

Kon Cha Rang Nature Reserve

Alternative site name(s)

Kon Chu Rang, Kon Ja Rang

Province(s)

Gia Lai

Area

15,900 ha

Coordinates

14°26' - 14°35'N, 108°30' - 108°39'E

Agro-ecological zone

Central Highlands

Decreed by government

Yes

Management board established

No

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

Management history

Kon Cha Rang Nature Reserve was included on Decision No. 194/CT of the Chairman of the Council of Ministers, dated 9 August 1986, with an area of 16,000 ha (MARD 1997). An investment plan was prepared by the Forest Science Institute in 1994 but was never approved by the former Ministry of Forestry (Anon. 1994). In 1999, a second investment plan was prepared by the Forest Inventory and Planning Institute (FIPI) (Anon. 1999). This investment plan proposed establishing a 15,900 ha nature reserve, comprising a strict protection area of 8,746 ha and a forest rehabilitation area of 7,154 ha. In addition, the investment plan defined a buffer zone of 56,000 ha in Son Lang and Dak Rong communes, K'Bang district.

The investment plan was approved by Gia Lai Provincial People's Committee on 21 June 2000, by Official Letter No. 857/CV-UB. Following approval at the provincial level, MARD approved the investment plan on 4 August 2000, by Decision No. 2648/BNN-KH. Due to remoteness of the site and the low level of threat, Gia Lai Provincial People's Committee decided not to establish a management board for it. Instead, it was designated as a nature reserve and placed under the management of the provincial FPD (Tran Van Thieu, Vice-director of Gia Lai Provincial FPD verbally 2001).

Kon Cha Rang is included on a list of Special-use Forests to be established by the year 2010, prepared by the FPD of MARD, as a 15,900 ha nature reserve (FPD 2003); this list has not yet been approved by the government.

Topography and hydrology

The topography of the nature reserve is dominated by a montane plateau. The highest point is Mount Kon Cha Rang at 1,452 m. A number of other summits attain altitudes greater than 1,000 m in the northern part of the nature reserve, and the lowest point at the site is c.800 m.

Kon Cha Rang Nature Reserve is located within the catchment of the Kon river. Numerous streams originate from within the boundaries of the nature reserve and feed this river, which flows through An Khe and Tay Son districts before emptying into the sea at Quy Nhon town. The lower Kon river is dammed at more than one location for the purposes of generating hydroelectricity for Binh Dinh province. The upper Kon river, within the nature reserve, has a number of waterfalls along its route, the most famous and tallest of which is 50 m high.

Biodiversity values

Forest covers 15,610 ha or 98% of the total area of Kon Cha Rang Nature Reserve. The main forest type is lower montane evergreen forest, distributed at elevations between 900 and 1,500 m in the north-west of the nature reserve. Canopy cover of this forest type is 70 to 80%, and the tree flora is dominated by a number of species from the Fagaceae, Lauraceae and Magnoliaceae families, mixed with gymnosperms, such as *Podocarpus imbricatus* and *Dacrydium elatum*. In certain areas, Tram Lap Forest Enterprise has selectively extracted valuable timber species from the lower montane forest belt. However, the disturbance caused has not been great. Lowland evergreen forest occurs at elevations below 900 m. Only 2% of the nature reserve is covered by secondary vegetation, mainly scrub with scattered trees (Anon. 1999).

Field surveys by FIPI and BirdLife International in 1999 recorded 546 vascular plant species in 376 genera and 122 families. Of these species, 201 are timber species, 121 have a known medicinal use and 48 have potential economic value as ornamentals. Several species of plant recorded at the nature reserve are globally threatened, and nine are endemic to Vietnam: *Acer erythranthum*, *Baccaurea silvestris*, *Bulbophyllum hiepii*, *Calamus poilanei*, *Craibiodendron scleranthum*, *Dalbergia cochinchinensis*, *Dendrobium ochraceum*, *Dialium cochinchinensis* and *Michelia mediocris* (Anon. 1999).

