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To Study of Site selection, Research design and methods of Corbett National Park, Ramnagar.

¹ R. K. Singh, ²Meenakshi bisht and ³ Pravesh Kumar Sehgal

¹ R. K. Singh' Associate professor, Department of Zoology Govt. (P.G.) College, Ranikhet , Almora, Uttarakhand.

²Meenakshi Bisht Department of Zoology kumaun university nainital-263002

³Pravesh kumar Sehgal, Associate professor, Department of Zoology, School of Science, Behind Transport Nager, Haldwani 263139, Nainital, Uttarakhand.

ABSTRACT

The National parks are symbol of protected areas of wild life especially endangered species. In one side human establish these national parks to protect the wild life and in other side he is disturbing it one self. The main purpose of this study is to know the causes of human induced disturbance in and surrounding areas of Corbett National Park and quantify them. Corbett National Park is situated in the foothills of outer Himalayas with in districts of Nainital and Pauri Garhwal and occupies the middle reaches of the Ram Ganga, covering an area of 520.82 sq km. This study is based on the first national park of India, Corbett National Park, Ramnagar. Corbett national park is rich in floral and faunal biodiversity. This study highlights how the human activities are resulting in various problems to the national park. These activities are affecting the park environment severely. By good education, stick rule, awareness and providing job to the local community this pressure may be minimized in the Corbett National Park.

Key Words - Site selection, Research design and methods Corbett National Park Ramnagar

INTRODUCTION

Corbett National Park is the area of high biodiversity, including some species of flora and fauna with natural beauty. The aim of establishing to Corbett national park is to protect and conserve the wildlife, especially the species those are facing serious problems. A healthy national ecosystem is rich in biodiversity and gives a suitable opportunity for development. Disturbance and loss of biodiversity reduce the ecosystem health. To minimize these disturbances Government of each country established some protected areas. Protected areas have long been recognized as the single most important method of conserving wildlife and preserving biological diversity (Kideghesho et al., 2006). Protected areas not only protect the biodiversity but also they are expected to obtain resources for improving human health and for distributing economic profits for local people (Noughton-Treves et al., 2005). Corbett National Park is very sensitive area due to

wildlife but facing many disruptions. These disturbances are arising due to local people. These protected areas are known as national park, wild life sanctuaries, biosphere reserve, botanical garden, seed bank, etc. National park is established to conserve and protect biodiversity. The reasons for establishing national parks are given below:

- a) National park is established for protect and conserve wildlife and biodiversity.
- b) National park is important to promote the sustainable use of the biodiversity for future generation.
- c) To promote the population growth of different species of fauna and flora especially endangered species.

Corbett National Park is the first and oldest national park of India, and it is getting disturbed by several direct or indirect activities of humans. So, in present, the wild life of park is badly affected by these activities. Today CNP is facing many problems due to human induced disturbance. Corbett National Park is very rich in faunal and floral diversity in all over world, especially for Tiger, Leopard, and Elephant. In 1973 a Project Tiger was launched in CNP and this was the first Tiger Project of India. The main aim of this Project Tiger was to save the Tigers of India. The surrounding community has been always depending on the CNP for their livelihood. They do many activities such as grazing, poaching, farming, fire etc. in the park. Initially, these activities were not a big issue but with increase in population and their dependency, nowadays it is a major area of concern. At the beginning, villagers did these activities for only fulfill their primary needs but as the time has been passing, these activities are becoming uncontrollable. Due to over exploitation by villagers and tourists Corbett National Parks is facing many problems. The most important problem is extinction of wild life species and this problem becoming major day by day. Biodiversity, therefore, is being exploited at much faster rates than ever before with negative implications for sustainable human livelihood (Turner et al., 1990).

REVIEW LITERATURE

Primary threat to biodiversity worldwide is hunting which leads to major demographic changes in targeted and non-targeted species which in turn leading to local and global extinctions, as well as ecological changes that disturbs ecosystem services and livelihoods (Milner-Gulland & Bennett, 2003; Brashares *et al.*, 2011). Rural communities are provided with goods and income from wild and large herbivores. They have major impacts on land use and habitats of conservation importance and in some cases, face local or global extinction (Gordon et al., 2004). in the Kilombero Valley, southern Tanzania, several reports tells that wild animal populations use the areas less which are grazed heavily by the livestock, and that those areas previously used by wild animal species will be avoided following the encroachment of livestock (Bonnington, et al., 2007).

