

BOMFOBIRI WILDLIFE SANCTUARY

Size of the PA : 5 300 ha

IUCN category: unknown

International label: none

Protected area's values

Type of values	Protected area's values
Biodiversity	<ul style="list-style-type: none">• riverine and swampy forests along watercourses to the Ongwam and Amobia rivers• animals species specific to forest ecosystem• threatened species (bare-headed rock fowl, Red river hog)
Cultural values	<ul style="list-style-type: none">• Porcupine (totem)• Pames hills• Caves
Economical values	Ecosystem service such as water provision especially during the dry season when rivers outside the PA are empty.

Main pressures

- **Poaching** for bush meat trade is carried out by fringe communities.
- **Bush fire** burn each year a large area of the PA as it is mainly made up of savanna. They are initiated for hunting, farming or grazing purposes.
- **Invasive species** (*Chromolaena odorata* in open places close to riverine forest and *Teaks* along the PA boundaries)
- **River pollution** for fishing purposes

Main threats

- **Logging for charcoal production** is more and more important in the region.

1. Context : from where are we starting ?

Legal status and date of establishment

The PA is fully established since 1975 (LI 1022 of wildlife reserve regulation).

Land owner: State

Management institution

Wildlife Division department of the Forestry Commission is responsible for the management

of Bomfobiri Reserve

On-going projects

There is no on-going project.

Neighboring stakeholders

- Private sector:
There is no private society located close to the PA.
- Associations and NGOs:
There isn't any NGO specialized in conservation issues and working around the park. World Vision is an NGO working on education but without specific scope on environmental education.
- Communities:
15 villages are surrounding the PA. They are represented by a parliament chief and 3 deputy chiefs.

Protected area boundary demarcation

Teaks and some pillars have been planted to demarcate the boundary. This invasive species is now spreading inside the PA but remains located in small areas.

Protected area regulation

Regulation is detailed in the wildlife regulations, 1971 LI 710. This regulation specifies that hunting, animal or plant capture, fires, and pollution are prohibited in the PA.

2. Planning : where do we want to be how will we get there ?

Management plan objectives

A new management plan is under development. The previous management plan (1994-2004) mentioned the following conservation objectives:

- To ensure the maintenance of conditions necessary to conserve significant species, groups of species or communities;
- To protect from disturbance the breeding, migration or feeding sites for those species so as to encourage their propagation;
- To facilitate the public appreciation of the area through providing facilities for visitors who may come there for educational, scientific, recreational or touristic reasons.

But these objectives may not have been reached as no scientific information on "significant" species has ever been gathered in order to determine the best management actions to carry out.

Protected area design

The 1994-2004 management plan describes 3 types of zones:

- (i) A protection zone made up of riverine and swampy forests (which occupy less than 10% of the PA area). This ecosystem is fragile and provides protection to the watercourses and act as refuge habitats for wildlife. Specific regulation proposed for this zone is: law enforcement intensification, tourism activities control (no wandering out of the labeled trails), early burning policy in the surrounding areas to protect riverine forest.
- (ii) A multi use zone covered by a rocky savanna area, where tourism activities will be promoted, sustainable natural resources harvesting (fishing) by local

- populations.
- (iii) A special use zone covered by a remaining Teak plantation (3% of the PA area) that was dedicated to be use as a source of sustainable source of commercial timber and fuel wood for the local communities.

But in practice, there is no effective zoning as all parts of the PA are managed in the same way. There is no buffer zone around PA either.

Management plan

The previous MP has been drafted in 1994 and was available until 2004. A new MP is under development.

Regular work plan

An annual work plan based on the management plan is being developed each year.

Monitoring and evaluation

The previous MP drafted in 1994 didn't mention any indicator to monitor the impacts of management actions on PA natural resources conservation.

3. Inputs : what do we need ?

Human resource

PA staff is made of 33 persons. 27 of them are dedicated to law enforcement activities. There is also a park manager, a driver, a security guard for the office and 2 tour guides.

Research

Research activities have never been carried out in the PA.

Financial resource

The annual budget is provided by the government and was about 19 000 Cedis in 2011 (excluding staff salaries).

