

Lo Go Sa Mat Nature Reserve

Alternative site name(s)

Lo Go Xa Mat

Province(s)

Tay Ninh

Status

Decreed

Management board established

Yes

Latitude

11°19' - 11°40'N

Longitude

105°49' - 105°59'E

Bio-unit

05a - Mekong Delta



Conservation status

Lo Go Sa Mat was included on Decision No. 194/CT of the Chairman of the Council of Ministers, dated 9 August 1986, which decreed the establishment of a 10,000 ha nature reserve (MARD 1997). Lo Go Sa Mat Nature Reserve was established in 1993 by merging Hoa Hiep and Tan Binh Forest Enterprises (Le Trong Trai pers. comm.). In December 1996, Ho Chi Minh City Sub-FIPI prepared an investment plan for Lo Go Sa Mat, which proposed establishing a 16,754 ha cultural and historical site (Anon. 1996). This investment plan was approved by Official Letter No. 842/NN-PTLN-CN of MARD, dated 21 March 1997, and by Decision No. 261A/QD-UB of Tay Ninh Provincial People's Committee, dated 16 July 1997. Upon approval of the investment plan by Tay Ninh Provincial People's Committee, a management board was established, and the site was placed under the management of Tay Ninh Provincial DARD (Tay Ninh Provincial FPD 2000).

Ho Chi Minh City Sub-FIPI were, however, mistaken in proposing that the area be established as a cultural and historical site since Lo Go Sa Mat was originally listed as a nature reserve in Decision No. 194/CT. During the Second Indochina War, Lo Go Sa Mat was a base for liberation troops, hence the belief by some authorities that Lo Go Sa Mat is a Special-use

Forest of principally historical, rather than biological, interest (Le Trong Trai and Tran Hieu Minh 2000).

In 1997, it was decided that Lo Go Sa Mat no longer met the requisite standard to be included in the national protected areas network (MARD 1997), and the site was not included on the 2010 list (FPD 1998). However, a review of Vietnam's protected areas system by FIPI and BirdLife International identified Lo Go Sa Mat as still supporting a sizeable and important area of natural forest, and recommended that the status of the site should be reassessed prior to removal from the protected areas system (Wege *et al.* 1999). In fact, FIPI and BirdLife recommended expanding Lo Go Sa Mat Nature Reserve (Wege *et al.* 1999). Consequently, FIPI and BirdLife conducted a rapid field survey of Lo Go Sa Mat Nature Reserve in December 1999, which concluded that the site had high biodiversity value and that there was no reason to remove it from the protected areas system (Le Trong Trai and Tran Hieu Minh 2000). However, the authors concluded that the current boundary of the nature reserve includes all the natural habitat in the area, and that it is not possible to expand the nature reserve as recommended by Wege *et al.* (1999). As a result of the authors' recommendations, Lo Go Sa Mat has been included on a proposed list of protected areas currently being prepared by FPD and FIPI as a 16,754 ha nature reserve, including 13,270 ha of forest (FPD and FIPI in prep.).

Topography and hydrology

Lo Go Sa Mat Nature Reserve lies in the lowlands of southern Vietnam. The topography of the site is very flat, with altitudes reaching only 20 m. The main hydrological system in the area is the Vam Co river. The Vam Co river originates in Cambodia and constitutes 16 km of international border between Vietnam and Cambodia. Within the nature reserve, a number of streams and small rivers feed the Vam Co river, including the Da Ha, Mec Mu, Xa Nghe, Ta Dot and Ba Diec rivers.

Biodiversity value

Lo Go Sa Mat Nature Reserve contains the single largest forested area in Tay Ninh province, and includes 26% of the province's total natural forest cover (Le Trong Trai and Tran Hieu Minh 2000). The site supports a mosaic of lowland semi-deciduous forest, lowland deciduous forest (which, because of poor soil and hydrology, is stunted and without a closed canopy), and smaller patches of lowland evergreen forest along watercourses and *Melaleuca* forest. Close to the border with Cambodia, there are extensive patches of wet grassland with large sedge beds (J. Eames pers. comm.).

The dominant tree species at Lo Go-Sa Mat include *Anisoptera costata*, *Dipterocarpus alatus*, *D. costatus*, *D. intricatus*, *D. dyeri*, *Hopea odorata*, *Shorea roxburghii*, *Xylia xylocarpa*, *Azelia xylocarpa*, *Sindora siamensis*, *Dialium cochinchinensis*, *Dalbergia* sp., *Pterocarpus macrocarpus*, *Lagerstroemia* sp. and *Shorea cochinchinensis*. There are also some monospecific stands of dipterocarp species, such as *Dipterocarpus costatus* and *D. intricatus*. The forest at Lo Go-Sa Mat supports a number of plant species listed in the *Red Data Book of Vietnam*, including *Azelia xylocarpa*, *Pterocarpus macrocarpus* and *Diospyros mollis* (Le Trong Trai and Tran Hieu Minh 2000).

