

2. INTRODUCTION

2.1 Context

2.1.1 *Protected Areas Management and Wildlife Conservation Project.*

The main objective of the Protected Areas Management and Wildlife Conservation Project (PAMWCP) is to develop a comprehensive financing proposal ("Action plan") for investment in the wildlife sector in Ghana. The project is being implemented by a team of Wildlife Department Officers assisted by an IUCN Principal Technical Advisor. At the inception workshop for the PAMWCP project in February 1997, it was agreed that a series of short-term studies / consultancies / design missions would be carried out to identify needs, strategic approaches and associated costs in key areas. This report presents the findings and recommendations of the "Protected Area Infrastructure and Management Costs" Study. (See Appendix 2 for the terms reference for the consultancy.)

2.1.2 *Infrastructure and Management*

What is the relationship between "infrastructure" and "Management" in the context of this study? In this report "infrastructure" will refer to all the physical necessities or requirements that need to be put in place to facilitate management. "Management" on the other hand, will refer to administrative, technical and professional needs and guidelines which are sine qua non for the control and running of protected areas.

The major constraints to protected area (PA) management in Ghana have been the absence of an overall strategy for the development of the system. Individual conservation areas have lacked:

- management guidance
- adequate finances and manpower
- more critically the support of local communities which has resulted in relentless encroachment and poaching pressure.

This dismal situation is compounded by the daily uncertainties of the PA managers over such worrying problems as lack of basic infrastructure (accommodation for staff and reasonably good roads), basic equipment i.e. transport, fuel, spare parts, and staff welfare issues.

These are but some of the essential needs for the effective and efficient management of protected areas which have been addressed by this study.

2.2 Background and Present Situation

2.2.1 *Background*

The Wildlife Department established in 1965, is responsible for 18 protected areas comprising seven National Parks (including the new Kyabobo Range National Park), six

resource reserves, four wildlife sanctuaries including (the ungazetted Agumatsa wildlife sanctuary) and one Strict Nature Reserve. The WD is also responsible for the management of five coastal wetland sites and the two Zoos in Accra and Kumasi. The protected areas and Ramsar sites cover 13, 489 sq. km or 5.7% of the country (see fig 1).

One of the major set backs to protected area management in this country has been lack of overall guidelines and management objectives for the individual protected areas. The absence of clear guidance and planned strategies have led to these areas being managed inconsistently and on ad hoc basis by succeeding Senior Wildlife Officers. An attempt has been made to arrest this state of affairs by contracting the World Conservation Union (IUCN) in collaboration with WD to among other things draw management plans for 7 protected areas in Ghana. This was part of the governments effort to revitalise the forestry sector of the economy with loan from the International Development Agency (IDA) of the World Bank.

The Management plans which are all about four years or more old are yet to be fully implemented largely because of lack of funds and limited resources. The existing support for protected areas for which management plans have not yet been prepared and the rest of the WD sector is woefully inadequate.

2.2.2. Present Situation

Presently, six of the 18 protected areas in the country are being developed under different sources of funding as shown in table 2.

