

Quy Nhon Proposed Marine Protected Area

Alternative site name(s)

Quy Nhon lagoon, Thi Nai lagoon

Province(s)

Binh Dinh

Area

5,800 ha

Coordinates

13°50' - 13°55'N, 109°13' - 109°18'E

Agro-ecological zone

South Central Coast

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

The Asian Development Bank (ADB 1999) proposed establishing a marine protected area at Quy Nhon lagoon, with a total area of 5,800 ha, comprising a terrestrial component of 800 ha and a marine component of 5,000 ha.

Topography and hydrology

Quy Nhon lagoon is located north-east of Quy Nhon town. The lagoon is a natural saline swamp that is connected to the East Sea by a 700 metre-wide channel. The lagoon covers around 5,000 ha at high tide and 3,200 ha at low tide (Scott 1989). During the rainy season, the water level in the lagoon rises to 14 m in the deepest part but, during the dry season, the average water level is only 1.5 m. The lagoon is sheltered from the open sea by the Phuong Mai peninsula, which extends down from the north (ADB 1999).

Biodiversity values

The lagoon supports both seaweed and seagrass beds. Seaweed beds cover about 35 ha and are dominated by *Gracilaria verrucosa* and *G. blodgettii*. Seagrass beds cover about 200 ha. Past surveys have recorded 185 phytoplankton species, 58 zooplankton

species, 100 mollusc species, 71 crustacean species and 116 fish species (ADB 1999).

During January 2002, Quy Nhon lagoon was visited during a rapid biodiversity survey of the coastal zone of central Vietnam, conducted by BirdLife International and the Institute of Ecology and Biological Resources. Only small numbers of waterbirds were recorded, including no species of national or global conservation concern (Le Manh Hung *et al.* in prep.).

Conservation issues

The lagoon is surrounded by settlements, including Quy Nhon town, which poses difficulties in managing the site as a protected area and maintaining environmental sustainability. The lagoon has become severely degraded as a result of over-exploitation, destructive fishing and expansion of aquaculture (ADB 1999).

Other documented values

More than 1,000 households depend upon the natural resources of the lagoon for their livelihoods. About 80 tonnes of seaweed are harvested each year and used for food and fertilizer. The lagoon is a spawning area for the shrimp *Penaeus merguensis*, and the area is important for shrimp production. Yields of wild-caught shrimp are around 200 to 250 tonnes

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per year but are reported to be declining rapidly (ADB 1999).

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.

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

ADB (1999) Draft coastal and marine protected areas plan. Hanoi: Asian Development Bank.

Le Manh Hung, Nguyen Duc Tu, Nguyen Quang Truong, Tordoff, A. W. and Nguyen Viet Hung (in prep.) A rapid biodiversity survey of the coastal zone of central Vietnam. Unpublished report to the BirdLife International Vietnam Programme, the Institute of Ecology and Biological Resources, and Thua Thien Hue Provincial Department of Science, Technology and the Environment.

Scott, D. A. (1989) A directory of Asian wetlands. Gland: IUCN.