

## Description of Demonstration Project

Adapted from Annex G of the *UNEP/GEF "Wings Over Wetlands"*  
Project "Enhancing Conservation of the Critical Network of Sites required by  
*Migratory Waterbirds on the African/Eurasian Flyways (AEWA)*" – project no. 51210

### ANNEX G-5 DEVELOPING ORNITHOLOGICAL ECOTOURISM IN BANC D'ARGUIN NATIONAL PARC, MAURITANIA

#### 1. BACKGROUND AND CONTEXT

##### 1a. Table 1: Summary of background information on demonstration site

<b>Name</b>	Parc National du Banc d'Arguin
<b>Size (hectares)</b>	1,173,000 ha
<b>Location (grid reference)</b>	Situated on West African seaboard; ca. 20° 00'N / 16° 30'W
<b>Principal wetland features</b>	Vast maritime wetland comprising shallow coastal waters, mudflats and islands meeting a shifting mostly sandy coastline of spits and bays. The waters support rich sea grass beds (e.g. <i>Zostera</i> and <i>Cymodocea</i> ). The nearby permanent upwelling of Cap Blanc contributes to a high marine productivity. Coastal wetland vegetation includes <i>Spartina</i> grass and relict mangroves of <i>Avicenna africana</i> . The mudflats are highly productive, supporting many aquatic invertebrates, which in turn attract large numbers of fish and wading birds. The shallow waters are internationally important fish breeding nurseries.
<b>Bird species of principal importance under the AEWA agreement and Ramsar Convention</b>	There are breeding and non-breeding waterbirds; many surpass the 1% criteria for international importance, some of them by a very high margin. These include: <b>Breeding:</b> ca. 15,000 birds of over 15 species: e.g. great cormorant, long-tailed cormorant, white pelican, grey heron ( <i>monicae</i> ), Eurasian spoonbill ( <i>balsaci</i> ), greater flamingo, slender-billed gull, gull-billed tern, Caspian tern, royal tern. <b>Non-breeding:</b> >2,000,000 waders, e.g. turnstone, sanderling, dunlin, red knot, curlew sandpiper, little stint, Kentish plover, ringed plover, bar-tailed godwit, Eurasian curlew, whimbrel, grey plover, common greenshank, common redshank; + others e.g. lesser black-backed gull. 80% of the European breeding population of Eurasian spoonbill winter in PNBA.
<b>Protective status of the site</b> PNBA staff patrol the park regularly, especially its maritime component.	<b>International level:</b> PNBA is a Ramsar Site (since 1982) and UNESCO World Heritage Site. It is also a key site in the West African Coastal Management Network. <b>National level:</b> PNBA is a national park and administrative structure created by a decree in 1976. It has been, under direct supervision of the President's and the prime minister's office until 2006. This year a new environmental structure dependent from the prime minister's office has been created in Mauritania (Secretariat of State of the Environment – SEE). The park falls presently under the SEE framework keeping however its management autonomy. A national law runs the park and has been the object of a Gift to the Earth ceremony organized by WWF the year 2000. In spite of the sheer size and harsh physical environment PNBA staff patrol the park regularly, especially its marine component.
<b>Summary of wetland uses</b>	Fishing (by the local Imraguen population, using traditional sailing boats), ecotourism, protection of biodiversity.
<b>Summary of wetland threats</b>	Local and external illegal over-fishing, unplanned tourism development, oil extraction and cockle dredging in the surroundings, island erosion, nest flooding by tides.
<b>Agencies responsible for site management and their roles.</b>	PNBA is an administration department entirely responsible for the park's management. A number of international agencies support various aspects of the park operations, whilst there are strong links with the relevant ministries and the University of Nouakchott. Spanish, German and French, Co-operations, the Fondation International pour le Banc d'Arguin (FIBA), IUCN, WWF and Wetlands International provide direct technical and financial support.

**NOTE:** The activities described in the present project description are indicative only and may be subject to revision as a result of a project launching workshop to be held on site at the outset of the project. The workshop will ensure participation of all project stakeholders in the review and update of the project objectives, workplan

*and budget. Subject to prior approval by UNOPS, the results of the workshop and associated revised workplan will be incorporate in the project Inception Report.*

### **1b. Relevance and importance of the site and proposed activities in the national biodiversity strategy**

The PNBA is one of only two national parks in Mauritania, and comes presently under direct supervision of the Secrétariat d'Etat à l'Environnement. A park director manages a staff of around 100 personnel, both in a coordinating office in Nouakchott and in the park. The park has a political profile and a role in securing national biodiversity higher than any other natural area in Mauritania. Furthermore, the park supports a rich biodiversity, particularly in marine invertebrates, fish and waterbirds, and is of proven international importance. The park appears prominently in the national action plan for implementation of the Convention on Biological Diversity (CBD), which Mauritania ratified in 1996. Key species in the national action plan include the Mediterranean monk seal, a number of migratory and breeding waterbirds, marine turtles and several species of fish.