Protected areas have long been recognized the single most important method of protecting wildlife and preserving biological diversity (Kideghesho, et al. 2006). Protected areas are popularly associated with vast areas of 'undisturbed wilderness' (Twyman, 2001). Protected areas perhaps hold a uniquely hostile place in the conservation toolbox because some view them as having been established at the expense of local through displacement and regarded by others as responsible for perpetuating poverty by the continued denial of access to land and other resources (Ghimire & Pimbert 1997). Anthropogenic activities have elevated the rate of species extinctions to a thousand or more times the natural background rate (Pimm et al. 1995). Human encroachment into wildlife habitat which has increased exponentially over the last few decades has usually resulted in the elimination of the species, especially the large mammals (e.g., Eltringham, 1990).

OBJECTIVE

1. A demographic study of localities surrounding Corbett national park.
2. Study of the impact of localities behavior on the Corbett national park.
3. To make a recommendation for better management of the park

STUDY AREA

The Corbett National Park has been chosen for this study, as it is the oldest national park and rich in floral and faunal biodiversity. Corbett national park covers 520.82 sq. km area. To study localities activities and their effect on the park we take seven villages that lie 0-7 km from the park's boundary.

METHODOLOGY

This study is based on secondary data and descriptive in nature. Secondary data has been acquired from Corbett tiger reserve office Ramnagar, books, journals and from the internet, which is related to the national park.

SITE SELECTION

CNP was chosen for this study as this the first and oldest national park of India. Being rich in floral and faunal biodiversity, it is a one of the highest source of income for the government. Tiger is main attraction of this park. CNP plays a very important role to provide income to localities. Since CNP is facing many challenges, such as increased dependency of local community, poaching, fire burning and tourism raised problems, so this park is chosen for study. Seven neighboring Villages of CNP were chosen for this study. Where villagers are depending on the CNP for basic needs, the park is being negatively affected by the different activities of the tourists and villagers. In this study, different activities of villagers and tourists have been identified, through which park is negatively affected.

LOCALITIES ACTIVITIES IN THE CORBETT NATIONAL PARK

Many villages surround Corbett national park. In this study, we took seven villages that lie at 0-7 km from the park boundary. Dhela, Himmatpur Dotiyal, Kaniya, Sawal Deh West and Chorpani are the villages which located toward the southern edge. Muhan and Dhikuli are the villages, which located close to the eastern side.

TABLE-1 : DISTANCE OF VILLAGES FROM CORBETT NATIONAL PARK.

S.No.	Name of village	The distance of Village from the Corbett national park.
1	Dhela	0 km
2	Sawal Deh West	5 km
3	Himmatpur Dotiyal	4 km
4	Kaniya	4 km
5	Chorpani	6 km
6	Muhan	3 km
7	Dhikuli	6 km

Source: CTR office, Ramnagar.

From Table 1, distances of these villages from the Corbett national park boundary easily be seen. With 0 km distance from CNP, village Dhela is nearest to the park, whereas the distance of village Chorpani is 6 km from park boundary which is the maximum distance.

TABLE-2: LIST OF VILLAGE'S POPULATION GROWTH FROM 2001 TO 2011.

S.No.	Village Name	TOT_P_2001	TOT_P_2011	Growth rate %
1	Dhela	1248	1402	1.23%
2	Sawal Deh West	1641	2023	2.33 %
3	Himmatpur Dotiyal	572	967	6.91 %
4	Kaniya	1314	2099	5.97%
5	Chorpani	823	2251	17.35%
6	Muhan	202	185	-0.84%
7	Dhikuli	1020	1344	3.18%
	Total	6820	10271	5.06%

Source: Vikas Bhawan, Bhimtal.

As per 2001 census, the population in selected villages was 6820 which reached to 10271 as per 2011 census. It has been almost 50% growth in population. The growth rate in these communities is 5.06%. The interesting point here is the people of Muhan, which is decreasing, while in other villages population has been increasing.

DISCUSSION

CNP is circumscribed by few villages which are distributed within 7 km range from park boundary. 7 Villages are taken for the study, these villages are Dhela, Himmatpur dotiyal, Kania, Chorpani, Sawal deh west, Muhan and Dhikuli. Village Dhela lies nearest to the park at 0 km while Dhikuli and Chorpani are having maximum distance of 6 km from the park boundary. Dhela, Himmatpur Dotiyal, Kaniya, Sawal Deh West and Chorpani are located toward the southern boundary while Muhan, Dhikuli, are in close to the eastern side. In these villages most of people are from Kumaon. Brahmin, Rajput, Muslim, boksa, gujjar caste are easily seen in these villages. The villages, which are situated near the city Ramnagar are more developed than those that are near the park. Electricity facility is available in these villages but still many households are depending on kerosene. At present, most of houses are made of bricks and cement but there are some houses also that is made of mud, timber and poles.

