



Ecotourism in Ladakh: A Critical Aspect to Contemplate

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Abstract

Ladakh has always remained a tourist destination for many in the world. Since the region was opened for the foreigners in the late 70s, it has played host to lakhs of tourists in the recent times. While the increase in tourist arrival brought with it a huge foreign exchange and employment opportunities to the region, a sense of concern remains in the recent times among the Ladakhi people about the drastic changes which have been witness in the region especially in regard to its ecology and socio-cultural milieu. The said goal of conservation and livelihood of eco-tourism often results with environmental objectives outweighed by other objectives. In the aftermath of union government decision to grant Union territory to Ladakh, the developmental activities in the region are bound to expand and so is the arrival of tourists. In this paper, I will be discussing the various implications of the concept of eco-tourism which is propagated as a sustainable of tourism by developmental experts. It particularly focuses of how ecotourism in Ladakh is understood by various stakeholders in the region

Key words- Ecotourism, Ladakh, Development, Himalayan region

Introduction

Tourism industry is one of the fastest and biggest growing industry in the world. UNWTO (2013) notes that international tourist arrivals worldwide surpassed the 1 billion mark for the first time, precisely tourists 1.035 million compared with 995 million in 2011, while international tourism receipts amounted to \$ 1.075 billion in 2012 compared to 1,042 billion realized in 2011. International tourist arrivals grew 6.8 per cent in 2017, the highest increase since the 2009 global economic crisis and well above UNWTO's long term forecast of 3.8 per cent per year for the period 2010 to 2020 (UNWTO Tourism Highlight, 2018 edition). Acknowledging the sheer size of this industry across the world, it is not wrong to consider it as an option for wealth generation by many countries. For instance, over 70 per cent of island country Maldives' foreign exchange earnings come from tourism (Kundur 2012). In India, international tourist arrivals grew from 14.57 million in 2016 to 15.54 million in 2017 (economictimes.indiatimes.com/ accessed on 23 July 2018). Economic Survey of India, 2018, points out that the foreign exchange revenue earned from tourism grew 20.8 percent to \$ 27.7 billion in 2017. The ministry of Tourism of India also reported that the year 2017 witnessed a growth of 15.6 per cent in terms of foreign tourist arrival (FTA). Ladakh, on the other hand, witnessed a huge growth in hosting tourists, reaching the height of 30 per cent annual growth rate in total tourist arrival, around 568123 tourists visited Ladakh from 2014 to 2017. According to the director tourism of Kashmir, the region received record number of over 2.77 lakh tourists in 2017.

Corresponding to this growth are concerns about the veritable impact of tourism on the environment. The essential arguments levelled by the critiques of tourism is that, the massive potential to boost the economy of a country as it seem, destroy what it seeks to find. As a result of this, there are new concepts of tourism that is receiving significant attention from academicians to policymakers across the globalized world. Few promising alternative tourism paths include green tourism, eco-culture tourism, heritage tourism and the concept discussed in the present paper: Eco-tourism. Lowman (2004) hailed ecotourism as the panacea, minimising environmental impact, boosting economy for the local communities and also maximising the tourist's satisfaction. Over and above, what it attracts most is the sheer capacity of this alternative tourism to shrink the time period for achieving 'sustainable development'¹. This becomes even more important when it is contextualised in Ladakh, where the travel enthusiasts all over the world are making its target destination (Dewan 2017). Since its inception, ecotourism has considerably grown (Dowling and Fennel, 2003; WTTC, 2004) and expanded at an unprecedented rate all over the world. While the tourism industry has an estimated growth of 4 per cent annually, nature travel² boost of a growth rate between 10 per cent and 30 per cent (www.downtoearth.com accessed on 13 November 2018). Witnessing the growing prospects of ecotourism has generated interest from a multitude of stakeholders because it satisfies seemingly desperate needs of conservation, tourism (Donohoe and Needham 2006) and most importantly the livelihood of the local communities who often remained neglected in this growing travel industry.

¹ Tourism has the potential to contribute, directly or indirectly to all the 17 goals of Sustainable development targeted under by the United Nation. In particular, it has been included as targets in Goals 8, 12 and 14 on inclusive and sustainable use of oceans and marines resources, respectively.

