Saloum Delta (Senegal) No 1359

Official name as proposed by the State Party
Saloum Delta

Location
Thiès and Fatick regions
Foundiougne, Fatick and Mbour departments
Senegal

Brief description
The Saloum Delta is testimony to original human occupation within a vast wet and brackish region. Its development was based on shellfish gathering and fishing, within a natural environment of extensive biological diversity comprising mangroves, water courses, sand banks and mudflats. The shell mounds built up through the ages by human activity form man-made promontories and islets. The presence of tumuli on some of the shell mounds is testimony to the ancient and permanent nature of this human culture in symbiosis with a specific natural environment.

Category of property
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, the nominated property is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008), paragraph 47, it is also a *cultural landscape*.

[Note: The property is nominated as a mixed cultural and natural site. IUCN will assess the natural significances, while ICOMOS assesses the cultural significances.]

1 Basic data

Included in the Tentative List
18 November 2005

International Assistance from the World Heritage Fund for preparing the Nomination
None

Date received by the World Heritage Centre
22 January 2010

Background
This is a new nomination.

Consultations
ICOMOS consulted the International Scientific Committee on Cultural Landscapes, as well as several independent experts.

Literature consulted (selection)

Agbogba, C., et al., *La mangrove à usages multiples de l'estuaire du Saloum (Sénégal)*, Dakar, EPEEC-MAB, 1985.

Baltzer, F., Diop, E. S., and Barusseau, J. P., « L'estuaire et la mangrove du Sine-Saloum », *Rapport sur les Sciences de la Mer*, n° 32, Paris, UNESCO, 1985.

Descamps, C., *Le Sénégal de l'âge de la Pierre à l'âge des Métaux*, Paris, AUDECAM, 1976.

Thilmans, G., « Sauvegarde de certains amas coquilliers du Saloum », *Saint-Louis - Lille - Liège*, 3, 1997, p. 22-29.

Technical Evaluation Mission
A joint ICOMOS/IUCN technical evaluation mission visited the property from 29 September to 6 October 2010.

Additional information requested and received from the State Party
ICOMOS requested additional information from the State Party on 23 September 2010 and 14 December 2010 concerning:

- The historical and/or contemporary reuses of the shell mounds, and the application of measures to prevent their exploitation;
- The inventory and the archaeological studies concerning the tumulus mounds;
- The presence of any material vestiges of fishing activity;
- The regional comparative analysis, especially West African tumuli;
- The property's integrity and authenticity in relation to current human activities;
- The management of relations between natural heritage and cultural heritage at a local level;
- The shell mounds' listing as Historical Monuments;
- The situation of private property or property returned to the inhabitants within the property;
- The respective boundaries of the National Park, Biosphere Park, Marine Area and Palmarin Reserve in relation to the boundaries of the property and its buffer zone;
- The responsibilities and official implementation of the new Management Plan;
- The possibility of extending the buffer zone north of the Saloum River.

The State Party's responses, received on 16 November 2010 and 28 February 2011, are taken into account in this evaluation.

Date of ICOMOS approval of this report
10 March 2011

2 The property

Description

At its greatest, the surface area of the Saloum Delta region is close to 5,000 km^2, of which the actual delta represents approximately half. The property comprises the western, southern and central parts of the delta, the most humid and most typical, with a surface area of approximately 800 km^2; it also includes the coastal marine area from the mouth of the Saloum River in the northwest, to the Gambian border in the south.

The property is structured by three main river arms: the Saloum itself in the north (110 km), the Diombos in the centre (30 km) and the Bandiala in the south (18 km). Together with a great many *bolons* or brackish channels, they form a dense network encompassing over 200 main islands and islets. The property is defined by three main ecosystems: the mangrove forest, which is the most extensive, the Atlantic marine environment in the west and southwest, and a dry forest in the southeast. Along with these dominant environments, the property includes floodable sandbanks, mudflats and several sandy cultivatable expanses. The original ground is always at a very low altitude, a few metres at most. These are, especially as regards the mangroves, very rich ecosystems able to provide food for human consumption.

The delta's ecosystems have supplied vital resources for human communities for over 2,000 years, mainly from fishing and shellfish gathering. In addition to these resources, wood is collected from the mangrove forest and forest, along with some crop growing, domestic stock-breeding and beekeeping. The close and fragile link between humans and the mangrove forest resulted in expertise and social behaviour respectful of the environment at a very early stage. The wealth of plant life yields fruit, bark and medicinal roots. The buffer zone, drier and slightly higher, is more suitable for agricultural use.

Shellfish were particularly sought after by the local population, notably cockles and mangrove oysters, for food and preparation methods which enabledtheir storage and transport. As a result, numerous shell mounds have been created: 218 have been observed within the property; they are grouped in 96 identified and mapped mound sites (Thilmans inventory, 1997). They form man-made islets in a lake environment, physical supports for human settlements and for animals and plants. The largest and most representative have names. The mounds sometimes have imposing dimensions; the largest are up to 400-500 m at their greatest length (Dioron Boumak) and even 800 m (Ndiamon-Badat); they are a few metres high and even up to 8 to 12 m for the most imposing. Trees, especially baobabs, indicate the presence of shell mounds and they are clearly identifiable on satellite images. They form a relic archaeological landscape characteristic of the Saloum Delta.

The shell mounds are above all present in the more maritime section of the Saloum islands and in all the Betenti islands, in the south of the property. Their distribution may initially appear random, but they are generally grouped into clearly identified local sub-assemblies: three main sub-assemblies for the Saloum islands and six for the Betenti islands. These sub-assemblies have up to fifteen mounds, sometimes relatively close to each other. The largest mounds, around twenty, are more than 100 metres long; the average sized mounds are between 50 and 100 metres; and the smallest are under 50 metres.

Of these shell mounds, 28 have funerary sites in the form of tumuli (Thilmans inventory 1997), of which over 900 have been identified to date. They are shell cairns containing the remains of one or many individuals. The number of tumuli on any given mound is generally in the tens; sometimes there are less (2 or 3 tumuli). The number exceeds one hundred on the three main mounds: Dioron-Boumak (125), Ndiamon-Badat (149), and Tioupane near Falia (222). The mounds with a great many tumuli have a characteristic undulating profile and they are home to specific vegetation, notably large baobabs, that aids their identification.

In some cases, for an important individual, a funerary structure using a baobab circle forms a sanctuary (tomb of the *griot* Wolof Bak Kawl on Dioron Boumak). The frequent geographic proximity of mounds with tumuli follows fairly precise topographic rules indicating the presence of a funerary area to the inhabitants. Rites and/or bans were associated with these necropolises and funerary areas; occasionally, they are still practised by the local population.

