

Phu Quoc Proposed Marine Protected Area

Alternative site name(s)

Cac Dao Tay Nam Bo, Phu Quoc-An Thoi

Province(s)

Kien Giang

Area

18,700 ha

Coordinates

9°53' - 10°28'N, 103°49' - 104°05'E

Agro-ecological zone

Mekong Delta

Decreed by government

No

Management board established

No

Investment plan prepared

No

VCF eligibility criteria met

None

Social screening criteria met

None

Conservation needs assessment prepared

No

Operational management plan prepared

No

Tracking tool completed

No

Map available

Yes

Management history

Phu Quoc island lies in the Gulf of Thailand, about 40 km west of the Vietnamese mainland. Phu Quoc was included on Decision No. 194/CT of the Chairman of the Council of Ministers, dated 9 August 1986, which proposed establishing a 5,000 ha nature reserve (MARD 1997). The management category of the site was later revised to national park, following Decision No. 91/TTg of the Prime Minister, dated 08 June 2001. According to the Prime Minister's Decision, Phu Quoc National Park covers 31,422 ha and includes no marine component (see Phu Quoc National Park site card).

In 1994, WWF and the Institute of Oceanography conducted a marine biodiversity survey of the group of small islands situated off An Thoi port, at the southern tip of Phu Quoc island. As a result of this survey, the two organisations proposed establishing An Thoi Marine Protected Area (ADB 1999).

Phu Quoc was again proposed as a marine protected area by the former MOSTE in 1998. In this proposal, the total area of the proposed marine protected area was not identified (Nguyen Chu Hoi *et al.* 1998). Subsequently, the Asian Development Bank (ADB 1999) proposed incorporating the then Phu Quoc Nature Reserve and An Thoi proposed marine protected area within a single, expanded protected area: Phu Quoc-An Thoi Nature Reserve. The proposed protected area covers 33,657 ha, comprising

a terrestrial component of 14,957 ha and a marine component of 18,700 ha. The proposed marine component has two sectors: a northern sector, which extends around the northern end of the island, is contiguous with Phu Quoc National Park and covers 9,900 ha; and a southern sector, which comprises An Thoi proposed marine protected area and covers 8,800 ha (ADB 1999).

If a marine protected area is established at Phu Quoc in the future, it will need to be clarified whether it would incorporate Phu Quoc National Park, or whether it would be limited to the marine component. As the terrestrial component is currently under the management of Phu Quoc National Park Management Board, this site card only reviews the marine component of the proposed marine protected area as proposed by ADB (1999).

Topography and hydrology

The Phu Quoc archipelago comprises 14 islands, the largest of which, Phu Quoc, covers 56,200 ha and reaches a maximum elevation of 603 m. With regard to the marine component, most of the northern sector is situated between the coast and the 6 m bathymetric contour. The southern sector is also situated in shallow waters, mostly less than 10 m in depth. However, the group of small islands off An Thoi port is separated from the southern tip of Phu Quoc island by a deep strait, more than 60 m in depth.

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Biodiversity values

Phu Quoc proposed marine protected area supports ecosystems characteristic of the shallow coastal waters off south-western Vietnam. Seagrass beds occur mostly off the northern and eastern coasts of Phu Quoc island, and cover an area estimated to be greater than 1,000 ha (N. Cox *in litt.* 2003). Coral reefs occur around most islands in the southern sector of the marine component, and in some places in the northern sector. At 41%, the cover of living coral is relatively high but species richness is rather low, with a few taxa being dominant, including *Porites* and *Pavona*. The coral reef fish fauna is characterised by an abundance of groupers (Serranidae) and butterfly fish (Chaetodontidae). Juvenile fish of economic importance, such as *Caranx sexfasciatus* and *Sphyrna* sp., can be observed on some reefs (ADB 1999).

The marine biota includes 89 hard coral species, 19 soft corals, 125 coral reef fishes, 132 molluscs, 32 echinoderms and 62 species of seaweed. These include several species of conservation concern, such as Scallop *Tridacna squamosa* and Trochus Shell *Trochus nilotichus*. Prior to 1990, the globally critically endangered Hawksbill Turtle *Eretmochelys imbricata* was known to nest on the beaches of the Phu Quoc archipelago. However, the frequency of nesting has declined sharply in recent years (ADB 1999). In addition, the seagrass beds at the site are important for foraging marine turtles (N. Cox *in litt.* 2003). Furthermore, the proposed marine protected area has recently been confirmed to support a population of the globally threatened Dugong *Dugong dugon* (Vietnam News 2002).

Conservation issues

Settlement of migrants from other parts of Vietnam is leading to a rapid growth in the population of Phu Quoc island. As fishing is one of the most important economic activities for the local population, the growing population is putting increased pressure on marine resources. Although fisheries production is actually increasing, it is not keeping pace with the number of boats in operation. Consequently, production per unit of effort is decreasing. This indicates that the area is being over-exploited, especially the shallow waters. There is also evidence

that agricultural activities on the mainland are changing environmental conditions in the waters around Phu Quoc island, due to sedimentation and pollution (ADB 1999).

Increasing fishing activity within the proposed marine protected area is placing increased pressure on the Dugong population. The species is currently under severe and immediate threat from over-exploitation, incidental capture and destruction of the seagrass beds on which they feed by trawlers (Vietnam News 2002). Although a small number of local fishers continue to hunt Dugong, most Dugong mortalities are thought to be the result of more intensive gill netting and trawling activities in shallow seagrass areas (N. Cox *in litt.* 2003).

Regarding threats to marine turtles at the proposed marine protected area, Green Turtles are regularly caught offshore and sold in local markets, while Hawksbill Turtles are commonly traded as souvenirs.

Other documented values

The waters around the Phu Quoc archipelago are an important fishing ground, not only for the local population but for fishing communities on mainland Vietnam and, even, Thailand. The proximity of the island to Cambodia further emphasises the regional importance of the proposed marine protected area to fisheries management and the conservation of migratory fish species (ADB 1999). Furthermore, Phu Quoc proposed marine protected area has high potential for the development of ecotourism, particularly diving.

Related projects

No information.

Conservation needs assessment

A conservation needs assessment has not been conducted for the site.

Operational management plan

An operational management plan has not been prepared for the site.

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Eligibility against VCF criteria

The site is ineligible for VCF support because it is not a Special-use Forest.

Criterion	Eligibility
A _I	
A _{II}	
B _I	
B _{II}	
B _{III}	
C _I	
C _{II}	

Social screening requirements

A social screening report has not been prepared for the site.

Criterion	Eligibility
A	
B	
C	
D	

Literature sources

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