² There are many definition of ecotourism. They vary in regard to restrictiveness, depth and perspective. In this context, I used the simple definition given by Boo (1993); Fennel and Eagles 1990; Stewart and Sekarjkrarim 1994 which has used ecotourism as a nature based tourism.

Understanding Ecotourism

Ecotourism is basically a kind of tourist activity, which keeps tourist operations and the nature on a similar ground, thereby enhancing nature's reach of tourists in concurrence with the nature's need (Wallace and Pierce 1996). As a concept, ecotourism is not a new one, as it originally appeared in the late 1960s and early 1970s (Nelson, 1994). The idea of ecotourism was primarily generated from the concern of numerous researchers in figuring out the untoward use of natural resources made by visitors in different natural destinations (Mitra and Khan 2017). In the mid 60s, Hetzer (1965) referred to a form of tourism '*... based principally upon natural and archaeological resources such as caves, fossil sites (and) archaeological sites*'. By 1980s, the global consciousness for the environmental issue has reached at its acme, in this context; an environmentally sustainable tourism gained further ground. The term 'Eco-tourism' had even firmly established by then. Boo (1990) cites that environmental tourism in the 1980s led to what is now known as ecotourism. In 1987 Ceballos-Lascurain gave a more widely accepted definition of Ecotourism (Blamey, 2001; Boo, 1990) it stated: that,

It is an environmentally responsible, enlightening travel and visitation to relatively undisturbed natural areas in order to enjoy and appreciate nature (and any accompanying cultural features both past and present) that promotes conservation, has low visitor impacts

and provides for beneficially active socio economic involvement of local populations (Ceballos-Lascurain, 1987:14)

Card and Johnson Vogelsong (1994) stated that the concept of ecotourism originated within the responsible tourism movement of the 1970s and was a reaction to cultural spoliation, economic incongruities, and the destruction of natural resources.

Momentarily, the conceptual acceptance of ecotourism within the scholarly circle brings with it the need for further elaboration in its definition. Thus, in a very brief span of time, discourses emerged accentuating the complexities of ecotourism development (Butler, 1990; Wheeler, 1991; Hall, 1994). The self assured hubris among the propagators of ecotourism was shaken with the concept becoming more and more fuzzy (Valentine, 1993). This ambiguity in the manner it is defined has led to the moulding of its concept for anybody's benefit.

Amidst growing enigma, this definitional discourse of eco-tourism further broadened to include other dimensions. For example, some proclaim ecotourism as an expression of sustainable development (Bjork, 2000; Fennell, 2003; Wight, 1993) while others argue that it is strongly rooted in educational experiences (Blamey, 2001; Buckley, 1994), and few links it to the natural environment, which distinguishes this tourism type from other tourism experiences, such as mass tourism (Hvenegaard, 1994). Other attempts to understand the ecotourism concept have been related to exploring individual eco-tourism components. These components have been expressed in the literature as 'principles', 'characteristics', 'criteria', 'themes', and 'dimensions' (Donhoe and Needham, 2006).

Meanwhile, critics dispute the high aspirations this form of alternative tourism promises to achieve. Underscoring its sustainable approach and the benefits this form of tourism touted to cater has also many negative impacts (due to various reasons) which often go in tandem with the former. It has become a hotly debated issue since its implementation across countries because of a mismatch in vision and practice. Critics argue that there is a lack evidence to show that the words about ecotourism have actually being put into realities (Zeppel, 2006). Moreover, the concept is poorly understood and much abused (Das and Chatterjee, 2015a). There is a general agreement regarding what the basic concept it entails but there is many discordant views regarding those activities or operations that don't clearly fit into 'eco-tourism' context. For instance, does travelling to eco sensitive regions of Ladakh on a loud noised Enfield motor bike, with maximum regards to the local people and nature, can be constituted an ecotourism experience?