Archaeological excavations of the tumulus mounds have revealed notable artefacts in the form of often remarkable pottery, and funerary objects. These are important for a better understanding of the cultures associated with the various periods of the delta's occupation. These archaeological artefacts are mainly conserved in scientific institutions and museums in Dakar.

The following 17 tumulus mounds sites can be considered the most important and the most representative in terms of the number of tumuli, their individual quality, or their symbolic meaning still present today:

1 Tioupane-Boumak and Tioupane-Boundaw, 222 tumuli
2 Ndafafe, 20 tumuli
3 Ndiamon-Badat, 149 tumuli
4 Site 35, near Dionewar, 11 tumuli
5 Fandanga, 17 tumuli
6 Ndiouta-Boumak, 26 tumuli
7 Sandale, 17 tumuli
8 Mbar-Fagnick, 4 tumuli
9 Site 9, on the Bakhalou bolon, 6 tumuli
10 Site 14, on the right bank of the Diombos, 77 tumuli
11 Dioron-Boumak, 125 tumuli
12 Dioron-Boundaw, 12 tumuli
13 Site 45, right bank of the Bandiala, 14 tumuli
14 Site 90, Bossinka north bolon, 63 tumuli

15 Bandiokouta, 30 tumuli
16 Site 67, Oudierin bolon, 72 tumuli
17 Site 46, left bank of the Bandiala, 33 tumuli

Like mollusc gathering, the aim of fishing is to feed the local population and, after preparation, to provide an export commodity to the region's towns and villages. Fishing has not left any notable material vestiges.

History and development

Human exploitation of shellfish in brackish or freshwater wet zones dates back to prehistoric times. From as early as the early Palaeolithic, archaeological traces of these customs have been found in the Mediterranean, on the Libyan coast, and on the coast of South Africa; a little later in Europe in Jutland, Scandinavia, and Brittany; in Asia in Japan, etc.

In northwest Africa, the exploitation of marine molluscs combined with fishing can be seen during the Neolithic, along the coast of Western Sahara and Mauritania. The oldest sites date back to 4000-4700 BC; they are more numerous between 4000 and 2000 BC. Shellfish gathering areas, cockles in particular, are then found further south between 2000 and 600 BC, notably in the mouth of the Senegal River. They reached the Saloum Delta and Casamance River a little later, benefiting from vast expanses of brackish water and considerable biodiversity associated with the mangroves. A culture of shellfish exploitation combined with fishing spread here permanently.

In the Saloum Delta, carbon 14 dating of the shell mounds dates the oldest at up to 400 BC. The creation of the mounds is the result of deliberate action by the population so as not to block the delta's channels and to create promontories in floodable land. They are man-made structural points within the delta's shifting territory.

The creation of tumuli on certain large shell mounds occurred later. It started in the 8th century AD and developed through to the 16th century. Various populations occupied the islands in the Saloum Delta one after another: Fulani, Tukulor and Serer in particular. The latter arrived in the 11th century from modern northern Senegal fleeing the Almoravid conquest. They erected large tumuli and they are still the dominant ethnic group in Saloum. In the 12th and 13th centuries, the islands were occupied by the Guelowars, who unified the local population under their leadership.

Population movements undoubtedly regularly affected the delta's history, an area attractive for its shellfish and fish resources. These migrations are in particular reflected in the linguistic practices in certain villages and by their oral traditions concerning their origins.

Large-scale shellfish gathering and the resultant creation of shell mounds continued in a regular and intense manner for around 2,000 years, until around 1600 AD. Combined with fishing, it forms a stable and sustainable development model. Less intensive exploitation of the natural resources has continued to the present day where it still provides an appreciable source of additional resources. The material testimony of this delta culture principally resides in the shell mounds and their landscapes, in the tumuli and their funerary uses, and in the study of pottery and its regional dissemination. In addition to the population movements having affected the delta, these aspects confirm the development of a sustainable human culture, with stable and appropriately managed resources, in a specific physical and biological environment, for more than 2,000 years through to the present day.

In the Saloum Delta, the intensive exploitation of shellfish and fishing satisfies local needs as well as providing long-standing and long distance economic trade. The preparation of the shellfish and fish is an elaborate process resulting in a long-lasting dried or smoked product. Specific local pottery called Dioron-Boumak-ware was long used for storage, archaeological finds provide important information about the dissemination of Saloum products. This preservation process enabled long-distance trade between the Saloum Delta islands and the neighbouring coastal communities, as well as those in the hinterland. The dried or smoked molluscs and fish must have been traded for iron, copper and cereals.

As early as the 15th century, the Saloum shell mounds were mentioned by the first Portuguese explorers, such as Dinis Diaz. In the early 16th century, Valentim Fernandes described in his *Description of the African West Coast,* how the molluscs were processed by the inhabitants and sold commercially in locally made earthenware pots. The formation of centralised hegemonic kingdoms from the 13th to the14th centuries, then the colonial maritime pressure from the 16th century onwards, disrupted the traditional lifestyles and trade between peoples. This would explain the decline in shellfish gathering and fishing, gradually leading the delta people back towards self-sufficiency and poorer living conditions. In the 18th century, the colonial audits refer to a Saloum king heavily involved in the slave trade and profiting from Franco-British rivalry.

The end of the 19th and the 20th centuries were marked by the regional need for building materials for construction and public works (lime kilns, aggregate for concrete, fill, etc.). In a certain number of cases, the shell mounds became quarries exploited using canoes. Certain mounds have disappeared (Baboura); at least twenty have been intensively exploited. These practices have decreased considerably since the introduction of conservation measures for natural spaces in the 1970s and 1980s; they are now banned, but illegal extraction seems still to take place. Today, the shells from shellfish gathering contribute relatively little to the mounds, being used directly for construction; the finest examples are of greater value and are used to decorate facades or gardens.

The shell mounds were long considered natural accumulations. It was only in the 1930s that their man-made origin was fully proven, and their funerary role

brought to light. The first archaeological excavations in the Saloum Delta were carried out in Dioron-Boundaw and Dioron-Boumak in 1939. Stratigraphic cross-sections revealed their structure and shell composition, making it possible to deduce the rate of formation and periods of accumulation, and to help understand how the shellfish were exploited. The mounds have since been the subject of several major study campaigns, notably at the beginning of the 1950s and in 1971-1973. The research programmes were started up again in the 2000s.

The material and landscape testimonies are complemented by anthropological testimonies that support the traditional legends and descriptions by travellers, such as those by Valentim Fernandes.

