





# **Dao Cat Ba Proposed Marine Protected Area**

## Alternative site name(s)

Cat Ba archipelago, Cat Ba-Ha Long

## Province(s)

Hai Phong

#### **Status**

Proposed

#### **Management board established**

No

#### **Latitude**

20<sup>0</sup>41' - 22<sup>0</sup>14'N

# Longitude

106<sup>0</sup>58' - 107<sup>0</sup>14'E

#### **Bio-unit**

06a - Tropical South China



#### Conservation status

The establishment of Cat Ba National Park was decreed on 31 March 1986, following Decision No. 79/CT of the Chairman of the Council of Ministers (MARD 1997). The total area of the national park given in this decision was 15,200 ha, comprising a terrestrial component of 9,800 ha and a marine component of 5,400 ha (see Cat Ba National Park site card). The terrestrial component of Cat Ba National Park is currently under the management of the national park management board. However, Cat Hai District Fisheries Department holds the rights to utilise the marine component (ADB 1999). The relationship between the national park management board and the district fisheries department is not clear.

Cat Ba National Park was the first national-level protected area in Vietnam to include a marine component. However, the marine component has never been clearly delineated, nor has its management regime been adequately defined. In 1995, the Hai Phong Institute of Oceanography proposed establishing a marine protected area called Cat Ba-Ha Long, which included the marine component of Cat Ba National Park (Nguyen Huy Yet and Vo Si Tuan 1995). Dao Cat Ba was subsequently included on a list of 16 proposed marine protected areas compiled on behalf of MOSTE in 1998, with an area of approximately 10,500 ha

(Nguyen Chu Hoi *et al.* eds. 1998). This area comprised the marine component of Cat Ba National Park together with an additional 5,100 ha of marine waters and small islands.

In 1999, the proposal to establish a marine protected area at Dao Cat Ba was reiterated by the Asian Development Bank (ADB 1999) in their marine and coastal protected areas systems plan for Vietnam. In the ADB proposal, the area of the site was given as 20,700 ha, comprising a marine component of 10,900 ha and a terrestrial component of 9,800 ha. Because there is as yet no formal legal framework for establishing marine protected areas (ADB 1999), it is not clear whether, in the future, Dao Cat Ba will be established as a separate protected area, or simply managed as part of Cat Ba National Park, with a clearer remit for protecting the marine ecosystem.

As the terrestrial component is currently under the management of Cat Ba National Park Management Board, it is assumed that any future marine protected area will comprise only the marine component. Consequently, this site card only reviews the marine component of Dao Cat Ba proposed marine protected area as proposed by ADB (1999); for a review of the terrestrial component, readers should refer to the Cat Ba National Park site card.

# Topography and hydrology

Dao Cat Ba proposed marine protected area is located in Cat Hai district, Hai Phong city. The proposed marine protected area is centred on the Cat Ba archipelago, which consists of one large island and 366 smaller islands located approximately 30 km east of Hai Phong city and immediately to the west of Ha Long bay. Dao Cat Ba proposed marine protected area covers the marine waters and small islands to the east of Cat Ba island. The islands in the proposed marine protected area have similar topography to the islands in Ha Long bay, being composed of limestone karst and rising abruptly from the sea. The surrounding marine waters are relatively shallow, with an average depth of around 13 m.

# **Biodiversity value**

Dao Cat Ba proposed marine protected area supports a wide range of natural habitat types, including coral reefs, seagrass beds, mangroves and, on the islands, limestone forest. The known marine biodiversity of Dao Cat Ba is high relative to other proposed marine protected areas in northern Vietnam, although this might reflect higher levels of survey effort rather than any difference in actual levels of biodiversity. To date, 199 phytoplankton species, 89 zooplankton species, 75 seaweed species, 160 coral species, 4765 zoobenthic species and three seagrass species have been recorded at Dao Cat Ba (ADB 1999).

# **Conservation issues**

ADB (1999) identify several major threats to Dao Cat Ba proposed marine protected area. Firstly, the coral reefs at the site are being threatened by siltation, dynamite fishing and excavation. Secondly, fish stocks are being depleted by unsustainable fishing practices, including the use of fine-mesh nets, poisons and electric fishing. Thirdly, the marine environment is being polluted by marine traffic and effluent from ports, industry and agricultural land in the Hai Phong area. Furthermore, ADB (1999) recognise low levels of awareness of environmental issues among local people and the lack of a system of boundary markers as obstacles to marine conservation.

### Other documented values

Dao Cat Ba proposed marine protected area harbours rich fisheries resources, including many species of economic importance. The area is an important fishing ground for both local people and people from other coastal areas of Vietnam (ADB 1999).

Dao Cat Ba proposed marine protected area borders Ha Long Bay World Heritage Site, and is part of the resource base for an expanding tourism industry. Tourism now makes a significant contribution to the local economy, and many visitors to Cat Ba island visit the proposed marine protected area by boat. Well managed eco-tourism has the potential to reduce existing pressures on the natural resources of the area as well as to boost the local economy (ADB 1999).

# Related projects

The ADB is 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. Dao Cat Ba is included in this plan.

Cat Ba National Park is the focus of several other projects (see Cat Ba National Park site card). However, none of these are focussed specifically on the area included within Dao Cat Ba proposed marine protected area.

### **Literature sources**

ADB (1998) Coastal and marine environmental management in the South China Sea (East Sea): phase 2, inception report. Hanoi: Asian Development Bank.

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

# **Dao Cat Ba Proposed Marine Protected Area**

Cheung, C.P.S. (1992) Report on a visit to the coasts of Vietnam. Unpublished report to WWF Asian Region.

EVS (1996) Coastal and marine environmental management for Ha Long bay, Socialist Republic of Vietnam: final report. Vancouver: EVS Environmental Consultants.

Nguyen Chu Hoi, Nguyen Huy Yet and Dang Ngoc Thanh eds. (1998) [Scientific basis for marine protected areas planning]. Hai Phong: Hai Phong Institute of Oceanography. In Vietnamese.

Nguyen Huy Yet and Vo Si Tuan (1995) [Information on proposed marine protected areas on the coast of Vietnam]. Hai Phong: Hai Phong Institute of Oceanography. In Vietnamese.

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