The said goal of conservation and livelihood of eco-tourism often results with environmental objectives outweighed by other objectives. Lack of funding, mismanagement, population and development pressures as well as poaching and bureaucratic nature of forest department have distorted the very concept of ecotourism (Das and Chatterjee, 2015b) which ultimately leads to conflict between protected areas and local approach (West *et al.*, 2006). Goodwin (2002) found that the employment generated because of ecotourism caters to only to a few selected people. This can lead to further increase in economic inequality. Another serious menace which can result due to ecotourism is the threat of pollution in those un-accessed regions which till now has remained pure and pristine but now flooded with tourist in the name of eco-tourism.

In the context of Ladakh, the tourism industry is growing at a tremendous pace in recent times. This raised the concern about the actual impact of mass tourism on the environment and society at large (Mason, 2003). It demands different stakeholders to peruse upon the issue. At least four groups of actors will play a pertinent role in achieving the required balance: Governmental authorities, the tourism business sector, tourists and local people (Bjork, 2000).

One of the most highlighted responses to address this vexed question is an 'alternative form of tourism'. Thus eco-tourism purports to be the answer. However, the essential questions remains, Can this alternative form of tourism advocate a solution to this anathema which Ladakh is facing? How long will it sustain Ladakhi ecology given the fact that the region being highly sensitive ecologically that even a minute alteration in its nature might wreak havoc³? The present study will attempt to critically analyse the role conferred on ecotourism in Ladakh. It highlights the crucial aspects of society and culture of Ladakh which impel establishing a concept which is highly vexatious. The author contends that ecotourism will not be a solution to deal with the boom in tourism in this region which is already facing huge threat due to climate change.

³ Ladakh is facing tremendous threat from climate change. A paper 'Climate Change Over Ladakh' by Chevuturi, Dimri and Thayyen, 2016 in the journal of Theoretical and applied Climatology has succinctly described the vulnerability and sensitivity of Climate Change on Ladakh.

Research Methodology

The present study adopted thematic triangulation method which involves using more than one method of data collection. This ensures that the data collected on the topic is validated through a variety of methods. For the current paper, data were collected from two sources: First by semi structured in depth interviews and focussed group discussions with academicians, local political leaders, government officials and more importantly, the local people of the region. Secondly, secondary information such as books, magazines, and newsletters generated by the Government of India and the state government of Jammu and Kashmir. The sample collection was done for 3 month during the summer months of July and September. The sample sites were chose based on the attraction garnered during the tourist seasons and thus Sham valley and Changthang regions were selected besides the main centre, Leh. 8 villages in Changthang region and 7 villages in Sham regions were visited. From each villages 5 respondents were interviewed, thus 35 respondents from Sham region and 40 from Changthang region. Out of them, 10 people were heads of their respective villages. In Leh, 6 peoples who were in travel business were interviewed. Hence purposive sampling method techniques were used to select the respondents.

Knowing Ladakh

Ladakh lies between north latitude 30.45' to 35.50' and east longitude 75.45' and 80.31'. It lies at the northernmost part of India. The high and extreme passes around Ladakh and the harsh climate have made the region remained isolated for almost 7 to 8 months in a year. The entire Ladakh supports a population of 274289 (www.census2011.co.in retrieved on 13th May, 2015). The vast majority of people live as farmers in small villages. Rainfall in the region is very low and local populations have to rely on glacial melt water, which is brought to the field through an elaborate channel system. Culture, tradition and limited population growth have helped to ensure the natural carrying capacity of the land is not exceeded.