### **1c. Role and status of the site in other relevant national policies/initiatives**

Mauritania ratified the Convention on Wetlands (Ramsar) on 22 October 1982, and the PNBA was declared a Ramsar site then. Mauritania has started the process of ratifying the AEW. A decree establishing the national park is engrained in the national legislation<sup>1</sup>, and a new law protecting the park's natural resources has been passed in January 2000. These link closely to the country's national environment and rural sector strategy. Particular rules relating to fishing are also in place. Relevant plans approved or under preparation are the National Environmental Action Plan, the Biodiversity strategy, the UNCCC (climate change) action plan and the national plan to combat desertification (under the Convention on Combating Desertification (CCD)).

Relating to ecotourism, the PNBA has already developed and printed a Strategy for Ecotourism Development. This strategy fits within the conservation mission and sustainability objectives of the PNBA. Further, it seeks actions which minimise negative impacts on the park (local population, wildlife and ecosystems), but which also bring economic benefits to the country. Some trial ecotourism activities and basic training are already being carried out within the park. This current project builds directly on this Strategy for Ecotourism Development, following the recommendations of the project development workshop of June 2001.

### **1d. Current conservation status and threats to the site**

The PNBA was established as a national park by a decree in 1976. Compared to other protected areas, it is relatively well resourced, though the park is very large and the terrain inhospitable. A population of Imraguen fishermen are the only permanent residents in the park, with some 1,300 people residing in 9 coastal villages and owning slightly over 100 *lanches* (traditional sailing boats). A satellite reserve, Cap Blanc, co-supports the largest population of Mediterranean monk seal, a critically endangered marine mammal.

The main threat to the park's ecological integrity is from various types of unsustainable fishing practices. The coastal waters of West Africa are heavily fished by local fishermen, migrant West African fishermen using large pirogues (sea-faring motorised canoes) and by the industrial fisheries sector. Unauthorised vessels enter the waters of the park, which supports the most important fish breeding areas of West Africa. In addition, a number of species have been specially targeted and exploited at unsustainable levels, including a high off-take of sharks and rays for their fins. Such fishing causes an imbalance in the ecology of the park.

<sup>1</sup> The creation decree of 1976 was abrogated by the new law of January 2000.

A number of fragile habitats are present, including extensive sea-grass beds and a relict mangrove ecosystem, which needs careful monitoring. Breeding bird colonies are threatened by natural tidal fluxes.

### **1e. Details of current /past management activities, the organisations involved and current status of management in the site**

The park has a management plan. A 10-year Master Plan was inceptioned in 1993. The park authorities are entirely responsible for managing the site, including park surveillance, ecological research and monitoring. Several international organisations have supported the PNBA in managing the site, including IUCN, WWF, French Co-operation, German Co-operation-GTZ, Spanish Co-operation with IPADE, but management authority has always rested with the PNBA itself. There is a special foundation focused primarily in raising finances and providing technical support to the park. This, the Fondation International pour le Banc d'Arguin (FIBA), has more recently been assessing the sub-regional importance of the park, notably for fisheries sustainability in West Africa. A research station is based at Iwik in the northern sector of the park.

In addition, the local population are also involved in park management through local management committees. There are 9 Imraguen cooperative groups with more than 700 adherents, among them 300 women; 70 people are management committee members (40% women). Infrastructure for visitors is very limited. A new strategy for developing ecotourism in the PNBA marks the start of a new approach for opening up the park to visitors in this remote area. Tourism has been seen before as a threat more than an opportunity. However, ecotourism may provide important direct and indirect sources of income for the local population, therefore reducing pressure on the park's natural resources and biodiversity. Properly managed ecotourism should include adequate mechanisms for the engagement of local communities in the provision of visitor services.

### **1f. Synthesis of current management needs in the site, emphasising the gaps that need to be filled**

Improved management of the park is important for its long-term viability. Recent initiatives are underway to improve park surveillance, especially control of illegal fishing and implementing the new park legislation. Upgrading and implementing an ecotourism strategy is seen as an important need for harnessing the park's high tourism potential. The existing ecotourism strategy and the PNBA Management Plan provide a framework for the management of the park. The terrestrial zone of the park also needs closer attention, and there are plans to boost the ailing wildlife populations. Whilst the park is relatively well resourced, it is a vast and difficult area to work in, comprising mostly marine waters, islands and desert. Thus, it is not easy task to monitor the significant numbers of aquatic fauna and waterbirds nor the human activities, which impact on biodiversity. Equally, infrastructure within the park is limited and there is only minimal control of visitors. In order to achieve good management, including surveillance, ecotourism and research, a diverse programme of capacity development is needed for engaging park staff and local communities effectively.

## **2. DEMONSTRATION PROJECT RATIONALE, IMMEDIATE OBJECTIVES AND SUB-OBJECTIVES**

### **2a. Demonstration project rationale**

The project focuses on waterbirds, which constitute the most visible biological indicator of the park's ecology and also present an important attraction for specialised as well as general tourism. The extraordinary concentrations of waterbirds in particular present a high potential for attracting ecotourism operations, which in turn could help bring important revenue to the park and local communities. There is evidence of such ecotourism positively contributing to a protected area from the Parc National des Oiseaux du Djoudj in neighbouring Senegal, where large numbers of visitors now come for guided tours of the pelican colonies and to see other birds such as flamingos and large concentrations of ducks and

waders. Although the PNBA is vital for national and sub-regional economy on account of its role in supporting breeding grounds for resident and migratory fishes, very little revenue is generated by the park directly nor invested back into the park itself (park operations and local population). As such, the park depends heavily on international support and the goodwill and wishes of the donor community. A successful implementation of an appropriate ecotourism development strategy could help to reverse this situation, and could also improve the livelihood of the Imraguen, several of whom would need to be involved closely in the venture.