The fauna of Lo Go Sa Mat Nature Reserve is not well studied, although Le Trong Trai and Tran Hieu Minh (2000) received reports of the occurrence of several species of conservation concern, including Black-shanked Douc Langur *Pygathrix nigripes* *nigripes*, Silvered Leaf Monkey *Semnopithecus*

cristatus, Bear Macaque *Macaca arctoides*, Asiatic Black Bear *Ursus thibetanus*, Dhole *Cuon alpinus* and Golden Jackal *Canis aureus*. Of particular note, fishermen reported the continued occurrence of Siamese Crocodile *Crocodylus siamensis* in the Vam Co river. If confirmed, the occurrence of this species at the site would be of great significance for conservation (Le Trong Trai and Tran Hieu Minh 2000).

During a visit to the site in January 2001, the presence of Green Peafowl *Pavo muticus*, Siamese Fireback *Lophura diardi* and Great Hornbill *Buceros bicornis* were all reliably reported by a member of staff. In addition, Woolly-necked Stork *Ciconia episcopus* and Alexandrine Parakeet *Psittacula eupatria*, two species that are rare and localised in Indochina, as well as Green Imperial Pigeon *Ducula aenea*, a lowland forest specialist, were observed. Based on the habitat present and the suite of species recorded, a number of other species of conservation concern may possibly occur at Lo Go Sa Mat. These include Germain's Peacock Pheasant *Polyplectron germaini*, Lesser Adjutant *Leptoptilos javanicus*, White-shouldered Ibis *Pseudibis davisoni* and Giant Ibis *P. gigantea* (J. Eames pers. comm.).

Conservation issues

During the Second Indochina War, the Lo Go Sa Mat area was subjected to extensive spraying of defoliants. As a result, many valuable timber trees and large mammals were killed (Vu Van Dung pers. comm.). Conservation at Lo Go-Sa Mat today still faces many obstacles. The nature reserve covers a large, easily accessible area, which the management board has insufficient staff and resources to satisfactorily protect. Only nine forest guard stations, all in state of disrepair, are present at the nature reserve (Le Trong Trai and Tran Hieu Minh 2000).

Sixty households are still living inside the nature reserve, all of which depend heavily upon forest resources for their livelihoods. The management board is currently collaborating with the border army and local communities in forest protection work. This collaboration includes the donation of consumer goods to encourage compliance with forest protection regulations. At Lo Go Sa Mat to date, too little emphasis has been placed on protecting wildlife

populations and conserving non-timber forest products (Le Trong Trai and Tran Hieu Minh 2000).

According to the *Annual Report on Agricultural and Forest Projects* by Tay Ninh Provincial People's Committee, logging and other exploitative activities have not ceased inside the nature reserve. The timber requirements of some of the poorer households within the region are causing a certain amount of continued disturbance, and illegal loggers from Cambodia still extract timber from the area (Le Trong Trai and Tran Hieu Minh 2000).

Currently, the biggest threat to the integrity of the site is human settlement. The road network has recently been extended into the centre of the nature reserve. Also, a one-kilometre-long drainage canal has been dug through one of the largest wet grassland areas, in order to drain it. These developments have taken place with the intention of settling people in the area and converting the wet grasslands into wet rice cultivation (J. Eames pers. comm.).

The construction of roads into the area has increased the accessibility of the core areas of the nature reserve. During January 2001, the following activities were observed at the site: collection of resin from dipterocarps, hunting, fishing, cassava cultivation, grazing of cattle in the forest, collection of non-timber forest products and human settlement. Given the topography of the site and unrestricted human access to it, if plans to settle people at Lo Go Sa Mat continue, irreversible ecological damage to the wetlands will occur within one year. Furthermore, if current trends persist, there will be permanent human settlement in the nature reserve within three years, which will undermine the ability of the authorities to conserve the biodiversity value of the site, and ultimately lead to its destruction. In February 2001, however, the provincial authorities will convene a meeting to reassess the current development plans for the area, which may result in their revision or abandonment (J. Eames pers. comm.).

Other documented values

During the Second Indochina War, Lo Go Sa Mat was a base for South Vietnam Liberation Radio and, also, a revolutionary base for liberation troops. Therefore, the site has historical significance.

Additionally, the forest within the nature reserve performs an important role in protecting the watershed of the Vam Co river. Many households depend upon the aquatic resources, especially fish, of this river.

Related projects

The budget for the activities of the nature reserve management board comes from the national 661 Programme, which replaced the national 327 Programme in 1999.

Literature sources

Anon. (1996) [Agricultural plan for Lo Go Sa Mat Cultural and Historical Site]. Ho Chi Minh City: Ho Chi Minh City Sub-FIPI. In Vietnamese.

Anon. (1999) [Investment plan for Lo Go Sa Mat Cultural and Historical Site]. Tay Ninh: Tay Ninh Provincial People's Committee. In Vietnamese.

Le Trong Trai and Tran Hieu Minh (2000) [A rapid field survey of Kalon Song Mao Nature Reserve \(Binh Thuan province\) and Lo Go-Sa Mat Nature Reserve \(Tay Ninh province\), Vietnam](#). Hanoi: BirdLife International Vietnam Programme and the Forest Inventory and Planning Institute. In English and Vietnamese.

Tay Ninh Provincial FPD (2000) [FPD questionnaire]. Tay Ninh: Tay Ninh Provincial Forest Protection Department. In Vietnamese.