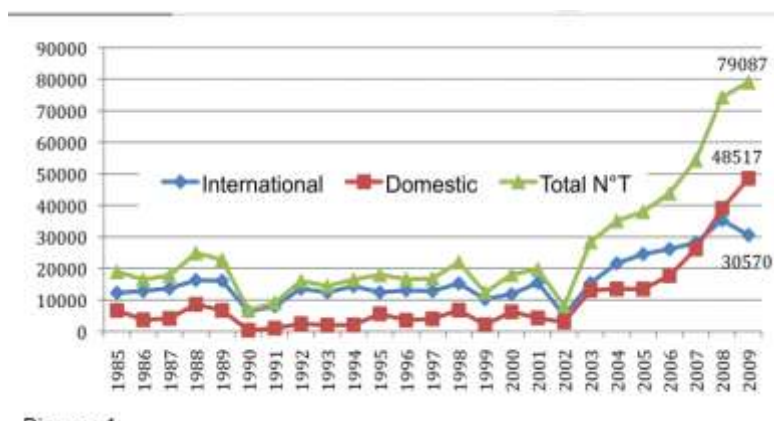
Ladakh has many important rivers. Indus (Originates from Mansarover Mountain in Tibet) and Shyok rivers are important rivers. These rivers traverse through the lofty mountains of Ladakh before finally entering Pakistan. The region also displays a wide range of altitude from 2800 m in Kargil to the 7600m Saser Kangri peak ('La' in Ladakhi) in Karakoram. Most of these passes remain closed during the winter due to heavy snowfall and the danger of avalanches in the hills. Annual temperature ranges from over 30 degree Celsius in summer to minus 40 degree Celsius in winter. Rainfall is extremely slight and that people depend mostly on snowfall for their survival. Though there is hardly any mention about thunder and lightning in Ladakh in the past but until recently there is high frequency of such incidents.

Historically, agriculture has been the mainstay of the Ladakhi economy (Bhasin, 1992). Almost all Ladakhi families own land (Gupta and Tiwari, 2002) and a number of animals. Land holdings are neither sold, nor divided, but passed in an intact form from one generation to the next (Mann, 2002). The crop-growing season is for only four months in summer. However, local varieties of wheat, barley give plentiful yields. At lower altitudes, people often grow apples, apricots and few vegetables. Agricultural inputs have so far been simple and supported by non-mechanized tools. Ploughing is done using animal power. Modern chemical fertilizers and high yield varieties of seeds are hardly known to local farmers. Manure made mainly of night soil and some animal dung formed an important input to the soil (Beall, 1989).

Every work in family or in society is done on a cooperative basis. Beyond family, the wider social organization of the village incorporates families in various ways, into relatively stable relationships with their fellow villagers (Bhasin, 2005). Representation within the village community is through hereditary groups called *Phaspun*, which is a group of households that helps each other at the time of birth, marriage and death ceremonies. *Phaspun* provides individual with social identity of key significance in their society. Traditional ecological knowledge, which is centred on the manipulation of biodiversity, determines the land use dynamics of the region. As such, the land use system is based on diversification rather than homogenization of the landscape (Ramakrishnan *et al.*, 2001).

Becoming a 'Tourists Paradise'

The year 1974 marks the beginning of mass tourism in Ladakh. It was in this year that the region was opened for the tourist visit. No sooner, it got the attention of travel enthusiast, thus facilitating it to achieve the distinction of being a paradise to visit. This is evident from the tourist arrival pattern in Ladakh. There is an exponential growth in the number of tourists having visited the region (see graph below). In the year, 1974 the total number of tourist arrivals to the Ladakh region was 527 out of which 500 were foreign and 27 were the domestic tourist. In late 1980's, the tourist arrival data reached 22,748 with around 16,000 tourists from foreign countries and around 6000 from different parts of India. In 2016, the number of tourist arrival in Ladakh exceeded 2 lakh. The tourist season starting mid-April and lasting till to mid-September has become a period of intense economic activity (Bora, 2004). It has also brought significant changes in the traditional economy that was largely land and agriculture centred (Norberg, 1991).



Tourist arrival in Leh District

Source: <http://ladakhstudies.org/resources/News/pelliciaridtourismtraffic>. Retrieved on 13/12/2014

As a small cold desert region, Ladakh tries to preserve the environment and the Buddhist culture in its natural state. However, the region is undergoing an irreversible societal transition. Its socio-ecology has witnessed substantial encroachments resulting in considerable induced transformations. Roads have been built to bring not only material goods but also the western notions of 'Progress'. Thus, witnessing the first cultural impacts since opening up to globalization. The once self-reliant region is now becoming increasingly dependent on imported resources over which they have no control and is relying ever more on a distant bureaucracy for needs once provided by their own community. Youth in the region is continuously being drawn to the lures of the west. They want to look like foreign tourists and behave in a similar manner. Traditional value system and customary practices are perpetually under a cloud.