4. Management processes : how do we go about it ?

Natural resource management

Even if bush fires remain the most important pressure on PA ecosystem, no management actions have been undertaken to prevent them.

Some invasive species have been identified (*Chromolaena odorata* and Teaks) but no management actions have been planned to remove them. Also teak trees expose the reserve to bushfires, which they are very sensitive to.

Ecological monitoring is done during law enforcement patrols. Data are analyzed thanks to Hugo method which provides a global overview of their distribution on a map representing the PA.

Law enforcement

Patrolling of law enforcement staff is permanent especially during the bush fire season as most of the animals take refuge in the riverine forest and therefore attract poachers. 2 poachers have been prosecuted in 2011. Collaboration between PA law enforcement staff and police regarding to prosecution of poachers is efficient.

Resource inventory

There is only very few data available on fauna of the PA: work of 2 students that drafted a list of mammal and bird species in 2005. There is no inventory of flora.

Management of staff

Appropriate trainings are provided when staff is employed. Then ongoing training can also be provided by the mobile team of Wildlife Division.

Management of budget

There is no information on the split of budget to support current activities implementation during the year.

Infrastructure and equipment

Some basic equipment for patrolling are lacking still there are 3 GPS available but law enforcement staff is not able to use them. One vehicle and 4 motorbikes are available. 2 camps are in bad conditions and need to be renovated. A new head office is under construction.

There is no specific infrastructure or track network within the PA.

Education and awareness

Some meetings have been organized with the leaders of the 15 surrounding villages. Some environmental education is provided in schools by PA staff. Hunters groups are also sensitized during the period where hunting activities are prohibited (August to December). PA staff also proceeds to bush meat seizure on markets and sensitized bush meat traders.

Interactions with the users of the surrounding land (public and private stakeholders)

There is no private stakeholder around the PA. Communities respect the PA boundaries and don't grow crops within the PA because the boundary is well marked. There is no CREMA around Bomfobiri.

Some conflicts between farmers and buffalos are occurring in the surrounding area of the PA.

Role of communities regarding to management decisions of the PA

At the moment there is only very few communication and no specific collaboration with communities regarding to the management of the PA. But the new park manager wishes to improve this aspect by developing guiding tour by communities.

Tourism

Only few tourists come to visit the PA (less than 100 per year).

5. Outputs : what did we do and what products and services were produced ?

Visitor facilities

There is no visitor facility close or within the reserve. Visitors usually stay in the nearest city or even drive strait from Kumasi to Bomfobiri reserve.

Fees and taxes

Fees and taxes amounts are stated in the Wildlife Division regulation. Budget collected from fees and taxes is send to the Wildlife Division head office but the park manager wishes to

promote that part of tourism incomes could be used for communities' incentives. Hunting is authorized outside PA. Hunting licenses and bush meat trade licenses are delivered by Wildlife Division staff. But the district assembly is responsible for collecting bush meat trade license taxes. It should give 20% of this amount back to Wildlife Division but practically, it doesn't.

Condition of values

Some data are provided by the ecological monitoring but they don't provide any information on PA values evolution over time or on animal population size. Park manager wishes to develop inventories on the main values of the PA.

According to PA ecological monitoring data, some buffalos, monkeys (5 species), duikers, red river hogs, pangolins... remain in the PA. But big antelopes and stop nose monkeys have disappeared.

Access control

A big portion of the PA boundary is demarcated with a road. Several permanent camps are located along this road to control the access of the reserve. There is no camp to control PA access in other part of the boundary. That is why most of illegal activities take place in the Eastern part of the reserve.

Economic benefits for communities

Although harvesting of natural resources (leaves, wood, etc.) was proposed in the previous management plan, this is in practice strictly prohibited. Indeed given the high level of degradation of the reserve and given the lack of sufficient PA staff to control these kind of sustainable resources use, Wildlife division staff chose not to take the risk to allow these activities. Communities don't benefit from direct incomes from the PA but 50% of staff employed in the PA comes from surrounding villages.

There is no project supporting livelihood of fringe communities.