

# Chapter 24

## Issues and Challenges of Sustainable Tourism in Nainital, Uttarakhand

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**Abstract** Nainital has a distinct identity with a wide variety of natural, rural and urban landscape of mountainous character. The focal point of the settlement, the natural lake of Nainital, continues to draw scores of visitors every season. In Nainital, presently, tourism is prevailing as ‘mass tourism’ with a mass appeal. The mass scale of tourism in an ecologically sensitive area is bound to be a delicate matter. The physical area around the lake is highly restricted bound by the slopes of surrounding ridges. The scope of expansion of the town seems to be highly improbable, until and unless it seeks to expand beyond the Municipal boundary. The vital question arises how to make tourism sustainable in this small but promising town which is practically perched on the local catchment area of a natural lake. Today, Nainital is looking for a development model which should uphold its position in the tourism market as well as save its ecological integrity; because in face of any ecological eventuality this mountain habitat will go into irretrievable loss.

**Keywords** Sustainable tourism • Tourism destination • Ecologically sensitive • Natural waterbody

### Acronyms

LDA	Lake development authority
MSW	Municipal solid waste
NLRSADA	Nainital lake region special area development authority
NNPP	Nainital nagar palika parishad

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## 24.1 Introduction

Nainital, the celebrated hill station of Kumaon hills in Uttarakhand, evokes a sense of romance with its natural charms. The lake is surrounded by seven mountain peaks which are Naina or China peak (8569 ft), Alma (7980 ft), Sher Ka Danda (7890 ft), Laria Kanta (8144 ft), Ayarpatta or Dorothy peak (7640 ft), Handi Bundi (7150 ft) and Deopatta or Camel's Back (7990 ft). Nainital is located approximately at the co-ordinates of 79° 45' E longitude and 29° 38' N latitude. Naini lake is situated at an elevation of 1938 m, covering an area of 11.73 km<sup>2</sup>. Almora district lies to the north of Nainital and to its south lies the Udham Singh Nagar district. In the east, the Champawat district and in the west, district of Pauri Gahwal are located. Some of the well-known places in the closer range of Nainital are, Bhowali (11 km), Bhimtal (22 km), Naukuchiatal (26 km), Sat tal (24 km) and Khurpatal (10 km).

In 1840s Nainital attracted the Europeans who had a fine sense of landscape appreciation. They were so much captivated by the pristine beauty of this lake destination that they started to evolve it as a summer retreat. Today also it remains a hill station thronged with visitors during summer months. According to the data available, Nainital had become a popular hill resort by 1847. In 1845 Nainital Municipal Board was officially formed, which was the second Municipal Board of North Western Provinces in British regime. Nainital assumed much importance when it became the summer seat of the North Western Provinces in 1862. Later, in 1960s Uttar Pradesh government officials preferred to make long sojourns during summer months here. Population of Nainital town (NPP/Municipal Board) has increased from 38,630 in 2001 to 41,377 in 2011. Nainital is known for its salubrious climate with average range of monthly maximum and minimum temperatures of 28 and 7 °C, respectively.

Today, the elite cottages of Britishers built during colonial days, surrounded by the deep woods of conifers, are lost amidst the haphazardly built habitations. Today, they are often referred as the old landmarks of this lake town. The colonial connection of Nainital lives in the nostalgic memoirs of the Anglo-Indians and Europeans who once dwelled here and admired it endlessly. Though the emergence of tourism in this hill destination has been impressive in conservative terms in last few decades, but now it has assumed totally different proportion. 'Himalayan mountain tourism is a relatively new industry that has seen explosive but uncontrolled, demand-led growth in the past three decades; tourists have simply arrived in areas formerly visited by the occasional people, and the regions have reacted to meet their needs' (East et al. 1998). In early days, the highly potential prospects of tourism had spurred construction of numerous hotels along Mall Road. According to Forest department sources, between 1950 and 1975, approximately 40,000 trees were felled in the town for different purposes, mainly for construction of hotels and buildings. (The Times of India 1997). The euphoria of early tourism days caused haphazard growth of hotels, lodges, dwellings and market. Nainital, right from the days of its advent remained a place of administrative power and authority, gradually