Entire Ladakh witness an unprecedented increase in number of vehicles, and guest houses and hotels⁴, with the latter encroaching on irrigated agricultural land. Despite the preparation of a land-use plan, no authority has been willing to restrict these growing concrete buildings. In addition, certain places have become the destinations of special day out, particularly the shores of the Tso Moriri⁵, and Pangong lakes⁶. Rising visitor flows have augmented the waste

⁴ Hotels are most prevalent in the regions surrounding Leh. However, there are growing numbers of luxury hotels in Leh. These hotels are to run like the one in the plains of Delhi and Mumbai with extravagant provisions, all at the cost of livelihood of the local people.

⁵ Tso Moriri was notified in November 2002 under the List of *Ramsar* Wetland sites under the *Ramsar* Convention.

⁶ Besides its picturesque beauty, Pangong Lake has become popular among the domestic tourists owing to the famous Bollywood film "3 Idiots" which was shot here (released in 2009).

problems and impacted on bird-nesting⁷ areas, thus threatening the biodiversity of the birdlife present (Morup, 2009; Humbert-Droz, 2009). The strategy of the wildlife warden to encourage the development of accommodation facilities in local homes (homestays) or campsites managed by the local communities has not always been well received (Goeury 2010).

Local educational institutions are training children in colonial framework, preparing young children and adolescents to take clerical jobs in urban districts of Ladakh following model of education promoted by Lord Macaulay (1953) for colonial India. This trend is resulting in an exodus of families from their villages to a nearby city, Leh. Predictably, the small city centre is not able to cater to the requirements of all those seeking employment opportunities. Not every qualified student is guaranteed a government job in Leh, thus creating tensions and unwarranted competition among the young, contrary to the spirit of communal living that was the hallmark of customary life ways of the region.

Affixing Eco in Tourism in Ladakh

The increasing number of tourist arrival in Ladakh beyond its carrying capacity has brought the region into the focus of the higher echelons of policy makers. The Tourism department, Leh, highlighted to have a policy framework on tourism for Leh district based on the principle ecotourism to pursue a 'high value and low impact policy'. *"It will bring a more nuanced understanding of the growing number of tourist's pattern in the region, thus enabling the department policymakers to address problems associated with it"* remarked an official in the department.

Tourism industry in Leh city is predominantly run by families with huge landholdings and other wherewithal. Since Leh is the main centre of the administration, maximum tourist activity occurs in and around Leh. Even if tourists visit outside of Leh, travel agents at Leh had already set up sub centres at other places. It is argued that in such situations the benefits of tourism cannot trickle down to other regions. This has resulted in polarized pattern of development. The concept of Ecotourism describes the importance of travel in consonance with the ecology of the region and it is important that every player involved in its promotion understands its importance. There was some momentary development towards making available the fruits of tourism activity equitable as enshrined in eco-tourism principles. Cultural promotions by remote regions of Ladakh such as Changthang, Nubra, Da Hanu etc were done to attract tourists to these regions. The recent opening of Turtuk region for tourism by the Government of Jammu and Kashmir was a move in that direction.

The sudden spike in the number of tourist arrival in Ladakh had created a sense of fear among the people and the policy makers about the threat to the ecology of this region which has started indicating signs of degradation (Mallon and Prodon, 1995; Osmaston, 1995; Singh 1993; Norberg 1991). Therefore the need to think in the perspective of environment of Ladakh was felt. Ecotourism is purported have the capacity to bring a holistic and sustainable development in such region.

The ecotourism activities in various protected areas of Ladakh including Hemis National Park, Changthang Wildlife Sanctuary and Karakoram Wildlife sanctuary, had been working to promote various aspects of ecotourism which had been attracting international tourists. This year around 90 per cent of over 3,000 tourists, mostly foreigners, who visited the park sighted Snow leopard in its wild habitat, informed the sources.

