

Pa Co-Hang Kia Nature Reserve

Alternative site name(s)

Hang Kia-Pa Co

Province(s)

Hoa Binh

Area

7,091 ha

Coordinates

20°41' - 20°46'N, 104°51' - 105°01'E

Agro-ecological zone

North-western

Decreed by government

Yes

Management board established

Yes

Investment plan prepared

Yes

VCF eligibility criteria met

B, C

Social screening criteria met

None

Conservation needs assessment prepared

No

Operational management plan prepared

No

Tracking tool completed

No

Map available

Yes

Management history

Pa Co-Hang Kia Nature Reserve is located in Pa Co, Hang Kia, Tan Son, Bao La, Cun Pheo and Pieng Ve communes, Mai Chau district, Hoa Binh province (Hoa Binh Provincial FPD in litt. 2000). Pa Co-Hang Kia was included on Decision No. 194/CT of the Chairman of the Council of Ministers, dated 9 August 1986 (MARD 1997), which decreed the establishment of a 1,000 ha nature reserve for the conservation of "limestone karst forest, gymnosperm species [and] rare wildlife" (Cao Van Sung 1995). An investment plan for the site was prepared by FIPI in September 1993, and was subsequently approved by the then Ministry of Forestry. The area of the nature reserve stated in the investment plan is 7,091 ha, comprising a strict protection area of 2,681 ha and a forest rehabilitation area of 4,410 ha (Duong Coi 1993).

A management board was established for Pa Co-Hang Kia Nature Reserve on 23 May 2000, following Decision No. 453/QD-UB of Hoa Binh Provincial People's Committee. The management board currently has 15 members of staff based at two guard stations (Nguyen Manh Dan, Director of Pa Co-Hang Kia Nature Reserve in litt. 2003).

Pa Co-Hang Kia is included on a list of Special-use Forests to be established by the year 2010, prepared by the FPD of MARD, as a 7,091 nature reserve (FPD

2003); this list has not yet been approved by the government. The nature reserve is currently under the management of Hoa Binh Provincial FPD (Nguyen Manh Dan, Director of Pa Co-Hang Kia Nature Reserve in litt. 2003).

Topography and hydrology

Pa Co-Hang Kia Nature Reserve is located in the extreme west of Hoa Binh province, on the border with Son La province. The site lies in the limestone range that extends south-east from the Son La plateau to Cuc Phuong National Park. The main physical feature within Pa Co-Hang Kia is a high ridge, which reaches 1,536 m in the north-west of the nature reserve, and gradually decreases in altitude to the east. Most of the nature reserve lies above 500 m.

The geology of the site is characterised by limestone, which is partly of a non-karst nature, and has been eroded into a series of rugged, steep-sided hills between some flatter valleys. There are flat valley bottoms in the north of the nature reserve, in which are located a number of human settlements. Surface water is seasonal in the nature reserve, even in the populated valleys. Water sources dry up during the dry season, and rains are quickly absorbed into underground systems.

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Biodiversity values

Tran Le Hung *et al.* (1994) report that “there are still hundreds of hectares of primary forest in the inaccessible limestone karst as well as on the high mountain peaks”. However, most of the forest in the nature reserve is restricted to ridges and hill tops, while valley bottoms have been cleared for wet rice cultivation and lower slopes for shifting cultivation of maize and cassava (A. Tordoff pers. obs.).

Three orchid species thought to be new to science were recently discovered at the site, and the site may be of importance for the conservation of a number of other plant species of conservation concern. However, because the remaining forest at the site is heavily disturbed and fragmented, and continues to be degraded as a result of human activities, it is unlikely that Pa Co-Hang Kia is of high importance for the conservation of bird and mammal species.

Conservation issues

Pa Co-Hang Kia is home to the only Hmong communities in Hoa Binh province (Tran Le Hung *et al.* 1994). Also, the south of the nature reserve is inhabited by members of the Thai ethnic group. The clearance of land for agriculture has led to the loss of much of the natural vegetation in the nature reserve.

Other documented values

Hang Kia cave, in Hang Kia commune, and the Hmong ethnic minority market in Pa Co commune receive small numbers of domestic and foreign tourists from Mai Chau village to the east (A. Tordoff pers. obs.). The forest provides numerous products for local residents, who “believe that their life cannot be separated from the forest” (Tran Le Hung *et al.* 1994).

Related projects

The Netherlands Local Environment Fund, administered by SNV, has provided a small grant to the management board of Pa Co-Hang Kia Nature Reserve for capacity building activities. These activities will continue until November 2004.

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 does not meet the criteria for supporting forest biodiversity of international importance.

Criterion	Eligibility
A _I	
A _{II}	
B _I	Decision No. 194/CT, dated 09/08/86
B _{II}	Nature reserve
B _{III}	Under provincial 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

Duong Coi (1993) [Investment plan for Hang Kia-Pa Co Nature Reserve, Mai Chau district, Hoa Binh province]. Hoa Binh: Hoa Binh Provincial People's Committee. In Vietnamese.

Tran Le Huy, Nguyen Van Lan, Nguyen Tuong Van, Pham Quang Thu and Dao Huong Lan (1994) Natural resources and socio-economy of Pa Co and Hang Kia communes in Mai Chau district, Hoa Binh

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province. Unpublished report to the Renovation of
Strategies for Forestry Development Project.