

STATUS AND CONSERVATION OF TIGER IN VIETNAM

Do Tuoc, Nguyen Nhu Phuong,
Vu van Dung, Pham Nhat, Tran Quoc Bao,
Ministry of Forestry

Tiger (*Panthera tigris*) is being threatened throughout its range around the world, including Vietnam. Based on the preliminary inventory data of the tiger's distribution, density and management activities, this paper will mention the status and propose a course of conservation action for tiger in Vietnam.

Background information.

Before there is not special work studying tiger in Vietnam. Anyhow, it could find out some data extracting from documents studying mammals of Le Hien Hao, 1973 and Do Tuoc, 1980. These first data show, at that time, the tiger has distributed throughout the forests existent in Vietnam (map 1,2).

Inventory method.

In recent years, follow the "Forest Resource Assess and Inventory Program: 1991-1995" of the Forest Inventory and Planning Institute, the Zoologists of expert group of Ministry of Forestry have done many mammal surveys in some provinces of Vietnam, though these surveys were merely at interview level. Besides, the data extracting from about 2500 hunting interview coupons which were collected from the hunters and local people during 1991-1994 were also used for this paper.

Present distribution and density of tiger in Vietnam.

Up to now, the tiger is distributing nearly in 17 provinces and in 14 Natural Reserves in Vietnam (map 3). There are five areas where the tiger is more concentrated, that the number of tiger is estimated about 50-100 individuals. As for at the other scattered distribution, there are only 1-2 tigers in each range, and they are the last ones before the species becomes extinct.

Based on the data gathered, though insufficiently and at low reliance, but we can estimate the tiger population in Vietnam probably to be about 150-250 individuals in total.

Status and Causes.

In the past, as the tiger population kept a lot of numbers of individuals therefore the Decree 39CP, 1963 of Government of Vietnam has registered it to animals limited hunting. Since 1992, the tiger is ranging into the list of animals forbidden to exploit and use (Decree 18HDBT, 17/1/1992).

Nevertheless, in fact because of the limitation of Decree implementation, the hunting of tiger, as well as tiger illegal trade have been continuing to be violated, so the last populations of tiger in Vietnam will be extinct in the near future, especially at the scattered distributions. ^{able}

Hunting pressure is main reason which damages seriously to tiger, because hunting is not only a direct threat, but also indirectly influences to tiger by the way of diminishing its food sources, such as Sambar, Barking Deer, Wild pig...

Deforestation is second cause which leads to restraining the habitat of Sambar, Barking Deer, Wild pig and other wildlives and even that of tiger.

Proposal of areas for tiger conservation.

Map 3 shows the tiger ranges along the boundary of Vietnam-Laos and Vietnam-Cambodia. There are five areas which could be ranged into priority investment for tiger conservation:

(1. Sathay area, including Momrey Natural Reserve (Kontum province) is the best site for tiger conservation in Vietnam.

This area has total land surface of 25,000 hectare. Between the ranges, there are many valleys and hills with two main forest types: evergreen forest and semi-deciduous forest. This habitat is available not only for tiger but also for ungulates - the preferable preys of tiger.

There are no or few people dwelling here.

Formerly, there were a lot of tigers living in Sathay area. Generally, prior to 1980, two tiger were killed per year by Morey village solely. Later in 1986, the survey team of Economic-Technique Project of Momrey witnessed a tiger going on the road on day time. In 1989, three tigers were shot here. At present, about 20 tigers are still living in Sathay area.

(2. Muongnhe area (Laichau province) is the biggest Natural Reserve of Vietnam, with the total area of 396,000 hectare and 121,000 hectare buffer zone.

There are two main forest types: Subtropical evergreen forest and tropical evergreen forest. This area is also scarcely or no people inside, but very rich in ungulates and other wildlives. In period of 1971-1975 the Pharmacy of Muong-te district used to buy average 6-7 skeletons of tiger per year. In 1980, the survey team identified 6 tigers at 6 boundary communes of this area. Presently, about 15 tigers are estimated and they are distributing along Vietnam-Laos border.

3. Tuyenhoa and Minhhoa area (Quangbinh province) occurs in Central of Vietnam which has the area of over 15,000 hectare.

Follow the interview data collected in 1994, three tigers were shot at Trunghoa commune, Minhhoa district.

There are many valleys which locate between hills and limestone forest and these habitats are convenient to tiger and tiger' preys. About 10 tigers are existing in this area, but there is no Natural Reserve yet.

(4. Hien-Giang area (Quangnam-Danang province), though the tiger is distributing at five districts: Hien, Giang, Phuocson (Quangnam-Danang) and Aluoi, Namdong (Thuathien-Hue), but its populations are too small. About 10 tigers are estimated. Without Natural Reserve, the last tigers in Hien-Giang area will be extinct because, presently about 1 tiger is killed every year.

(5. Easup area (Daclak province) including Southwest zone of Chuprong mountain (Gialai province) is covered by the largest deciduous forest in Vietnam. It has area of 20,000 hectare. Long time ago, this area was named as "Mammal pocket of Indochina". In the years of 1978-1980, at Ealop, Eamo valleys and Yokdon National Park, the population of Sambar and Barking Deer reached to 1-1.5 individuals per 100 hectare. But up to now, due to many reasons (population development, deforestation, expanding the ricefield, hunting pressure...) the wildlife resources in this area are seriously reducing. The number of tiger is estimated between 10 and 15 individuals.

Conclusion.

1. The tiger in Vietnam is going to be extinct in the near future because of poaching and habitat loss. ^{able}
2. There is no program in surveying and studying for tiger.
3. There is no tiger conservation program.

Recommendation.

In order to protect and develop the existing tiger populations, these measures of solution should be done:

- Education program needs to be designed for the awareness of local people to respect seriously the Decree 18HĐBT, 1992.

- Vietnam needs the assistance, both on survey and management technics and finance from the international associations for tiger conservation program. First of all, three areas should be effected in priority and they are: Sathay, Muongnhe and Tuyenhoa-Minhhoa.

References.

- Dao van Tien, 1985. Khao sat thu mien Bac Vietnam (Scientific results of some mammals surveys in North Vietnam, 1957-1971). Hanoi: Scientific and Technical Publishing House.
- Do Tuoc, 1980. Tinh trang mot so loai thu quy hiem o Vietnam (Status of some rare and precious mammals of Vietnam). FIPI.
- Forest Inventory and Planning Institute:
- 1992. Luan chung kinh te ky thuat khu bao ton thien nhien Yokdon (Economic-Technique Project of Yokdon Natural Reserve)
 - 1993. Luan chung kinh te ky thuat khu bao ton thien nhien Muongnhe (Economic-Technique Project of Muongnhe Natural Reserve).
 - 1994. Luan chung kinh te ky thuat khu bao ton thien nhien Momrey ((Economic-Technique Project of Momrey Natural Reserve).
- Le Hien Hao, 1978. Thu kinh te mien Bac Vietnam (Economic mammals of North Vietnam). Hanoi: Scientific and Technical Publishing House.
- Roger Cox et al., 1992. Feasibility study of Muongnhe Natural Reserve. WWF and Ministry of Forestry, December 1992.