The fundamental objectives for ecotourism in Ladakh have been the promotion of recycling, effective use of renewable energy, water conservation and creation of economic opportunities for the local communities. There are more than 700 homes in Ladakh, where local communities offer shelter to the visiting tourists informed a source from tourism department of Leh.

In 2001, The LedeG centre of Leh has organised a workshop on promoting ecotourism opportunities in rural Ladakh. Need for ecotourism in Ladakh is based on the fact that the tourism sector is not contributing to the improving the livelihood of the rural people. Even further, the greater consternation is the threat to the ecology of the region due to mass tourism. The alternative tourism envisages an equal voice from all the three stakeholders: government, travel operators and the rural communities. Eco tourism ostensibly will cater to a more inclusive development.

Discussion

'In Ladakh Tourism happen in the summer months while in chilling winter eco starts to work'

The above statement is of a member of a local association called Ladakh student Environment Action Forum (LEAF), he indicated a distressing view of the future of Ladakh if Ladakh is to progress with the concept of ecotourism.

"Almost 80 per cent of Ladakhi population are directly or indirectly are dependent on the tourism, is it possible for them to regulate their biggest source of income that too for a cause which is not particular rather general one" Tsering Punchok

There are 303 registered travel agencies in Leh Town itself. Many of them had on their brochure added "eco-tourism" in it. When enquired if they really follow the guidelines for promoting eco friendly tourism, we get the same ubiquitous answer *"we do not allow tourist to litter and spoil the surroundings"*. The definitional conundrum becomes visible precisely. Ecotourism does not end with maintaining a clean environment; rather it involves a plethora of components which needs to be implemented embracing "Ladakhi view of development and recognising the locals as equal stakeholders. The lackadaisical attitude of the travel agents, absence of any established ecotourism guideline (Orams, 1995; Wheeler, 1991) has given enough leverage for those in the

⁷ Threat to Black necked crane exacerbated with the rising anthropogenic activities on the shores of these lake *tsomo ri ri* and *Tso kar* (Chandan *et al.* 2014).

tourist business (West and Carrier, 2004) to manipulate this concept at their discretions (Dowling and Fennel, 2003). Market dynamics encourage travel companies to declare themselves as being promoters of eco-tourism. Scheyvens (1999) argues using the term eco-tourism, as a marketing tool is ethically inferior. I was surprised to see more than 30 signboards with 'Ecotourism' mentioned on travel agency offices in the Leh market. But do they genuinely follow the standards required for being registered as eco-tourism companies? "On my way to Lake Pangong in 2015, I often witnessed tourists engage in feeding the wild Marmots with biscuits and chocolates. These species, being wild, are never adapted to such poor nutritious food. This will endanger their survival in their winter hibernation period" argues Nyrrpa (a local). Locals in Khaspang, Pangong and Shachukul villages' fears the extinction of these wild animals so long as such intrusion in their habits and habitat occurs. 'The tourists neither understand the local ecology nor appreciate sensitivities of local people. They are in essence encroachers on local ecology and social systems' argues Dorje (a local). On being asked if the tour guides of the travel agents, purported to be following ecotourism principles, have some idea about the principles of ecotourism, out of 32, only 7 agreed to be aware of ecologically sustainable form of tourism. None of them however, gave any kind of instruction to their clients regarding the sensitivities of the environment and among the culture they were travelling. Conservation ethics, education and integrated planning are impervious terms for these organisations, sadly without meaning (Hvenegaard, 1994).

Another significant concern in the city of Leh is the constant increase in private vehicle. I was surprised to find that there were only few public transport facilities available. Taxi system is the only options for travelling between the villages. According to the locals the Taxi system started only three years back. I was informed by one of my co-passenger's on one such ride that prior to the 'private Taxi system', there was an efficient public transport system ferrying people to the nearby village. However, with the growing income, every other person owned a car. Thus the relevance of public transport was completely lost. This has put the disadvantaged sections of the society at a loss. She blames the growing number of tourists in the region for such widespread distortion of public transport system. 'They are ready to pay 20 rupees for a 3 km drive but for a poor person like me it is very expensive' added by another passenger. A person of low income has to pay three times the amount while travelling in a taxi then they would pay while commuting in the public transport. Thus, this is adding to the woes of poor people, which further the gap between rich and poor.

