

# ACTION PLAN FOR THE MANAGEMENT OF TRANSFRONTIER ELEPHANT CONSERVATION CORRIDORS IN WEST AFRICA



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CEPF



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This document is the product of a workshop on the Management of transfrontier elephant conservation corridors, held in Ouagadougou from 9 to 11 June 2003.

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## I. INTRODUCTION

The twentieth century witnessed a decline of 90% of elephant range in West African primarily because of ivory hunting and the rapid expansion of human activities (*Roth & Douglas-Hamilton, 1991*). Roads, railways and settlement split the remaining range into isolated fragments, so that today West African elephants are found for the most part in small isolated populations. Because the remaining elephant refuges are surrounded by dense human populations, crop-raiding and other forms of human-elephant conflict are frequent. The remaining habitats are often degraded, and encroachment by farmers and grazers is common (*AfESG, 1999*). Poaching for both ivory and meat is a constant risk.

Small patches of habitat may not have the resources necessary to support an elephant population year round or during periods of scarcity, such as drought. Small habitats have a large ratio of perimeter to area, making the animals therein vulnerable to human pressures. For example, during the period of poaching in the 1970s and 1980s elephants occupying small reserves had a low probability of survival compared to those in larger ranges (*Barnes, 1999*).

The median population size in the West African savannas is 100 elephants, while in the forest zone the median is 40 animals (calculated from data in *Blanc et al., 2003*). In both forest and savanna one quarter of the populations are thought to consist of twenty elephants or less. Small populations that are genetically isolated risk losing genetic variation, especially if the sex ratio has been distorted by hunting for ivory, and are likely to experience inbreeding. Inbreeding in mammals tends to reduce fecundity and survival, especially infant survival. In addition, random variations in age structure, sex ratio, mortality and natality increase the chances that a small population will decline rather than increase. Thus small populations of elephants are less likely to be viable in the long term (e.g. the next hundred years), and have a higher probability of dwindling to extinction, compared with larger elephant populations elsewhere on the continent.

The corridor concept is an idea whose time has come. It has been embraced by conservationists during the last two decades because it provides the hope that we may be able to reverse deleterious consequences of habitat fragmentation. There are two different types of corridor. The first may be called the migration corridor and consists of a strip of habitat that links two patches or reserves. This type of corridor promotes the movement of animals between the reserves and therefore reduces the effects of genetic isolation and allows access to a wider range of resources. This improved connectivity has been shown to bring wider ecosystem benefits such as enhanced pollination and seed-dispersal (*Tewksbury et al., 2002*). The second type may be called a conservation corridor and comprises a portion of landscape embracing several different land uses that are managed to achieve specific conservation objectives. This is broader in scope than the first and is the type promoted by Conservation International and others in West Africa. When such a conservation corridor spans an international boundary, the scope is even greater and these have become known in the conservation community as transfrontier conservation area. All these concepts share the same general conservation aims and objectives.

Here, these various corridor concepts are drawn together under the still broader concept of transfrontier elephant conservation corridors. Corridors that are large enough to promote elephant movements will

also benefit other species, and so although this action plans is focussed on one species it is a means of achieving far broader conservation aims. Examples of transfrontier elephant conservation corridors include the Selous-Niassa corridor between Tanzania and Mozambique (Mpanduji et al., 2002) and the Zambezi Valley corridor on the border between Zimbabwe and Mozambique (*Osborn & Parker, 2003*). A corridor linking the forests of western Ghana and eastern Côte d'Ivoire has been proposed by Parren et al. (2002).

According to the information provided by the African Elephant Status Report 2002 (*Blanc et al., 2003*), transfrontier elephant populations account for more than half the forest elephants in West Africa, and more than two-thirds of the savanna elephants in the sub-region. The successful management of transfrontier ranges will make a significant contribution to the conservation of West African elephants.

The continued rapid growth of human populations and advancing technology mean that human impact upon the landscape are increasing to the detriment of elephants. Wildlife managers must act quickly to secure elephant habitats and corridors while there is still time. The situation is made more urgent by the new theory that West African elephants are different from those elsewhere on the continent and may represent a separate sub-species or species (*Eggert et al., 2002*).

There are 18 transfrontier ranges in West Africa (see the distribution maps in *Blanc et al., 2003*). Only then five most important were selected for attention in this workshop as follows:

- (1) the complex of protected areas in eastern Burkina Faso, including W National Park in Niger and Benin, and the protected areas of northern Togo;
- (2) the sahelian elephants of the Gourma which move between Mali and northern Burkina Faso, Africa's northernmost elephant population;
- (3) the network of protected areas in southern Burkina Faso (Nazinga Game Ranch, Parc National Kabore Tambi) that connect via riverine forest to the Sissili valley and Mole NP in northern Ghana, and also to the Red Volta ecosystem of northeastern Ghana which extends into northwest Togo;
- (4) the forests of the Bia-Goaso complex in western Ghana that connect to Djimbarakrou forest reserves in eastern Cote d'Ivoire;
- (5) the Tai National Park and associated forests in western Côte d'Ivoire and the Grebo Forest in Liberia.

It had been intended to include the Ziaman National Park in Guinea, which lies adjacent to the North East National Forest in Liberia. However it was decided to await the elephant census planned for January-March 2004 that would provide more information on numbers and distribution.

For each of these corridors, the following steps were taken to develop a set of action plans:

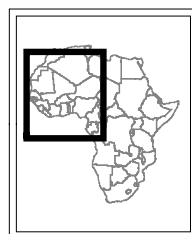
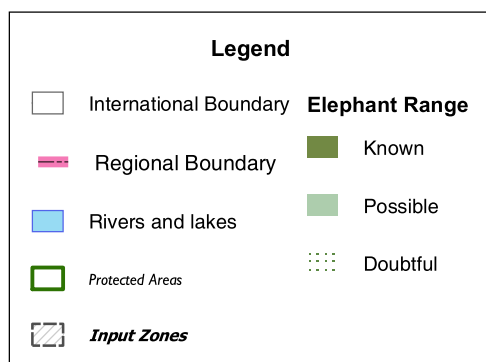
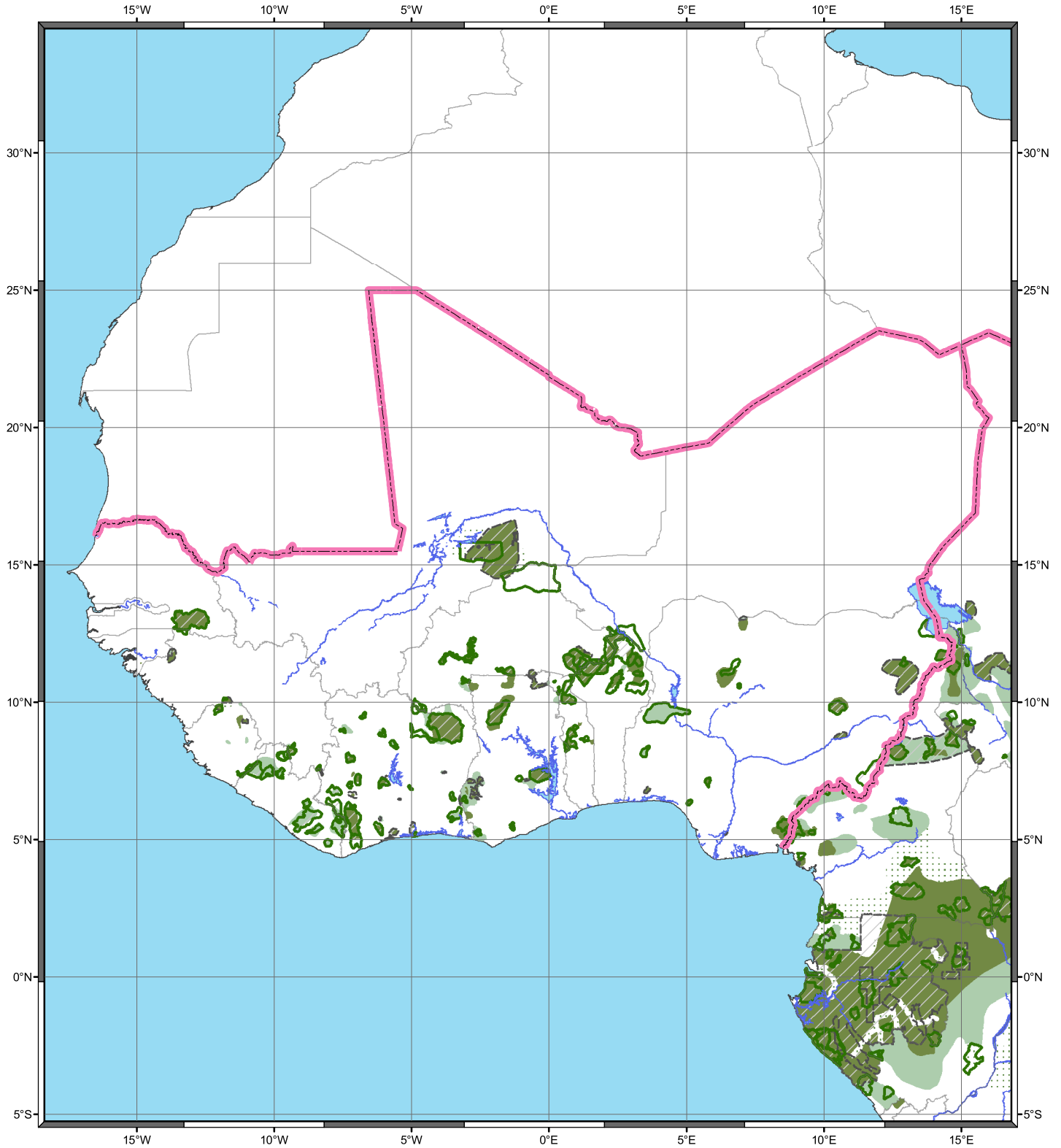
1. Description of the transfrontier elephant conservation corridor
2. Identification of major threats
3. Development of a framework for each corridor
  - Statement of objectives and results to be achieved for the improvement of elephants' conditions and their environment.
  - Identification of a series of activities to be implemented to obtain the expected so as to reach the targeted objectives.
  - Identification of verifiable result indicators in order to measure progress in the implementation of each management plan
  - Analysis of transfrontier population's range in order to secure it, and to reduce friction with the local human population
4. Identification of current projects and programmes in the sites of each corridor

These action plans also aim to create a common vision regarding the management of transfrontier natural resources in the sub-region, and to reinforce inter-state collaboration for the management of each transfrontier elephant conservation corridor as a unique entity in the broader landscape.