However, significant investment is required to fine-tune and put in place a successful strategy, especially as tourism has not been actively encouraged in the park until recently, with a lack of accommodation facilities for visitors, and visitor management capacity among the local communities being almost non-existent. Recently, the Park has begun to encourage visitors more, and there are now several camping sites managed by local co-operatives such as in the villages of Mamghar, Tessot, Iwik and Arkeiss. However, these require of significant improvements in terms of basic infrastructure and management capacity. There is also a private campsite. Park personnel and local people need specialised training in nature guiding/interpretation, visitor management, languages and ecotourism development principles. Basic infrastructure and local capacity needs to be enhanced and conditions need to be improved to both promote the park internationally and make visitors feel safe and welcome. Further, tourism stands to bring additional revenue to the Imraguen, who are skilled crafts-people; such revenue will lower their dependence on fish merchants and tradesmen. Whilst implementing a diversified ecotourism strategy is not expected to solve all the park's problems, it is expected to contribute positively to the sustainability of the park management and biodiversity.

## **2b. Immediate Objective**

The main goal of the PNBA is to ensure conservation of biodiversity and natural resources whilst guaranteeing a livelihood for the local Imraguen population and the long-term economic role of the park, especially through its contribution as a key site of an international importance for fisheries. In fitting with these principles, the overall aim of the project is to enhance the viability and economic status of the park by supporting the implementation of key elements of the ecotourism strategy.

## **2c. Sub-objectives**

*Sub-objective 1. Improve sustainability of PNBA and Imraguen livelihood through generation of revenues.*

PNBA is currently over-dependent on international funds for its continued existence as a protected area. Whilst such support is expected to continue, especially due to the park's international importance for migratory fish and waterbirds, well-managed and sustainable international ecotourism stands to bring a measure of sustainability to the park's operations. At the same time, employment opportunities and spin-off benefits of ecotourism (such as crafts, provision of visitor services, labour) should benefit and engage the Imraguen villagers, who live inside the park.

*Sub-objective 2. Enhance / widen the international reputation and awareness of PNBA and its role as a key site for migratory waterbirds.*

An improved international awareness of the park, especially of its integral role in sustaining some 2 million waterbirds (1/3 of all Western Palearctic waders), will generate wide interest, especially in Europe, where many of these same birds also visit. More detailed information of new park facilities should boost ecotourism and strengthen the park's reputation.

*Sub-objective 3. Enhance the capacity of PNBA personnel and the Imraguen and significantly improve the infrastructure and facilities of the park.*

Improved infrastructure and the availability of suitably trained guides are essential components for implementing an ecotourism strategy. The project will provide long-term, on-the-job and specific professional training to enhance the park's capacity to manage ecotourism, while providing new employment opportunities for locally trained guides.

## 2d. Demonstration Value of the Project

The PNBA is a key site on the Eastern Atlantic migratory flyway, and is part of several ongoing initiatives to link such sites and to work towards a system of integrated coastal zone management. Thus, exchange programmes are already taking place between PNBA and other sites along the flyway, often receiving international (including West African) visitors, especially researchers and conservation managers. PNBA is already of regional economic importance for maintaining the West African fishery. PNBA was awarded through WWF's 'Gift to the Earth' programme. Thus, through its national prestige and emerging international renown, the site offers tremendous demonstration potential.

The availability and implementation of a community-based ornithological ecotourism strategy is a relatively new phenomenon for a wetland along this flyway, and will immediately be relevant in many circles. It would serve as a fitting model for other key sites, especially along the Eastern Atlantic migratory flyway. Demonstration value will be primarily achieved through exchange programmes, whereby local communities and protected area personnel from other wetlands (especially in West Africa) will visit PNBA and vice-versa. A national exchange programme will ensure that Mauritania's other main wetland areas and Ramsar sites also benefit from this experience. In particular, ecotourism plans will be extended to the Parc National du Diawling, Chott Boul and the *tamourts* (isolated inland wetlands) of Eastern Mauritania, all of which would be sites of interest to visiting 'eco-tourists'. The ecotourism initiatives in PNBA will also be presented at appropriate international conferences. Special relationships will be forged with the following sites, especially to share experiences in the development of ecotourism plans:

- Saloum Biosphere reserve & Djoudj National Park, Senegal
- Bijagos Biosphere Reserve, Guinea Bissau
- Diawling National Park, Mauritania
- Tour du Valat Biological reserve in the Camargue, France
- Niedersächsisches Wattenmeer National Park, Germany
- Schiermonnikoog National Park, Wadden Zee, Holland
- Doñana National Park, Spain
- Sousse Massa Park, Morocco.

## 3. DEMONSTRATION PROJECT OUTCOMES AND ACTIVITIES

### 3a. Outcomes and activities

NOTE: the present document is meant to provide a general outline of planned activities. Specific details and workplan will be defined and adjusted in an initial workshop to be held in Mauritania, facilitated by PNBA and FIBA, at the very outset of this project, and involving all stakeholders (i.e. PNBA, FIBA, IPADE Project, Spanish Cooperation, GTZ, French Cooperation, WI, WOW Project etc.).