Shellfish gathering and processing for trade is today performed by women, while the men devote their time to fishing, without it being possible to know when this division of labour occurred. The shellfish are gathered in the mudflats and edges of the mangroves during the dry season, from December to June. The techniques used are derived directly from traditional practices (wooden dugout canoes, plant fibre baskets, knives, etc.). Gathering is performed rationally, the objective being to sustainably conserve the natural resource. The molluscs are boiled, the flesh extracted from the shell, then dried or smoked. Cockles and mangrove oysters are highly prized foods in West Africa, and their regional sale provides the population with an appreciable income. These activities provide a considerable counterweight to the rural exodus. The farming and collection of shellfish also contributes to mangrove conservation. The development of fishing techniques are still based on traditional methods and transport is also environmentally-friendly (bicycles today).

The current population is concentrated around six medium-sized towns (Niodior, Dionewar, Bassoul, Djirnda, Palmarin and Betenti) and a fishing centre (Missira). Nonetheless, the development of human settlements has been limited by the scarcity of fresh water resources and the low proportion of farmland in the delta; these activities are largely found in the buffer zone.

3 Outstanding Universal Value, integrity and authenticity

Comparative analysis

The State Party first proposes a comparison of shell mounds, a phenomenon that is well-known to archaeologists, the testimonies of which are found in numerous regions around the world. In various phases of the Palaeolithic and then the Neolithic, numerous cultures used salt or freshwater marine molluscs as a food source. Intensive exploitation systems appeared in the Mesolithic, for example in Scandinavia and Japan, that produced significant shell mounds.

In the northwest African context, the Saloum Delta is part of a general history of shellfish exploitation dating back to the Neolithic, often combined with fishing (see History). The oldest mounds are found north of Saloum, on the West Saharan Atlantic coast and in Mauritania. These are mounds of a relatively different structure, in the form of long ribbons, sometimes one kilometre or more; but they are not very thick, just a few tens of centimetres in general, one metre at the most. Slightly later mounds, on the old mouth of the Senegal River, reveal an intermediate structure: they are considerably larger and they can be as much as between one and two metres thick. They are, however, smaller in size than the Saloum mounds and they are fossilized in nature. Of easy access and close to Saint-Louis, they were quarried for fill and lime kilns. They are poorly preserved and no longer form a coherent, clearly identifiable ensemble.

South of Saloum, on the banks of the Gambia River estuary, shell mounds are also found, but their structure is different: composed mainly of oyster shell, they are smaller; they have also been extensively mined for lime kilns. Other West African sites are also mentioned: Bijagós Islands in Guinea Bissau and the Niger Delta in Nigeria.

In Brazil, numerous shell mounds (or *sambaquis*), almost one thousand, are spread along the coast in estuaries. However, they are fossil sites and the largest, while similar in form to the Saloum shell mounds, are nonetheless smaller. Large shell mounds also existed in North America, in Florida and California, but they were dismantled in the 19th and 20th centuries, to make way for building land and used as fill for urban development and road networks. Those that still remain in Japan (Tokyo Bay) are in an urban or peri-urban area where they are integrated into public squares. Most of these sites have completely lost their mangrove forests.

While shell mounds are common-place, the presence of organised tumuli on them is far rarer. The mounds close to Gambia have so far not revealed any sepulchres, although this does remain a possibility. Tumuli in shell mounds have been identified in California and Japan, but they have either disappeared or are now outside their cultural context.

The additional documentation provided by the State Party (November 2010) details the importance of the protohistoric phenomenon of tumuli, called *Mbanar* in West Africa. They are found relatively frequently in the Megalithic zones in the centre and northwest of Senegal; several thousand have been identified and many are found inside the Megalithic Stone Circles of Senegambia (2006, criteria (i) and (iii)). These practices continued throughout historic periods and the Serer people built tumuli until recent times. The general type of protohistoric tumulus is a funerary chamber dug in the earth and covered with a conical roof, which is then buried beneath an earthen mound. Artefacts and sacrificial objects are often found along with the remains of the deceased.

The shell mound tumuli are part of this West African cultural tradition, notably with respect to similar funerary

artefacts testifying to significant contact between the delta and the mainland, even up to considerable distances.

In this relatively general context of the regional funerary practice of tumuli, the shell mound tumuli differ in terms of their presence up until relatively recent historical periods, the originality of the materials and higher position linked to the topography of these man-made topographic spaces. The result is a funerary protocol specific to the Saloum Delta, where inhumations were concentrated in precise and delimited spaces. They accumulated over long periods of time, whereas the mainland inhumations in a given place are simultaneous and without any subsequent funerary re-use. The Saloum tumuli shell mounds, at least the largest of them, are concentrations of a small number of tombs and fulfil the role of necropoli and permanent sacred spaces. Their construction typology is, moreover, different to those in Senegambia.

ICOMOS considers that the arguments in the comparative analysis for the property have been approached appropriately and notably strengthened by the additional documentation (November 2010) and concludes that there are no properties of similar values already inscribed on the List. The shell mounds of the Saloum Delta are among the largest and most representative of human cultures which have practiced a sustainable lifestyle of shellfish gathering in a wet brackish zone. This exploitation of the natural environment, combined with fishing, is still practised using traditional methods. The historic and ethnological meanings of the property are also illustrated and made tangible by the many funerary tumuli on certain shell mounds. Acting as necropolises and sacred spaces, they are testimony to unique funerary practices in the region. Their undulating forms and specific vegetation form a remarkable cultural landscape.

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The shell mounds of the Saloum Delta are testimony to food-gathering practices as much for local food supply as for trade. They date back almost 3,000 years.
- Over the centuries, the shell mounds have led to the creation of numerous man-made islets contributing to the stabilisation of the delta's channels and its territory. The largest mounds have considerable dimensions.
- The use of certain mounds as funerary sites with numerous tumuli provides precious information about the lifestyle of coastal peoples and its consistency throughout time. These are sacred spaces with exceptional characteristics.
- The funerary artefacts are testimony to extensive contact between the delta people and coastal and hinterland societies.
- These various cultural practices are still in use and they have moulded a typical and unique landscape in the delta which is testimony to a sustainable balance between humans and nature.
- It is a rich and varied ecosystem preserved by the limited and careful use by man (see natural property).

ICOMOS considers that this justification is adequate. The Saloum Delta landscapes are testimony to an original traditional human settlement in a vast wet tropical zone with brackish water. A civilisation based notably on shellfish gathering and fishing has been able to develop sustainably. These landscapes of the delta are characterised by numerous shell mounds of man-made origin, at times imposing, which provide structure to and organise the delta's space. They are the fixed points in the landscape, in symbiosis with a complex and diverse natural environment. Some mounds are funerary sites with tumuli which, in the light of archaeological studies of regional pottery, have provided a better understanding of the traditional societies of the West African coast and their contacts. It is a living tradition that dates from protohistoric times, but it is fragile from both the socio-economic and environmental aspects.

