Chapter 7 The Conservation of Bears in Cambodia

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The Asiatic black bear (*Ursus thibetanus*) and the Malayan sun bear (*Ursus malayanus*) inhabit in Cambodia (Suon 2002). The species are locally known as Khlakhmom Thom and Khlakhmom Touch, respectively.

No scientific research has been conducted on the biology and conservation of either species in Cambodia. Now, the government is making efforts to enact international and national conservation measures into law. However, additional improvements are recommended.

Status

Distribution

No official information on bear distribution in Cambodia is available so far. It is generally believed that both species inhabit almost all protected forests and protected areas throughout Cambodia, especially in the northern, south-western, and eastern parts of the country where suitable habitats appear to remain sufficient. Since 2005, the Biodiversity and Protected Areas Management Project has been trying to develop a wildlife database by reviewing the reports of many forest and wildlife conservation projects in Cambodia. However, the database is still under preparation. With this attempt, it is expected that an official bear distribution map will also be produced and put into public use.

Habitat condition

During the 1960s, about 75% of Cambodia's total area of 13.2 million ha was covered by forests: 6.7 million ha were evergreen and mixed forests, 5.3 million ha deciduous forests and the rest were inundated forest, mangrove forest, bamboo, and other forests. However, civil unrest for the last two decades had caused a rapid and continuous decline in the forest resource. According to the Mekong Secretariat (1994), by 1985-86 forest cover had been reduced to only 67.4%, and by 1992-93 to 63.6% of the forest area existing before the 1960s. Similarly, the Forestry Administration (2003) indicated that forest had been reduced to 61.3% in 1992-93, and to 60.2% in 1996-97 of pre-1960s levels. FAO (2000) estimated that remaining forest in 2000 was only 52.4% of

the area forested before the 1960s.

Cambodia has a long history of nature conservation. The first national park, covering about 108 km² of forest around the Angkor Temple complex, was established in 1925. This was the first national park in South-East Asia. By 1969, the country had established six national parks and wildlife sanctuaries, covering 2.2 million ha (12% of the country). The two decades of political instability and civil war destroyed all the conservation efforts of the past (Keo 2003). As of 2006, over 4.3 million ha of forest (25.5% of the country's area) are under protection, which includes 23 protected areas and 4 protected forests, covering 3.3 million ha and 1 million ha, respectively. Protected areas were established in 1993 and were categorized into 7 National Parks, 9 Wildlife Sanctuaries, 3 Protected Landscapes, and 3 Multiple Use Management Areas. They are under the management of the Department of Nature Conservation and Protection of the Ministry of Environment (MoE). The protected forests were designated between 2000 and 2002, and are under the management of the Forestry Administration of the Ministry of Agriculture, Forestry and Fisheries.

Human-bear conflicts

There is no reporting system on crop damage and injury to humans by bears. Thus, no data are available.

Use of bear parts as a population threat

As with other wildlife species in Cambodia, bear parts (skin, meat, bone, paws, lung, heart, liver, intestines, gall bladder, and blood) are widely used for food and medicine (Suon 1999). Skin is important in decoration and is kept as a talisman for bringing about luck or protecting people from potential dangers. Bear meat is considered as delicious as other animal meat (e.g., fish, pigs and cows), thus is sometimes cooked for food. Bones are usually used as an antibiotic to treat skin problems such as abrasions and boils. Paws and some internal organs (including liver, heart and intestines) are popular soup ingredients, because Cambodians believe they improve sexual energy. In addition, soup made with bear lung is believed to have a positive effect on people with lung disease or sore throats. Another expen-

sive bear part, which is the most popular among traders, is the gall bladder. The dried gall bladder, which is chopped into small pieces and mixed with wine, is used to treat women after giving birth, as well as other problems such as hair loss, fever, low blood pressure, emaciation, inflammation, and focusing malfunction in the eyes. Similarly, bear blood combined with wine is used to reduce fever and to improve strength.

International trade of bear parts produces motivation to over-exploit both species of bears, which we believe is a serious threat to wild populations. These species may become extirpated unless we develop effective measures to stop hunting.

