



A CASE STUDY.....

Panda: Focus and role of biological research for conservation

SUKANTA SARKAR

AUTHOR FOR CORRESPONDING :

SUKANTA SARKAR

Department of Social Science and Humanities, Faculty of Management Studies, ICAI University, AGARTALA, (TRIPURA) INDIA
Email: sukantaeco@gmail.com

ABSTRACT..... Panda are two types: (a) Giant panda and (b) red panda. Giant pandas are black and white bears. The red panda is dwarfed by the black-and-white giant that shares its name. The giant panda is a vulnerable species, threatened by continued habitat loss and habitat fragmentation and by a very low birthrate, both in the wild and in captivity. Habitat loss and fragmentation have reduced its numbers, shrunk its distribution and separated the population into isolated subpopulations. The main objectives of this paper are: (a) to study the situation of panda in Himalayan region and (b) to identify the reasons for reducing numbers of panda.

KEY WORDS..... Red panda, Giant panda, Bamboo, Population explosion, Mountain

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INTRODUCTION.....

Pandas are famous for their black and white markings. The legs, shoulders, ears and oval patches around the eyes are black and the rest of the coat is white (Panda Fact Sheet, 2012). Panda belongs to the family of bears (Panda facts, 2016). Panda are two types: (a) Giant panda and (b) Red panda. The giant panda is also known as the panda bear, bamboo bear, or in Chinese as Daxiongmao, the large bear cat (Giant Panda Facts, 2013). Giant pandas are black and white bears (National Geographic Kids, 2016). The giant panda is one of the world's most endangered mammals (Schaller, 1993). It was once distributed throughout most of the lowland forests of eastern and southern China, northern Vietnam and northern Myanmar (Hu, 2001).

The red panda is dwarfed by the black-and-white giant that shares its name (Red Panda, 2010). Red panda is slightly larger than a domestic cat with a bear-like body and thick russet fur. They are very skillful and

acrobatic animals that predominantly stay in trees (Overview, 2016). They are usually found in mountainous regions of India, at an altitude of more than 1800 m. They are very sensitive to heat and cannot tolerate temperatures over 25°C (Red Panda, 2014). Panda live in temperate climates, in deciduous and coniferous forests, usually with an understorey of bamboo and hollow trees (WWF, 2016).

RESEARCH METHODS.....

The paper is based on secondary information. Information are called from published sources, like as journals, books, news papers, government reports, magazines etc.

RESEARCH FINDINGS AND ANALYSIS.....

Panda is endemic to the temperate forests of the Himalayas and ranges from the foothills of western Nepal to China in the east. The red panda

population in Sichuan Province is larger and more stable than the Yunnan population, suggesting a southward expansion from Sichuan into Yunnan in the Holocene. The red panda has become extirpated from the Chinese provinces of Guizhou, Gansu, Shaanxi and Qinghai (Red Panda, 2016).

But due to expanding human populations and development, the species is now restricted to around 20 isolated patches of bamboo forest in six mountain ranges in China's Sichuan, Shaanxi and Gansu provinces (Habitat of the Panda, 2016). An increase in human population, particularly in China and Nepal, has seen the red panda's bamboo forest homes cut down and cleared for timber, fuel and agriculture land, pushing them to more remote, fragmented and often unprotected mountain areas (Red Panda, 2015).

People and wildlife are increasingly coming into contact as the wild spaces decrease, and the human populations grow. This causes conflict as wild animals destroy crops and kill livestock (Himalayas, 2016). Habitat loss and fragmentation have reduced its numbers, shrunk its distribution, and separated the population into isolated subpopulations. Such isolated, small populations are in danger of extinction due to random demographic factors and inbreeding (Shen, 2008). Pandas are often erroneously believed to be poor breeders, an impression rooted in the previous disappointing reproductive performance of captive animal. Studies of wild pandas, however, indicate that their reproductive rates are comparable to those of some other species of bears (Geographic Range Information, 2016).

The giant panda is a vulnerable species, threatened by continued habitat loss and habitat fragmentation and

by a very low birthrate, both in the wild and in captivity. The Sichuan Giant Panda Sanctuaries, located in the southwest Sichuan province and covering seven natural reserves, were inscribed onto the World Heritage List in 2006 (Giant Panda, 2016). Conservation of endangered wild giant pandas in fragmented landscapes has become a central issue for conservation biologists (Loucks *et al.*, 2003).

In the 1980s and 1990s, there were a number of cases of panda poaching, but this has declined due to strict laws and greater public awareness of the panda's protected status (Giant Panda, 2014). Both the giant panda and the red panda are hunted and poached for their fur. While poaching of the giant panda has declined considerably due to strict laws and greater public awareness of the panda's protected status, the red panda is still poached regularly for its pelt and for its glorious tail, which is used to decorate hats during wedding ceremonies in the Yunnan province of China (Red Panda Network, 2016).

Conclusion :

Number of red and giant pandas are decreasing continuously. People and wildlife contacts causes' conflict as wild animals destroy crops and kill livestock. Habitat loss and fragmentation have reduced its numbers, shrunk its distribution, and separated the population into isolated subpopulations. Pandas are often erroneously believed to be poor breeders, an impression rooted in the previous disappointing reproductive performance of captive animal. Poaching is also responsible behind it. Government of China and India has taken steps for conservation of Panda's by strict laws and greater public awareness.

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