Ben En National Park

Alternative site name(s)
None
Province(s)
Thanh Hoa
Area
16,634 ha
Coordinates
19^{0}31' - 19^{0}40'N, 105^{0}23' - 105^{0}35'E
Agro-ecological zone
North Central Coast
Decreed by government
Yes
Management board established
Yes
Investment plan prepared
Yes
VCF eligibility criteria met
A, B, C
Social screening criteria met
None
Conservation needs assessment prepared
No
Operational management plan prepared
No
Tracking tool completed
No
Map available
Yes

Conservation status

In 1979, a dam was built on the Muc river, forming an artificial lake, and the surrounding area was designated as an area for the protection of fauna. This area was designated as a nature reserve in 1986, under the name Ben En, and with an area of 12,000 ha (MARD 1997). According to Decision No. 194/CT of the Prime Minister, dated 9 August 1986, the main objective of the nature reserve was the protection "of the wild life elephant and *Cervus unicolor* and forests in the upper part of the Muc river" (Cao Van Sung 1995). However, it was not until 27 January 1992, that the site was placed under conservation management, when Ben En National Park was established by Decision No. 33/CT of the Prime Minister, with an area of 16,634 ha and a buffer zone of approximately 30,000 ha. Prior to 1992, Ben En was under the management of Song Chanh and Nhu Xuan Forest Enterprises (Ben En National Park Management Board *in litt.* 2003).

Recently, part of Ben En National Park was transferred to Thanh Hoa Provincial People's Committee, following Official Letter No. 99/CP-NN of the Prime Minister, dated 22 January 2002. This resulted in the area of the national park reducing to 15,339 ha, and the area of the buffer zone increasing to 31,054 ha (Ben En National Park Management Board *in litt.* 2003).

A proposed extension to the border with Nghe An province would increase the area of the national park to 38,153 ha (Anon. 1995). This proposal was submitted to the then Ministry of Forestry by Thanh Hoa Provincial People's Committee on 19 June 1995 (Ha Dinh Duc ed. 2000). A separate proposal, to extend Ben En National Park from 16,634 to 50,000 ha, is included in the *Biodiversity Action Plan for Vietnam* (Government of SRV/GEF 1994). To date, neither proposal has been approved by MARD.

Ben En is included on a list of Special-use Forests to be established by the year 2010, prepared by the FPD of MARD, as a 16,634 ha national park (FPD 2003); this list has not yet been approved by the government. The area of the national park on this list does not reflect the recent change in its boundaries.

Topography and hydrology

Ben En National Park is located in Nhu Thanh and Nhu Xuan districts, Thanh Hoa province. The national park is situated in a region of low hills surrounding an artificial lake. Altitude ranges from 20 to 497 m, with most areas being below 200 m. The lake is 50 m above sea level and covers 2,281 ha. The geology of the national park is characterised by sedimentary rocks, particularly mudstone. Small areas of limestone are also present, and impressive limestone karst formations can be found in the buffer zone in north-east boundary

of the national park. The core zone of the national park is drained by the Muc river, while the proposed extension to the national park is drained by the Chang river (Tordoff *et al.* 2000).

Biodiversity values

Ben En National Park is moderately important for the conservation of biodiversity. The national park protects one of the few surviving areas of lowland evergreen forest in north-central Vietnam. The forest has, however, been extensively disturbed in the past by commercial logging operations, and, as a result, is characterised by small, shade-intolerant trees and a dense undergrowth dominated by bamboo. However, since the cessation of commercial logging, forest quality has improved (Tordoff *et al*. 2000).

Despite the disturbed condition of the forest, the diversity of plants and animals at Ben En National Park remains relatively high. The national park supports a number of globally threatened tree species, most notably *Erythrophleum fordii*, which was the focus of much of the commercial logging prior to 1992, and remains the focus of small-scale, illegal timber extraction.

In addition, a number of mammal species of global conservation concern have been recorded at the national park, including White-cheeked Crested Gibbon *Hylobates leucogenys*, Asian Golden Cat *Catopuma temminckii* and Owston's Civet *Hemigalus owstoni* (Tordoff *et al.* 2000). The population sizes of most large mammal species at Ben En are, however, very low, probably as a result of past hunting, and some have undoubtedly been eradicated already (Tordoff *et al*. 2000). Previously, Asian Elephant *Elephas maximus* occurred at the national park. However, despite several anecdotal reports (Tordoff *et al*. 1997, Ha Dinh Duc ed. 2000), there have been no confirmed records of this species at the site since 1993 (Tordoff *et al*. 1997). Tordoff *et al*. (2000) concluded that the species has probably been eradicated from the core zone of the national park, and that any populations which do still persist are likely to be small, of doubtful viability, and restricted to buffer zone areas to the west of the core zone.