*Outcome 1. Improved sustainability of PNBA and livelihood of Imraguen through generation of park revenue with direct community spin-offs.*

*Activity 1.1 Contribute to the development of a specific ornithological ecotourism implementation strategy for the park.*

An over-arching activity that will be supported by the presence in the park of a team specifically dedicated to management of bird tourism. This team will contribute to the improvement and implementation of key elements of the existing park management plan and ecotourism development strategy, and therefore it will support all related outcomes of the project.

*Activity 1.2 Identify key sites for waterbirds and associated aspects of tourism potential:*

In light of recent experience and lessons learnt from the establishment of the first campsites (managed by local cooperatives) the project will contribute to the re-assessment of the ecotourism development potential for each site and also to the fine-tuning of the PNBA ecotourism development strategy at the park level. This will include analysis, prioritisation and diversification of interventions, based on agreed criteria for the ranking of actual and potential economic benefits and opportunities of tourism for each different village of the Imraguen, e.g. craft production, nature guiding and interpretation, hiring of traditional boats etc. The potential for soft loans to local stakeholders to help establish tourist facilities will also be assessed. This activity will support the integrated implementation of the existing PNBA Management Plan and ecotourism strategy. In the process, specific information and data on waterbirds and the environment of the park will be generated. This will include the feasibility assessment of community-based ecotourism at key sites within the park for waterbird observation, including bird roosts, breeding colonies and popular feeding and resting areas.

*Activity 1.3 Develop ecotourism guidelines for the park, based on carrying capacity:*

The project will contribute to the development of guidelines for bird-tourism carrying capacity and frequency of visits, especially for sensitive areas such as breeding sites. The carrying capacity of the Park and the desired frequency of visits will be established with the support of GTZ and specific guidelines will be developed during year 1 of the project, focusing the numbers of visitors and revenue.

*Activity 1.4 Support the implementation of the PNBA Ecotourism Strategy:*

This activity will be adjusted to fully complement other ongoing and planned activities in the ecotourism sector within PNBA. It will involve improving key infrastructure (to be implemented by PNBA), training local personnel, supporting elements of PNBA communications strategy, contributing to advertising the park, liaison with tour operators, training for local communities and park staff on hosting and guiding visitors etc. Specific details and time-scales will be defined in an initial workshop to be held at project outset with all stakeholders involved (PNBA, FIBA, IPADE Project, Spanish Cooperation, GTZ, French Cooperation, WI, WOW Project etc.).

*Outcome 2. Wider international reputation and awareness of PNBA, and its role as a key site for migratory waterbirds.*

*Activity 2.1 Contribute to the set-up of an Ornithological Communications Strategy for the park:*

This activity will entail a specific consultancy to assess the potential market for bird-watching tourism in PNBA and define a suitable communication strategy to promote the potential of PNBA in this respect. This study will complement parallel ongoing efforts undertaken by PNBA, FIBA, GTZ and the IPADE project. Detailed promotion and awareness activities and schedules will be defined at the project outset and after completion of the above study, and implemented in collaboration with all stakeholders at local and national level (see 1.4).

The birdwatching/ecotourism offer being developed by PNBA as a result of this project will also be advertised and promoted by inclusion in the broader WOW communication strategy, that will include all major project partners.

*Activity 2.2 Develop EPA Materials:*

The project will contribute to selected components of PNBA efforts to design and produce key elements of environmental education, awareness and nature interpretation strategy within the PNBA: i.e. visitor interpretative panels, education/teaching aids, information packs, etc., designed specifically to

promote ornithological ecotourism in the park. These components will be selected at project outset, so as to best complement ongoing and planned materials to be supported by the IPADE project and PNBA.

*Outcome 3. Enhanced capacity of PNBA personnel and the Imraguen, and significantly improved infrastructure and facilities of the park.*

*Activity 3.1 Establish and implement a project training programme for park staff & Imraguen Training programme:*

Building professional capacity for the local communities and park staff in the specific area of ornithological tourism is identified as a critical element for the success of a ecotourism development in the park.

The project will assist PNBA in the set-up and initial management of a “birds conservation training centre” in the field station of Mamghar in the southern edge of the park. The principal objective is the provision of long-term on-the-job training for key park personnel and members of the local communities. Local community members will be strategically selected from the villages with highest long-term potential for birdwatching tourism, and will be provided long-term training in nature interpretation, birdwatching and visitor management. The long-term training will include language learning as a critical element of visitor management, (this skill is yet virtually not available within PNBA communities). A full-time trainer will be recruited and posted by WI within the PNBA at the Mamghar camp, located at the southern edge of the park. The Trainer will report to and be working closely with PNBA staff located the Mamghar camp, and will be responsible to (a) oversee the finalization and upgrading of the Mamghar training centre, (b) organise and provide long term and on-the-job training for local guides, students, park personnel and others, and (c) facilitate and support the short-term missions of incoming international experts that will periodically support the training courses and bird monitoring activities within PNBA. The main role of the trainer will be the facilitation and support for know-how transfer between international visiting scientists and local trainees under the trainer’s supervision.