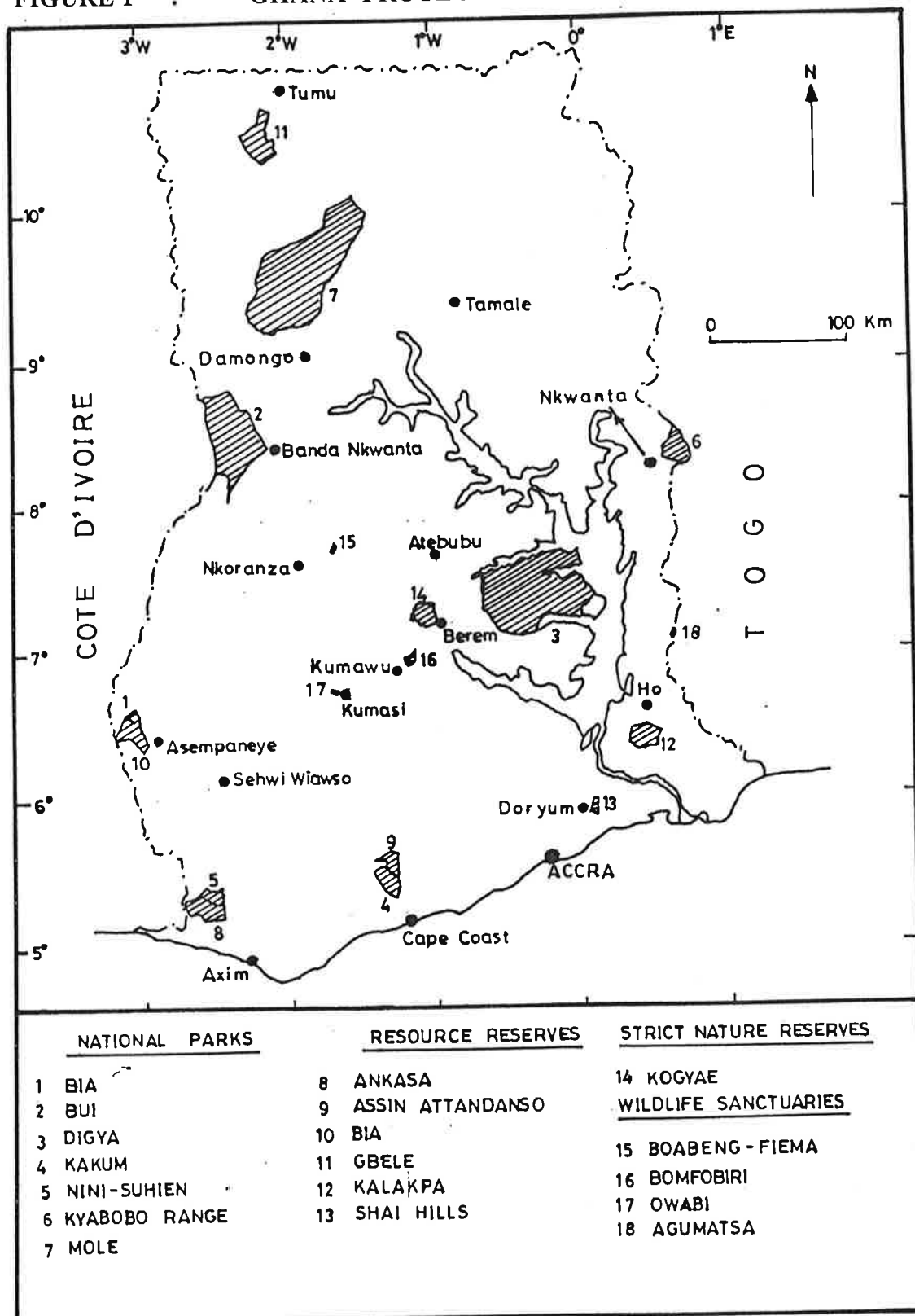
Table 2: Development of Six Protected Areas, their Locations and Source of Funding

No.	Protected Area	Location	Source of Funding
1	Bia National Park	Western Region	EU
2	Bia Resource Reserve	Western Region	EU
3	Ankasa Resource Reserve	Western Region	EU
4	Nini - Sushien National Park	Western Region	EU
5	Kakum National Park	Central Region	USAID,UNDP, Conservation International (CI)
6	Boabeng - Fiema Monkey Sanctuary	Brong-Ahafo Region	GEF

Of the remaining 12 PAs action has been taken as follows: Infrastructural Development in 6 protected areas namely Mole, Digya, Gbele, Kalakpa, Shai Hills and Kogyae. The funding for development in Mole and Shai of these protected areas (Mole and Shai) was from FRMP while development in the rest were funded from the Public Investment Programme (PIP) of Ghana Government.

The infrastructural Development so far completed (in some cases still in progress) include survey and rehabilitation of roads, renovation of existing buildings and construction of new ones. The details of these developments are shown in table 3.

FIGURE 1 : GHANA - PROTECTED AREAS



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Table 3: Infrastructure and Other Developments in Twelve Protected Areas & Source of Funding