# West Africa

## Elephant Range, Input Zones and Protected Areas



Sources:  
African Elephant Database  
Digital Chart of the World

0 250 500 1,000 km

Geographic Projection  
Scale is indicative only

IUCN/SSC



African Elephant  
Specialist Group

## **II – MANAGEMENT PLAN FOR EACH TRANSFRONTIER ELEPHANT CONSERVATION CORRIDOR**

### **1.0 Action Plan for the Management of the Transfrontier Elephant Conservation Corridor of Park W – Eastern Burkina Reserves – Pendjari Park - Northern Togo Reserves**

#### **1.1 Description**

The W-Eastern Burkina- Pendjari-Northern Togo transfrontier elephant conservation corridor lies across the borders of four countries: Burkina Faso, Benin, Niger and Togo. This site comprises several adjacent protected areas, including the tripartite W Park, the Pendjari Park, and the Arly Park. There are also numerous hunting zones that surround the parks, which are managed by private operators. This corridor extends to the North- East of Togo and includes the wildlife reserve of Oti-Mandouri, the Keran National Park and the forest reserves of Galangachie and Barkoissi.

With an approximate area of 43 746 km<sup>2</sup>, this corridor is located in the sudano-sahelian zone, between the latitudes 9°54' and 12°57' N and the longitudes 0°27' and 3°11' E. The average annual rainfall varies between 600 and 1100 mm.

This network of protected areas shelters an estimated population of 3800 elephants, giving a density of 0.13 km<sup>2</sup> (Blanc et al, 2003). It is the most important and viable population in West Africa.

Even though there have not been any dedicated studies on transfrontier movements these last few years, it is widely accepted that elephants have moved between the neighbouring countries.

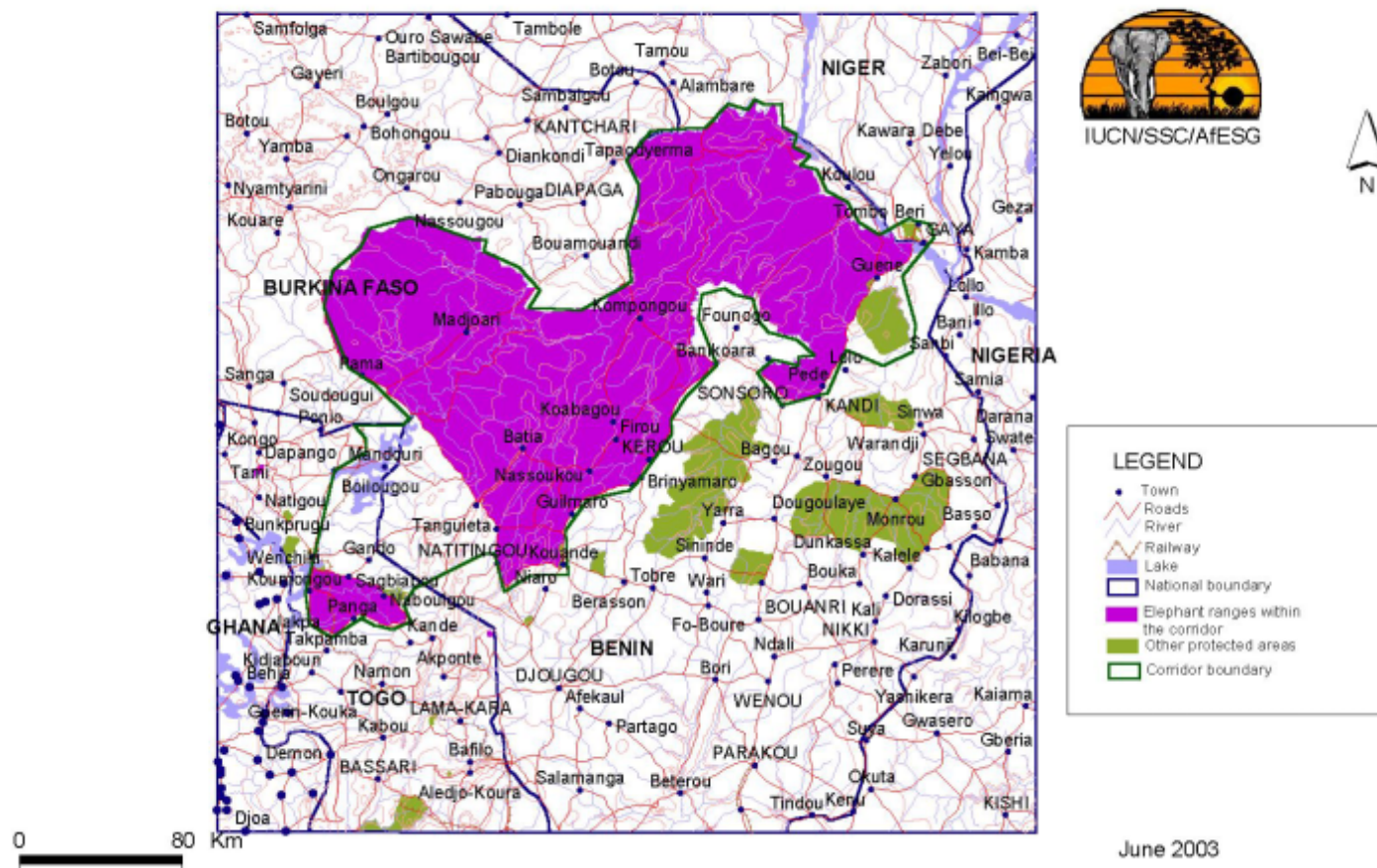
Recent programmes include simultaneous inventories that were carried out in 2003 by the CITES Monitoring of Illegal Killing of Elephants (MIKE) Programme.

A programme (ECOPAS) common to the three countries Burkina Faso, Benin, and Niger for the management of W Park is being implemented. In addition, some isolated conservation actions are being undertaken in most sites of the corridor, notably in the Arly Park, the Park W, the Pendjari Park and their peripheral zones.

#### **1.2 Major threats**

- **Human pressures (poaching and cattle herding)**
- **Loss and degradation of habitat**

# CORRIDOR : COMPLEXE PARC W - ARLY - PENDJARI - NORD TOGO



### 1.3 Logical framework

<b>OBJECTIVE 1 : HARMONISE ELEPHANT CONSERVATION PROGRAMMES IN THE CORRIDOR</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> completion of national strategies for elephant management in each country.</p> <p><i><b>INDICATOR 1 R1:</b> All national strategies available by 2004</i></p> <p><i><b>INDICATOR 2 R1:</b> An implementation programme for the corridor action plan available by 2005.</i></p>	<p>1.1 Seek funding for workshops in order to develop national strategies.</p> <p>1.2 Compile strategy documents and validate them</p> <p>1.3 Disseminate the strategy documents</p> <p>1.4 Present the documents to relevant donors</p> <p>1.5 Develop corridor conservation programmes based on the national strategies</p>
<p><b>RESULT 2 :</b> Harmonising national strategies of elephant conservation</p> <p><i><b>INDICATOR R2:</b> A strategy document resulting from the workshop available by end 2004</i></p>	<p>2.1 Organise harmonisation workshops (identify categories of actors, share strategies between countries, organise workshops).</p> <p>2.2 Harmonise existing legal documents (collect documents in the different countries, circulate them, and organise a harmonisation meeting at the national level and then at the level of the four countries).</p> <p>2.3 Disseminate the harmonised strategy</p>

<p><b>RESULT 3:</b> Enforcement of an agreement between the four countries for elephant-population- management.</p> <p><i><b>INDICATOR R3 :</b> A sub-regional agreement protocol for elephant management is signed by end 2005</i></p>	<p>3.1 Define transfrontier migration corridors (negotiate with communities, map out corridor, etc.)</p> <p>3.2 Elaborate a draft agreement between the four countries (carry out a consultative mission in the concerned countries, organise a workshop to finalise the agreement)</p> <p>3.3 Submit the agreement to the country's relevant authorities for signature</p> <p>3.4 Sensitise all actors regarding this agreement (reinforce and develop tools, popularise and disseminate the agreement)</p>
<p><b>RESULT 4 :</b> promoting sustainable management of habitats in cross-border corridors</p> <p><i><b>INDICATOR R4 :</b> A management plan of the habitats in the corridor is available by end 2005</i></p>	<p>4.1 Identify corridors in each country ( Describe the status of land occupation, hold a harmonisation workshop)</p> <p>4.2 Define corridors limits</p> <p>4.3 Seek funding for the development of the plan</p> <p>4.4 Identify a team of experts to collect data for the development of the plan</p> <p>4.5 Design a management plan for the whole corridor.</p> <p>4.6 Disseminate the management plan and validate it</p> <p>4.7 Implement the plan (validate, disseminate, popularise).</p> <p>4.8 Reinforce actors' capacities in elephant conservation.</p>

<b>OBJECTIVE 2 : REDUCE HUMAN / ELEPHANT CONFLICTS</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1 :</b> Comprehension of the HEC issue</p> <p><i><b>INDICATOR 1 R1:</b> A report on the analysis of H/E conflict at the site is available by end 2005</i></p> <p><i><b>INDICATOR 2 R1 :</b> The number of reports of human – elephant conflicts is reduced of 50% by 2008</i></p>	<p>1.1 Identify an expert to collect information at the site level</p> <p>1.2 Collect necessary data from sample villages or fields</p> <p>1.3 Analyse the data and write the report</p>
<p><b>RESULT 2 :</b> Setting up conflict prevention mechanism</p> <p><i><b>INDICATOR R2:</b> 80% of the target-populations have at least one protection system for their crops by end 2007</i></p>	<p>2.1 Demarcate cultivated areas, use deterrent methods and devices, set up a good policy for the management of fires, grazing areas, water points</p> <p>2.2 Set up a system for the monitoring of HEC</p> <p>2.3 Develop an Information, Education and Communication ( IEC) strategy</p> <p>2.4 Identify and acquire the IEC tools</p> <p>2.5 Define appropriate themes to reach as many people as possible with the IEC tools.</p>

