Nghia Hung Proposed Nature Reserve

Alternative site name(s)
None
Province(s)
Nam Dinh
Status
Proposed
Management board established
No
Latitude
$19^{0}56'$ - $20^{0}00'$N
Longitude
$106^{0}07'$ - $106^{0}12'$E
Bio-unit
05c - North Annam

Conservation status

Nghia Hung refers to the coastal zone of Nghia Hung district, comprising Nghia Trung, Nam Dien and Nghia Phuc communes. A survey of 18 coastal wetland sites in the Red River Delta by BirdLife International and FIPI in 1996 identified Nghia Hung as the second most important site for wetland conservation (Pedersen and Nguyen Huy Thang 1996). As a result of this survey, FIPI and BirdLife proposed establishing a nature reserve at Nghia Hung. This idea has the support of Nam Dinh Provincial People's Committee and FPD (Le Trong Trai pers. comm.).

Nghia Hung is not listed on any official decree related to the Special-use Forest system (MARD 1997). Nghia Hung is, however, included on a proposed list of protected areas currently being prepared by FPD and FIPI, as a 7,600 ha nature reserve (FPD and FIPI in prep.).

Topography and hydrology

Nghia Hung lies in the coastal zone of the Red River Delta. The site covers 12 km of coastline, and is bordered to the west by the Day river and, to the east, by the Ninh Co river. Adjacent to the Ninh Co estuary is an area with sandy beaches, dunes and salt-marsh, to the west of which there is an area of aquacultural ponds. Along the Ninh Co river, there is an area of salt-ponds. Outside of the main dyke, there is an intertidal area of about 3,500 ha. Five kilometres offshore, there are two small sandy islands covering 25 ha that support dunes and, in the case of the southern island, salt-marsh (Pedersen and Nguyen Huy Thang 1996).

Biodiversity value

Nghia Hung supports 13 different habitats and is one of the most diverse areas in the Red River Delta. The main habitats found at Nghia Hung include mangrove plantation of *Kandelia candel*, mudflats, large sandy beaches and dunes. Beyond the main dyke, there is a large area of aquacultural ponds, which support reedbed *Phragmites* sp. or patches of mangrove (Pedersen and Nguyen Huy Thang 1996).

Nghia Hung supports a wide variety of waterbirds, including eight globally threatened or near-threatened species: Nordmann's Greenshank *Tringa guttifer*, Asian Dowitcher *Limnodromus semipalmatus*, Spoon-billed Sandpiper *Calidris pygmeus*, Saunders's Gull *Larus saundersi*, Spot-billed Pelican *Pelecanus philippensis*, Chinese Egret *Egretta eulophotes*, Black-headed Ibis *Threskiornis melanocephalus* and Black-faced Spoonbill *Platalea minor*. A maximum of 16 Black-faced Spoonbills was recorded at the site in February 1996, and a maximum high-tide count of 1,774 shorebirds was made in May 1996 (Pedersen and

Nguyen Huy Thang 1996). During April 1994, it was estimated that more than 30,000 shorebirds were in Nghia Hung district (Pedersen *et al.* 1996).

Conservation issues

The main threats to biodiversity at Nghia Hung are hunting, over-exploitation of marine products and disturbance (Le Trong Trai pers. comm.). Hunting is a particular threat to populations of waterbirds. During February 1999, 20 km of mist-nets were observed in the intertidal area of Nghia Hung district. Hunters also use airguns and shotguns. The main quarry species are reportedly ducks and geese, which are sold for export to China (Pedersen and Nguyen Huy Thang 1996). Despite the introduction of a hunting ban, levels of hunting have remained high at Nghia Hung because local people depend heavily on exploitation of natural resources and do not understand why the ban was introduced, and because the local authorities have not implemented the ban strictly (Le Trong Trai pers. comm.).

Pedersen and Nguyen Huy Thang (1996) identified several constraints to management at Nghia Hung, including the absence of a coastal zone management plan for the district, lack of technical capacity among the district FPD staff, and lack of awareness of the biological value of mangrove and intertidal mudflats. Furthermore, the authors noted that aquacultural development is unregulated, there is a lack of baseline data to monitor trends in bivalve populations, and there is no enforcement of regulations prohibiting bird hunting.

Pedersen and Nguyen Huy Thang (1996) recommend that a management plan be developed for the site that seeks to promote the sustainable exploitation of marine products, fully taking into account the importance of mudflats as feeding areas for threatened species, and the importance of offshore islands as roosting areas for migratory shorebirds.

Other documented values

The Day and Ninh Co estuaries are important stocking areas for fish and other marine animals central to the local economy. Also, the mangroves at Nghia Hung are a feeding and nursery area for fish, shrimp and crabs, and have, therefore, played an important role in maintaining inshore marine productivity. A large proportion of the mangrove at the site has been enclosed within aquacultural ponds, which are managed for the mangrove crab *Scylla serrata* and other products.

During 1996, about 1,000 people were observed collecting shellfish at low tide in an intertidal area of 1,500 ha. The most common species collected were *Meretrix* sp., *Hitula diphos* and *Mactra quadrangularis*. An additional economic activity at Nghia Hung is salt production: there are 50 ha of salt ponds in the north of the site (Pedersen and Nguyen Huy Thang 1996).

Related projects

Mangrove afforestation is taking place at Nghia Hung. Prior to 1999, this was funded by the national 327 Programme, while, since 1999, it has been funded by the national 661 Programme. The Danish Red Cross have also funded a mangrove afforestation project at the site.

The Mangrove Ecology and Research Division of the Centre for Natural Resources and Environment Studies are currently developing a medium-sized Global Environment Facility (GEF) project through UNDP. This project, which is entitled *Conservation of coastal wetlands in the Red River Delta, Vietnam*, is expected to be implemented at five sites in three provinces: Ninh Binh, Nam Dinh and Thai Binh. The objective of this project will be the long-term conservation and sustainable use of biodiversity in the coastal zone of the Red River Delta.

Literature sources

Lao Dong [Labour] (2000) [Spoonbill, a rare bird, is disappearing from Vietnam]. Lao Dong [Labour] 15 June 2000. In Vietnamese.

Le Dien Duc (1992) Final report on monitoring of hunting pressure on waterbirds on the Red River Delta, Vietnam. Unpublished report to Asian Wetlands Bureau.

Pedersen, A. and Nguyen Huy Thang (1996) The conservation of key coastal wetland sites in the Red

River Delta. Hanoi: BirdLife International Vietnam Programme.

Pedersen, A., Nielsen, S. S., Le Dinh Thuy and Le Trong Trai (1996) Northward migration of shorebirds through the Red River Delta, Vietnam, in 1994. Stilt 28: 22-31.