Integrity and authenticity

Integrity

The State Party considers that the nominated property has been maintained at a high level of integrity as a result of the following points:

- The state of conservation of the natural environment and its biodiversity is remarkable. It has been maintained to the present day in symbiosis with the development of a stable human culture.
- The traditional exploitation practices of the fishery and mollusc resources have generated careful and sustainable relations between humans and their natural environment. They are still used today.
- The very many shell mounds as well as the archaeological and ethnographic studies testify to this traditional lifestyle.
- The many shell mounds are well preserved within the property, the central part of which is formed by the delta's ocean-facing side. They have suffered greater alteration closer to the mainland, in the buffer zone and in the internal part of the delta.
- The meeting between traditional life styles and the already ancient policy of preserving the natural environment guarantees this integrity.

ICOMOS considers that the conditions of cultural integrity of the Saloum Delta are in theory adequate, but the integrity is fragile. The shell mounds and cultural landscapes and the biodiversity of the natural environment may be under threat from poorly controlled socio-

economic behaviour. While a large number of shell mounds and tumulus mounds appear to be intact, or only slightly affected by human mining, others have disappeared or been damaged in the contemporary era (see History). Monitoring and better knowledge of the conditions of integrity of the entire property must be reinforced for the shell mounds.

Authenticity

The State Party presents an authenticity analysis along with the integrity analysis, supplemented by the documentation supplied in November 2010. The arguments in favour of a high degree of authenticity are therefore very similar: the state of conservation of the natural environment in symbiosis with man, the constancy of the utilisation of the natural resources, traditional lifestyles, especially mollusc gathering, and the good preservation of the shell mounds and tumuli on the ocean-facing islands. Moreover, there is no doubt as to the authenticity of the shell mounds.

ICOMOS first of all considers that the conditions of authenticity apply to the characteristic shell mound landscapes. It is expressed by the perception of them as an ensemble within the natural environment, by the character of their typical plant cover (presence of baobabs, plant density, etc.) and by the characteristic morphology of the tumulus mounds.

Secondly, this is a living property given the continuity of use through the on-going traditional harvesting of shellfish by the women of the community, by the respect for gathering zones and the right periods to harvest them, in order to ensure sustainable breeding, and finally by the traditional methods used for their preservation. The elements of modernisation concern aspects of protection and health, such as the use of gloves, rubber boots, plastic buckets and shears. This analysis of the anthropological authenticity of food practices also covers fishing and the production of dugout canoes. More noticeable elements of modernisation have, however, occurred in this area: use of motors (roughly for 50% of the dugouts), nets made of plastic fibre, etc.

In conclusion, ICOMOS considers that the conditions of authenticity of the mounds, tumulus mounds and their landscapes are generally adequate. They are augmented by an anthropological authenticity of the shellfish gathering and, to a lesser extent, fishing practices.

ICOMOS considers that the conditions of integrity and authenticity have been met.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (iv) and (v) (and natural criteria (vii) and (x)).

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that the Saloum Delta has important shell mounds that testify to a subsistence and trading economy dating back almost 3,000 years. While this lifestyle based on shellfish gathering and fishing is widespread in many regions of the world, from prehistoric times in some instances, the Saloum shell mounds are remarkable in terms of their great number, dimensions, state of preservation and persistence of this lifestyle up to the present day. The testimony is unique as a result of the presence of mounds containing a great many still-intact tumuli. They are exceptional in terms of the construction of shell tumuli, the accumulation of burials over time, the lasting role as necropolises and funerary areas, and by their characteristic landscapes.

ICOMOS considers that in terms of the important shell mounds, associated landscapes and the presence of a rare and well preserved ensemble of funerary tumulus mounds, the Saloum Delta provides an exceptional testimony of a coastal lifestyle, in a subtropical Sahelian environment with brackish water rich in shellfish and fish. Such a civilisation dates back more than 2,000 years and has continuously developed through to today, notably in its relationship with the resources of the natural environment. The traditional techniques for the preservation of the molluscs and fish have enabled self-sufficiency and regional trade. This is a living civilisation to which numerous anthropological elements bear witness.

ICOMOS considers that this criterion has been justified.

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that the Saloum shell mounds, in particular those with tumuli, present an exceptional and authentic cultural landscape. The property overall forms an almost perfect example of a sustainable human settlement in a mangrove environment from the protohistoric era through to the present day. The islands and islets, with their dense plant cover, form a complete and extremely rich, physical and biological system in which the action of humans and nature harmoniously complement each other.

ICOMOS considers that the ensemble of the shell mounds, built up over a 2,000-year cultural process, has formed a physical structure of stable islets and reclaimed land within the Saloum Delta. This has resulted in stabilised land and brackish water channels favourable to the development of the natural mangrove environment and the permanency of its biodiversity in harmony with its human exploitation. These are exceptional evolving cultural landscapes that illustrate a long period of the history of human settlements along the coast of West Africa.

ICOMOS considers that this criterion has been justified.

Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

This criterion is justified by the State Party on the grounds that the shell mounds and the tumulus mounds are testimony to an interaction between humans and their environment over a very long period. In this way, humans have modelled their environment and modified its landscapes. The shell islets and their abundant vegetation dominate the lagoon and naturally floodable lands. Some mounds have acted as necropolises with funerary tumuli with multiple sepulchres, their undulating forms associated with large baobabs are testimony to the apogee of the populations who erected them. While this culture may have disappeared in terms of its funerary and symbolic expressions, the exemplary nature of a virtuous exploitation of the delta's resources remains.

ICOMOS considers that the property constitutes an eminent example of traditional human settlement in a river delta. It represents a lifestyle based on shellfish gathering and fishing within the context of a rational interaction with the natural environment of mangroves, mudflats, brackish water channels and floodable land. It is a fragile balance that is in particular threatened by the aggressive practices of the modern and contemporary world. It is a perfect example of sustainable development in a natural environment of great biodiversity, itself also under threat.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the nominated property meets criteria (iii), (iv) and (v) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

Description of the attributes

- The many shell mounds in the Saloum Delta are well preserved and they sometimes have imposing dimensions. They form an exceptional ensemble testifying to very ancient cultural practices widely spread across the globe.
- Over the centuries, the shell mounds have formed numerous man-made islets helping to stabilise the delta's land and channels.
- With their characteristic vegetation, the shell mounds form a typical cultural landscape within the delta's natural environment of mangroves, brackish water channels and sandy soil.
- The use of certain mounds as funerary sites comprising numerous tumuli is a remarkable testimony to past lifestyles of the coastal peoples of West Africa.
- The mounds and their landscapes are testimony to a human culture fully and sustainably adapted to a rich but fragile natural environment. This refers to shellfish-gathering, fishing and the preservation of molluscs and fish. These practices dating back to the protohistoric era are still alive.
- It is a rich and varied ecosystem preserved thanks to the limited and considered impact of human action on the natural environment.

