



Proposal to the African Elephant Fund

1.1 Country:	NIGER
1.2 Project Title:	Eco ethology of savannah elephant (<i>Loxodonta Africana</i> , Blumenbach 1797) facing climate change in W National Park of Niger
1.3 Project Location:	South east of Niger Republic
1.4 Overall Project Cost:	Niger requesting amount from African Elephant Fund: 3726.50 US \$
1.5 Project Duration:	17months
1.6 Project Proponent:	Ecological monitoring service of W National Park of Niger
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1.12 Date proposal submitted:	07/01/2019

2.0 Project Summary:

W National Park of Niger Elephant populations are not well known. Several aspects among which biology, ecology and demography deserve to be explored. The method of counting by dung measure will be used. At least five sites will be monitor during the cool and the hot dry season This research proposal will provide scientific information on dynamic and social behaviour of W National Park of Niger Elephants so as to contribute to a better management of the species.

The general objective of the study is to improve knowledge on ethology and ecology of savannah elephants in West Africa. The specific objectives are i) determine the defecation rate and dung decay, ii) estimate the savannah elephant population to update the local database iii) appreciate the savannah elephant distribution related to the protected area resources and the climate change.

3.0 This proposal is line on African Elephant Action Plan priority objectives:

PRIORITY OBJECTIVE 2: Maintain elephant habitats and restore connectivity

Activity 2.1.5 Identify and rehabilitate migration corridors and dispersal areas for effective protection of the African elephant.

Activity 2.2.3. Assess and monitor habitat change and fragmentation, with a focus on transboundary populations.

Activity 2.4.5. Investigate impacts of climate change on elephant habitat and elephant populations through appropriate research.

PRIORITY OBJECTIVE 5: Strengthen range states knowledge on African elephant management.

Activity 5.1.2. Conduct inventories for unknown/less known populations to ascertain their biological status and their habitats.

Activity 5.2.1. Maintain and update databases on elephant populations for management purposes.

4.0 Project Rationale –

Niger part of W Park appears among the richest Park of West Africa in term of wildlife and ecosystems diversity (Hibert, 2007). This Park with other protected areas of western Africa constitute the complex WAP which is a continuous group that comprises the other parts of W of Benin, Burkina Faso and Niger; the Arly and Pendjari Parks in Burkina Faso and Benin respectively and others neighbouring hunting zones. It is the most important stock of biodiversity of the

country and contains big mammals populations such as savannah elephants now in the northern borders of their area distribution (Ipavec, 2006). On the whole complex, elephant population was estimate at least 7945 individuals roughly 2% of the total population of Africa (Bouche, 2012; Bouche *et al*, 2013).

These elephants populations often fragmented in less than 200 individuals confined in some protected areas (Ipavec, 2006) representing currently 5% of the soudano-sahelian zone (CITES, 2011). Indeed according to Bouche (2012) the sub region is subject to a strong population growth which is characterized by a quadrupled human population in 60 years (from 1950 till 2010) with a density growing from 13 to 60 inhabitants/square km. needs of space for farming, breeding and others human settlements lead to a considerable reduction of elephants'home range (Sebogo, 2003). Nevertheless, elephants of Africa registered on the appendix I of CITES with vulnerable status are entirely protected by many states of the sub region including Niger Republic (DFC/AP, 2010).

Unlike certain parts of Africa which deal with a revealing overpopulation and where the “elephant problem” appears (Whyte *et al*, 1997; Pimm *et al*, 2001; Fazio, 2014); elephants of western Africa are subject to anthropological pressures such as fragmentation and degradation of their home range, poaching as well as variability and climate change effects (DFC/AP, 2010).

Little information such as age structure, sex ratios, seasonal movement and home range preferences are available on elephants of western Africa compared with those of East Africa where the information is of determined type (Sebogo, 2003). Information is indeed of capital interest for the implementation of a good elephants management, conservation (Pereboom, 2006) and safeguard measures. Efforts were supplied by researchers (Barnes *et al*, 2004; Ipavec, 2006; Bouché, 2012) and by certain institutions (Save the elephant, the Wild Foundation, Africa elephant Fund, African Elephant Specialist Group) and Conservation Programs (MIKE, ECOPAS).

Savannah elephants deserve to be well known, It's in this context that we should consider the present research proposal “Eco ethology of savannah elephant (*Loxodonta Africana*, Blumenbach 1797) facing climate change in W National Park of Niger”

This project is very important for our conservation area because little information is known on elephant trend and dynamic in the W National Park of Niger since 1980. Elephant populations are facing climate change and poaching. Their movements are not known, for example there was a wildlife survey (2015) during which any elephant is observed. But on the ground, few days before the survey they were observed.

Activities to be carried out:

Phase 1: Planning

The planning phase will involve preparation of sites for conducting dung count.

Phase 2: Procurement

This project will procure laptops, ranger finder, GPS and a satellite phones to be used to determine elephant population in W. National Park.

Phase 3: Project Implementation

Dung count will be conducted in five sites across W. National Park which will then be analysed to determine elephant population.

Phase 4: Monitoring and Evaluation

A detailed report will be published and disseminated to various stakeholders for this project.

Phase 5: Reporting

A final report will be prepared and submitted to African Elephant Fund.

