



Full Length Research Article

FIELD VISIT TO LAMTANG NATIONAL PARK OF NEPAL

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ABSTRACT

Visiting the protected areas like National Parks, Wildlife Reserves, Conservation areas, Buffer zones is a part of scientific education. It is the practical method of learning i.e. learning by direct observation. Protected areas are the resourceful places where from the people of different field gain the knowledge from the different point of view. It helps to create awareness to the large mass of people towards the vulnerability of a wide variety of flora, fauna, geography, climate, socio-economy, tourism etc. It also creates the opportunity for development of tourism in the environmental friendly methods i.e. ecotourism and thus increasing the national economy. It is very essential to broaden the knowledge of conservation education on which the existence and survival of whole the living organisms including human beings depends. Visiting the protected areas also offers the opportunity to expose something new and learn lots of things which is not possible merely by the study of books. Theoretical knowledge gained by book is not enough until it is practically implemented. The present study of Lamtang National Park is genuinely based on field visit and direct observation. Visiting the National Park of mountain area, interacting with the people, collecting data, trekking new places is really adventurous and exciting. It is a new method of learning which may inspire the people to study the protected areas of remote mountain by enthusiastic field visit and use the knowledge in performing scientific research.

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INTRODUCTION

So far as the National Park or protected area is concerned, United States comes in first rank in the establishment of National Park. The example is the Yellowstone National Park (Mackinnon1986). After that only other countries of the world realized the value of Protected areas and then protected areas and National Parks went on being established. Allin (1990), mentioned that the impetus for the establishment of Yellowstone National Park was the public demand of USA. In developing countries including Nepal, the concept of preserving the natural resources was developed by the inspiration of foreign scholars, naturalists, scientists, businessmen, colonial administrators, visitors and affluent leisure seekers. They used to impose the different types of Parks and reserves to the indigenous local people along with their cultures around the world (Allin, 1990).

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Following the ii World-war, many countries who were in the colonial state prior to the world war, started to adopt the Parks and reserves with a belief that management, maintenance and protection of natural resources encourages scientific tourism involving scientific research along with the flow of foreign currency. Regarding the Langtang valley, a mountain park, Miller (1981) noted the particular species of plant called *Andropogon tristis* as the indicative of good range land condition. He wrote about it as the climax plant species of this region. During the survey of Langtang valley, especially the Southern slopes of Lamtang, DUHE (1970) noted certain shrubs along with a community of *Caragana nepalensis* and other shrubs which were developed as the grazing area. It was due to the disappearance of the forest that most of the area was being converted in the form of grass land which was used for grazing of the different types of animals. The area was being used for over grazing also. Plant species in the area were also noted by Dobremez (1972). Cox (1985) and Meveigh (in progress) studied the indigenous pastoral management system in Lamgtang VDC. And Fox et al (without date) for information on Syabru VDC.

So far as Nepal is concerned in terms of National Parks, the United States system was first attempted in the beginning of the National Park and protected areas movement. There are many areas in Nepal which are suitable to be categorized as the National Parks due to the quality, features, ecology and the other parameters along with the history of human habitation and the existing villages within the proposed boundaries near the National Park and protected area site. Government at first, attempted to implement the North American model of protecting and conserving the wildlife Reserves, National Parks and other protected areas by excluding the inhabitants of the park area who used to use the forest products like fire-wood, fuel-wood and depend mostly on forest by doing activities like grazing their cattle near the National Park, collecting grass and fodders from the forest, using forest area in doing agricultural activities etc. Inhabitants near the lake Rara were excluded somewhere far to Terai from the Rara lake area so as not to allow them to disturb the National Park and Protected area. But unfortunately, those people who were compelled to live in the hot climate of Terai region could no more adapt in the new type of climate and were suffered from malaria disease. So the government understood that excluding the natural inhabitants of the National parks and near the Park area is not the right way of protecting wildlife and National Parks. Instead, the right way was to involve people in the conservation and management process and that is possible by creating the feeling of responsibility and awareness in them. By the method of the participatory approach, it was possible to protect and manage the National Parks and Wildlife Reserves in a sustainable way.