<p><b>RESULT 3:</b> Effective involvement of local populations in elephant management.</p> <p><i><b>INDICATOR R3 :</b> 50% of target villages have a structure for elephant management by 2006.</i></p>	<p>3.1 Organise local structures of elephant management (inform, train populations, propose and popularise selected types of organisations, determine a draft by-law and internal regulation for the structure)</p> <p>3.2 Promote appropriate tourism activities</p> <p>3.3 Create surveillance networks by facilitating information exchange between communities, and by strengthening the surveillance structures at the site level.</p> <p>3.4 Determine local populations' and other actors' rights and duties, organise a workshop at the local level.</p>
<p><b>RESULT 4 :</b> Establishment of a self-compensation mechanism for damages caused by elephants</p> <p><i><b>INDICATOR R4:</b> 80% of target villages have a self compensation structure by end 2007</i></p>	<p>4.1 Set up a compensation fund and identify sources of funds</p> <p>4.2 Define in collaboration with local communities how to use funds</p> <p>4.3 Training local community representatives in setting up and managing funds</p> <p>4.4 Strengthen knowledge of elephant biology</p> <p>4.5 Develop an IEC strategy</p>

<b>OBJECTIVE 3 : SECURE CROSS-BORDER ELEPHANT POPULATIONS AGAINST POACHING</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>



<p><b>RESULT 1:</b> Improvement of law enforcement capacity</p> <p><b>INDICATOR 1 R1:</b> <i>Two yearly joint patrols organised no later than 2004</i></p> <p><b>INDICATOR 2 R1:</b> <i>The number of illegally killed elephants is reduced of 90% by end 2008</i></p>	<ul style="list-style-type: none"> <li>1.1 Assess the existing anti-poaching agreement (Burkina Faso, Benin, Niger)</li> <li>1.2 widely disseminate this agreement to the field officers</li> <li>1.3 Extend the agreement to all the concerned countries (update and implement this agreement)</li> <li>1.4 Organise joint patrols for combating poaching at the corridor level</li> <li>1.3 1.5 Organise meetings to share experiences between officers involved in anti-poaching</li> <li>1.6 Organise aerial patrols</li> <li>1.7 Equip and train site agents in combating poaching</li> <li>1.8 Set up a reliable communication system which help contacting all patrol teams in the field</li> <li>1.9 Create an information network in each country (organise consultation meetings, determine the Terms of Reference of the network, set up the network.)</li> <li>10. Create an information in the corridor (Organise consultation meetings between national committees, determine the network's Terms of Reference)</li> <li>10.1 Strengthen the CITES network. (popularise CITES convention objectives, train and involve actors, set up a formal exchange framework)</li> </ul>
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<p><b>RESULTAT 3 :</b> Improvement of elephant populations viability</p> <p><b>INDICATEUR R 3:</b> <i>Elephant number within the corridor increased up to 5000 in 2010.</i></p>	<p>3.1.Set up and implement a regular monitoring system for elephants</p> <p>3.3 Organise regular elephants surveys.</p>
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#### 1.4. Ongoing Programme/Projects

SITES	PROJECTS /PROGRAMMES	PARTNERS
Park W	<p>Protected Ecosystems in Soudano-Sahelian Africa (ECOPAS)</p> <p>Monitoring Illegal killing of Elephants (MIKE)</p> <p>Panafrican Programme of Epizootic control (PACE)</p>	<p>European Union</p> <p>CITES / IUCN</p> <p>UNEP / UNESCO</p> <p>Netherlands Governmentt</p>
Pendjari Park	<p>Programme for the Conservation and Management of National Parks (PCGPN) PACE</p> <p>Panafrican Programme of Epizootic control (PACE)</p>	<p>GTZ</p> <p>KFW</p> <p>AFD</p> <p>Netherlands</p> <p>UNEP / UNESCO</p>
Arly	Assistance Programme to Fauna Conservation Units (PAUCOF)	AFD
Northern Togo	Protected Areas Rehabilitation Programme	European Union

## **2.0 Action Plan for the Management of the Transfrontier Elephant Conservation Corridor of Malian Gourma – Burkina Sahel**

### **2.1 Description**

This transfrontier elephant conservation corridor is located in the sahelian area between northern Burkina Faso and south-eastern Mali, between latitudes 40°30' and 16°15' North, and longitudes 0°45' and 3°45' West. The average annual varies between 100 and 300 mm. This corridor is composed, on the Burkina Faso side of the forest reserve and the partially protected wildlife reserve of the Sahel, covering about 1600km<sup>2</sup> and on the Mali Side of the Gourma elephant reserve, with an area of about 12 000 Km<sup>2</sup>. In addition to these two large units, there is an unprotected area between them. The corridor covers 73547 Km<sup>2</sup>.

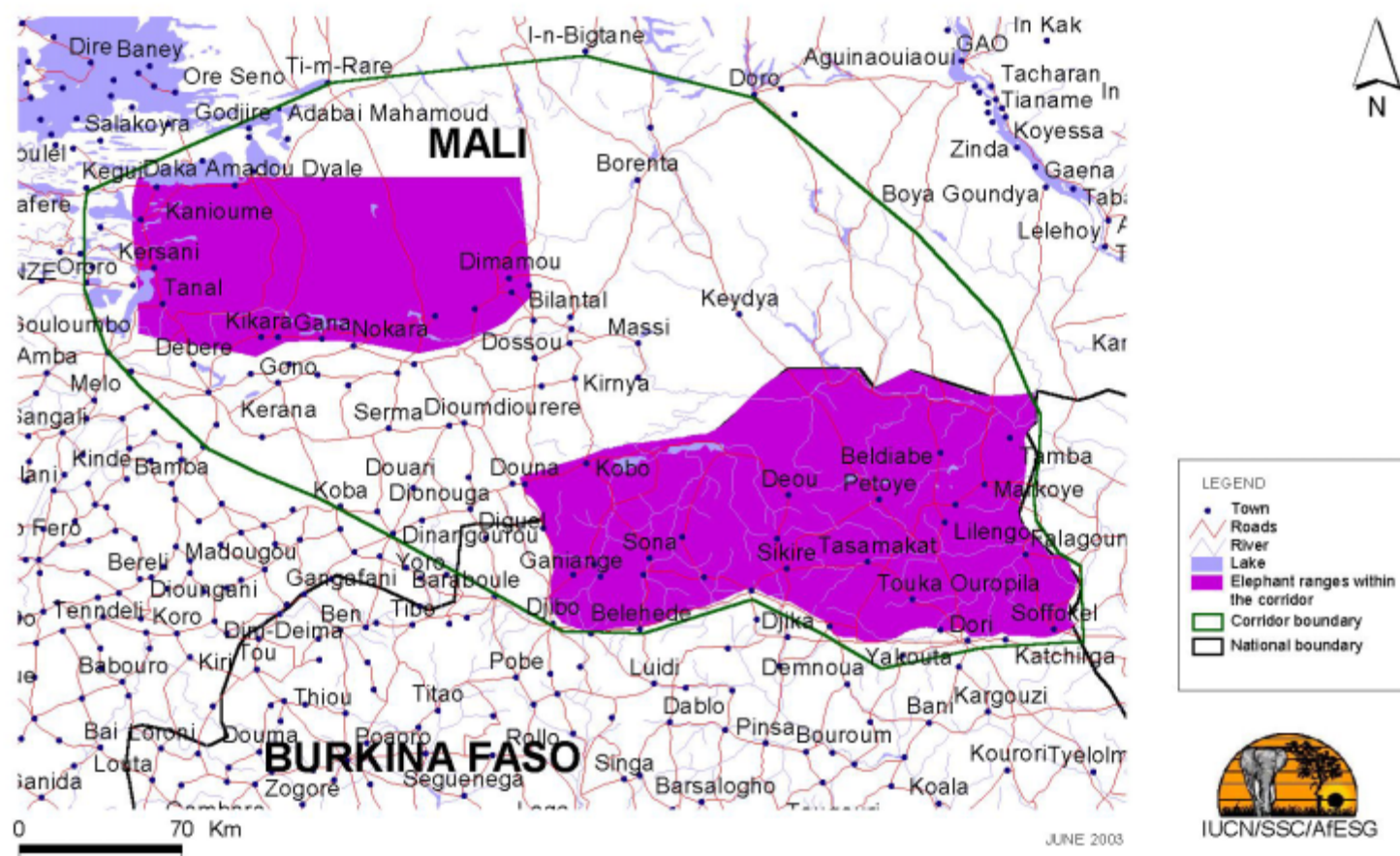
According to the survey carried out in 2002 (*Douglas Hamilton et al; 2002*), the number of elephants of this corridor is estimated at 350. This elephant population is the most northern one in West Africa. Several surveys have shown important seasonal transfrontier movements between Malian Gourma and Burkina Sahel. While most of the time, these elephants use the Malian Gourma area, they move to the Burkina Sahel during the rainy season.

Recent activities include the aerial survey simultaneously carried out in Malian Gourma and Burkina Sahel by the MIKE programme. A radio-tracking study of elephant migrations and spatial distribution was conducted during the last three years by the NGO " Save the Elephants".