Bears in captivity

In Cambodia, zoos have been established by both government and private sectors. The government established the Phnom Tamao Zoological Garden and Wildlife Rescue Center in 1995 to keep confiscated animals obtained from illegal hunters and traders. This zoo now keeps 91 wildlife species, including tigers (Panthera tigris), elephants (Elephas maximus), bears, leopards (P. pardus), clouded leopard (Neofelis nebulosa), banteng (Bos sauveli), dhole (Cuon alpinus), gibbon (Hylobates spp.), sarus crane (Grus antigone), adjutant storks (Ciconia spp.), vultures, crocodiles, pythons, and cobras. There are 50 Asiatic black bears and 23 sun bears in the zoo. Two NGOs, i.e. Wild Aid and Free the Bear Fund, have cooperated with the Forestry Administration to look after the animals in the zoo. Since 1998, the Free the Bear Fund has assisted by providing food and medicine, facilities (including a wildlife hospital), and volunteer experts. As of 2006, there were 4 private zoos in Cambodia, most of which were involved in collecting animals illegally from the wild. There are no data on the number of bears in such private zoos.

Management system

The Royal Government of Cambodia has adopted several measures to prevent the extirpation of bears. The main strategies include establishment of the Forestry Law (enacted in 2002), and other regulations which relate to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), enforcing laws, and conducting short training courses, workshops, and education.

Establishment of the forestry law and other declarations

Article 48 of the Forestry Law states that "all kinds of wildlife species in the Kingdom of Cambodia are State property and the component of forest resources, includ-

ing all species of mammals, birds, reptiles, amphibians, insects, other invertebrates, and their eggs or offspring. Such wildlife is under the management, research and conservation of the Forestry Administration, except for fish and animals that breed in water. Wildlife specimens are dead wildlife, including the whole body, internal or external organs, the skeleton and processing products shall be under the management jurisdiction of the Forestry Administration".

According to the Forestry Law, all wildlife are divided into the following three categories: (1) Endangered species, (2) Rare species, and (3) Common species. The Ministry of Agriculture, Forestry and Fisheries, through the proposal of the Forestry Administration, shall issue a Declaration to determine the criteria for each category and establish a separate list for endangered and rare species, which may vary between regions in Cambodia, in consultation with Ministry of Environment. Asiatic black bears were listed as Endangered Species and sun bears were listed as Rare Species in the 1994 draft of this Declaration (Forest Administration 2005).

Here, we list detailed regulations of the laws related to wildlife. (1) The 22nd and 23rd Article (Decree No. 35, dated 25 June 1988) state that hunting of all species of wildlife is not allowed. (2) The 2nd Article of the Declaration No. 359, dated 1 August 1994, states that everyone is prohibited from hunting, poisoning, transporting, selling, or trading of listed wildlife species. The 3rd Article states that catching, poisoning, hunting, transporting, selling, or trading in living animal, meat, or wildlife specimens is only permitted by special permission from the Ministry of Agriculture Forestry and Fisheries (MAFF). (3) According to Article 96 of the 2002 Forestry Law, any individual, who has transported, stocked, or exported bears without a permit shall be fined 2 to 4 times the market value, as determined by the Forestry Administration. (4) Joint Declaration No. 1563 of the Ministry of Agriculture, Forestry and Fisheries, and the Ministry of Environment, dated 20 September 1996, states the intention of the government to prevent destruction of wildlife in the kingdom of Cambodia. (5) Announcement No. 3837 of the Ministry of Agriculture, Forestry and Fisheries, dated 14 August 2001, forbids wildlife trade.

CITES

Cambodia joined CITES in 1997 and intends to continue to adopt legislation for its implementation (Resolution conf. 8.4).

In Cambodia, there are two main pieces of legislation relevant to the implementation of CITES and the conservation of bear species: the Forestry Law, dated 31 August 2002, and Sub-decree on International Trade in

Endangered Wild Animal and Plant Species, dated 29 May 2006. TRAFFIC Southeast Asia in Indochina supported the project to develop the sub-decree on international trade in endangered wild animal and plant species. Several articles within the Forestry Law and this Sub-decree were enacted to protect bears species in Cambodia.