Study area

Lamtang National Park, established in 1976 by the Government of Nepal, covers an area of 1,710 sq. km.

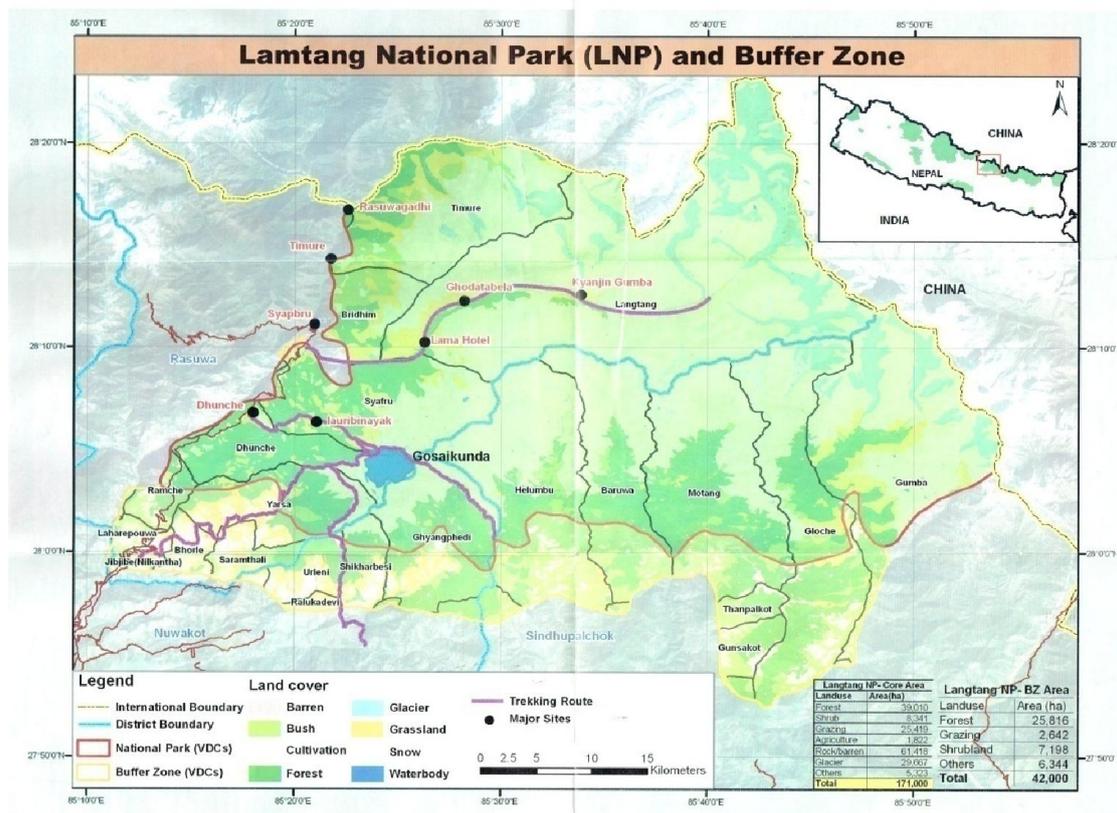
It extends over the three mountainous districts of Nepal which are, Rasuwa, Nuwakot, Sindhupalchowk up to the Southern mountainous terrain of the Nepal-China border located in Tibbet. The Lamtang National Park is like a meeting point between Indo-Malayan and palearctic Realms. The Park encompasses the famous pilgrimage called Gosainkunda and associated lakes which were declared to be wetlands of international importance in 2007 under the Ramsar convention. Lamtang National Park is rich in biodiversity due to its unique features which are, graded climatic conditions of the central Himalayan type, elevation gradients ranging from the mid-hills to the alpine zone, a complexity in the topography and geology.

It also possesses an area of 420sq. km. as the buffer zone declared in 1998 and has been managed by the joint venture of the park management and the local communities. As the Lamtang National Park was established with the main objective of conserving the unique flora and fauna of the region, it has involved the local communities in decision-making role in the management of this area. In addition to this the National Parks and Wildlife Conservation Act has made the provision of ploughing back about 30 to 50 percent of the park's revenue into community development as well as in the conservation of the buffer zone.