4 Factors affecting the property

Development pressures

The most direct threat on the property's cultural integrity is the use of the shell mounds as quarries for construction and public works. These uses were considerable at the end of the 19th century through to recent times, notably in that part of the delta closest to the mainland. The State Party has announced that these practices are declining as a result of the application of regulations banning such practices.

Pressure is also being exerted by the development of farming land which is tending to encroach on the integrity of the mangroves and the forest.

Pressure from urban growth would seem to be moderate; it is limited to the existing agglomerations and villages whereas the delta is for the most part not suitable for permanent settlement.

The growing pressure from fishing is affecting the delta's fishery resources and, as a result, threatens the social stability of the community of fishermen who account for approximately 50% of the population.

Tourism pressures

The growth of tourism is leading to construction and the phenomenon of buildings being decorated with shells. This is contributing to the potential extraction of material from the shell mounds.

Ecotourism is leading to the creation of camps in the coastal regions, which could have an impact on the landscape and the environment.

Environmental pressures

There is the threat of the pollution of the entire ecosystem, which is all the more sensitive given that it is a fragile environment, as a result of, on the one hand, waste coming from the sea, sometimes from far away, which washes up on the coast and, on the other hand, poorly managed urban and village waste which directly affects the delta water, and sometimes the landscape. The result is a deterioration of the environment near the villages, with resultant health consequences for the population.

A certain number of mounds are eroded by the coastal currents and storm water. This could eventually cause

difficulties for the conservation of some of the property's shell mounds.

ICOMOS considers that the management of waste and wastewater must be rapidly improved to limit polluting the environment and to protect the health of the inhabitants and their traditional lifestyles.

Natural disasters

Tropical storms and exceptional rainfall compound the phenomena of the erosion of the banks, especially the banks of the shell mounds.

Impact of climate change

The general trend towards rising sea-water levels increases the risk of the physical deterioration of the shell mounds. Ultimately, certain reclaimed land may be permanently inundated. Also, the lower rainfall in recent years has changed the freshwater inflow resulting in increased salinity in the '*bolons'*, which may alter the balance of the natural environment and the shellfish and fish resources.

ICOMOS considers that the most direct threats to the cultural property are the natural erosion of some of the shell mounds, illegal mining of the shell mounds and pressure from the growth of villages and tourism. Poorly controlled management of waste and wastewater is a threat for the inhabitants and their traditional lifestyles, as well as for the cultural landscapes.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The surface area of the nominated property is 145,811 hectares. It has a population of 55,000 (2009 projection), mainly in the rural towns of Bassoul, Dionewar, Djirnda, Keur and Toubacouta.

The buffer zone has a surface area of 78 842 hectares. It has a population of 81,000 (2009 projection). Also, the part of the delta north of the Saloum River's main channel has very similar characteristics to those of the proposed buffer and is very close to the actual property.

ICOMOS raised the issue with the State Party of an eventual extension of the buffer zone north of the property. In its February 2011 reply, the State Party indicated that such an extension would be of little use as it would have no direct influence on the property or its value; it would also be complex to implement and would contribute to dissipating its already very extensive protection efforts. Furthermore, the most vulnerable coastal area of the zone north of the Saloum River is already protected by the Community Reserve of Palmarin.

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate.

Ownership

The bulk of the property belongs to the National Estate, owned by the State, notably the areas forming the park and listed forest. The aquatic marine and river sections belong to the State Marine Estate. Law 64/46 of 17 June 1964 of the National Estate defines the land use and establishes the property rights given to private owners. All the vacant land or land not registered with the National Registry of Mortgages is owned by the National Estate. The State can transfer it to third parties for its development under national or regional development plans and programmes. Law 96/07 of 22 March 1996 transfers property responsibilities to the regions and municipalities.

ICOMOS requested from the State Party clarification concerning private ownership and property returned to individuals or private legal entities within the property. In its February 2011 reply, the State Party indicated that under the Protection Law of 25 January 1971, no listed cultural property can be ceded by the State to individuals.

Protection

The various geographic and ecological parts of the property are protected by four entities with national, international or local status, which overlap geographically and complement each other:

- Saloum Delta National Park (March 1976) covers a surface area of 76,000 hectares;
- A Biosphere Reserve has been recognised by UNESCO (February 1981); in particular, it is tasked with assessing the human impact on the natural environment;
- Marine Protected Area of Bamboung (1984);
- Community Reserve of Palmarin (2001).

These regional entities contribute to the conservation of the overall property, notably its natural and landscape components. The State Party also indicates its support for various international agreements on the protection of nature and the protection of cultural properties; it is working on their implementation.

Following the request by ICOMOS, the State Party has provided an adequate map detailing the geographic boundaries of the National Park, the Biosphere Reserve, the Marine Area and the Community Reserve of Palmarin. The map makes it clear that the entire property and its buffer zone are located within the Biosphere Reserve and that the latter's boundaries correspond to the boundaries of the buffer zone.

Legal protection

In addition to the aforementioned more general statutes concerning the property's regional protection, the shell mounds should be protected by being listed as *historic monuments* under Law No 71-12 of January 1971, but

without specific stipulation. This Law also protects the archaeological tumulus sites and sets out the conditions for excavation and research.

The 28 tumuli mounds and their inventory are also taken into account in the specific Decree No 08836 of 12 November 2007.

Following the request made by ICOMOS, the State Party provided confirmation in its February 2011 reply that all the shell mounds are included in the National Heritage List in accordance with the Law of January 1971.

Traditional protection

Bans and rites still associated with certain funerary areas contribute to protecting the tumulus mounds.

Through their traditional lifestyle, the local population is involved in the protection and conservation of the delta's topographical structures and the natural habitat.

The local communities and village associations are active partners in the property's protection and conservation. Numerous local agreements govern their operation and their relations with the entities in charge of the property's protection and management.

Effectiveness of protection measures

ICOMOS considers that an obvious effort to protect the property exists, notably through the various regional structures and the heavy involvement of the local communities in the various programmes for the rational use of the natural resources and protection of the biodiversity as a guarantee of sustainable development.

The National Park's responsibility for protection and conservation is reflected at the ground level by permanent monitoring stations and the presence of park guards and eco-guards from the villages.

In its February 2011 reply to the request by ICOMOS, the State Party confirmed that the mining of all the shell mounds in the property and its buffer zone is prohibited under the Law of January 1971 concerning Listed National Monuments. The National Park eco-guards are responsible for monitoring and enforcing this measure. Nonetheless, ICOMOS considers that the same land protection regime must be ensured for those areas of the property located outside the National Park and which form the bulk of the property's land components with the majority of the shell mounds.

ICOMOS considers that the protective measures are adequate. Nonetheless, ICOMOS recommends that the same land protection regime be ensured for all the property's shell mounds, both within and outside the National Park.