### **2.2 Major threats**

- **Degradation of the vegetation cover**
- **Anthropogenic pressure**
  - **Occupation of the banks of permanent ponds**
  - **Anarchic creation of farmlands**
  - **Domestic livestock pressure**
- **Human -elephant conflicts**
  - **Damage to crops and harvests**
  - **Fatal accidents**

## CORRIDOR : MALIAN GOURMA - BURKINA SAHEL



## 2.3 Logical framework

<b>OBJECTIVE 1: HARMONISE ELEPHANT CONSERVATION PROGRAMMES WITHIN THE CORRIDOR</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Setting up similar projects and programmes in matters of elephant management</p> <p><i><b>INDICATOR R1:</b> At least two projects on elephant management are implemented in Burkina and Mali by 2005</i></p>	<p>1.1 Undertake negotiations and sign grant agreements with partners to the development</p> <p>1.2 Set up project teams</p> <p>1.3 Write project proposals to raise additional financial resources</p>
<p><b>RESULT 2:</b> Strengthening transfrontier co-operation</p> <p><i><b>INDICATOR R2:</b> two contracts are signed with IUCN for facilitating transfrontier co-operation by 2005</i></p>	<p>2.1 Carry out joint field missions in both countries</p> <p>2.2 Organise local population through associations to enhance their involvement in elephant conservation and the management of income generated from tourist valuing of elephants.</p> <p>2.3 Share information and data</p>
<p><b>RESULT 3 :</b> enforcement of an agreement between both countries for elephant population management</p> <p><i><b>INDICATOR R3:</b> An agreement protocol between both countries is signed by end 2005</i></p>	<p>3.1 Draw up a draft agreement between both countries (carry out a consultative mission in each country, organise a workshop to finalise the agreement)</p> <p>3.2 Submit the agreement to relevant authorities for signature, sensitise all relevant parties regarding this agreement</p> <p>3.3 Implement the signed agreement</p>

<b>OBJECTIVE 2 : REDUCE HUMAN - ELEPHANT- CONFLICTS</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Reduction of competition between local populations and elephants on the use of natural resources</p> <p><i><b>INDICATOR R1:</b> crop damage is reduced by 50% in 5 years time</i></p>	<p>1.1 Map out elephant- migration routes and circuits</p> <p>1.2 Inform populations about elephant movements</p> <p>1.3 Draw a land use map</p>
<p><b>RESULT 2:</b> Integration of local communities needs in elephant conservation issues.</p> <p><i><b>INDICATOR R2 :</b> At least 20% of villages surrounding the corridors are provided with social infrastructures</i></p>	<p>2.1 Draw up and implement land use development and management plans.</p> <p>2.2 Promote development of eco-tourism (e.g through international and national media)</p> <p>2.3 Provide appropriate accommodation facilities for tourists.</p>
<b>OBJECTIVE 3 : MANAGE CORRIDOR HABITAT IN A SUSTAINABLE WAY</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Identification of elephants habitats and their migration routes</p> <p><i><b>INDICATOR R1 :</b> Maps of elephant and human population distribution are available by 2006</i></p>	<p>1.1 Initiate a study on the use of habitat by humans and elephants</p> <p>1.2 Initiate a study on elephants' diet</p> <p>1.3 Carry out socio-economic surveys and start a process of defining elephant-migration routes between the protected areas of the corridor (carry out studies, negotiate space, map out and demarcate the routes).</p>

<p><b>RESULT 2:</b> Elaboration and implementation of management plans in each site of the corridor</p> <p><i><b>INDICATOR R2 :</b> Site development plan is available by end 2005</i></p>	<p>2.1 Take stock of available water and pasturage resources</p> <p>2.2 Conduct additional studies where necessary</p> <p>2.4 Finalise development plan and have it adopted by interested ministries in concerned countries</p>
<p align="center"><b>OBJECTIVE 4 : IMPROVE ELEPHANT POPULATION VIABILITY</b></p>	
<p><b>RESULTS</b></p>	<p><b>ACTIVITIES</b></p>
<p><b>RESULT 1 :</b> Improvement of elephant population viability</p> <p><i><b>INDICATOR R1:</b> Elephant number increased up to 25% by 2010</i></p>	<p>1.1 Develop and implement elephant monitoring protocol</p> <p>1.2 Develop an ecological follow up strategy, acquire telemetry radio equipment, conduct scientific researches</p> <p>1.3 Organise regular elephant surveys</p>
<p align="center"><b>OBJECTIVE 5 : DEFINE AND IMPLEMENT AN INFORMATION, EDUCATION AND COMMUNICATION PROGRAMME ON ELEPHANT CONSERVATION</b></p>	
<p><b>RESULTS</b></p>	<p><b>ACTIVITIES</b></p>
<p><b>RESULT 1:</b> Development of an IEC programme</p> <p><i><b>INDICATOR R1 :</b> IEC document is available by end 2005</i></p>	<p>1.1 Identify populations' need in information area</p> <p>1.2 Set up an information strategy</p> <p>1.3 Organise information and sensitisation campaigns</p> <p>1.4 Develop and implement a strategy on environmental education for youth and women</p>

<b>OBJECTIVE 6 : REINFORCE ACTORS' CAPACITIES IN ELEPHANT POPULATION MANAGEMENT</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p>RESULT 1 : Training of trainers in elephant conservation methods and techniques</p> <p><i><b>INDICATOR R1</b> : After 5 years, at least 60% of the trained staff apply their knowledge in conservation area</i></p>	<p>1.1 Identify agents' needs for training</p> <p>1.2 Identify appropriate trainers and agents for the training; hold training sessions for agents.</p> <p>1.3 Organise study trips, identify appropriate training schools and seek scholarships for students.</p>

## 2.4 Ongoing programmes/projects

SITES	PROGRAMMES/PROJECTS	DONORS/ PARTNERS
Burkina Sahel	<p>Partnership Project for the Improvement of Natural Ecosystems Management (PAGEN)</p> <p>National Programme for Land Management, phase II (PNGT II)</p>	GEF (World Bank)
Malian Gourma	<p>Gourma Biodiversity and Elephants Conservation and Upgrading Project (PCBG)</p> <p>Assistance Project to Mopti and Tombouctou Local Government (APMTLG)</p>	GEF (World Bank)



### **3.0 Action Plan for the Management of the Transfrontier Elephant Conservation Corridor of Nazinga-Kabore Tambi National Park-Red Volta- Doungh Ecosystem**

#### **3.1 Description**

The transfrontier elephant conservation corridor Nazinga - Kabore Tambi National Park - Red Volta Ecosystem - Doungh, consists of a network of protected areas that includes the following ecosystems:

Burkina-Faso: the Nazinga Ranch, the forest reserves of the Sissili and Nazinon, the Kabore Tambi National Park and the Zabre region range.

Ghana: Red Volta West Forest Reserve, Red Volta East Forest Reserve, White Volta East Forest Reserve, Morago River Forest Reserve, Gambaga Scarp Forest Reserve, Chiana Hills Forest Reserve, Pudo Forest Reserve, Sissili Central Forest Reserve, Fumbissi Forest Reserve and Mole National Park.

Togo: the classified forest of Doungh, with elephant migration corridor leading to the Fosse aux Lions.

This corridor includes the most important network of transfrontier protected areas in West Africa. It is located in the Sudanian zone between the latitudes 9° 3' and 10° 7' N and longitudes 2° 12', 1° 23' W. The average annual rainfall varies between 800 and 1100 mm. It covers an area of 18035 Km<sup>2</sup>

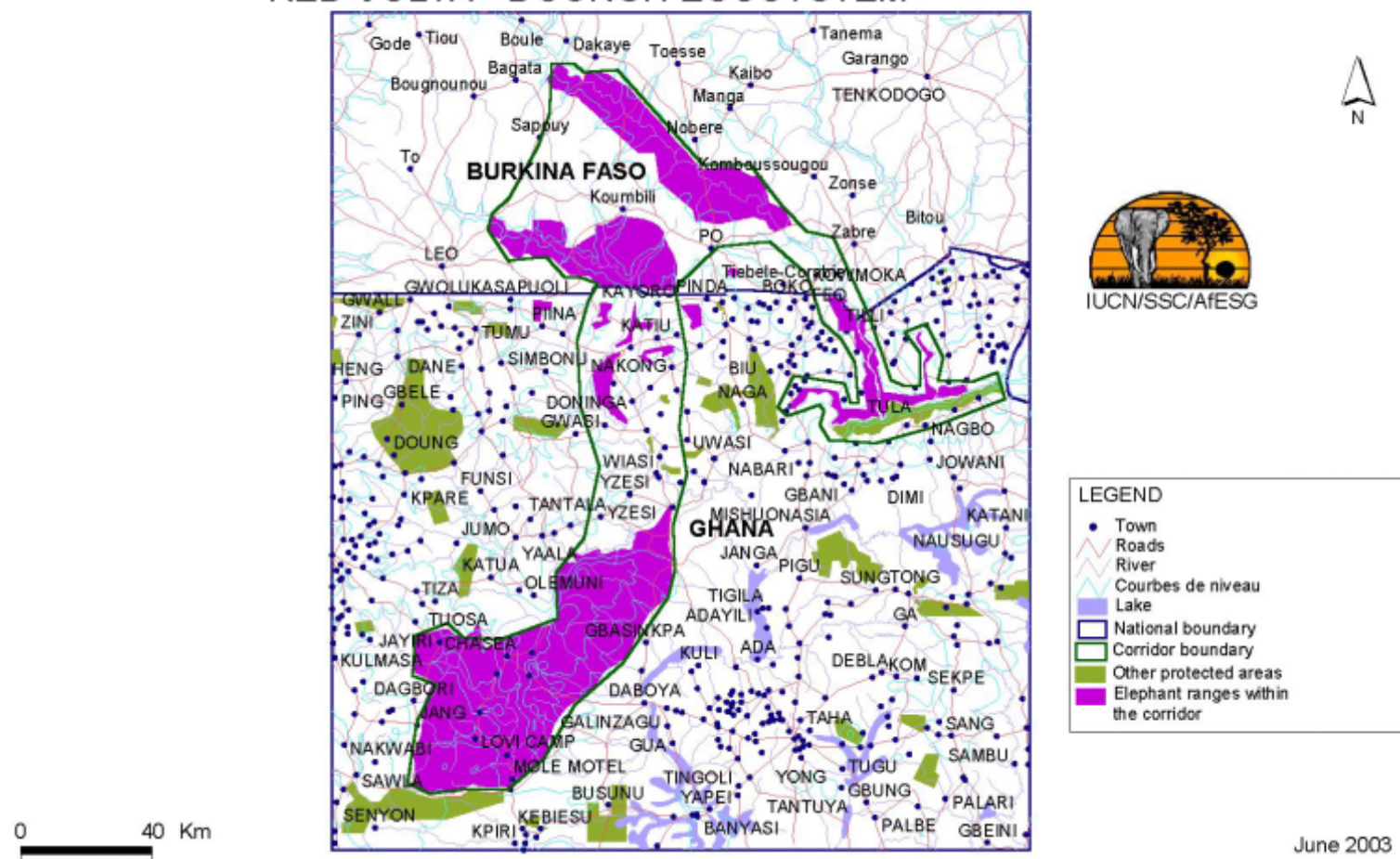
According to the information given in the African Elephant Status Report 2002, this corridor accommodates a total of 770 elephants in the Nazinga-Kabore-Tambi-Red Volta-Doungh area, and 590 elephants in Mole NP (*Blanc et al, 2003*). Despite the lack of information on elephant migration between the different sites of the corridor, some information indicates frequent elephant movements between the ranch of Nazinga, the Kabore Tambi Park, the Red Volta ecosystem in Ghana, and the forest of Doungh in the north-west of Togo. There may still be a possible migration corridor that leads from Doungh to the Fosse Aux Lions. There may be some movement of elephants between Nazinga and the northern part of Mole NP.