Conservation issues

The area was commercially logged until 1992, and, while forest still covers most of the core zone, no areas remain undisturbed (Tordoff *et al.* 2000). More than 3,500 people live inside the national park, and nearly 30,000 live in the buffer zone (Ben En National Park Management Board *in litt.* 2003). These people continue to exert an influence on the natural environment. Illegal logging by both local people and people from outside the national park continues, and, whilst this activity is not preventing forest regeneration, it will surely delay the process (Tordoff *et al.* 2000). In recent years, however, illegal logging and other human impacts on the forest have reduced, significantly (Ben En National Park Management Board *in litt.* 2003).

The long-term survival of many large and medium-sized mammals at Ben En National Park is threatened by the fact that the core zone may be too small to support viable populations of these species. It is important, therefore, that the proposed extension of the national park, which will link it with forest areas in Nghe An province, takes place. Unfortunately, people are already moving into the area of the proposed extension and clearing forest for swidden agriculture and sugar cane cultivation. Unless this forest clearance is controlled immediately, it threatens to isolate the forest in the core zone from surrounding forest areas and significantly reduce the conservation importance of the national park (Tordoff *et al.* 2000).

The national park uthorities intend to relocate the households that are currently living in the core zone of the national park. Up until now, this policy has not been implemented due to lack of resources and local support. Because these people know neither when nor if the proposed relocation to the buffer zone will take place, they are uncertain about their future and have little incentive to exploit the forest in a sustainable fashion or to invest in schemes without immediate returns, such as planting fruit trees (Tordoff *et al.* 2000). Tordoff *et al.* (2000) recommend that a decision be reached as to whether communities in the core zone of the national park should be relocated. If they are to be moved, this should happen as soon as possible. If they are to remain, the communities should be encouraged to take part in social forestry and other

schemes to raise income and reduce dependence on natural resources.

Other documented values

The national park protects the catchment of the Muc river, which has been dammed, forming an artificial lake. The forest cover provides catchment protection for this water system, which provides irrigation for communities downstream (Tordoff *et al*. 2000).

In the years following the damming of the Muc river, a state fishery production unit stocked the lake with fish and managed harvesting. Between 1983 and 1987, the annual yield of fish increased from 14 to 30 tonnes but, by 1989, this had fallen to only 7 tonnes. In 1993, the activities of the state fishery production unit ceased, although local people still continue to fish on the lake and its tributaries (Tordoff *et al*. 2000). In recent years, with strengthened enforcement of national park management regulations, fish stocks in the lake have increased markedly (Ben En National Park Management Board *in litt.* 2003).

Most households in the core and buffer zones of Ben En National Park exploit forest products to a greater or lesser degree. Many forest products, such as bamboo and rattan, are in plentiful supply due to the disturbed condition of the forest. However, over-exploitation of some resources in the past, such as timber trees and large mammals, has caused them to become scarce (Tordoff *et al*. 2000).

Ben En National Park has high tourism potential and is currently being developed as an attraction for domestic tourists. Scenic beauty and accessibility are two of the national park's greatest assets. There is a small guesthouse at the national park and visitors can take a boat trip on the lake. Tourism has the potential to both raise the profile of the national park and generate income for management (Tordoff *et al*. 2000).

Related projects

In July-September 1997 and October-December 1998, Frontier-Vietnam and the Institute of Ecology and Biological Resources (IEBR) conducted biodiversity surveys of Ben En National Park (Tordoff *et al*. 1997, 2000).

Between 1998 and 2000, the Ecosystem Conservation Society of Japan and Hanoi National University implemented a wildlife conservation programme for Ben En National Park, which involved evaluating the biodiversity values of the site and developing conservation strategies for the national park (Ha Dinh Duc ed. 2000).

In 1999, a programme of Tiger *Panthera tigris* surveys was carried out by IEBR, FPD and Ben En National Park.

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

Ben En meets eligibility criteria A, B and C. However, as a centrally managed Special-use Forest, it will only be eligible for VCF support if the Investment Plan and Operational Management Plan demonstrate a high proportion of government support directed towards conservation activities.

Criterion	Eligibility
A_I	NA3 - Ben En Lowlands
A_{II}	
B_I	Decision No. 33/CT, dated 27/01/92
B_{II}	National Park
B_{III}	Under central management
C_I	Management board established
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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