Following programs are undergoing in the buffer zone of Lamtang National Park by the joint effort of the Park management and the communities:

- Biodiversity Conservation Programme
- Community Development Programme
- Conservation Education and
- Income generation and skill development





Ethnic groups

Lamtang National Park area consists of the three main ethnic groups in LNP area and its buffer zone. They are Tamang, Yolma(Sherpas) and Bhotia. All the three groups have been found to be of Tibetan origin.



They follow the 'Bon' religion which is a form of pre-Buddhist doctrine and is prevalent in Tibet. The monasteries and the religion of the ethnic groups reflect the rich Buddhist tradition. They have their own religion, culture, language, dresses, ornaments and customs. The historical and spiritual wetland called Gosainkund is considered to be created by Lord Shiva when he tried to draw water to cool his throat after swallowing poison by thrusting his trident into a mountain.

Flora: As the Lamtang National Park is genuinely a mountainous park, it is rich in floral and faunal diversity of mountainous nature.

It consists of the following types of vegetation each consisting of its characteristic type of flora and fauna. The sub-tropical vegetation is characterized by the Sal forest(*Sorea robusta*), *Schima castanopsis*, Chirpine and Nepalese alder. The temperate zone is characterized by *Rhododendron*, oak, Silverfir, Hemlock, and Larch (*Larix nepalensis*), the only deciduous conifer in the region is found in the park. Juiper and the *Rhododendron* shrubs (*R. anthopogon*) gradually dissolve into the expansive alpine grassland meadows.



Fauna: Lamtang consists of high altitude meadows which is the suitable habitat for the musk deer and the Himalayan tahr. It also is the habitat for the other mountain fauna which are mainly Red panda, Himalayan Black bear, Snow-leopard, clouded-leopard, Wild dog, Goral, Serow and other more than 250 species.



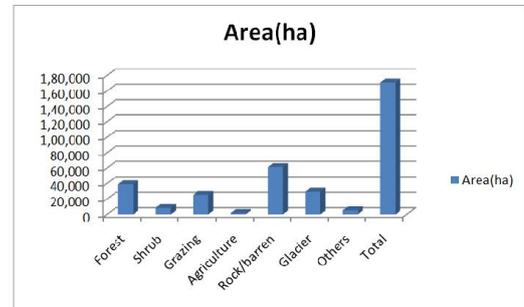
Figure- Lamtang National Park

The major attractions of Lamtang National Park: The major attractions of the Lamtang National Park are:

- Lamtang valley
- Gosainkunda lake
- Buddhist culture
- Helambu region
- Red panda
- Lamtang valley (Trekking route) contain the hill-top view point (Kianjin), cultural sites like Panch pokhari (five lakes), Heambu, the toe of the Langtang glacier etc.

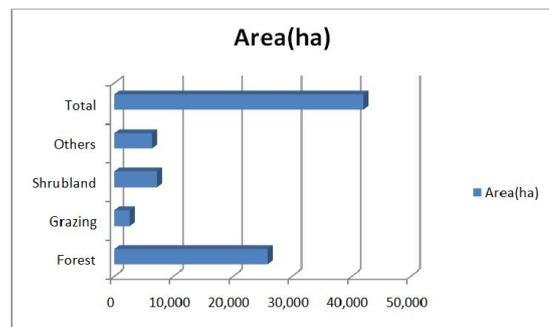
MATERIALS AND METHODS

Field visit to Lamtang National Park was done in the month of June of the year 2014. A group of professors and students of BSc. third year zoology and Bsc. third year Environmental Science started the field tour from the main city of Kathmandu to the eastern side in the Sindhupalchowk district which is one of the district adjoining the Lamtang National Park.



Source- Department of National Park and Wildlife Reserve, Kathmandu.