Conservation

Inventories, recording, research

The property has been the subject of many research studies and scientific inventories, both cultural and natural. The results are published as scientific reports and articles.

For the cultural aspect, the inventory of the shell mounds was first published in 1982 by the National Parks of Senegal. It was updated by the scientific publication of G. Thilmans (1997). It was further augmented with photographic documentation carried out in 2007-2008.

The documents and archives are held in Dakar by the National Parks Department and the Cultural Heritage Department.

The archaeological artefacts (pottery, ornaments, iron weapons, etc.) are mainly conserved in the collections of the Fundamental Institute of Black Africa, of the University of Cheikh Anta Diop (IFAN-Ch. A. Diop) in Dakar, and secondarily in various museums in Senegal (Gorée and Saint-Louis).

Present state of conservation

More protected from the pressures of modern urban development than most other similar sites, the Saloum Delta region has been relatively well preserved. Closely associated with the property's conditions of integrity and authenticity, the state of conservation concerns the shell mounds, the tumulus mounds and the associated characteristic landscapes. It is considered fairly good but fragile. It is threatened by the natural and man-made deterioration of the shell mounds, by a potential deterioration in the natural environment and by pollution from human sources. More broadly, a reasonable balance between the human activities and natural resources guarantees the property's sustainable conservation.

Active Conservation measures

The conservation of the shell mounds, tumulus mounds and landscapes is assured by the organisation of their monitoring by guards and the application of regulatory measures protecting them from human exploitation. More broadly, the conservation measures for the cultural heritage are developed as part of the management of the natural heritage and sustainable development programmes designed to conserve the economic and social value of the fishing and shellfish gathering practices. In the future, the cultural dimension must be given greater priority as regards the property's management, notably through the preparation of the Management Plan (2010-2014). The latter must enable a stricter application of the protection regulations for the shell mounds. It makes provision for the presence on the property's site of personnel specialising in cultural heritage, which has not been the case up until now.

ICOMOS considers it is essential to significantly strengthen the practical measures for the protection and conservation of the property's cultural values. In the first instance, this refers to the use of eco-guards for the entire property, not just that part incorporated in the National Park, and improved training; and, more widely, to have onsite a sufficient number of staff trained in the protection and conservation of the property's cultural values.

Maintenance

There is no specific maintenance policy for the property given its mixed and open-air nature. Further, in the villages, the property's maintenance and the quality of its landscapes come back to the issue of waste and wastewater.

ICOMOS considers that a policy of "best practices" could be promoted in inhabited and tourism areas as part of a general framework of improved management of household waste and wastewater within the property.

Effectiveness of conservation measures

ICOMOS considers that the conservation measures for the material cultural heritage have until a very recent period been handled in an ancillary manner compared with the conservation measures for the natural environment. Following the recognition of the property's outstanding universal value, they must become a priority in the Management Plan and they require the presence of a sufficient number of competent staff. Furthermore, sustainable economic development programmes respectful of traditional fishing and shellfish gathering values are very important measures for the conservation of a living heritage.

ICOMOS considers that there is a risk of erosion of certain shell mounds by sea and river currents, and that it is necessary to consider conservation measures.

ICOMOS considers there is a conservation dynamic for the cultural heritage linked to the conservation of the natural environments and the sustainable development programmes. This must, however, be confirmed and detailed, and a sufficient number of competent staff provided. Conservation measures for the shell mounds threatened by erosion need to be considered.

Management

Management structures and processes,
including traditional management processes

Given the extent of the delta and the diversity of the aspects of its management, the multiple stakeholders operate, insofar as their relevant sector of expertise is concerned, through various programmes or development plans and within the framework of the regional organisations in place (park, reserves and villages). The following are the groups of stakeholders:

- Several ministries (Environment, Fishing, Tourism and Culture) are represented by six ministerial departments, three of which are exclusively part of the Ministry of the Environment (Water and Forests, National Parks and the Environment);
- The university and various national research institutions are involved in the property's scientific management;
- Regional and municipal bodies and community associations are involved in the property's management.
- Various organisations and international agencies, including the United Nations (*Millennium Development Goal Fund*), non-governmental organisations (NGOs) or specialist foundations are also involved in specific programmes.

The main regional stakeholder in the property's management is the Saloum Delta National Park, which reports to the National Parks Department (DPN) of the Ministry of the Environment. It works in a coordinated manner with the rural communities, which are administrative entities, and village associations, through programmes and specific actions, such as the organisation of eco-guards or the management of the Marine Protected Area of Bamboung and the Community Reserve of Palmarin. The Park is responsible for a certain number of conservation or development programmes in association with other institutional partners (Department of the Environment, districts and sub-prefecture, the National Programme for the Management of Marine and Coastal Resources (*GIRMAC*)), national scientific institutions (Society for the Protection of the Environment and Fauna, Dakar Oceanium, etc.), international institutions (UNDP, UNESCO regional office, etc.), and NGOs concerned with environmental protection (IUCN, Waame) and sustainable development (USAID).

The Cultural Heritage Department has for the moment limited itself to providing a remote advisory role for the Park and assistance with the training of personnel. The Fundamental Institute of Black Africa, University of Cheikh Anta Diop (IFAN-Ch. A. Diop), Dakar, coordinates archaeological issues in the delta.

In its February 2011 reply to the request by ICOMOS for clarification regarding the structure of the property's management, the State Party indicated that it is currently the Property's Steering Committee, assisted by the United Nations' *MDG-Fund* Technical Committee, that fulfils this role. The property's future Permanent Management Committee will be established as part of the current (2011) establishment of the Community House in Toubacouta.

Soukouta Community Radio plays an important role in providing information and raising awareness among the local population.

Policy framework: management plans and arrangements, including visitor management and presentation

The property Management Plan has been drawn up for 2010 to 2014. It covers the various actions and programmes in progress, while displaying a forward-looking approach to seeking new goals.

The main plans and programmes in progress are:

- The integrated regional development plan, which includes five rural community development plans;
- The participative development and management project for the Protected Marine Area of Bamboung (Oceanium);
- The Wula Nafaa project for the considered exploitation of natural resources (USAID);
- Tourism development projects: circuits, eco-guard and guide training, Bamboung eco-tourism camp, etc.;
- The Toubakouta cultural interpretation centre project;
- The various natural environment conservation programmes.

For the near future, the Management Plan defines the general objectives for the conservation of the cultural heritage and sustainable development. This refers, in particular, to the "Culture and Development" project (*MDG Fund*) aimed at integrating the current actions and providing them with new perspectives on a larger scale than the nominated property. The Management Plan also aims to strengthen the legal protection and improve the property's overall management. The inhabitants' living conditions are the subject of a programme aimed at developing local production and appreciation of the natural and cultural heritage.

