factors limiting population increase

of the species. Research areas may consider focusing on species competition for resources and nesting sites with other species, foraging preferences of the species, and possibly the species predation-prey ecology.

- ii. More needs to be done on engaging the communities as their livelihood and sustenance revolve around the forests and its resources. Their involvement and participation in the management of resources amidst engagement in other alternative livelihood to reduce pressure on forests could also help reduce dependence of forest for resources.
- iii. The project identified the major sources of livelihood in surrounding communities as farming and hunting. Training of farmers on more environmental friendly agriculture and increasing land productivity is likely to reduce further encroachment/conversion of forest areas.

### 3.4 Financial Report

	Itemized expenses	Total CLP Requested (USD)*	Total CLP Spent (USD)	% Difference
2				
3	<b>PHASE I - PROJECT PREPARATION</b>			
4	Communications (telephone/internet/postage)	582.00	442.42	-24%
5	Field guide books, maps, journal articles and other printed materials	305.00	243.03	-20%
6	Insurance	158.00	133.33	-16%
7	Visas and permits	0.00		#DIV/0!
8	Team training	518.00	521.21	1%
9	Reconnaissance	765.00	800.00	5%
10	Other (Phase 1)			
11	<b>EQUIPMENT</b>			
12	Scientific/field equipment and supplies	1,864.00	1963.64	5%
13	Photographic equipment	90.00	90.91	1%
14	Camping equipment	770.00	757.58	-2%
15	Boat/engine/truck (including car hire)	0.00		#DIV/0!
16	Other (Equipment)	715.00	727.27	2%
17	<b>PHASE II - IMPLEMENTATION</b>			
18	Accommodation for team members and local guides	1,500.00	1636.36	9%
19	Food for team members and local guides	800.00	727.27	-9%
20	Travel and local transportation (including fuel)	1,550.00	1545.45	0%
21	Customs and/or port duties	0.00		#DIV/0!
22	Workshops	0		#DIV/0!
23	Outreach/Education activities and materials (brochures, posters, video, t-shirts, etc.)	2,812.00	2848.48	1%
24	Other (Phase 2)	400.00	393.94	-2%
25	<b>PHASE III - POST-PROJECT EXPENSES</b>			
26	Administration			
27	Report production and results dissemination	450.00	456.06	1%
28	Other (Phase 3)			
29	<b>Total</b>	<b>13,279.00</b>	<b>13,286.97</b>	

## **SECTION 4:**

### **4.1 Appendices**

<b>Output</b>	<b>Number</b>	<b>Additional Information</b>
Number of CLP Partner Staff involved in mentoring the Project	1	Jennifer Agaldo
Number of species assessments contributed to (E.g. IUCN assessments)	1	<i>Malimbus ibadanensis</i>
Number of site assessments contributed to (E.g. IBA assessments)	0	None
Number of NGOs established	-	None
Amount of extra funding leveraged (\$)	-	Still ongoing
Number of species discovered/rediscovered	-	None
Number of sites designated as important for biodiversity (e.g. IBA/Ramsar designation)	-	None
Number of species/sites legally protected for biodiversity	1	<i>Malimbus ibadanensis</i> in IITA forest
Number of stakeholders actively engaged in species/site conservation management	2	Local communities and researchers in the area
Number of species/site management plans/strategies developed	1	Ongoing regional forest afforestation programme plan
Number of stakeholders reached	2	Local communities and researchers in the area
Examples of stakeholder behaviour change brought about by the project.	n/a	More knowledge on significance of species by the local community
Examples of policy change brought about by the project	-	None
Number of jobs created	1	Brief engagement of locals in communities. Prospective opportunity as field assistants in subsequent projects in the area

Number of academic papers published	None	Being developed
Number of conferences where project results have been presented	None	In progress

Appendix 4.1 CLP M&E measures

## 4.2 Bibliography.

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### **4.3 Distribution list**

- i. Nigerian Conservation Foundation (NCF), Lagos and all project site offices
- ii. Forest Project, International Institute of Tropical Agriculture (IITA), Ibadan
- iii. Project advisers
- iv. Department of Wildlife Management, University of Ibadan