Figure 1. Showing the core area of Lamtang National park



Source Department of National Parks and Wildlife Conservation

Figure 2 Lamtang National Park consists of Buffer zone area as mentioned

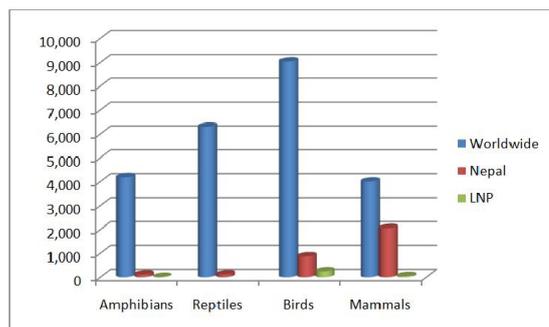


Figure 3. The number of wildlife species found in Lamtang National Park is represented in the figure mentioned below

Table-1. Wildlife species of Lamtang National Park consists of following numbers

Species	Worldwide	Nepal	LNP
Amphibians	4,184	117	11
Reptiles	6,300	123	11
Birds	9,040	867	250
Mammals	4,000	2,058	46

Table 2. Showing the protected mammals and protected birds of Lamtang National Park

S. No.	Nepalese name	English Name	Scientific Name
Protected mammals			
1.	Habre	Red panda	Ailurus fulgens
2.	Hiun Chituwa	Snow leopard	Panthera uncia
3.	Chiru argali	Tibetan antelope	Pantholops hodgsoni
4.	Kasturi mriga	Musk deer	Moschus chrysogaster
5.	Asamy or pahare bandar	Assamese monkey	Macaca assamensis
6.	Charibagh	Leopard cat	Prionailurus bengalensis
7.	Salak	Pangolin	Manis pentadactyla
8.	Himali khairo bhalu	Himalayan brown bear	Ursus arctos
9.	Dhwane chituwa	Clauded leopard	Pardofelis nebulosa
10.	Bwanso	Grey wolf	Canis lupus
Protected birds:			
1.	Danphe	Impeyan Pheasant	Lophophorus impejanus
2.	Munal	Crimson Horned pheasant	Tragopan satyra
3.	Chir	Cheer pheasant	Catreus wallachii

It took two days to reach in the core area of Lamtang National Park. First day of the tour we reached to the Melamchi Bazar in Sindhupalchowk district. We had the night stay in Melamchi in the department of water supply. On the second day we visited Melamchi Bazar, its surrounding area, different area in and around Melamchi which were important as the places were affected by land- slide, erosion, flood , heavy rainfall etc. We had the interaction with the local people of different ethnic group like Tamang, Sherpa, Bhotia, Brahmin , Kshetri, Magar, Newars etc. Questions were asked as much as possible with the different age groups of different casts and cultures regarding the major important places, flora and fauna of Lamtang National Park. We walked on foot and took short trekking where the vehicle could not be reached. On the second day of the tour our group headed towards the large water resource area i.e the famous dam of Melamchi water resource.

It was geographically a little bit remote area with difficult path to reach there by crawling on the way. We visited the important places like Helambu, Timbu, Sindhukot etc during our field visit. Pictures of environmentally impacted area were taken. Water samples and soil samples were taken by the students of Environmental science for further research study after coming back. On the third day we went to Sindhukot to observe the tunnel which was under construction for water supply from Melamchi to Kathmandu. On the fourth day also we visited the different villages, forests, rivers etc by interacting with the local people. On the fifth day we returned back to Kathmandu after completing our field visit. During the field visit we observed over-grazing area, animal husbandry, commercial and subsistence use of wild plant harvesting, cheese-making by local people, fuel-wood collection etc in Lamtang National Park area. Questionnaires were prepared for interviewing with the local people so as to collect primary data as much as possible.

RESULTS AND DISCUSSION

Lamtang National Park core area consists of 39,010 forest, 8,341 Shrub, 25,419 Grazing area, 1,822 agricultural land, 61,418 rock/barren, 29,667 glacier and others including 5,323. The total core area of Lamtang National Park is 171,000

Lamtang National Park consists of the total Bufferzone area of 42,000 (ha) of land involving 25,816 (ha) of Forest, 2,642 ha of Grazing land, 7,198 ha of Shrub-land, 6,344 ha of others.

Conclusion

Lamtang National Park, a resourceful and rich mountain Park is unique in its various features. It is the National Park which attracts tourists from national and international field. It is rich in biodiversity. So, it attracts the attention of every nature lover. Protected species of this park need more concern for conservation, monitoring and organized management in the coming future.

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