

# Hon Mun Proposed Marine Protected Area

## **Alternative site name(s)**

Hon Mun-Bich Dam

## **Province(s)**

Khanh Hoa

## **Status**

Proposed

## **Management board established**

No

## **Latitude**

12°09' - 12°13'N

## **Longitude**

109°15' - 109°20'E

## **Bio-unit**

05b - South Annam



## **Conservation status**

In 1993, site surveys conducted by Nha Trang Institute of Oceanography, supported by WWF International, led to the recommendation that Hon Mun island and its surrounding reefs be gazetted as Vietnam's first marine protected area (Cheung and Vo Si Tuan 1993). This recommendation encouraged Khanh Hoa Provincial People's Committee to propose that the site be managed for conservation. However, despite this proposal, little action towards enforcement followed (ADB 1999).

The proposal to establish a marine protected area at Hon Mun was reiterated by Hai Phong Institute of Oceanography in 1995 (Nguyen Huy Yet and Vo Si Tuan 1995). Subsequently, Hon Mun was included on a list of 16 proposed marine protected areas compiled on behalf of MOSTE (Nguyen Chu Hoi *et al.* eds. 1998). Finally, a proposal to establish a marine protected area at Hon Mun was included in the Asian Development Bank's (ADB 1999) marine and coastal protected areas systems plan for Vietnam. In this proposal, the area of the site is given as 10,500 ha, comprising a marine component of 7,500 ha and a terrestrial component of 3,000 ha (ADB 1999).

In 1998, an investment plan for Hon Mun proposed marine protected area was prepared by Hai Phong

Institute of Oceanography for an area of 10,500 ha (Nguyen Huy Yet 1998). This investment plan has been submitted to the National Environment Agency of the Ministry of Science, Technology and the Environment (Nguyen Huy Yet pers. comm.) but there currently exists no legislative or institutional framework under which this management plan can be approved. Consequently, there exists no management unit for the proposed protected area and the site remains under the management of Nha Trang city, Khanh Hoa province (ADB 1999).

## **Topography and hydrology**

Hon Mun proposed marine protected area is located off the coast of south-central Vietnam, to the south-east of Nha Trang city. Various proposals for the marine protected area boundary exist. The one proposed by ADB (1999) includes Hon Tre, a large island with an area of around 2,000 ha, and several smaller islands: Hon Mieu, Hon Tam, Hon Mot, Hon Mun and Hon Ngoc. The highest point in the site is 496 m on Hon Tre island, and the average depth of the surrounding marine waters is 10 to 20 m (Nguyen Chu Hoi *et al.* eds. 1998). Hon Mun island and the south-eastern cape of Hon Tre island are formed of diorite, creating very high, vertical cliffs; other parts of the islands are formed of granite (Nguyen Xuan Ly 1998).

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## Biodiversity value

One of the key conservation features of Hon Mun proposed marine protected area is the abundant and diverse coral reefs at the site. Hon Mun is reportedly the best site in Vietnam for the conservation of hard coral biodiversity (ADB 1999). Coral reefs are distributed in shallow waters around Hon Mun, Hon Ngoc and Hon Mot islands, down to a depth of 15 m. All the coral reefs have a fringing structure, and the average cover of the reefs is over 30% (Nguyen Xuan Ly 1998). During surveys in the 1990s, 157 species of hard coral, 26 species of soft coral and three species of horned coral were recorded at the site (Nguyen Chu Hoi *et al.* eds. 1998). The reef fish fauna of the site is characterised by a high species richness (176 species) but exhibits signs of over-fishing (Cheung and Vo Si Tuan 1993).

Hon Mun proposed marine protected area is also home to a number of species listed in the 1996 *IUCN Red List of Threatened Animals*, such as Hawksbill Turtle *Eretmochelys imbricata* and Scaly Clam *Tridacna squamosa* (ADB 1999). A number of the small, rocky islands off the coast of Khanh Hoa province provide suitable nesting habitat for Germain's Swiftlet *Collocalia germani* and Black-nest Swiftlet *C. maxima* (Casellini *et al.* 1999); several of these islands are located within Hon Mun proposed marine protected area (ADB 1999).

## Conservation issues

The biggest threat to biodiversity at the site is illegal, unsustainable fishing practices, such as dynamite fishing and use of cyanide (ADB 1999). These activities have serious negative impacts on the coral reef communities, although these are still in a good condition. The level of exploitation of seashells and live corals has increased with the growth of tourism, and there are further serious threats posed by the collection of marine organisms for the aquarium and curio trades. A number of other negative impacts on the proposed marine protected area are associated with tourism development in Nha Trang bay, including damage to coral reefs by the anchors of tourist boats and the activities of divers (ADB 1999).

The port at Nha Trang city is considered to be a significant source of pollution, particularly due to the high numbers of ships that pass through the proposed marine protected area. Currently, there are noticeable amounts of localised oil and domestic organic pollution at the site. In the future, with the development of the port at Cam Ranh bay, 60 km to the south, the risk of oil pollution will increase (ADB 1999).

Some of the offshore islands, including Hon Mun, are uninhabited apart from controlled seasonal collection of swiftlet nests. Some protection is already in place for two of the islands where the swiftlets nest, with the provision of guards from the border army (ADB 1999).

## Other documented values

The 15,000 inhabitants of Vinh Nguyen commune, which includes the marine protected area, depend upon the marine resources of the area for their livelihoods. There is no major reef fishery in the area but pelagic fish, including tuna, are raised in large enclosures in the area. Nha Trang city is one of the major tourist centres in Vietnam, and tourism is increasing rapidly: in 1996, 60,000 foreign tourists visited the area, up from 40,000 in 1994. Marine-based tourism is already well established, including day trips to the coral reefs off Hon Mun island for diving and snorkeling (ADB 1999).

## Related projects

ADB are currently supporting a regional technical assistance called *Coastal and Marine Environment Management in the South China Sea (East Sea)*, partly supported by a grant from the Swedish Development Cooperation Agency. This project aims to promote improved management of coastal and marine resources in the region, and is being implemented by MOSTE. Under this project, a draft coastal and marine protected area systems plan for Vietnam has been compiled, which reviews a number of candidate sites for inclusion within a revised national system of 30 marine and coastal protected areas. Hon Mun is included in this plan.

The National Marine Programme of Vietnam has been running at Hon Mun since 1975. This programme

is implemented by the National Centre for Natural Science and Technology, through the Nha Trang and Hai Phong Institutes of Oceanography.

In January 2001, a medium-sized Global Environmental Facility (GEF) project to establish a pilot marine protected area at Hon Mun was approved. This project will be implemented by IUCN, with over US\$1.9 million in funding from GEF, Danida and IUCN (Saigon Times 2001).

## Literature sources

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