No simultaneous activities have been conducted across the corridor, but isolated initiatives have been carried out in some areas, notably in the ranch of Nazinga and Kabore Tambi Park, where the MIKE program made a survey in May 2003. Investigations on the status of elephants and human-elephant conflicts were carried out during the last few years along the red Volta river, on both sides of Ghana-Burkina Faso frontier by GSEAF members (Blaise Swadogo and Moses Kofi Sam). Research was undertaken on elephant migration in October 2002 in the Doungh area. The MIKE programme conducted also an aerial and ground survey of elephants in Mole NP in March 2002.

### **3.2 Major threats**

- **Absence of concerted initiatives in matters regarding site management**
- **Human/ elephant conflicts**
- **Poaching**

# CORRIDOR : NAZINGA - KABORE TAMBI NATIONAL PARK - RED VOLTA - DOUNGH ECOSYSTEM



### 3.3 Logical framework

<b>OBJECTIVE 1 : HARMONISE ELEPHANT CONSERVATION PROGRAMS IN THE CORRIDOR</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1 :</b> Harmonisation of corridors conservation programs</p> <p><i><b>INDICATOR 1 R1 :</b> A consultation framework is created and operates by the end of 2005</i></p> <p><i><b>INDICATOR 2 R1 :</b> At least 50% of common programmes implemented by 2010</i></p>	<p>1.1 Create a technical consultation framework for the management of the corridor</p> <p>1.2 Develop common projects with national components</p> <p>1.3 Produce an accurate map of the corridor</p> <p>1.4 Conclude an agreement on a common vision for the management of the ecosystem and harmonise legal documents to this effect</p> <p>1.5 Produce legal documents necessary for enforcing transfrontier management and negotiate their adoption</p> <p>1.6 Develop joint programs on elephants research</p>

<b>OBJECTIVE 2: REDUCE HUMAN/ELEPHANT CONFLICTS</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1 :</b> Developing a common approach and an efficient mechanism on the resolution of H-E conflicts</p> <p><i><b>INDICATOR R1 :</b> Crop damages are reduced to 50% by the end of 2008</i></p> <p>illegal Killing illegal Killing illegal Killing</p>	<p>1.1 Develop coherent approaches to prevent and manage human-elephant conflict</p> <p>1.2 Organise regular meetings between managers in the three countries to evaluate the effectiveness of approaches</p> <p>1.3 Carry out specific studies on HEC issues (causes, importance, consequences, etc...)</p> <p>1.4 Integrate the HEC concern in the consultation framework agenda</p> <p>1.5 Organise exchange visits for technicians and for local communities</p> <p>1.6 Promote income generating activities and ensure the sharing of benefits between local communities</p> <p>1.7 Plan settlement and land use within the corridor.</p>
<b>OBJECTIVE 3 : SECURE ELEPHANT POPULATIONS AGAINST POACHING</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>

<p><b>RESULT 1 : Reducing transfrontier poaching</b></p> <p><i><b>INDICATOR R1:</b> The number of elephants illegally killed is reduced at least at 50% by the end of 2008</i></p>	<p>1.1 Develop, adopt and implement a common strategy to combat poaching and elephant trade.</p> <p>1.2 Develop an anti poaching agreement and have it signed by relevant authorities in the three countries</p> <p>1.3 Train and equip the staff responsible for the surveillance of the migration corridors</p> <p>1.4 Conduct studies on the transfrontier elephant movement</p> <p>1.5 Conduct a survey on the internal market of ivory in the three countries.</p>
<p align="center"><b>OBJECTIVE 4 :PROMOTE SUSTAINABLE MANAGEMENT OF THE HABITATS IN THE CORRIDOR</b></p>	
<p><b>RESULTS</b></p>	<p><b>ACTIVITIES</b></p>
<p><b>RESULT 1:</b> Ensuring the conservation of the corridor</p> <p><i><b>INDICATOR R1:</b> A map of the corridor that integrates the different migration routes is available by 2010</i></p>	<p>1.1 Investigate status of of the overall ecosystem and its associated problems</p> <p>1.2 Start a process of identifying / mapping elephant migration routes between protected areas of the corridor (carry out research, draw maps and demarcate routes)</p> <p>1.3 Start a process of demarcating the corridor and initiate its validation by authorities of the countries</p> <p>1.4 Prepare and implement a management plan of the corridor with the participation of all stakeholders.</p>

<b>OBJECTIVE 5 : DEFINE AND IMPLEMENT AN INFORMATION, EDUCATION AND COMMUNICATION PROGRAMME</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Promotion of appropriate information on elephant conservation for local communities</p> <p><i><b>INDICATOR R1:</b> 75% of target groups are informed of the process and participate by the end of 2008</i></p>	<p>1.1 Identify themes, target groups, and local population's needs for information</p> <p>1.2 Set up an information strategy and organise information and sensitisation campaigns</p> <p>1.3 Develop and implement a strategy for environmental education of young people and women</p>

<b>OBJECTIVE 6 : IMPROVE ACTORS' CAPACITIES FOR SPECIES CONSERVATION</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1 :</b> Training of trainers in the mastery of methods and techniques related to the conservation of elephants</p> <p><i><b>INDICATOR R1 :</b> Within 5 years, at least 60% of trained agents are applying their knowledge in conservation activities</i></p>	<p>1.1 Identify agents' training needs</p> <p>1.2 Identify trainers and wildlife officers to train, hold training sessions</p> <p>1.3 Organise study trips for staff and local communities</p> <p>1.4 Identify appropriate training schools and seek scholarships and training courses for staff.</p> <p>1.5 Reinforce institutional capacity in logistics and equipment ( motorcycles, vehicles, communication material, etc )</p>

### 3.4 Ongoing programmes/projects

SITES	PROGRAMES / PROJECTS	DONORS / PARTNERS
Nazinga-Kaboré Tambi- Zabré Region- Nazinon	<p>PAGEN</p> <p>Nazinga Ranch Assistance Project</p> <p>National Program For Land Management phase II (PNGT II)</p> <p>Rural development program (PDR/Boulgou)</p> <p>Investigation study on H/E conflict and elephant movements</p> <p>Socio-Economic Development project in the Oncho-freed zones of Burkina and Ghana</p>	<p>GEF ( World Bank)</p> <p>GEF /UNDP</p> <p>IDA (World Bank), Denmark, Netherlands Governments</p> <p>Small Grants Programme AfESG / EU</p> <p>FAO/Belgium Government</p>
Red Volta ecosystem	<p>Northern Savannah Biodiversity Conservation Project</p> <p>Human-elephant &amp; Habitat Issues in the Red Volta Area</p> <p>USAID/NCRC Ecotourism Project</p> <p>Socio-Economic Development project in the Oncho-freed zones of Burkina and Ghana</p>	<p>GEF</p> <p>Small Grants Programme AfESG / EU</p> <p>USAID</p> <p>FAO/Belgium Government</p>
Northern Togo	Protected Areas Rehabilitation Project	European Union



## **4.0 Action Plan for the Management of the Transfrontier Elephant Conservation Corridor of Bia-Goaso-Djambarakrou**

### **4.1. Description**

This transfrontier elephant conservation corridor lies in the wet evergreen, moist evergreen and moist semideciduous forest zones of the Upper Guinea forest block (Hall & Swaine, 1981; Parren & de Graaf, 1995). The rainfall varies between 1300 and 2000 mm per annum. The site covers 21.156 Km<sup>2</sup> and is situated between longitudes 5° 4' and 7° 3' N and latitudes 2° 25' and 3° 51' W. This area is one of five priority regions for biodiversity conservation identified by the West Africa Priority Setting workshop held by Conservation International in Elmina in December 1999. It was proposed as a transfrontier corridor for elephants by Parren et al. (2002)

This corridor comprises a network of forests that lie across the border between southwestern Ghana and southeastern Cote d'Ivoire. In Ghana, the corridor includes the Bia National Park, Bia Resource Reserve, the Ankasa Conservation Area, and the following forest reserves: Bia North, Bia Tawya, Sukusuku, Asukese, Ayum, Bia Tano, Bonkoni, Bonsam Bepo, Krokosua Hills, Mpameso, Subin, and Dadieso, Boi River, Monzam, as well as the shelter belts that link some of them. The classified forests of the Ivorian side are: Djambarakrou, Béki, Bossematié, Besso, Manzan, Tamin, Mabi, Songan, and Yaya.

The various forest fragments within the corridor have different protection status. Some are managed as national parks or wildlife reserves, particularly in the Ghanaian side, while most of the classified forests in the Côte d'Ivoire side are managed for timber production.

Only a small proportion of the corridor has been surveyed for elephants, and the estimate of over 500 elephants is based largely on informed guesses (Blanc et al., 2003). If this estimate is proved correct, then this will be the most important forest elephant population in West Africa.