Protected Area	Item for Development	Qty.	Type/State of Development	Source of Funding	Remarks
Mole N P	j) Civil Works				
	Roads				
	Surveyed Designed, BoQ and estimates prepared	150km		FRMP	
	Senior Staff Quarters	67 Km		FRMP	
		3	Renovation (Completed)	FRMP	
	Middle Grade Quarters	7	Renovation (Completed)	FRMP	
	Administration Block	1	Renovation (Completed)	FRMP	
	Junior Staff Quarters	6	Renovation (Completed)	FRMP	
	Wildlife School	1	New Construction	FRMP	Student Dormitory/ mullet-purpose hall 2 JSQ to accommodate six to staff Office/Garage
	Range Camp New	1	(On-going)	FRMP	
	Store (Park HQ.)	1	New Construction	FRMP	
	Garage (Park HQ.)	1	Completed	FRMP	
	External Water Supply System	1	Replacement of old pipe lines with new PVC pipes and a new electric pump	FRMP	
	ii. Plants and Equipment				
	Electric Water Pump	1		FRMP	
	Generating Plant	1		FRMP	
	iii) Vehicles				
	4WD pickup	2		FRMP	
	4WD Tractor	1		FRMP	
Shai Hills RR	Buildings				
	Senior Staff Quarters	2	New Construction (Completed)	FRMP	
	New Camp	2		FRMP	
	Gate House	1	New Construction (Completed)	FRMP	
Digya N P	Student hostel and Junior Staff Headquarters	1	Renovated	FRMP	
	Staff Accommodation	1	New Construction (Completed)	PIP	
Kogyae	Staff Accommodation and Office/ Store	1	New Construction (Completed)	PIP	
Kalakpa	Road	3 km	Rehabilitated (Completed)	PIP	Access road to reserve
Gbele	Junior Staff Quarters	1	New Construction (On-going)	PIP	
	Office	1	New Construction (On-going)	PIP	
Protected areas	Installation of Communication Equipment Base Radio (Motorola)	9	In Place	FRMP	Installed at Park / Reserve HQs.
Mole and Shai Hills	Community Conservation (CC) Initiatives	2	- Formation of MAB at Shai Hills - Formation of CCC in 3 Communities at Mole	Grant (Government of Japan)	

2.2.3 Preparation of Costing and Budget

The infrastructure and equipment requirements of each of the ten protected areas covered in this study were listed in close consultation with the Senior Wildlife Officers (SWOs) in charge of the PAs. In the case of the PAs for which management plans have been prepared, cognisance was also taken of the recommendations / proposals made in the plans in respect of these items. With regards to the items for the core budget to be financed by NRMP, the costing was based on the one done by the International Development Association (IDA) team, while the costing for the full budget was done by the consultant based on current local market prices and in co-ordination with the PAMWCP Principal Technical Advisor. About 3% of the estimated cost of each item has been added to take care of inflation.

Expenditure for each of the protected areas were prioritised in co-ordination with the SWOs in charge of PAs and the PAMWCP Principal Technical Advisor. Core elements that should be financed under NRMP were distinguished from the full implementation budget.

2.2.4 Assessment of Present Situation and Needs of the Individual Protected Areas

In consultation with the SWOs in charge of the PAs under review, the infrastructure and equipment presently available on the ground for management were assessed and their conditions determined.

Items that were still serviceable and in reasonably good condition were retained and the unserviceable ones that are beyond salvage written-off and recommended for auctioning.

2.2.5 Prioritisation of Needs and Development Programmes

Areas that need priority actions were identified and costed and these constituted the elements of the management programme that should be financed under NRMP. Areas of the management programmes that were considered necessary but could not immediately be funded, for instance, community conservation, were identified as potential areas for development as and when grant funds become available. Given the objectives and the type of activities involved in community conservation, in particular, they fit within Agenda 21 and within the Global Environment Facility (GEF) objectives for bio-diversity conservation and contributing to rural livelihoods. Hence, this area of the management programme, should ideally be funded from grant arrangements.

Areas for which priority actions needs to be taken for all the 10 PAs included provision of basic infrastructure (staff accommodation, water and rehabilitation of roads) equipment, (communication equipment, office equipment and field equipment) and a modest 5-year budget for their operations and maintenance as shown in table 4.

Since uniform wears away fast from constant usage, it has a short life-span, therefore, it was considered expedient to provide each PA with a 10-year supply budget for this essential item.

Table 4: Core Budgets for Infrastructure, Equipment and Operations and Maintenance for Ten Protected Areas

PROTECTED AREA	INFRASTRUCTURE AND EQUIPMENT (US\$)	OPERATIONS AND MAINTENANCE (US\$)
Mole National Park	1,653,500	286,500
Digya National Park	615,500	241,500
Bui National Park	273,760	163,500
Gbele Resource Reserve	264,800	161,000
Kalakpa Resource Reserve	343,530	184,500
Kyabobo Range National Park	268,880	177,000
Shai Hills Resource Reserve	205,100	150,250
Kogyae Strict Nature Reserve	208,660	146,300
Bomfobiri Wildlife Sanctuary	173,200	114,600
Owabi Wildlife Sanctuary	122,500	86,500
TOTALS	4,129,530	1,711,650