This activity will also result in the selection of a core group of local guides and park personnel to be trained as trainers. This core group will later carry forward the operation of the PNBA Mamghar Training Centre under the auspices of PNBA and FIBA.

*Activity 3.2 Design and operate an Exchange Programme:*

Through liaison with international partners, PNBA, FIBA, and WI, the Trainer will design and implement an Exchange Programme for key trainees (i.e. focusing on those selected for becoming trainers) with other key sites in the AEWa regional network as well as within PRCM (Regional Programme for the Conservation of Coastal and Marine Areas in West Africa). The focus of the exchange programme will be primarily on those sites supported by the WOW project.

*Activity 3.3 Improve park interpretation system:*

The project will support the upgrading and installation of some selected informative signposts. The location and description of park signposts will be defined at project outset in consultation with PNBA, IPADE Project and relevant project stakeholders (see activity 1.4).

*Activity 3.4 Establish the park bird conservation training centre:*

This will be located at the southern edge of the PNBA in the existing Mamghar centre operated by PNBA. The centre will have facilities for bird conservation training and lodging of trainees and trainers, and will be equipped to serve as a base for organising long-term training in bird conservation, birdwatching tourism and associated language training for park staff and community members.

*Outcome 4. Integration of ecotourism activities and monitoring into the park’s administrative procedures and management plan.*

#### *Activity 4.1 Project Management and Review:*

The project team will be built into the day-to-day internal management of and planning for the park. A full-time trainer and project coordinator will be recruited by WI and seconded to the PNBA for the project duration. The Project Coordinator will be based full-time at the Mamghar camp, and will work closely with PNBA staff on site on all aspects of work, while liaising regularly with PNBA headquarters.

Specifically, the PNBA will appoint a full-time counterpart (i.e. the PNBA Ecotourism Officer) to share all responsibilities and work very closely with the Trainer/Project Coordinator. The Trainer will act as project site coordinator and will be responsible with its PNBA-appointed counterpart for project technical reporting coordination, with support for administrative and financial reporting by the WI office in Dakar.

The PNBA administration and the FIBA will be fully involved in project management through the set-up of close consultation mechanisms covering all aspects of project implementation. Detailed communication mechanisms and reporting structure to ensure best coordination with PNBA will be discussed and agreed on site at project outset between the WI Trainer and PNBA Management. PNBA and FIBA will also be involved in the supervision and review processes that will take place during the course of the project, including external reviews.

A detailed tri-partite convention assembling all parties and clearly defining different responsibilities within the project framework will be developed and signed prior to project implementation. The project Steering Committee will be charged with oversight of project implementation and will meet at least annually and ideally twice (i.e. prior to the release of each bi-annual progress report and associated workplan for the next six-months period).

#### *Activity 4.2 Project Monitoring and Evaluation:*

The project will be subject to periodic external auditing of all accounts and will undergo internal and external monitoring by the WI office in Dakar and the WOW Project Coordination Unit. The project will be assessed to evaluate its achievements and delivery of expected outputs, including the upgrading and management of park infrastructure at Mamghar. The project will also be evaluated in terms of the degree to which local professional capacity was generated, and PNBA development strategy supported.

### **3b. Project sustainability**

PNBA is a well-established and functioning national park, in which the Government of Mauritania has invested heavily during the last 30 years, notably through national legislation and its continuing support of an administrative office and local staff register. Due to the park's exceptional international importance for biodiversity, fish, sea-mammals and migratory waterbirds, the park is most likely to maintain a strong framework of international partnerships.

Building up much needed local professional capacity will add significantly to the sustainability of park operations especially in terms of local community involvement. Specifically, the project will train 20 staff and community members in a wide range of ecotourism subjects. Key PNBA staff will also be involved in the design, delivery and management of training programmes, adding to the capacity of PNBA to manage the Maghar training centre and deliver training programmes for national and regional partners in this and other related topics in subsequent years.

This project will provide added value and new initiatives to the park, and will provide a realistic opportunity for income generation for both local communities and park operators. By supporting the development and implementation of its own ecotourism strategy, the park will create additional functioning mechanisms and infrastructure for sustaining its own operations. Further, it is expected that an increase in ecotourism will serve to boost international interest in the park and increase possibilities for attracting new partners.

4. BUDGET

**Table 2: Project financing expenditure categories**

Wings Over Wetlands							
USD							
Budget Lines	Global budget	GEF/UNEP	MAVA	PNBA	IPADE	GTZ	Observations
<b>Personnel</b>							
Project leader	60,000	60,000					Junior PhD 2500 USD/month
French teacher	31,500		31,500				21 month
Homologue PNBA	7,200		7,200				Formation de formateurs/durabilité du projet
PNBA staff	24,000			24,000			In-kind staff time
<b>Sub-total</b>	<b>122,700</b>	<b>60,000</b>	<b>38,700</b>	<b>24,000</b>			
<b>Equipment and infrastructures</b>							
Car	35,000		35,000				Land-cruiser HZ 11 places - Gibraltar
2 Lap-tops	2,500	2,500					
1 Printer	300	300					
24 Binoculars	9,800		4,800		5,000		
5 Telescopes	5,000	5,000					
5 Tripods	750	750					
24 Uniforms	4,800	4,800					
4 Portable radios	1,650	1,650					
Rehabilitation Mamghar	40,000			40,000			
<b>Sub-total</b>	<b>99,800</b>	<b>15,000</b>	<b>39,800</b>	<b>40,000</b>	<b>5,000</b>		
<b>Sub-contracts</b>							
International consultancy	15,000		15,000				Market assessment/communication strategy
Local consultancy	23,000		10,000		3,000	10,000	Short-term training input
Interpretation panels and hides	12,000	6,000			6,000		