5.0 Detailed Proposal Timelines

Periods	Activities	Expected Outputs	Observations
January 25 th to 29 th 2019	Identification of sites	5 identified sites	Where the monitoring will take place
February 1 st to 10 th 2019	Dung measure, defecation rate assessment	Defecation rate is known (1 st time)	Session of cold dry season in the chooses sites
April 1 st to 10 th 2019	Dung measure, defecation rate assessment	Defecation rate is known (1 st time)	Session of hot dry season in the chooses sites
January 1 st to 10 th 2020	Dung measure, defecation rate assessment	Defecation rate is known (2 nd time)	Session of cold dry season in the chooses sites
April 1 st to 10 th 2020	Dung measure, defecation rate assessment	Defecation rate is known (2 nd time)	Session of hot dry season in the chooses sites

After each session of field, data will be compiled and analyse in the laptop. A final report will be made at the end of the project.

Equipment to be purchased

In order

N°	Designation	Number	Observations
1	PC (Laptop)	01	Data processes
2	GPS	01	For field positions
3	Rangefinder	02	Distance measurement
4	Satellite phone	01	For rescue

Reporting procedures

A Report will be issued after each field mission; a final report will be done in the end of project.

The results will be share with law enforcement service of the Park and in general with all the managers of the protected area.

Identification: A team of 3 persons will prospect sites in the W Park where the research will be conduct. They must representative of the different kind of ecosystems.

Procurement: In this step, all the devices will be purchased for the project.

Implementation: It is the step of field activities when dung count will take place, during 10 days according to the season (Cold dry or hot dry) in the target sites. A team of 3 persons will follow transects for the survey.

Reporting: at the end of each field activity a report will be made and a final report at the end of the project.

Evaluation: At the end of the project, AEF and the Direction of Wildlife and Protected areas will assess the project.

6.0 Project Timeline

Identification: January 25th to 29th

5days will be used to identify representative sites. The will be follow during two years (2019 et 2020).

Procurement: January 20th to 24th

The material will be purchase at Niamey, Niger Republic.

Implementation: January 2019 to April 2020

The project will be implemented over 2years January 2019 to April 2020.

Counting by dung measure, determination of defecation rate will take place and will be led by a team of 3 persons.

Reporting: At the end of each field activity, data will be compiled, analyzed and a seasonal report will be made (January 2019 to April 2020).

Evaluation: June 2020

The evaluation will take place after field activities (June 2020). The Direction of wildlife and Protected Area and AEF will evaluate the project (strengnnesses and weaknesses) and the best practices.

BUDGET

7.0 This project will be co-funded by the government of Niger for a total amount of 1912.50 usd which represent the contribution for field data collectors fees and a part of logistic (motor bike hire of the Park).

7.1 Detailed proposed budget for this project (in US\$).

Identification:

Hire motorbike (AEF): 5days *2 motorbikes*17/2= 85 US \$

Hire motorbike (Niger Govt): 5days *2 motorbikes*17/2= 85 US \$

Fuel(AEF):5litres*2motobikes*5days*0.9=45 US \$

Field lunch (AEF):: 5days *3persons*3.5=52.5 US \$

Field data collector fees (Niger Govt):: 5days*3pers*8.5=127.5 US \$

395 US \$ are necessary for the team in charge of collecting data: AEF (182.5 US \$), Niger Govt(212.5 US \$) .

Procurement: Purchase devices (Laptop, Rangefinder, GPS, satellite phone for the project) before the project starts. AEF (100%)

Laptop (PC)	01	833
Rangefinder	01	167
GPS	01	417
Satellite Phone	01	667
Total		2084

Implementation: Hire motorbike, fuel, field lunch will be necessary for the team in charge of collecting data

Hire motorbike (AEF):40days *2 motorbikes*17/2= 680 US \$

Hire motorbike (Niger Govt):40days *2 motorbikes*17/2= 680 US \$

Fuel (AEF):5litres*40days *2motobikes*0.9=360 US \$

Field lunch (AEF): 40days *3persons*3.5=420 US \$

Field data collector fees (Niger Govt): 40days*3pers*8,5=1020 US \$

2140 US \$ are necessary for the team in charge of collecting data: AEF (1460 US \$); Niger Govt(1700 US \$).

Reporting: Laptop

Evaluation: Laptop

For each activities receipts will be made:

Any other budget lines:

7.2 The W National Park contribution for this proposal:

Field data collector fees: 45days*3pers*8.5=1147.5 US \$

Motorbike of W Park: 45days*2motorbikes*17/2= 765 US \$

Total: 1912.5 US \$

TEMPLATE FOR PRESENTATION OF PROJECT BUDGET TO THE AFRICAN ELEPHANT FUND
(Section 7.1 of the Project Proposal template)

We will provide receipts for all the equipment purchase. The material will be used for field activities: a range finder helps to determine distance operator-dung; for the determination of position a GPS is used; a satellite phone help to communicate in the field with the office because there is no network in some parts of the Park.

With a laptop, data can be process and the reports can be made easily.

FULL PROPOSAL BUDGET					
BUDGET LINE	Quantity	Cost/Unit	Expected source of funds and amounts		
			AEF	PROPONENT (GOVT.)	Other (please specify)
EQUIPMENTS/ GEAR/ SUPPLIES					
Laptop (PC) (AEF)	01	833	833	0	
Rangefinder (AEF)	01	167	167	0	
GPS(AEF)	01	417	417	0	
Satellite Phone (AEF)	01	667	667	0	
Other expenses					
Motorbike hire (AEF and Niger Govnt)	90	17	765	765	
Fuel for motorbike (AEF)	450	0,9	405	0	
Field lunch (AEF)	135	3.5	472.5	0	
Field data collector fees (Niger Govnt)	135	8,5	0	1147.5	
TOTAL			3726.5	1912.5	

Total request to AEF is 3726.5 US \$

Co-funding from the government is 1912.5 US \$