Corbett national park has the mission to protect and conserve the biodiversity. Villages surround most of the national parks. Villagers are residing there for a very long time. The population was not an issue at starting, but in recent years, the rapid growth of population becomes the major area of concern of the national park. The speed, in which the population is increasing, it may be an indicator of biodiversity risk. About 67.22% people are non-working in these villages, so we can understand how much they are dependent on the park for their basic needs. Directly or indirectly, they are dependent on Corbett national park for their need. CNP provides not only a home for poor villagers but also give the fuelwood, timber, plants, grass for their livestock, fruits, etc. some villagers got a job due to CNP. Nowadays most of the houses are made of bricks

and cement but all villagers are not capable of building such house, so some of them are dependent on the CNP for mud, timber or poles to make their home.

Villagers are dependent on national parks for their needs and shelter. Agriculture is useful occupation of many villagers. But for their use a large area of the park. Villagers do agriculture subsistence and sometimes commercially also. Many villagers have livestock also. For their fodder, they depend on the national park. Thus, livestock feed on that food and grass which is available for herbivores animal of the national park. As a result, it creates pressure on herbivores animal of the park for food and grass. Sometimes in search of food and water animals comes in the villages which is present in the buffer area of national park. On coming near the villages, conflict start between villagers and wild animals of the national park and sometimes occur between wild animals and livestock. Despite being benefited in so many ways, some people do such activities which are not good for park's environment like fire burning. Most of the times after smoking, people throw burning cigarettes on the field, and their negligence becomes the cause of fire burn. The direct effect of fire burning is the death of fauna and destruction of flora. The indirect effect of wildfire can be seen as habitat loss of wild animals, lack of food availability which can cause conflict between wild animal and human or conflict between wild animal and livestock.

CONCLUSION

Our study indicates that CNP is facing many problems because of surrounded villages and tourists. Populations of these villages are increasing continuously. Due to lack of education, or less education, villagers are facing the problem of unemployment. Neighboring villages are dependent on the park from starting, but with increase in population and due to unemployment, the dependencies of these villages on CNP have been increasing drastically. The local community is dependent on CNP for fuelwood, timber, plants, grass for their livestock and wild fruits. CNP is facing pressure due to high consumption of fodder and fuelwood by villagers. Many Villagers have livestock. Livestock grazing in park, is creating a pressure and causing conflict situation

RECOMMENDATION

Disturbance is a common phenomenon and widely distributed in nature. It can be defined as a discrete event along the passage of time that changes community, ecosystems, population structure and landscape (White and Pickett, 1985). The presence of people near the national park poses a critical challenge for the park management. Local community has been always benefited from the park resources and with the increasing population their dependency on park is also gradually increasing. In these villages, local community does many activities, some activities are in form of dependency (such as fodder, timber collection, fuelwood collection, grazing etc.) and other is negative. Visitors do also some unwanted activities which disturb the park environment. The objectives of this study are-

OBJECTIVES

- Demographic study of standard of living in neighboring areas of Corbett National Park.
- To investigate and quantify the various human activities in and neighboring areas of Corbett

National Park

- To study the effect of various human activities on Corbett National Park.
- To make recommendations for the effective management of the park.

Corbett national park is situated in the foothills of Himalaya in Uttarakhand state. The Corbett National Park's area lies between 29°25' to 29°40'N latitude and 78°5' to 79°5'E longitude. Total area of the Corbett national park is 520.82 sq. km.

- i. One most important thing is to educate the local people. To provide the proper education it's important that each village should be benefited from the primary school, high school, and intermediate school.
- ii. The main cause of more dependency on the CNP is unemployment. Most of the villagers are non-working or get a job for few months. So, it's critical to minimize the dependency that at least 60-70 % job should be reserved for the local community in the CNP management, resorts or in tourism.
- iii. With the help of local people plantation and proper conservation in the surrounding area of CNP is the better option to minimize the vegetation disturbance in the CNP.
- iv. By providing fencing and walls between villages and CNP, we can reduce the conflict between wild animals and livestock or local people.
- v. For better management of the park, it is important to involve the local population officially. Without local people involvement, it's impossible to conserve biodiversity.

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