<b>Sub-total</b>	<b>50,000</b>	<b>6,000</b>	<b>25,000</b>		<b>9,000</b>	<b>10,000</b>	
<b>Workshops and training</b>							
Initial workshop	3,000		3,000				
Trainees	98,000	67,000	23,000		8,000		50% entretien infrastructures et alimentation
Teaching materials	10,500		3,000		7,500		
Training centre	24,000			24,000			In-kind contribution
<b>Sub-total</b>	<b>135,500</b>	<b>67,000</b>	<b>29,000</b>	<b>24,000</b>	<b>15,500</b>		
<b>Travel and operations</b>							
Vehicle operation	27,000	27,000					Fuel and maintenance
Travel Project Leader	10,000		10,000				
<b>Sub-total</b>	<b>37,000</b>	<b>27,000</b>	<b>10,000</b>				
<b>Overheads</b>							
WI Dakar	16,000	16,000					
<b>Sub-total</b>	<b>16,000</b>	<b>16,000</b>					
<b>Evaluation</b>	<b>5,000</b>	<b>5,000</b>					
<b>Sub-total</b>	<b>5,000</b>	<b>5,000</b>					
<b>Contingency</b>	<b>4,000</b>	<b>4,000</b>					
<b>Sub-total</b>	<b>4,000</b>	<b>4,000</b>					
<b>TOTAL</b>	<b>470,000</b>	<b>200,000</b>	<b>142,500</b>	<b>88,000</b>	<b>29,500</b>	<b>10,000</b>	

**Table 3: Disbursement Projection**

Budget Category	TOTAL	Year 1		Year 2	
		semeste r 1	semeste r 2	semeste r 3	semeste r 4
	GEF	GEF	GEF	GEF	GEF
Personnel	60,000	15,000	15,000	15,000	15,000
Equipment	15,000	15,000			
Subcontracts	6,000		6,000		
Workshops and training	67,000	16,750	16,750	16,750	16,750
Travel & operations	27,000	7,000	7,000	7,000	6,000
Executing agency support overheads	16,000	4,000	4,000	4,000	4,000
Monitoring, evaluation, auditing	5,000				5,000
Miscellaneous and contingency	4,000	1,000	1,000	1,000	1,000
<b>TOTAL</b>	<b>200,000</b>	<b>58,750</b>	<b>49,750</b>	<b>43,750</b>	<b>47,750</b>

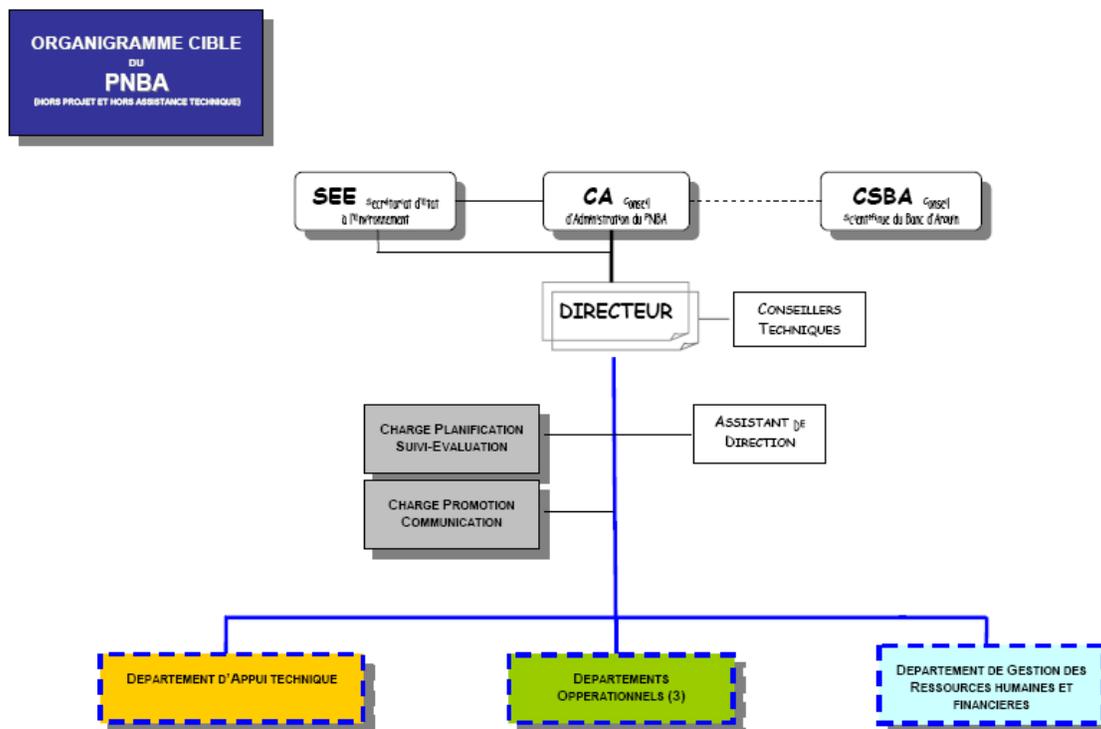
**NB: The travel budget has been calculated to allow the demonstration project to participate in two international WOW workshops**