The BirdLife/FIPI survey recorded 62 species of mammal, 169 species of bird and 161 species of butterfly at the nature reserve. Eight of the mammal species recorded at Kon Cha Rang are globally threatened, and 17 are nationally threatened. Also, three mammals recorded at Kon Cha Rang are endemic to Indochina: Yellow-cheeked Crested Gibbon *Hylobates gabriellae*, Grey-shanked Douc *Pygathrix cinerea* and Large-antlered Muntjac *Muntiacus vuquangensis* (Anon. 1999). Furthermore, Kon Cha Rang is one of a handful of sites from where there are recent records (albeit unconfirmed) of 'Indochinese' Hog Deer *Axis porcinus annamiticus*, a distinct subspecies, endemic to Indochina, which is on the brink of extinction.

Two of the bird species recorded at Kon Cha Rang are globally threatened (Crested Argus *Rheinardia*

ocellata and Masked Finfoot *Heliopais personata*) and a further seven are globally near-threatened. Five restricted-range bird species were recorded at the nature reserve: Crested Argus, Black-hooded Laughingthrush *Garrulax milleti*, White-cheeked Laughingthrush *G. vassali*, Short-tailed Scimitar Babbler *Jabouilleia danjoui* and Grey-cheeked Tit Babbler *Macronous kelleyi*. Therefore, Kon Cha Rang lies within the Kon Tum Plateau Endemic Bird Area, and qualifies as an Important Bird Area (Tordoff 2002).

Finally, a survey of the butterfly fauna of Kon Cha Rang Nature Reserve has also yielded seven taxa possibly new to science (Anon. 1999).

Conservation issues

Up until 1975, a number of ethnic minority communities lived within the boundaries of what is now the nature reserve, although, today, there are no people living inside the nature reserve. The population of the buffer zone is 5,564 people, who belong to the Ba Na and Kinh ethnic groups. The Ba Na people have a long tradition of forest resource use (Anon. 1999).

The four main threats to biodiversity at Kon Cha Rang are perceived to be forest clearance for coffee plantations, hunting, exploitation of forest products and forest fire. Many of these activities are both illegal and damaging to the natural forest habitat (Le Trong Trai verbally 2000). However, due to the remoteness of the site, the low human population pressure, and the existence of large areas of forest outside of the nature reserve, providing an alternative source of forest products closer to human settlements, the overall level of human pressure on the nature reserve are low relative to most other forest areas in Vietnam.

Kon Cha Rang Nature Reserve is situated 12 km to the east of Kon Ka Kinh Nature Reserve, linked by intervening forest areas. The two nature reserves, therefore, form an area large enough to support viable populations of large mammals, such as Tiger *Panthera tigris*, that neither area could support in isolation. However, the intervening forest areas are currently under forest enterprise management. In the investment plan for Kon Ka Kinh, BirdLife and FIPI strongly recommend that, in the future, these areas should be incorporated within the boundaries of the two nature

Kon Cha Rang Nature Reserve

reserves to form one contiguous protected area (Le Trong Trai *et al.* 2000). This recommendation is contained within the *Tropical Forestry Action Plan* (MOF 1991), the *Biodiversity Action Plan for Vietnam* (Government of SRV/GEF 1994) and *Expanding the Protected Areas Network in Vietnam for the 21st Century* (Wege *et al.* 1999).

Other documented values

Kon Cha Rang Nature Reserve protects a large proportion of the Kon river catchment. The forest at the nature reserve performs an important role in protecting the water supply for hydroelectricity generation, and irrigation of thousands of hectares of wet-rice cultivation in the lower Kon river basin. Kon Cha Rang Nature Reserve also has potential value for tourism and scientific research.

Related projects

With the assistance of BirdLife International, Gia Lai Provincial People's Committee are currently developing a medium-sized Global Environment Facility project, covering Kon Cha Rang Nature Reserve, Kon Ka Kinh National Park, and the intervening forest enterprises. It is expected that project activities will begin implementation in 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

Kon Cha Rang is eligible for VCF support because it meets criteria A, B and C.

Criterion	Eligibility
A _I	CA1 - Central Annamites
A _{II}	VN025 - Kon Cha Rang
B _I	Decision No. 194/CT, dated 09/08/86
B _{II}	Nature Reserve
B _{III}	Under provincial management
C _I	
C _{II}	Managed as a Special-use Forest by Gia Lai Provincial FPD

Social screening requirements

A social screening report has not been prepared for the site.

Criterion	Eligibility
A	
B	
C	
D	

Literature sources

Anon. (1994) [Investment plan for Kon Cha Rang Nature Reserve, Central Highlands]. Hanoi: Forest Science Institute of Vietnam. In Vietnamese.

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