#### 4.4 Complete species list for the Survey

<b>Family</b>	<b>Scientific Name</b>	<b>Common Name</b>
Accipitridae	<i>Kaupifalco monogrammicus</i>	Lizard Buzzard
Accipitridae	<i>Milvus migrans</i>	Black Kite
Accipitridae	<i>Polyboroides typus</i>	African Harrier-hawk
Phasianidae	<i>Coturnix coturnix</i>	Common Quail
Phasianidae	<i>Francolinus bicalcaratus</i>	Double-spurred Francolin
Columbidae	<i>Treron calva</i>	African Green Pigeon
Columbidae	<i>Turtur tympanistra</i>	Tambourine Dove
Columbidae	<i>Turtur afer</i>	Blue-spotted Wood Dove
Columbidae	<i>Streptopelia semitorquata</i>	Red-eyed Dove
Musophagidae	<i>Crinifer piscator</i>	Western Grey Plantain-eater
Cuculidae	<i>Ceuthmochares aereus</i>	Yellowbill
Cuculidae	<i>Chrysococcyx cupreus</i>	African Emerald Cuckoo
Cuculidae	<i>Chrysococcyx klaas</i>	Klaas's Cuckoo
Cuculidae	<i>Chrysococcyx caprius</i>	Didric Cuckoo
Cuculidae	<i>Centropus leucogaster</i>	Black-throated Coucal
Cuculidae	<i>Centropus senegalensis</i>	Senegal Coucal
Alcedinidae	<i>Halcyon malimbica</i>	Blue-breasted Kingfisher
Alcedinidae	<i>Halcyon senegalensis</i>	Woodland Kingfisher
Alcedinidae	<i>Ceyx lecontei</i>	African Dwarf-kingfisher
Meropidae	<i>Merops albicollis</i>	White-throated Bee-eater
Coraciidae	<i>Eurystomus glaucurus</i>	Broad-billed Roller
Coraciidae	<i>Coracias cyanogaster</i>	Blue-bellied Roller
Bucerotidae	<i>Bycanistes fistulator</i>	Piping Hornbill
Bucerotidae	<i>Tockus fasciatus</i>	African Pied Hornbill
Bucerotidae	<i>Bycanistes albotibialis</i>	White-thighed Hornbill
Bucerotidae	<i>Tockus nasutus</i>	African Grey Hornbill
Picidae	<i>Dendropicos fuscescens</i>	Cardinal Woodpecker
Capitonidae	<i>Gymnobucco calvus</i>	Naked-faced Barbet
Capitonidae	<i>Lybius bidentatus</i>	Double-toothed Barbet
Capitonidae	<i>Tricholaema hirsuta</i>	Hairy-breasted Barbet
Capitonidae	<i>Pogoniulus subsulphureus</i>	Yellow-throated Tinkerbird
Capitonidae	<i>Pogoniulus scolopaceus</i>	Speckled Tinkerbird
Capitonidae	<i>Pogoniulus bilineatus</i>	Yellow-rumped Tinkerbird
Campephagidae	<i>Campephaga phoenicea</i>	Red-shouldered Cuckoo-shrike
Pycnonotidae	<i>Andropadus virens</i>	Little Greenbul
Pycnonotidae	<i>Andropadus gracillirostris</i>	Slender-billed Greenbul
Pycnonotidae	<i>Phyllastrephus icterinus</i>	Icterine Greenbul
Pycnonotidae	<i>Phyllastrephus albigularis</i>	White-throated Greenbul
Pycnonotidae	<i>Chlorocichla simplex</i>	Simple Greenbul
Pycnonotidae	<i>Pycnonotus barbatus</i>	Common Bulbul
Pycnonotidae	<i>Nicator chloris</i>	Western Nicator
Turdidae	<i>Turdus pelios</i>	African Thrush
Cisticolidae	<i>Camaroptera brachyura</i>	Grey-backed Camaroptera
Cisticolidae	<i>Camaroptera chloronota</i>	Olive-green Camaroptera