5. TIMETABLE

Table 4. Workplan

Activity	Project periods in 6-month intervals			
	6	12	18	24
A1 Develop strategy	X	X		
A2 Identify key sites	X	X		
A3 Tourism guidelines		X		
A4 Implement Strategy		X	X	X
B1 Communications Strategy			X	X
B2 EPA Materials		X	X	
C1 Training programme	X	X	X	X
C2 Exchange Programme			X	X
C3 Interpretive panels	X	X	X	
C4 Training centre upgrade	X	X	X	X
D1 Management & Review	X	X	X	X
D2 Monitoring & Evaluation		X		X

6. ORGANISATIONAL DIAGRAM



This is the organisational diagram for PNBA, into which all park activities must fall. Thus, as PNBA will carry responsibility for the project, it is appropriate to use this diagram. The project coordinator and trainer will be linked to the ecotourism officer. They will report directly to the Director of the park, and will be supervised and supported by Wetlands International Office in Dakar. The Director of PNBA carries ultimate responsibility, and is guided by two advisory bodies – technical (CSBA) and administrative (CA). The Conseil Scientifique du Banc d'Arguin (CSBA) is supported by a network of partners (Cellule de Coordination des Partenariats), including Wetlands International. The main staff focal point for CSBA is the Head of the Technical Support Département, who will play a key role in selection of least sensitive areas for ecotourism and for monitoring impacts. Capacity development within the project involves park staff, most of whom fall under the two operational field departments (Départements Opérationnels): south and centre. Local communities are linked to the project through the park's organisational structure. Wetlands International will direct its main administrative and technical input to the project through the Head of the Technical Support Département.

To monitor the project implementation, a Steering Committee will be set up. It will be presided over by the Director of PNBA, and will report to the Scientific Council of the Park - CSBA, which in turn will evaluate the project against the overall objectives of the park. It will have representatives from the following invited organisations:

- Wetlands International (West Africa Office)
- Fondation Internationale du Banc d'Arguin (FIBA)
- GTZ
- IPADE Project
- PRCM (Programme Regionale de Conservation de la Zone Cotiere e Marine del L'Afrique du L'Uest)

## 7. LOCAL EXECUTING AGENCY CONTACT DETAILS

### **a. WETLANDS INTERNATIONAL WEST AFRICA PROGRAMME**

Mr. Seydina Issa Sylla

BP 8060, Dakar-Yoff, Senegal

Tel.: +221 8206478; Fax.: + 221 8206479; E-mail: [issawet@sentoo.sn](mailto:issawet@sentoo.sn)

### **b. PARC NATIONAL DU BANC D'ARGUIN (PNBA), MAURITANIA**

Dr. Sidi M. Ould Moine

Directeur Parc National du Banc d'Arguin (PNBA)

