

Case Study

A CASE STUDY ON WILDLIFE CONFLICT, AND CONSERVATION IN CHITWAN NATIONAL PARK (CNP), AMALTARI BUFFER ZONE, NAWALPARSI, NEPAL

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Abstract

World widely the wildlife attract huge number of tourists but, their conservation is a challenging job. The Government of Nepal and various organizations make plans to conserve the wild animals, while their conservation has negative role as well, because increase in number of wild, increases conflict between wild with Human, Livestock, and Crops. The increment of the number of tiger significantly increases the number of death due to tiger attack. Similarly, wildlife has conflict with the stray dog of buffer zone, but here the deer are being attacked by pack of stray dog. This attack has shown different negative effects in the wild animal conservation. CBAPU has shown significant role in the reduction of the poaching. Without community the conservation is not sustained and it cannot be maintained in its normal condition. Community people are directly benefitted from the national park and they protect wild animals, but stray dog are attacking the deer. The study conclude that community people are those who affected the most, benefitted the most and conserved the most.

Introduction

Chitwan National Park (CNP) is the first national park of Nepal with an area of 952.63km² covering 4 districts. Extending from altitude range of 330ft to 2,674 ft, it harbors more than 700 species of wildlife including 68 species of mammals (Bhujju, Shakya, Basnet, & Shrestha, 2007; Chitwan National Park Office, 2015). The buffer zone is the peripheral zone surrounding a specific protected area where public restrictions are imposed on resource use and special actions are taken for the conservation of the protected area. CNP comprises four buffer zones namely Sauraha, Kasara, Amaltari and Madi-Bagai. The practice of covering a protected area with other protected and non-protected areas aids in the creation of a gradient of protection around the core-site. Besides the protection of valuable species, such zones also facilitate the shifting of species within reserves to adjacent lands according to the climatic needs of species as mitigation against climate change (Hansen, L J, Biringer, J L, & Hoffman, n.d.).

The conflict between humans and wildlife has been one of the most challenging global issues for wildlife conservation (Woodroffe, Thirgood & Rabinowitz,

2005). Along with the increase in human population and subsequent demand of settlement, there exists huge competition for limited resources resulting in various conflicts such as livestock predation, crop-raiding, human injury and death, crop- pillaging and the revengeful killing of wildlife (Peterson, Birkhead, Leong, Peterson, & Peterson, 2010; White & Ward, 2010). When endangered or protected wildlife attacks human, such conflicts become extremely controversial. Fragmentation of large habitat leads to narrowing of the core region and divides the large population of wildlife (Cain, Bowman & Hacker, 2017). Similarly, destruction of habitat due to deforestation and rapid urbanization results in a decrease in available resources and hence supports a smaller population of wildlife that is prone to go extinct (Frankham et al., 2017). The article is focused in the role of community and the stray dog population management in the conservation.

Dog and Wildlife Conflict

We cannot deny that dogs are human's best and oldest friend. They have a curative effect in brain disease, they increase social harmony and increase confident

when they are with the blind people (Whitmarsh, 2005). In Nepal there are many stray dog, some of them are fed by more than one household and regarded as none of them (Massei et al., 2017). They have ability to transfer different zoonotic disease (Ghasemzadeh & Namazi, 2015), and may cause road accidents furthermore, they are hunting endangered as well as IUCN red listed animals in India (Home, Bhatnagar, & Vanak, 2018) and in Nepal.

Amaltari is located in middle Southern of Nepal; it has 22 buffer zone user groups. In the zone there are large number of stray and only few dogs are being kept as pet. Stray dog gather; make a pack to enter the Park. It is found that the dog mostly attack hog deer and spotted deer in the respective area. Hog deer (*Axis porcinus*) is listed in endangered species while spotted deer (*Axis axis*) is listed in vulnerable species by IUCN (Jnawali, S.R., Baral, H.S., Lee, S., Acharya, K.P., Upadhyay, G.P., Pandey, M., Shrestha & Joshi, D., Lamichhane, B.R., Griffiths, J., Khatiwada, A.P., Subedi, N., and Amin, 2011). Hog deer are sedentary; prefer grassland with nearby water source, grass and cover. Tall grass cover reduce small grass which reduce available grass in the deeper forest (Dhungel & O’Gara, n.d.). The area where the deer are attacked is favorable for stray to attack and for deer to rest and graze.