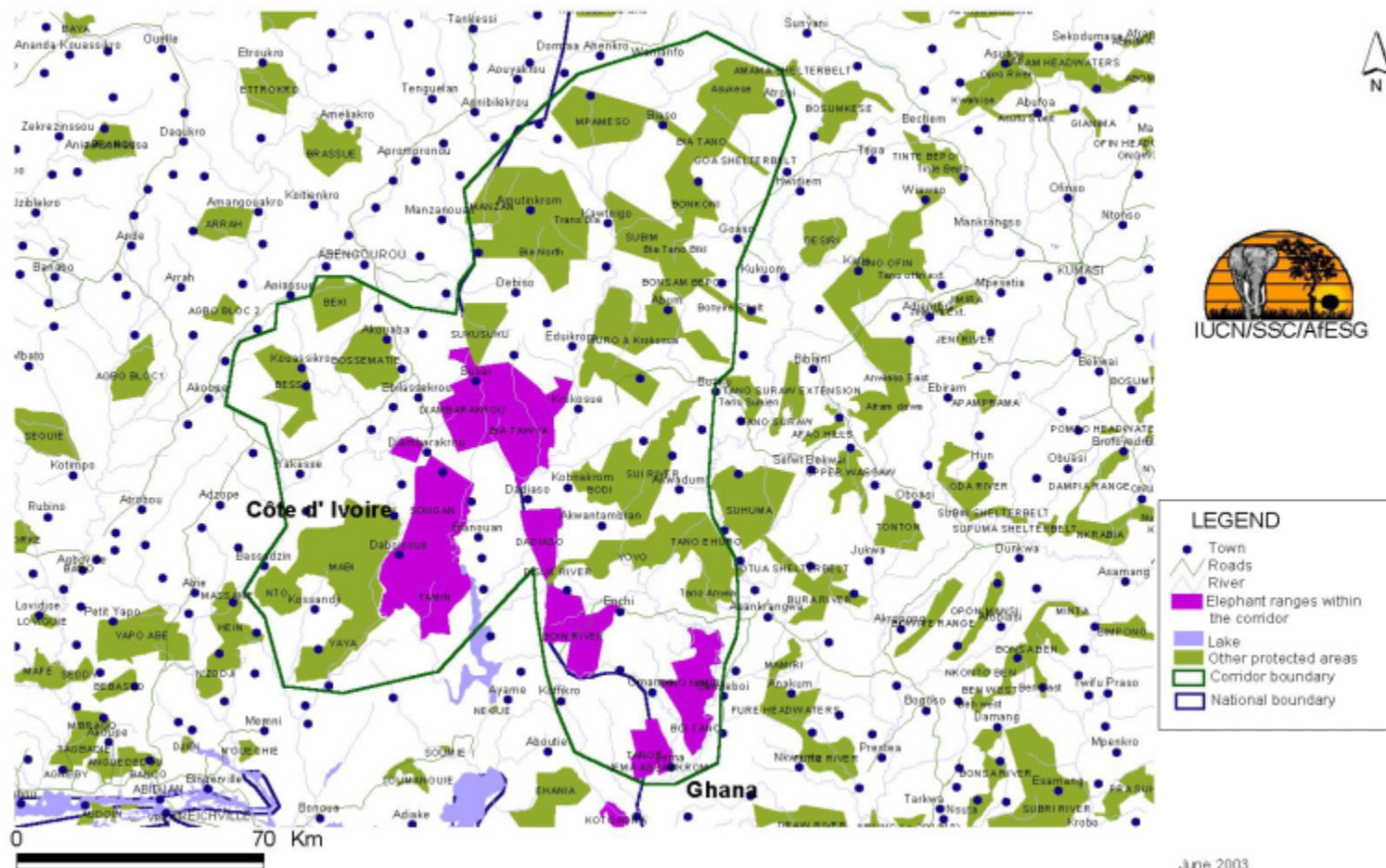
Cocoa production and subsistence farming are the main agricultural activities on both sides of the border.

The major institutions involved with forests and wildlife management are the SODEFOR on the Cote d'Ivoire side and Wildlife and Forest Services Divisions of the Forestry Commission in Ghana. These institutions are currently collaborating with Conservation International to develop a transfrontier conservation project for elephant management

### **4.2. Major threats**

- **Habitat loss as a result of agricultural expansion and human pressures**
- **Hunting pressure**
- **Loss of genetic variability due to lack of interbreeding as a consequence of habitat fragmentation**

## CORRIDOR : BIA - GOASO - DJAMBARAKROU



### 4.3. Logical framework

<b>OBJECTIVE 1 : HARMONIZED STRATEGY FOR ELEPHANT CONSERVATION WITHIN THE CORRIDOR</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<b>RESULT 1:</b> Completion of corridor management plan  <b>INDICATOR R1 :</b> <i>Corridor management plan is available by end of 2005</i>	1.1 Conduct elephant surveys in the corridor  1.2 Consultation Workshop to develop a management plan  1.3 Review land use, forest and wildlife policies Write a management plan
<b>RESULT 2 :</b> Establishment of legal and institutional framework  <b>INDICATOR R 2 :</b> <i>Legal document signed by the respective governments by end of 2008</i>	2.1 Consultations with major stakeholders  2.2 Engage legal expert to draw the MOU to be adopted  2.3 Get the MOU signed by governments  2.4 Set up co-ordination committee
<b>OBJECTIVE 2 : MITIGATE HUMAN/ELEPHANT CONFLICT</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<b>RESULT 1:</b> Identification of the major areas of conflicts  <b>INDICATOR R1:</b> <i>Map showing distribution of conflicts and document describing analysis of the problem available by end of 2005</i>	1.1 Investigate elephant human conflicts and Identify major risk factors  1.2. Map areas of conflict  1.3. Economic assessment of conflicts
<b>RESULT 2 :</b> Identification of appropriate deterrence methods  <b>INDICATOR R2:</b> <i>Recommendations for effective deterrence available by end of 2005</i>	Investigate different methods of deterrence
<b>RESULT 3:</b> Establishment of a committee to resolve human-elephant conflicts	3.1 Identify a representative in each village to sit on the committee  3.2 Train committee members in the selected methods for deterring elephants

<p><b>INDICATOR R3:</b> <i>The committee is active by end of 2005</i></p>	<p>3.3 Committee members train the farmers in the selected methods for deterring elephants</p>
<p><b>RESULT 4 :</b> Establishment of regular bio monitoring program</p> <p><b>INDICATOR 1 R4 :</b> <i>Monitoring plan available at the end of 2004</i></p> <p><b>INDICATOR 2 R4:</b> <i>Analyses of monitoring data available at the end of each year beginning in 2005</i></p>	<p>4.1. Design a monitoring programme</p> <p>4.2 Train staff to undertake the monitoring programme</p> <p>4.3 Conduct monitoring at the specified intervals</p> <p>4.4 Regular meetings between monitoring staff and corridor managers to ensure that information from monitoring is used to improve management</p> <p>4.5. Disseminate lessons learned from monitoring</p>
<p><b>OBJECTIVE 3 : REDUCE ILLEGAL KILLING</b></p>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Implementation of monitoring of illegal killing in the corridor</p> <p><b>INDICATOR 1 R1:</b> <i>Introduce MIKE methodologies by 2004</i></p> <p><b>INDICATOR 2 R1:</b> <i>MIKE methodologies implemented regularly in the corridor by 2005</i></p>	<p>1.1 Initiate monitoring of illegal killing in the corridor using the MIKE standardised methodologies</p>
<p><b>RESULT 2 :</b> Promote an effective law enforcement each side of the border</p> <p><b>INDICATOR 1 R2:</b> <i>Decline in index of illegal activity each year on each side of the border</i></p> <p><b>INDICATOR 2 R2:</b> <i>Number of arrests as a result of information provided through the intelligence network</i></p>	<p>2.1 Raise awareness within the local communities of the legal implications of killing elephants</p> <p>2.2 Apply the enforcement provisions of the new law on national parks in Côte d'Ivoire side</p>

<p><b>RESULT 3:</b> harmonisation and review of legislation on elephant illegal trade.</p> <p><i><b>INDICATOR R3 :</b> New legislation signed and applied by end of 2008</i></p>	<p>3.1 Organise workshop to review and harmonise current legislation</p> <p>3.2 Sensitize stakeholders on the new legislation</p> <p>3.3 Apply the new legislation across the border</p>
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<b>OBJECTIVE 4 : ENSURE SUSTAINABLE MANAGEMENT OF CORRIDOR ELEPHANT POPULATION</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Adoption of sustainable land use practices within the corridor</p> <p><i><b>INDICATOR R1 :</b> 50% of farmers change their farming practices</i></p>	<p>1.1. Assess land use practices</p> <p>1.2. Update the land use map</p> <p>1.3 Define land use practices that are compatible with elephants</p>
<p><b>RESULT 2 :</b> Establishment of a network of viable protected areas within the corridor</p> <p><i><b>INDICATOR 1 R2 :</b> An ecological description of the remaining forests is available by the end of 2005</i></p> <p><i><b>INDICATOR 2 R2:</b> A work plan for the establishment of the network is available by the end of 2006</i></p>	<p>2.1 Update information on the remaining forest reserves within the region</p> <p>2.2 Carry out biological and ecological surveys in the remaining forests</p>
<p><b>RESULT 3 :</b> Maintain of ecological process through the connection of the main areas</p> <p><i><b>INDICATOR R3 :</b> A work plan for the establishment of the connection is available by the end of 2006</i></p>	<p>3.1 Identify possible links between forest blocks to improve connectivity</p> <p>3.2 Establish links between forests (e.g through negotiations with local communities, traditional authorities, local administrations; delimiting the areas concerned)</p>

<p><b>RESULT 4:</b> Building Capacity of relevant authorities for corridor action plans design and implementation</p> <p><i><b>INDICATOR 1 R4 :</b> Training programme document available by end of 2004</i></p> <p><i><b>INDICATOR 2 R4:</b> University syllabus available by end of 2004</i></p>	<p>4.1 Develop training program at the field level for corridor management</p> <p>4.2 Develop university courses in elephant management at both undergraduate and graduate level</p>
<p align="center"><b>OBJECTIVE 5 : SECURE STAKEHOLDER SUPPORT FOR THE MANAGEMENT OF THE CORRIDOR AREA</b></p>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1 :</b> Development of awareness and education strategy</p> <p><i><b>INDICATOR R1:</b> All stakeholders have been reached by end of 2005</i></p>	<p>1.1 Assess socio – cultural value of elephants in the corridor</p> <p>1.2 Design awareness and education strategy (identify target audience, produce the material, identify the communication medium)</p> <p>1.3 Undertake a campaign of awareness, Information and education</p>
<p><b>RESULT 2 :</b> Promoting the involvement of major stakeholders for the management of the corridor</p> <p><i><b>INDICATOR R2:</b> All the stakeholders have been contacted by the end of 2004</i></p>	<p>2.1 Establish a partnership with stakeholders (NGOs, local communities, traditional authorities, local administrations and the private sector)</p> <p>2.2 Design and implement a management plan of the corridor</p>