As of 2006, there have been 3 training courses and 2 workshops regarding trade and CITES conducted in Cambodia. In 2001, there was a workshop on Basic CITES Implementation in Cambodia, in which participants included law enforcement officers (e.g., foresters, fishery officers, customs officers, cam-control officers, Police officers), representatives from the Ministry of Agriculture, Forestry and Fisheries, Ministry of Environment, and other relevant institutions and representatives from provincial authorities. In early 2003, there was an unofficial/internal training course on Basic CITES Implementation that trained officers from the Forestry Administration and the Department of Fisheries. In late 2003, there was a training course on science in CITES, including participants from Cambodia, Vietnam, Thailand, Burma, Lao PDR, and China. Cambodian participants were representatives from various relevant governmental institutions. In 2004, there was a workshop to discuss the Sub-decree on CITES. In 2006, there was a training course on Basic CITES Implementation, in which 35 customs officers participated.

Law enforcement and awareness raising

Article 76 of the 2002 Forestry Law states that forest (and wildlife) offences are criminal offences. The Forestry Administration officials qualified as Judicial Police Officials (JPO) have jurisdiction to investigate forest offences and file such cases and documents to the court. In Forestry Law Article 77, "the Sworn Forestry Administration officials are qualified as judicial police officials when certified by the General Royal Prosecutors of the Court of Appeals". The powers of these JPO are subject to certain controls and limitations under both the Forestry Law and the Law on Criminal Procedures. In general, Forestry JPOs are subject to the coordination of the relevant Municipal and Provincial Prosecutors. Moreover, the CITES Management Authority of Cambodia has improved enforcement cooperation with other agencies, such as the Forestry Administration, the Department of Fisheries, and the Customs Department. As a result, a recent, two-day training seminar for Customs Officers was provided to 35 customs officers (26-27 March, 2006). TRAFFIC Southeast Asia and Wildlife Conservation Society provided technical and financial support for this training.

Collaboration with NGOs

There are many local and international NGOs involved in wildlife conservation issues in Cambodia. Local NGOs include Save Cambodia's Wildlife and Mlup Baytorng. The international NGOs are Free the Bear Fund, FFI, WCS, ITTO, WildAid, Conservation International, Birdlife International, WWF, WPA, and NSOK International. Of these NGOs, only Free the Bear Fund and CI have projects focused on bear protection.

Thus far, all NGOs have carried out their projects individually and separately. The government of Cambodia has been attempting to improve the conservation management system in the country by putting all NGO projects into a national conservation system, so that the output of the projects can be properly planned and controlled at a national level.

Recommendations

There are still many issues to resolve in Cambodia regarding natural resources and biodiversity conservation, especially the implementation of reformed policy, legislation, and CITES. The Royal Government of Cambodia, on one hand, wants to develop the country and raise living standards of local communities above the poverty line. But the government needs to balance this goal with its commitment to ensure the sustainable use of biological resources use for future generation, as stated in the National Rectangular Strategy (which is a document proposing steps for the country's development during 2003-2008). In order to enhance conservation of bears and reduce illegal wildlife trade, the following recommendations should be followed:

- Improve enforcement activities in accordance with current legislation on protection of bears and other species listed in CITES appendixes.
- (2) Cooperate with ASEAN Countries and CITES-member states on implementation of CITES and protection of species listed on the appendixes.
- (3) Collaborate with other national and international conservation organizations.

References

FAO (2000) Forest resources assessment 2000. Forestry paper 140, FAO, Rome.

Forestry Administration (2003) Cambodia: Forestry statistics 2002, Forestry Administration, Phnom Penh.

Forest Administration (2005) Draft on the endangered species identification in Cambodia. Forest Administration, Phnom Penh, Cambodia.

Keo O (2003) Flora, fauna, biodiversity and conservation, In: Asian Development Bank, Compendium on

- environment statistics 2003 in Cambodia, Phnom Penh.
- Mekong Secretariat (1994) Cambodia land cover atlas 1985/87 and 1992/93, UNDP/ FAO in FA (2003) Cambodia: Forestry statistics 2002. Forestry Administration, Phnom Penh.

Suon P (1999) Trade in bears and bear parts in Cambo-

- dia. In: Williamson DF and Phipps MJ (eds.) International Symposium on the Trade in Bear Parts, TRAFFIC East Asia, Republic of Korea. pp.68-72.
- Suon P (2002) Wildlife identification for law enforcement, Department of Forestry and Wildlife, WCS, TRAFFIC Southeast Asia-Indochina, Cambodia.