In case of Chitwan National park, there are different types of carnivores, which rely on the different herbivore animals like, deer, wild boar, monkey etc. Sambar and chital together contribute more than 80% of the tiger diet. Lamichhane S et.al (2015) suggests that both small and large sized prey is important for the tiger for their conservation in Chitwan National park. The dog and wild carnivores are competing for the same prey, which directly affect the population of wild carnivores.

Human, livestock and Wildlife conflict

Wild animal are capable of damaging crop, killing different livestock, sometimes they may kill human too. Krishna Prasad Acharya et.al (2016) has suggested that, Asiatic elephant and common leopard are most commonly involved in attack to humans. The average number of people killed from 1998 to 2006 increased by 10 fold, being 1.2 ± 1.2 which increased to 7.2 ± 6.9 per year. The cause behind this increment

is restoration of forest around the buffer zone. Among all people killed, half of them were grass collectors (Gurung, Smith, McDougal, Karki, & Barlow, 2008). Electric wire fencing is found to reduce the human killing and is cost effective (Sapkota, Aryal, Baral, Hayward, & Raubenheimer, 2014). General People raise livestock as a source of income, but the wild animals have been threat.

Conservation from Grass Root level

In 2009, Nepal and some other countries pledged to increase the number of tiger, make them double, by 2022. Authority succeeded to announce that we are the first to achieve our goal by raising the number from 121 to 235. The restoration has some price, which is paid by local people around, which has led to conflict between Park authority and local people. There are various conservation organizations, which are working, together for wildlife. CBAPU (Community Based Anti-poaching Unit) is community based conservation unit, has great role in the conservation of wild animals. It includes those communities, which are indigenous to the place, and have knowledge, and skills related to the local resources. It is reported that Community Based Anti-poaching Operation is significantly reducing the rate of poaching of the wildlife (Bhatta, Bhattarai, & Aryal, 2018). They conduct afforestation program in different occasion, clean buffer zone area, and to reduce plastic they had banned it in some villages.

It is very important to include those of local people, because they have knowledge and deep relationship with the jungle and wild animals. We needed cheap and effective conserving hands, which is not suitable to use army force. Bajracharya et al. (2007) explains that conservation by violating the community is very difficult.

A case of injured Deer in Amaltari area of Buffer zone

Deer in National Park, used to graze around the edge of the forest. Spotted deer, hog deer are mostly seen. In 2000s people of buffer zone used to defecate in open, and it was food for dog being coprophagy. Nowadays, no one defecate in open area, this reduce feed for dog. So nowadays, they feed in garbage from small slaughterhouses; they feed on dead animals

flooded by river, or haunt themselves. Here hunting is directly related to wild as well as domestic livestock. 3-5 dogs gather, they went to jungle or near to livestock, and attack the animal. In the Amaltari buffer zone in 5th of April, 2019 two deer were attacked by a pack of dog, they were 5 in number, and attack was done at the edge of jungle. CBAPU was nearby, who rescued one of deer, and one was dead. This is a common case in that area, and such case occur as maximum as twice a week additionally, some of such cases may go unnoticed.

Conclusion

Dog play very important role in the life of community people who play important role for the protection of wild. Communities are getting benefit from those stray and stray get advantages from people around them. Of those dogs, few are killing the wild, being threat to wild animal conservation. The same pack used to repeat the incident, and became menace. Wildlife are also taking human and livestock life,

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damaging crops. Local community Based Conservation Organizations are improving the conservation approach, and

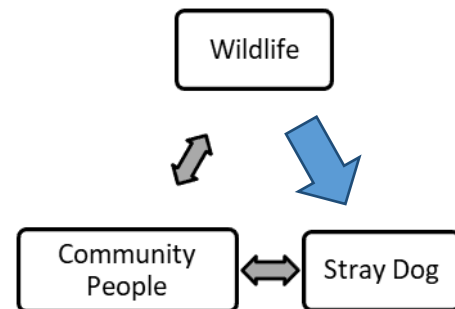


Figure 1: Relationship between Stray dog, Community people of buffer zone and

reducing poaching. From the article we can conclude that, local communities are only people who affected the most, benefited the most and conserve the most. The government must take strong step to manage and control the stray dog population so as to aid in the protection of wildlife.

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