Av. Gamal Abdel Nasser - BP 5355

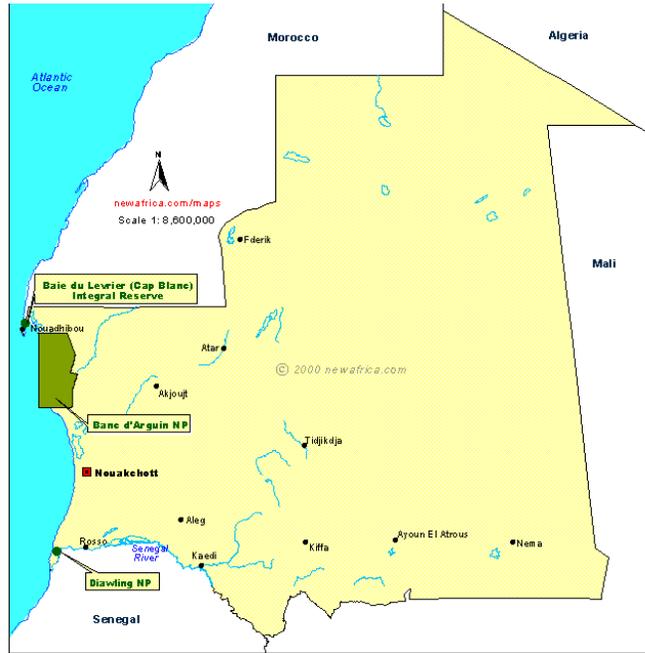
Nouakchott, Mauritanie

Tel. : 00222 525 85 41 / 222 529 99 63

Fax : 00222 525 85 42

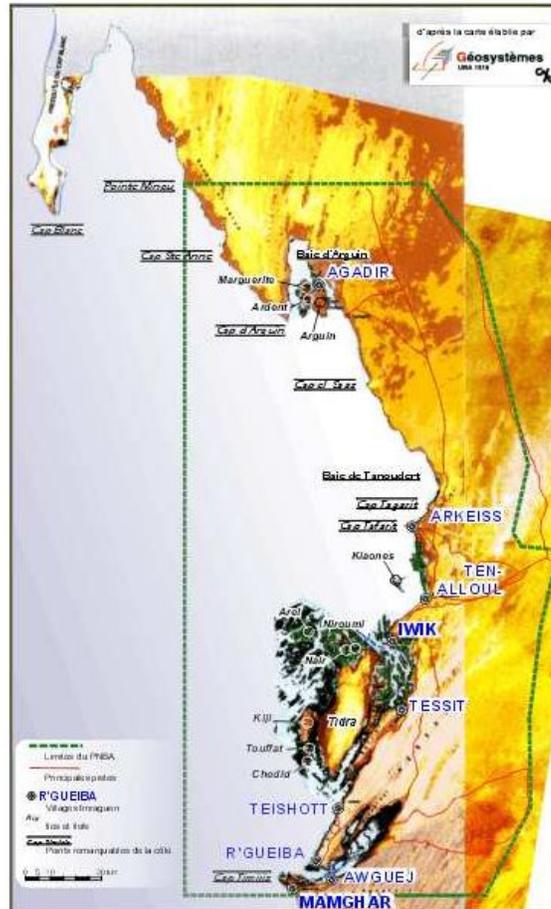
[directeur.pnba@mauritania.mr](mailto:directeur.pnba@mauritania.mr)

**Annex 1: Location map of demonstration site**



**Annex 2: Site map of demonstration site**

**PARC NATIONAL DU BANC D'ARGUIN**



**Annex 3: Logical Framework diagram**

<b>Intervention logic</b>	<b>Indicators of performance</b>	<b>Means of verification</b>	<b>Risks and assumptions</b>
<b>Development Objective:</b>			
<b>Immediate Objective: Enhance viability &amp; economic status of PNBA</b>	By project end, the park revenues from tourism increase and are used for surveillance and control.	Balance of figures from park tourism revenues, annual budget sources and financial report.	Tourism revenues are used directly for the park management and not for other purposes. Mauritania will remain open to tourism. Fisheries / other impacts do not disrupt the park's ecological integrity.
<b>Output 1. Improved sustainability of the park &amp; livelihood of Imraguen</b>	Key sites and carrying capacity identified and financial support to the development of the park's ornithological tourism strategy improved from the baseline. Diversification of Imraguen economy, with new direct & spin-off activities.	Brochure/leaflet guiding visitors produced. Final project reports & analysis of park's financial report & Imraguen revenues against the baseline situation. Cash-flows & Imraguen village socio-economic follow-up studies.	Tourism revenues are retained in/for the park. Tourism operations in the park will serve as additional surveillance. Imraguen will be fully involved in the project.
<b>Output 2. Wide international reputation / awareness of park.</b>	Park widely known & held in high regard, featuring in itineraries of at least 5 reputable international ecotourism operators. Increases from annual baselines in the number of ornithological visits. New partners for park support. Increase in website use.	Enquiries to tourists, determining e.g. origin, where they learned about park. Press records. Park entry records, volume of enquiries. Number of partners for park support, and financial contributions. Website visits / hits.	EPA materials should be appropriate and distributed widely. Press coverage should be well targeted. Mauritania as a country needs to remain open to international tourism and partners. Website should be regularly updated. Park facilities must provide good visitor security.
<b>Output 3. Enhanced capacity of personnel &amp; Imraguen; improved infrastructure / facilities.</b>	At least 4 staff & 16 Imraguen trained in bird tourism, language & birds monitoring and directly involved in guiding visitors by project end. Motivated park staff & villagers. New park training facilities established in Mamghar.	Staff / Imraguen enquiries, assessments and results from exchange programme. Physical park facilities & infrastructures.	Trained staff and villagers are fully occupied with ecotourism. New facilities must be environmentally appropriate, attractive for tourists and maintained.
<b>Output 4. Ecotourism activities &amp; monitoring integrated into the park's administrat. &amp; management plan</b>	Baseline situation established for reception facilities, visitor type & frequencies. Project on schedule & objectives achieved. Project management unit functioning. Active project monitoring plan.	No. & type of facilities & visits; Mid-term review & final evaluation. Annual reports & staff assessments. Monitoring plan data.	Data is available for determining the baseline situation. Park management will remain effective.
<i>Activity 1.1 Contribute to the development of an ornithological ecotourism strategy for the park.</i>			
<i>Activity 1.2 Identify key sites for waterbirds and associated aspects of tourism potential</i>			
<i>Activity 1.3 Contribute to the development of tourism guidelines for the park, based on carrying capacity.</i>			
<i>Activity 1.4 Support the implementation of the park's ecotourism strategy</i>			
<i>Activity 2.1 Contribute to the design an Ornithological Communications Strategy</i>			
<i>Activity 2.2 Develop selected EPA materials</i>			
<i>Activity 3.1 Establish and implement a project training programme for park staff &amp; Imraguen</i>			
<i>Activity 3.2 Design and operate an Exchange Programme</i>			
<i>Activity 3.3 Improve park interpretation system</i>			
<i>Activity 3.4 Establish a training centre</i>			
<i>Activity 4.1 Project management &amp; review</i>			
<i>Activity 4.2 Project monitoring a&amp; evaluation</i>			