The new Management Plan includes a tourism development programme. Tour circuits have been identified and information boards are starting to be erected. For the moment, visits are mainly accompanied by private guides. The plan comprises sections concerning: circuits and information panels, promotion of the property, a village interpretation centre project, campaigns targeting the inhabitants to raise their awareness of the property's cultural and natural values, production of educational and communication material, provision of accommodation, etc. The interpretation centre will exhibit examples of the archaeological artefacts selected from IFAN's collections.

The actions set out in the Management Plan are the result of the application of a SWOT analysis. They form a coordinated ensemble with an application schedule. Their implementation is guaranteed by the United Nations' *MDG-Fund* budget for 2009 to 2011, and its probable extension within the Management Plan (2010-2014).

ICOMOS considers that the proposed Management Plan adequately defines the general objectives and that it aims to harmonise actions between multiple stakeholders. The local actions must strengthen protection of the mounds and raise awareness among the inhabitants of their cultural value; they must also strengthen good practice in terms of waste and wastewater treatment. Tourism development programmes, notably facilities and accommodation, must pay particular attention to landscape conservation. More broadly, ICOMOS recommends extreme vigilance in the effective application of the Management Plan and clear coordination between the various bodies responsible for the natural and cultural heritage, up until now little or not at all involved in the field. Additionally, the official promulgation of the Management Plan must be confirmed and the financial resources for its application consolidated.

In its February 2011 reply to ICOMOS, the State Party indicated that a ministerial decree that will bring the Management Plan into effect is under examination and that the Management Committee will be established by a decree at the regional level.

Risk preparedness

There is no specific section dealing with risk preparedness, given that risks are closely associated with the property's preservation and conservation, from both the natural and cultural angles.

Involvement of the local communities

This is at the heart of the management process, through the rural communities and actions coordinated with the National Park and eco-guards, sustainable development programmes, etc.

Resources, including staffing levels, expertise and training

The National Park benefits from permanent presence in the field of surveillance and supervisory personnel belonging to the National Parks Department (DPN); a total of 15 in the central control station and 6 monitoring stations.

The eco-guards are volunteers from the villages; there are currently about 40. In addition to their park surveillance tasks, supporting the DNP guards, their role is scientific (animal counts, observation missions), educational (local population awareness, guidance) and economical (participation in development programmes). The eco-guards are given cultural heritage training by the Heritage Department; their headquarters are in Missira.

The Natural Reserve of Bambourg has 16 volunteer eco-guards.

In addition to the eco-guards, personnel need to be recruited as part of the creation of the Toubakouta Interpretation Village, especially for surveillance and promotion of the cultural heritage.

Up until now, the property's management has relied on a variety of sources of public and private, local and

international finance. Funds are generally tied to specific programmes, which sometimes complicates coordination. The contribution in the coming years from the "Culture and Development" project with funding of 6.5 million US dollars (United Nations *MDG Fund*), should provide greater stability, scale and synergy for the programmes.

Effectiveness of current management

ICOMOS considers that the current management is effective and adequately coordinated by the National Park, even if there are a large number of varied programmes and stakeholders. The ensemble forms a satisfactory management system for the property, with the main stakeholders and managers clearly identified, notably in the case of the National Park and rural communities. Nonetheless, the multiplicity of programmes and stakeholders tends to make some situations somewhat confused. Certain dynamics, such as the active protection of the cultural assets, are very recent and need to be confirmed. Furthermore, the official promulgation of the Management Plan and appointment of the people in charge of its application must be confirmed.

ICOMOS considers that the management system for the property is adequate; it is, however, necessary to confirm the official promulgation of the Management Plan, ensure its financial consolidation, appoint the people in charge and ensure its correct implementation. Particular attention needs to be paid to the complete integration of the protection and conservation of the property's cultural components into the National Park management.

6 Monitoring

Indicators have been established for monitoring the conservation of the natural environment, biodiversity and shell mounds. For the latter, the aim is to monitor the number of mounds still intact, the degree of degradation of the others, the number of mounds illegally exploited and regular checks to identify the presence of illicit excavations. Monitoring is coordinated by the Cultural Heritage Department of the Ministry of Culture (Dakar). There is a standard document for the individual monitoring of mounds.

Further to the request by ICOMOS regarding the possibility for improved monitoring of the landscapes, notably by photographic means, the State Party recalls the existence of a standard monitoring file for cultural properties and the possibility for more detailed monitoring of certain notable landscapes. The territory is moreover too vast to consider a systematic photographic approach.

ICOMOS considers that the elements allowing for the individual monitoring of the mounds exists, but that frequency and the responsibility for their implementation need to be specified. The monitoring needs to be extended to include the most significant cultural landscapes, for example by publishing an annual monitoring report on the property's state of conservation.

7 Conclusions

ICOMOS recognises the Outstanding Universal Value of the cultural dimension of the mixed property Saloum Delta, Senegal, as a particularly representative and well preserved testimony of coastal civilisations that exploited fishery resources and gathered shellfish.

Recommendations with respect to inscription
ICOMOS recommends that the Saloum Delta, Senegal, be inscribed as a cultural landscape on the World Heritage List on the basis of ***cultural criteria (iii), (iv) and (v)***.

Recommended Statement of Outstanding Universal Value

Brief synthesis

The region of the Saloum Delta is a remarkable testimony to the synergy between a natural environment with extensive biodiversity and a style of human development that is still present albeit fragile. Sustainable shellfish gathering and fishing practices in brackish water, and the processing of the harvest for its preservation and export was developed here. The shell mounds and the tumulus mounds form specific and exceptional cultural landscapes.

The numerous shell mounds in the Saloum Delta are generally well preserved and they sometimes have imposing dimensions. They are direct testimony of sustainable and very ancient socio-economic practices. Over the centuries, they have led to the formation of numerous man-made islets contributing to the stabilisation of the delta's land and channels. With their characteristic vegetation within the delta's natural environment, the shell mounds form typical cultural landscapes. Some mounds include tumuli; they form, with their baobab vegetation and their undulating forms, funerary sites with specific landscape features.

Criterion (iii): With its numerous shell mounds, associated landscapes and the presence of a rare and well-preserved ensemble of funerary tumulus mounds, the Saloum Delta provides exceptional testimony to a coastal lifestyle, in a Sahelian subtropical environment, with brackish water rich in shellfish and fish.

Criterion (iv): All the shell mounds built up over a 2,000 year-long cultural process have formed a physical structure of stable islets and reclaimed land within the Saloum Delta. The resultant cultural landscapes are exceptional and illustrate a long period of the history of human settlement along the West African coast.

Criterion (v): The Saloum Delta is an eminent example of traditional human settlement. It represents a lifestyle and sustainable development based on the gathering of shellfish and fishing, in a considered interaction with a natural environment of extensive but fragile biodiversity.