Historically, availability of water from natural resources determined the size of each village. Since water is scarce, the people adopt various methods for its frugal usage. 'Dry toilet system' is one of the exemplary practices of the region. Dry toilets are a special kind of toilet, which is used in Ladakh and few other Himalayan regions. The toilet is structured with a small room that is basically built as a two-storied unit. It is normally located away from the main house. The principal purpose of building two stories is that the waste generated in the upper floor is collected in the lower room. The upper room is used as the actual toilet. It has a small hole through which night soil is thrown into the dark room below. The room is constantly supplied with dry soil to avoid foul smell. The waste material collected in the collection room is also nourished with dry soil and dry leaves and other dry organic materials with which the passage of times is converted into nutritious manure to be applied in the agricultural field.



A typical traditional toilet in Ladakh

(Source: www.allposters.com/traditional/dry/composting/toilet. Retrieved on 20th May 2015)

These toilets are a valuable means of enriching soil and are free from pollution and continue to be the most important method for the disposal of human waste in Ladakhi villages (Bhasin, 2002). Inflow of western Tourists has forced the local tourism industry to replace traditional dry toilets with water guzzler flush systems, which are neither eco friendly or cost effective for the region. Most hotels and guesthouses in Leh have switched to water-flush toilets now. There are few households that have also installed water flush toilets. This trend is seriously threatening not only the ground water resources, but also polluting the remaining source of water of the region (www.LeDeG.org, retrieved on 12 January 2015).

Nyoma block⁸ has 12 home stay facilities set up by the locals with the help of an NGO which is focussing on eco tourism in Ladakh. Situating close to the famous nomads of Changthang, Nyoma is starting to attract tourists and the home-stays are serving the twin purpose of environmental protection and adding an alternative source of earning. On my visit this year, I had an interaction with one of the owner about the efficiency of home stays. *The home-stay has been running very good. I have now decided to give my full attention in doing my source of earning through home-stay only. I have also made*

⁸ An administrative sub division in which 'a block' is the intermediary level, with 'district' at the top of the hierarchy in India.

an improvement; western style toilet has been set up in my home-stay. I hope this time my house will attract more tourist. To my surprise, western style commode was set up in another house with home-stay facilities. When asked about the problems associated with this development, they had no answer⁹.

Experts in the region argue that the recent floods after the cloud burst in the region were caused by these changing activities. There is a growing opinion that all development activities are not necessarily ecologically viable. Unprecedented floods in August 2010 killed 250 individuals and injured many. Post flood investigations revealed that the area that was hit by the floods was the 'natural drainage zone' and had now been encroached by human settlements. This blocked the natural outlet for water. Flooding in Ladakh is quite rare. But now it is a serious ecological concern and has forewarned the residents of the region to be prepared for such future calamities. Thus, it is very important for the development planners, to be very diligent in choosing a site for any development activity.

In the wake of ecotourism, rural infrastructures are bound to expand. In such a scenario, the encroachment of natural drainage zone is apparently increasing. The case of Saboo village exemplifies the gravity of such ecological encroachment. Flood in Saboo village¹⁰ has become a normal phenomenon¹¹. This owes to its geography which has been a channel for water movement since time immemorial. However, in recent times, the devastation it causes is often of enormous magnitude. A huge number of settlements and luxurious resorts are built on the river drainage site which was generally left open until recently when the villagers saw a spike in tourists' inflow. The damaged done are mostly on those sites where we see a cases of encroachment to the natural flow of water. The rise in nature based tourism in the remotest of the region and the subsequent growth in guest houses might well enhance the probability of Saboo like pattern of devastation which is more anthropogenic than natural.

Ladakh, traditionally practiced cooperative farming, but under the changing social system, it is completely lost; particularly in the villages close to Leh. There is far greater economic competition than was the case earlier. Tashi Dawa 45, a government employee, argues that having a government job or being in a tourist business is much more lucrative than farming. He has abandoned most of his land and is planning to use it for another purpose. Tashi Dawa's village 'Chumathang', has just started receiving tourists in few numbers owing to the famous hot spring water at the riverside of the village which is grabbing tourists attention lately.