Cisticolidae	<i>Hypergerus atriceps</i>	Oriole Warbler
Cisticolidae	<i>Prinia subflava</i>	Tawny-flanked Prinia
Cisticolidae	<i>Cisticola juncidis</i>	Zitting Cisticola
Sylviidae	<i>Sylvietta virens</i>	Green Crombec
Sylviidae	<i>Hylia prasina</i>	Green Hylia
Sylviidae	<i>Sylvia borin</i>	Garden Warbler
Sylviidae	<i>Hippolais polyglotta</i>	Melodious Warbler
Platysteiridae	<i>Platysteira castanea</i>	Chestnut Wattle-eye
Monarchidae	<i>Terpsiphone rufiventer</i>	Black-headed Paradise Flycatcher
Nectariniidae	<i>Anthreptes collaris</i>	Collared Sunbird
Nectariniidae	<i>Nectarinia minulla</i>	Tiny Sunbird
Nectariniidae	<i>Nectarinia venusta</i>	Variable Sunbird
Nectariniidae	<i>Nectarinia verticalis</i>	Green-headed Sunbird
Nectariniidae	<i>Nectarinia cuprea</i>	Copper Sunbird
Dicruridae	<i>Dicrurus ludwigii</i>	Square-tailed Drongo
Dicruridae	<i>Dicrurus adsimilis</i>	Fork-tailed Drongo
Corvidae	<i>Corvus albus</i>	Pied Crow
Sturnidae	<i>Lamprotornis splendidus</i>	Splendid Glossy-starling
Ploceidae	<i>Ploceus tricolor</i>	Yellow-mantled Weaver
Ploceidae	<i>Ploceus cucullatus</i>	Village Weaver
Ploceidae	<i>Ploceus nigerrimus</i>	Vieillot's Black Weaver
Ploceidae	<i>Malimbus scutatus</i>	Red-vented Malimbe
Ploceidae	<i>Malimbus rubricollis</i>	Red-headed Malimbe
Ploceidae	<i>Malimbus ibadanensis</i>	Ibadan Malimbe
Ploceidae	<i>Malimbus nitens</i>	Blue-billed Malimbe
Estrildidae	<i>Nigrita canicapillus</i>	Grey-crowned Nigrita
Estrildidae	<i>Nigrita bicolor</i>	Chestnut-breasted Nigrita
Estrildidae	<i>Nigrita fusconotus</i>	White-breasted Nigrita
Passeridae	<i>Passer griseus</i>	Northern Grey-headed Sparrow

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## 4.6 Questionnaire



### Environmental Education Data Collection Sheet on Conservation Assessment of Ibadan Malimbe in South West Nigeria

*Instruction: This questionnaire is solely designed to collect basic information on Ibadan Malimbe useful for sensitization and awareness purpose. Users of this instrument must be able to translate the questions in local language understandable by the intended community.*

#### Community and Respondent Bios:

1. Community Name:
2. Age of Respondent: A.) 20-30yrs B.) 31-40yrs C.) 41-50yrs D.) 51-60yrs
3. Occupation: A.) Oil Palm Farmer B.) Hunter C.) Women in Oil Palm Processing D.) Others

#### Characteristic Feature Awareness:

4. Do you know a bird called "Ega Oko" (Pictures of IBMA should accompany this question)

#### IBMA Habitat, Range & Ecology:

5. When last did you see IBMA in your farm (what time of the year) A.) February B.) May C.) June D.) September E.) October F.) December
6. Where do you usually come across IBMA in your farm? A.) Peak of Palm oil Tree B.) Forest Edge C.) Perched on Tree Branches D.) In flight E.) NA
7. Did you see IBMA alone as a single bird or in group A.) Single bird B.) Group  
If in group, how many was in the group A.) 2 B.) 3 C.) 4 D.) 5
8. Have you or your children come across the nest of IBMA? A.) Yes B.) No

If Yes, can you describe how IBMA nest looks like

- A.) Long Sucks-like shaped nest with anterior opening B.) Short Sucks-like shaped nest with anterior opening C.) Other description

9. Do you sight IBMA in other places other than the normal range you sight them? A.) Yes B.) No If Yes, where \_\_\_\_\_

#### Threats:

10. How many acres of farm do you grow annually? A.) 1-2 B.) 3-4 C.) 5-10
11. Do you utilize the old farm land in another new year or you open up new farm land?
12. Do you know of any Protected Area in this community? A.) Yes B.) No
13. What is your cheapest and reliable mode of cooking? A.) Fuel wood B.) Sawdust Stove C.) Kerosene Stove
14. During fuelwood collection by your women and children, do you come across the IBMA nest? A. Yes B. No

If Yes, what do you do with the nest A.) Destroy B.) Take home C.) Hang Back on Tree

15. What do you come across in the IBMA nest? A.) Egg B.) Young IBMA C.) Nothing
16. Are you aware of any bird poisoning effort by hunters or farmers in your community  
A.) Yes B.) No  
If Yes, is it still ongoing within this community
17. Do you have forest loggers in your community? A.) Yes B.) No

Conservation Actions:

18. Which other way can you achieve subsistence farming without deforestation? A.) Crop rotation B.) Controlled Felling
19. What do you think we can do to help you reduce the number of acres you plant annually and still achieve breakeven/profit
20. Will you or anyone you know be able to volunteer as part of Site Support Group to safeguard IBMA in your community A.) Yes B.) No  
Please mention name if Yes \_\_\_\_\_
21. Do you know who regulate forest loggers in your community A.) Local Council B.) State Government
22. Potential for School Conservation Club:
23. How many school both Primary and secondary are in this community

Please mention their name

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_