Integrity

The conditions of cultural integrity of the Saloum Delta are in theory very adequate, even if some shell mounds have been damaged, but the integrity remains fragile. The shell mounds and the cultural landscapes and the biodiversity of the natural environment may be threatened by poorly controlled socio-economic behaviour.

Authenticity

The conditions of authenticity of the mounds, tumulus mounds and their landscapes are generally adequate. They are complemented by the anthropological authenticity of the shellfish gathering practices and to a lesser degree of the fishing practices.

Management and protection requirements

The protection of the shell mounds and the tumuli mounds is ensured by adequate regulatory measures. However, the active protection of the cultural sites in the field is recent and must be extended to the property as a whole, and not just concern the National Park. Additionally, the general policy for the property's conservation is closely tied to the conservation of the natural environment and the sustainable development programmes for the delta as a whole.

The property's management relies on numerous individuals in the field. Together they form an adequate management system for the property, with the key stakeholders and those in charge clearly identified, notably the National Park, the rural communities and the United Nations *MDG-Fund*. However, this management system is evolving and the multiplicity of programmes and stakeholders tends to make some situations somewhat confused. The overall management committee still has to be set up (2011), its resources confirmed, and the homogeneous handling of management and conservation for the entire property needs to be improved.

ICOMOS recommends that the State Party give consideration to the following:

- Prioritise attention on the simultaneous protection and conservation of the property's cultural elements and associated natural elements within the context of the Management Plan and economic and social development programmes. Ensure this joint protection-conservation is of the same level across the entire property, especially by means of eco-guards throughout the whole property;

- Confirm the official promulgation of the Management Plan (2010-2014) and the establishment of the Management Committee tasked with its implementation and coordination; stipulate the Management Committee's human and material resources as well as its ties with, on the one hand, the Community House in Toubacouta and, on the other hand, the Saloum Delta National Park;

- Consider specific conservation measures for the shell mounds threatened by erosion and/or by currents;

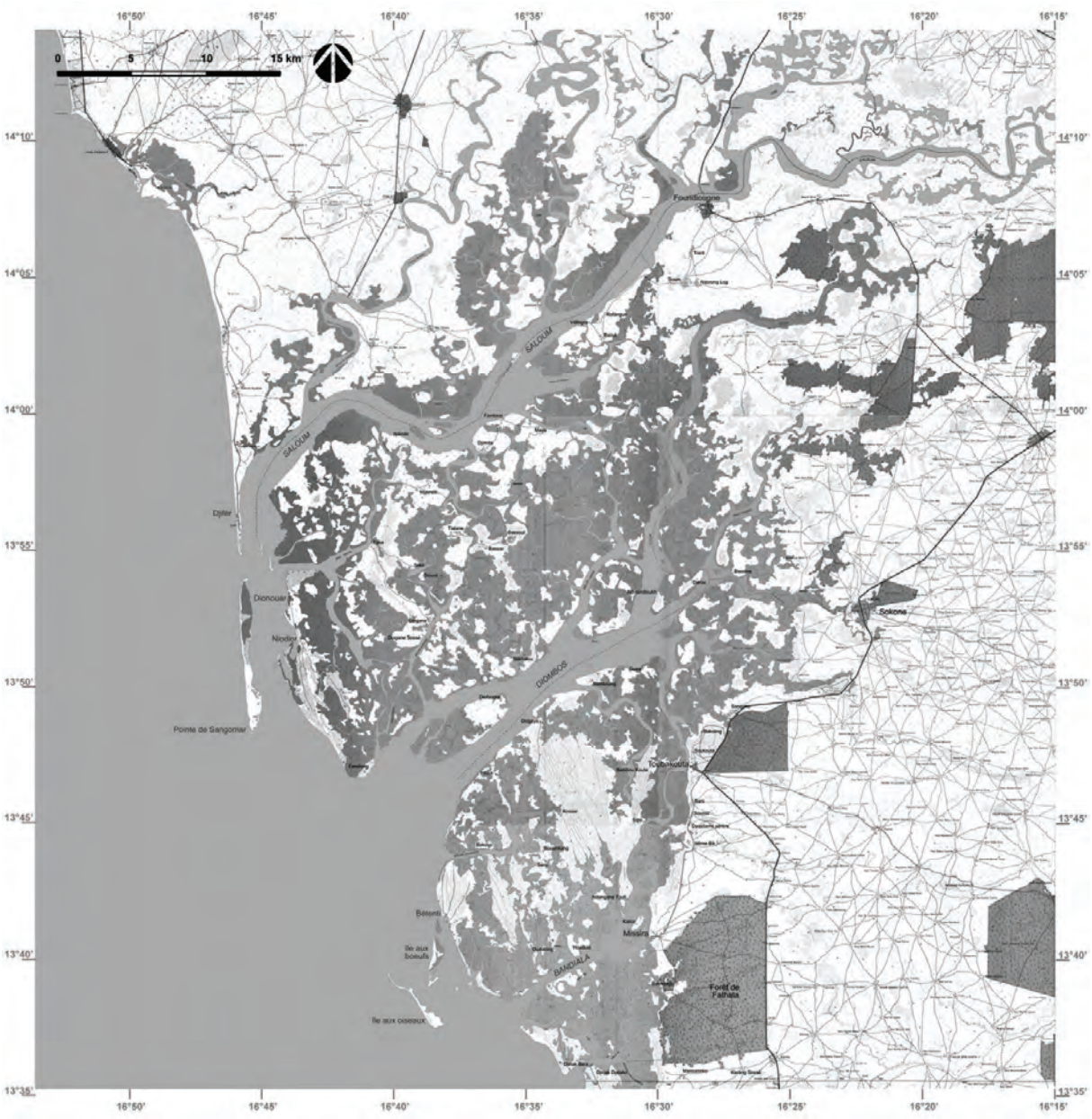
- Improve waste and wastewater management in order to limit pollution of the environment and to protect the inhabitants' health and traditional lifestyle, and those cultural landscapes near inhabited areas;

- Pay particular attention to the landscape management aspects of tourism development;

- Pay particular attention to the complete integration of the protection-conservation of the property's cultural elements in the property's management and development programmes;

- Specify the frequency of, and the responsibility for, the implementation of monitoring. It should be extended with respect to the most significant cultural landscapes. The publication of an annual report on the state of the property's cultural and landscape conservation is also desirable.

ICOMOS also recommends that the State Party compile a report on the implementation of its protection and management system for the property, for examination by the 36th session of the World Heritage Committee in 2012.



Plan showing the boundaries of the nominated property

Aerial view of mangrove forests

Undulating surface created by tumuli erected at the summit of the Tioupane-Boumak mounds

Dioron Boumak mound

Oyster culture on wooden stakes