<b>OBJECTIVE 6 : ESTABLISHE LONG TERM SUSTAINABLE FINANCIAL MECHANISM</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<b>RESULT 1 :</b> Development of fundraising strategy  <i><b>INDICATOR R1 :</b> New funding in account as from 2005</i>	1.1 Assess financial needs for the corridor management (financial analysis, business plan)  1.2 Approach potential funding sources (bilateral, multilateral donors, foundations private sector, government)
<b>RESULT 2 :</b> Development of internal income generating activities (ecotourism, conservation enterprises)  <i><b>INDICATOR R2 :</b> Number of tourists visiting the area increased of 10% each year as of 2010</i>	2.1 Assess internal income generating opportunities  2.2 Help to launch family business enterprises
<b>OBJECTIVE 7 :ENSURE SUSTAINABLE COCOA PRODUCTION IN THE CORRIDOR AREA</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<b>RESULT 1 :</b> Adoption of ecologically sound agricultural practices by farmers  <i><b>INDICATOR 1 R1:</b> &gt; 80 % of corridor area (outside protected areas) covered by cocoa agroforestry</i>  <i><b>INDICATOR 2 R1:</b> Frequency of passage of elephants through the cocoa farms increased</i>	1.1 Identify appropriate agricultural practices (agroforestry, shade cocoa, assess shade condition, genetic material )  1.2 Provide technical support to farmers (extension services, appropriate technologies)  1.3 Establish pilot demonstrations farms
<b>RESULT 2 :</b> Development of capacity for sustainable farming  <i><b>INDICATOR R2 :</b> 50% of farmers reached by training programme by 2008</i>	2.1 Train trainers (farmer field school)  2.2 Develop training program and material  3.1 Explore market opportunities (international NGO, private sector)



<p><b>RESULT 3 :</b> Promotion of fair trade market for organic cocoa</p> <p><i><b>INDICATOR R3:</b> At least 10% of farmers grow organic cocoa in the corridor</i></p>	<p>3.2 Formalise agreement between organic farmers organisations and fair trade organizations</p>
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#### 4.4. Ongoing programmes/projects

SITES	PROJECT/PROGRAMMES	DONORS /PARTNERS
Djimbarakrou	<p>Participatory management of classified forests project</p> <p>Establishment of transfrontier elephant corridors project</p>	<p>SODEFOR, GTZ, KFW</p> <p>CI, SODEFOR, Ghana Wildlife Division</p>
Bia-Goasso	<p>Biodiversity Component of Natural Resource Management Programme</p> <p>Establishment of transfrontier elephant corridors project</p>	<p>GEF</p> <p>CI, SODEFOR, Ghana Wildlife Division</p>

### 5.0 Action Plan for the Management of the Transfrontier Elephant Conservation Corridor of Taï National Park - Grebo National Forest

#### 5.1. Description

The Transfrontier Elephant Conservation Corridor Taï-Grebo National Forest is located along the Cavally River in the south west of Côte d'Ivoire and the North East of Liberia at the border between these two countries. It includes the Taï National Park and N'zo Fauna Reserve (Côte d'Ivoire) and the Grebo National Forest (Liberia) as well as the surrounding forest reserves.

Located in the Upper Guinea forest zone between latitudes 5°08' to 6°24' North and longitudes 6°47' to 7°25' West, this corridor covers an area of 27,729 Km<sup>2</sup>. Annual rainfall ranges varies from 1700 to 2300 mm.

Management activities have been made difficult on this corridor because of civil war in Liberia in recent years, but on the Côte d'Ivoire side, an estimate of part of the Taï elephant population was made in 2002 by the Elephant Biology & Management team and Dr. Lory Eggert.

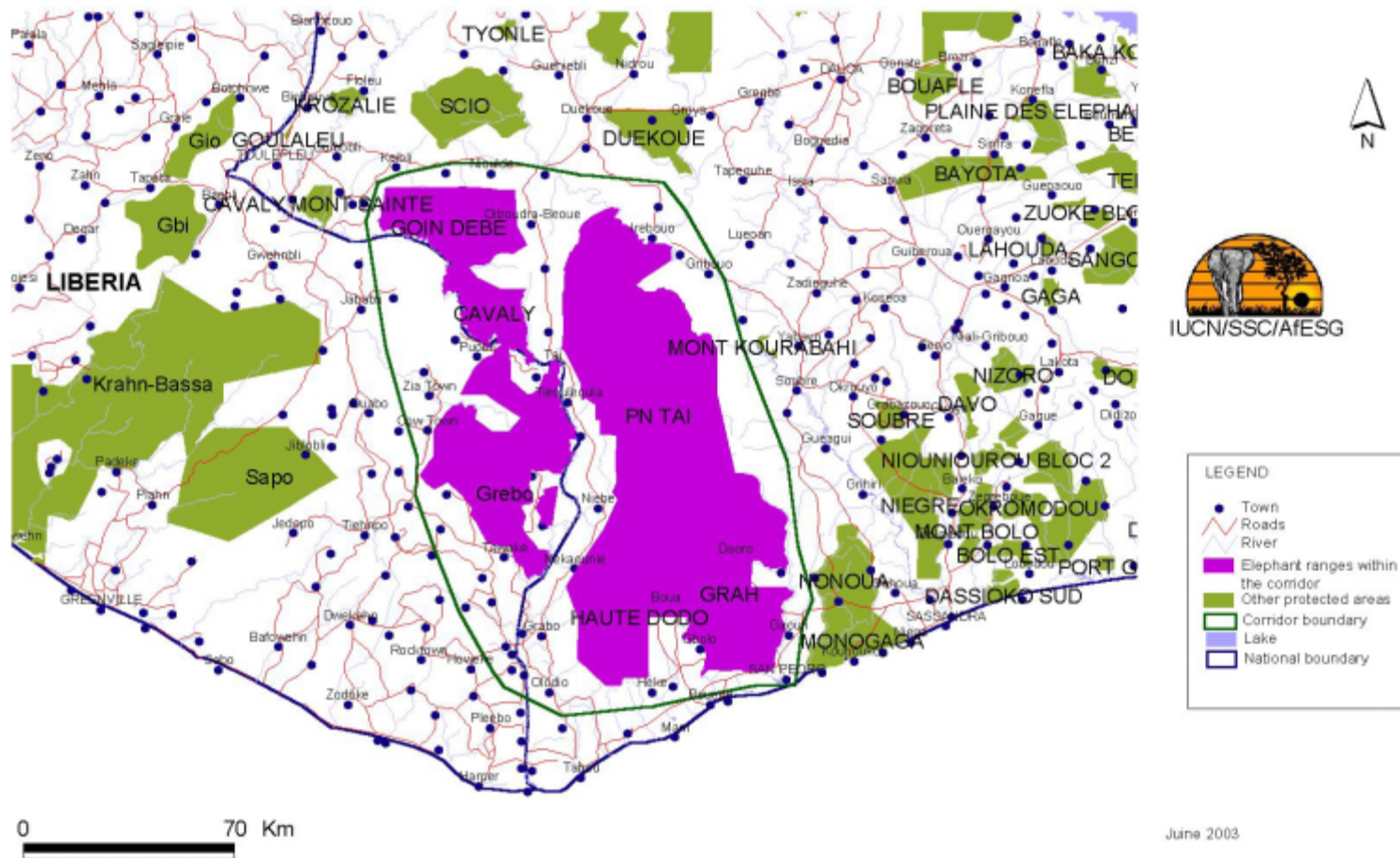
In the south west of Côte d'Ivoire the "Taï protected massif" (Taï National Park and N'zo Fauna Reserve) is located between Cavally and Sassandra Rivers, in a quadrilateral shaped by the towns of Guiglo, Buyo, San Pedro and Tabou. With the national park, which is its main component, the massif got its name from the small town of Taï, which is located between its west border and Cavally River, marking the border between Côte d'Ivoire and Liberia.

This protected massif is located within an area comprising the forest reserves of Grah Rapids and Haute Dodo in the south, those of Cavally and Goin Débé in the north west and the Liberian forests in the west.

## **5.2 Major threats**

- **Fragmentation of habitat due to human pressure**
- **Range reduction**
- **Lack of knowledge on the status of the elephant population (numbers, movements, etc)**

## CORRIDOR : TAI NATIONAL PARK - GREBO NATIONAL FOREST



### 5.3. Logical framework

<b>OBJECTIVE 1: HARMONISE CONSERVATION PROGRAMMES FOR ELEPHANT MANAGEMENT</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Putting in Place policy, legal and institutional mechanisms</p> <p><i><b>INDICATOR 1 R1:</b> Bilateral agreement on the implementation of this action plan adopted (2005) and implemented (2006)</i></p> <p><b>INDICATOR 2 R2:</b> Policy, legal and institutional mechanisms reviewed and in place (2007)</p>	<p>1.1.Develop and adopt a bilateral agreement on the implementation of this action plan.</p> <p>1.2.Review existing policy, legal and institutional mechanisms in both countries and harmonise where necessary</p> <p>1.3.Set up a mechanism to monitor and evaluate the implementation of this action plan</p>
<b>OBJECTIVE 2: REDUCE ILLEGAL KILLING</b>	
<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Standardisation of the illegal killing monitoring within the corridor</p> <p><i><b>INDICATOR 1 R1:</b> Introduce MIKE methodologies to Grebo by 2004;</i></p> <p><i><b>INDICATOR 2 R1:</b> MIKE methodologies implemented regularly in the corridor by 2005</i></p>	<p>1.1.Implement the MIKE programme in Tai including the inhabited area between Tai and Grebo</p> <p>1.2.Initiate monitoring of illegal killing in Grebo using the MIKE standardised methodologies</p> <p>1.3.Share knowledge from MIKE implementation in Tai with Grebo</p>

<p><b>RESULT 2 :</b> Promotion of the effective law enforcement on each side of the border</p> <p><b>INDICATOR 1 R2:</b> <i>Decline in index of illegal activity each year on each side of the border;</i></p> <p><b>INDICATOR 2 R2:</b> <i>Number of arrests as a result of information provided through the intelligence network</i></p>	<p>2.1 Raise awareness within the local communities of the legal implications of killing elephants</p> <p>2.2 Apply the enforcement provisions of the new law on national parks in Cote d'Ivoire (within the Cote d'Ivoire side of the site)</p> <p>2.3 Apply the existing species protection legislation ("integral protected species") in Liberia with respect to elephants</p>
<p><b>RESULT 3:</b> Development of an effective collaborative law enforcement in the corridor</p> <p><b>INDICATOR 1 R3:</b> <i>At least 3 meetings held between the respective management authorities at the relevant level in Liberia and Côte d'Ivoire by 2005 and annually thereafter;</i></p> <p><b>INDICATOR 2 R3:</b> <i>Mechanisms for regular communication between the local authorities in place by 2005</i></p> <p><b>INDICATOR 3 R3:</b> <i>System in place verifying that shared information has been acted upon in law enforcement activities by 2005</i></p> <p><b>INDICATOR 4 R2:</b> <i>At least 3 joint patrols per year, starting in 2005</i></p>	<p>3.1 Establish a dialogue between local enforcement officers of Tai and Grebo on cross-border law enforcement issues, including familiarisation with each country's respective laws</p> <p>3.2 Use information from the monitoring activities in law enforcement activities</p> <p>3.3 Clarify legal procedures regarding transfrontier law enforcement activities</p> <p>3.4 Identify legal and other measures to secure the transfrontier range</p> <p>3.5 Raise awareness amongst law and policymakers of the need to strengthen cross-border collaboration</p> <p>3.6 Establish a system for joint Liberian/Ivorian patrols</p>