The ordeal of Ngawang Thupstan (Male, 48) has a different tale, whose village Rumbak is situated in the great national park of Hemis, a protected area considered to be the best place to see Snow Leopard. The village has adopted ecotourism as a livelihood option and every house in Rumbak hosts three to four guests for at least 60 days in a year.

"The tourist inflow has increased owing to the success of ecotourism in my village. But the village has now become dependent on it. Most of the village youth or kids go to schools or colleges in Leh city and looking for avenues in other parts of the country, there is no one to take care of the cattle we own or to take them for grazing to far way patches in this cold desert".

The wide differentiation of perception towards ecotourism can be viewed from the perspective of time and space. Tashi Dawa is seeing the fruits of tourism as the most essential element of development of his village which has started undergoing transformation. In contrast, Ngawang Thupstan is dismayed over the impact of tourism on social order of his village. He exhorts a view of a revivalist's persona who detests current wave development which is ostensibly flowing with a pale imitation of the West.

The tourist agents are predominantly private players of the urban society. The scheme of eco-tourism is set to expand to the remote places, but at the cost of polarized pattern of development. The concept of eco-tourism describes the importance of travel in consonance with the laws of the nature which possesses a wide implication at a place like Ladakh. The lackadaisical attitude of the travel agents while dealing with such issues is highly endangered the existence of such pristine area itself. Many companies have declared themselves ecotourism companies standards of minimal impact, net benefits for visiting areas, conservation ethics, education and integrated planning (Hvenegaard, 1994). Such practice of using the term eco-tourism as a marketing tool is ethically inferior (Scheyvens, 1999). The concept which is specifically to address the environmental problem instead further threatens the environment of a region. The insensitive attitude of tourists in remote areas infuse negative attitude in the minds of the locals which ultimately results in failure of the much stated new policy.

Conclusion

Following the discussion it can be concluded that ecotourism is a complex and a blurred concept which in turn complicates its understanding and implementation. Although it was meant to address the growing environmental and social problems, arising out of mass tourism however, instead further threatens the ecology of a region. So it is natural that doubts are rising over the feasibility of sustaining innovative ideas like Eco-tourism challenging notions of cultural habitats. It is important that external agencies understand the cultural dynamics of people before introducing some new initiatives, in the name of development (Mohanty, 2007). Aggrandizement of such initiatives may result in an encroachment of the cultural ethos of local people, thus creating further rift between man and nature. Added to this is the problem of insensitive attitude of tourists in remote areas that is responsible for alienating local populations.

It is intriguing to see the government of India effort in promoting hill areas of Himalayas as a tourism hub since the percolating effect of such measures are not very appreciative. Further the sustainability of tourism in Ladakh is also doubtful particularly when the region's mother state is reeling under

⁹ Ladakh, owing to its ecology is a water scarce region and other than Leh and few surrounding villages, there is no sewerage system in Ladakh.

¹⁰ Saboo village was called as model village by former President APJ Abdul Kalam in 2003 when he saw its modern facilities comparable to any city.

¹¹ Flood wreaked havoc Saboo in 2010, 2014, 2018.

terrorism and rising conflict between state and non state actors. Thus perceived, despite showing improved performance, economically, owing to the rise in tourism, army, and government presence, the centrality of agriculture in Ladakh persist.

The last decade have seen a vigorous program of development in Ladakh, which has brought changes in education, health care, agriculture, energy and transportation. But there are now some areas of friction appearing between the opportunity for tourism development at the centre (Leh) and the 90 percent of Ladakhis who live outside these areas. These frictions are bound to get intense with the emergence of a new concept called Ecotourism. It has given a new lease of life for those involved in the tourist business. The growing deterioration of ecology and culture of this region goes parallel with the region's acceptance of tourist in the early 70s. Although tourism is not the sole cause of these trends, it is certainly a factor. By putting into perspective, a new debate is arising, should a few areas of Ladakh be allowed to accrue the benefits or losses while the periphery is made to suffer collaterally? The question is still remains.

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