**OBJECTIVE 3: MANAGE SUSTAINABLY THE GREBO-TAI TRANSFRONTIER  
CORRIDOR AS A UNIT**

<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Maintaining security of elephant habitats within the corridor</p> <p><i><b>INDICATOR 1 RI:</b> Corridor boundaries established in 2005, and accepted by political authorities of both countries in 2006</i></p> <p><i><b>INDICATOR 2 RI:</b> Map of current human settlements available by 2005</i></p> <p><i><b>INDICATOR 3 RI:</b> Map of elephant movement patterns available by 2006</i></p> <p><i><b>INDICATOR 4 RI:</b> Zonation plan available by 2006</i></p> <p><i><b>INDICATOR 5 RI:</b> Grebo gazetted as national park by 2007</i></p>	<p>1.1. Conduct studies on transfrontier elephant movements</p> <p>1.2. Apply legal tools to regulate human settlement</p> <p>1.3. Provide incentives to encourage local community to move out of areas frequently used by elephants</p> <p>1.4. Map the areas used by elephants</p> <p>1.5. Update the land use map</p> <p>1.6. demarcate elephant habitat and agricultural areas in the corridor</p> <p>1.7. Facilitate the gazetting of Grebo as a national park</p> <p>1.8. Analyse the possibility of establishing forest corridor linking Grebo and Tai to act as migration routes</p> <p>1.9. Investigate the possibility of integrating Cavally, Haute Dodo and Debe into the corridor</p>

<p><b>RESULT 2:</b> Improvement of Actors capacity for the management of the corridor</p> <p><i><b>INDICATOR 1 R2:</b>50% of villager volunteers trained in elephant management issues by 2008</i></p> <p><i><b>INDICATOR 2 R2:</b> 50% of Government officers have been trained to conduct monitoring and management activities in the protected areas and for the overall corridor by 2006.</i></p>	<p>2.1 Provide staff in the area with training in the management of transfrontier corridors</p> <p>2.2 Provide communities with skills and knowledge to mitigate human/elephant conflicts</p> <p>2.3 Create an intelligence network</p> <p>2.3 Encourage local community capacity to provide information to the corridor managers</p> <p>2.5 Train local volunteers in order to employ them within Grebo once it has been classified as a national park</p> <p>2.6 Exchange information between other actors in the sub-region, and between actors in transfrontier corridor elsewhere in Africa</p>
<p><b>RESULT 3:</b> Acceptance of the corridor concept by target audiences (local communities, refugees and local, traditional and administrative authorities, policy and decision-makers)</p> <p><i><b>INDICATOR R3:</b> 50% of villages involved in management issues by 2010</i></p>	<p>3.1 Provide information to the public, using friendly approaches(media, local radio, school materials etc)</p> <p>3.2 Sensitise public on the interest for conserving elephants</p>

<p><b>RESULT 4 :</b> Reduction of Human/elephant conflicts</p> <p><i><b>INDICATOR R4:</b> Reduction of 50% in the number of reported crop-raiding incidents by 2008</i></p>	<p>4.1 Encourage people to use agricultural practices which enable co-existence with elephants</p> <p>4.2 Identify potential areas of human-elephant conflict</p> <p>4.3 Assess the number and type of conflicts, extent of damage and community perceptions using standardised methods</p> <p>4.4 Develop an integrated database on human-elephant conflict</p> <p>4.5 Develop, test and apply techniques to ameliorate human-elephant conflicts</p> <p>4.6 Establish a policy for responding to crop-raiding incidents</p>
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**OBJECTIVE 4: MANAGE THE VIABILITY OF ELEPHANT POPULATIONS WHERE NECESSARY**

<b>RESULTS</b>	<b>ACTIVITIES</b>
<p><b>RESULT 1:</b> Assessment of viability of sub-populations in the corridor</p> <p><i><b>INDICATOR R1:</b> Integrated database developed by 2004</i></p>	<p>Assess population status (e.g., genetics, numbers, demography and distribution, etc) on both sides of the border when conditions allow</p>
<p><b>RESULT 2:</b> Improvement of the management of the sub-populations where necessary</p> <p><i><b>INDICATOR R2:</b> Population recovery plan developed as needed</i></p>	<p>Take appropriate management actions if the evaluations show the sub-populations to be not viable.</p>



## 5.4. Ongoing programmes/projects

SITES	PROGRAMMES/ PROJECTS	DONORS / PARTNERS
Taï National Park	Systematic survey of big fauna project	DPN
	Identification of the different elephant groups routes project	DPN
	Ecotourism promotion project	DPN / GTZ / KFW
	Project for the conservation of Taï national Parc elephants	CI / DPN
	Monitoring of Illegal Killing of Elephants (MIKE)	CITES/IUCN
Grebo National Park	Liberian forests reassessment project	Fauna & Flora International / CI WWF
	Bushmeat study	Alliance for the conservation in Liberia/ Philadelphia Zoo.

## III. NEXT STEPS

ACTIONS	ACTORS
Completion of the action plans document	IUCN /SSC/AfESG
Dissemination of the action plans document	IUCN/ SSC /AfESG
Assistance for the implementation of the action plans	IUCN-WARPO, IUCN/SSC/AfESG, Focal points , ECOWAS, PICDCS, WAEMU
Monitoring and evaluation of the action plans implementation	IUCN/SSC/AfESG Focal Points
Developing project proposals for co-ordinating the implementation of the action plans	IUCN/SSC/AfESG in the framework of projects on elephants conservation
Assistance in developing and validating sites project proposals	IUCN-WARPO, IUCN/SSC/AfESG, Focal Points
Contacts with potential partners	IUCN-WARPO, IUCN/SSC/AfESG, Focal Points
Monitoring and evaluating sites projects implementation	Focal Points

## **IV. CONCLUSION**

Elephants and their habitats in West Africa have suffered from strong anthropogenic pressures throughout the past century. These pressures have led to the fragmentation of habitats and to the isolation of elephant populations one after the other. If nothing is done to halt and reverse this trend, such a situation could lead progressively to the reduction of population size and range and inevitably to local extinction of the species in the long term.

One of the strategies for the conservation of wild plants and animals in the context of fragmented habitat and isolated populations is to succeed in linking the separated areas through the development of conservation corridors. Given that many of the main habitats in these areas that are of the greatest importance to elephants are located on opposite sides of international borders. Therefore, it is necessary to develop a concerted intervention approach.

This approach called for the development of action plans for the conservation of transfrontier corridors in West Africa. Although such initiatives may appear an ideal way to sustainably manage the shared resources, its success will ultimately depend on its successful implementation in the field. Many individual projects are already underway in the concerned corridors and others are being initiated. It is thus expected that these projects will collaborate and coordinate to orient their activities toward the priorities defined within these action plans. For the activities, which are not taken into account by ongoing projects and programmes, it will be necessary to look for additional resources. Because of the rapidly degrading situation in these important areas, it is important to immediately implement these plans before the ecosystems to be conserved reach a critical threshold beyond which their recovery will no longer be possible.

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## **ANNEXE I: ACRONYMS**

<b>AFD</b>	<b>French Agency for Development</b>
<b>AfESG</b>	<b>African Elephant Specialist Group</b>
<b>CEPF</b>	<b>Critical Ecosystem Partnership Fund</b>
<b>CITES</b>	<b>Convention on International Trade in Endangered Species of Wild Fauna and Flora</b>
<b>DNP</b>	<b>Direction for Nature Protection</b>
<b>ECOWAS</b>	<b>Economic Community of West Africa States</b>
	<b>Endangered Species</b>
<b>EU</b>	<b>European Union</b>
<b>FAO</b>	<b>United Nation Organisation for food and Agriculture</b>
<b>GEF</b>	<b>Global Environmental Facility</b>
<b>GTZ</b>	<b>German Co-operation for Technical Assistance</b>
<b>HEC</b>	<b>Human -Elephant Conflict</b>
<b>HEC</b>	<b>Human Elephant Conflict</b>
<b>IDA</b>	<b>International Development Agency</b>
<b>IEC</b>	<b>Information, Education and Communication</b>
<b>IUCN</b>	<b>The World Conservation Union</b>
<b>KFW</b>	<b>German co-operation Agency</b>
<b>MIKE</b>	<b>Monitoring of Illegal Killing of Elephants</b>
<b>NCRC</b>	<b>Nature Conservation Research Centre</b>
<b>NGO</b>	<b>Non Governmental Organisation</b>
<b>NP</b>	<b>National Park</b>
<b>PAGEN</b>	<b>Partnership Project for the Improvement of Natural Ecosystems Management</b>
<b>CILSS</b>	<b>Permanent Interstates committee for Drought Control in tl 48 l</b>
<b>SODEFOR</b>	<b>Society for Forest Exploitation</b>
<b>SSC</b>	<b>Species Survival Commission</b>
<b>TOR</b>	<b>Term of Reference</b>

<b>UNDP</b>	<b>United Nations Development Programme</b>
<b>UNEP</b>	<b>United Nations Environment Programme</b>
<b>UNESCO</b>	<b>United Nations Educational, Scientific and Cultural Organisation</b>
<b>USAID</b>	<b>US Agency for International Development</b>
<b>WAEMU</b>	<b>West African Economic and Monetary Union</b>
<b>WARPO</b>	<b>West African Region Programme Office</b>
<b>WWF</b>	<b>World Wild Fund for Nature</b>

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**ANNEXE III:** LIST OF FOCAL POINTS FOR THE IMPLEMENTATION OF ACTION PLANS

N°	Corridors	Focal points
1	Complex Pendjari – Park W - Eastern Burkina	Djafarou Ali Tiémoko
2	Gourma Mali - Sahel Burkinabè	Namory Traoré
3	Nazinga - Kaboré Tammbi - Red Volta Doungh Ecosystem	John Mason and Drabo Adama
4	Bia-Goaso-Djambarakrou	Léonie Bonnehin
5	Taï Park - Grebo N. Forest	Diarrassouba Abdoulaye