grown into a prominent centre of education with a number of reputed boarding schools and institutions, and also a landmark of kumaoni culture. But its most notable identity poses it as a hugely popular tourism destination of Uttarakhand. Today the urban dwellings are stacked all around the lake so precariously that its vulnerability has become a matter of deep concern. The civic amenities are in a tight spot today because no planning was exercised in its promising days. All the activities are concentrated in and around lake, putting great stress on this water body which is undeniably the soul of this town (Fig. 24.1).

The massive tourist crowd today keeps nudging through the Mall Road without registering the reason, which brought them here. In this sense, mass tourism has totally taken over this hill destination. The loads of tourists who disembark here, specially over long weekends, have no clue that how much this hill town can take in terms of accommodation and basic amenities. What makes Nainital one of the most sought after destination by travelers, lies in the fact that it is located at a motorable distance of average 8 h from some of the large urban centres of northern India which come under the severity of tropical heat during summer season. It is located at 304 km from Delhi, 360 km from Dehradun the state capital, and 388 km from Lucknow. Ever since the automobile revolution happened in 1980s, the mediocre strata of society have acquired greater mobility, and they are quite inclined to use private vehicles for the getaways for recreational purpose, most of the times on impulse.

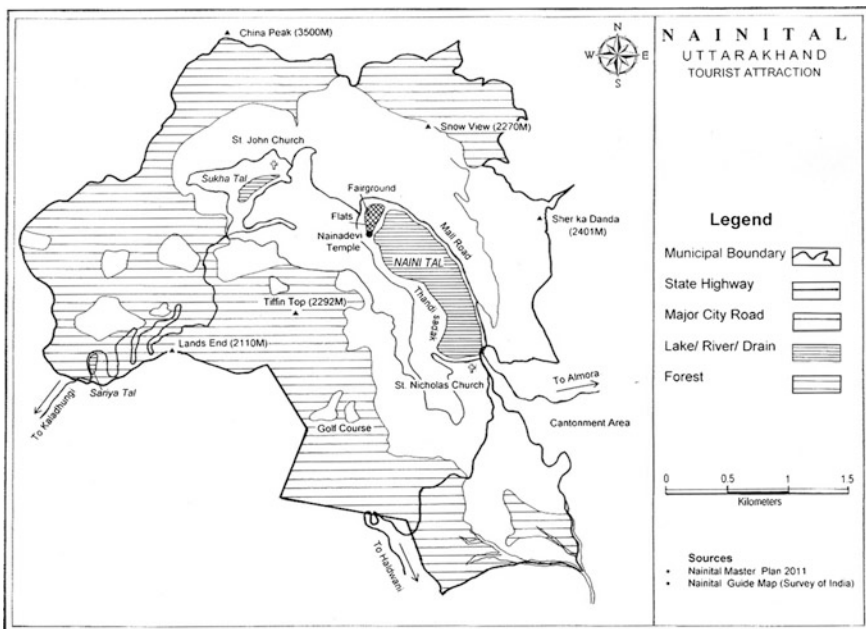


Fig. 24.1 Location of the study area: Nainital

Nainital needs a development model that suits the scale and pace of this lake town. The conception of such a model must recognize the need to strengthen and revitalize five significant aspects of its ‘personality’ as a hill town, namely, seat of administrative power as the district headquarter and its imperial connection; as an educational centre of much repute, with some of the institutions founded over a century ago; as the cultural centre with profound traditional traits; as a rich biodiversity and ecological region of the Himalayas, and very importantly, as a tourism destination with strong mass appeal. Though it has grown impressively in terms of business, services, cultural and educational assets, but its standing as the tourism destination is overriding all others. Tourism has actually emerged as the central pillar of economy in Nainital.

## **24.2 Issues of Sustainable Development in Nainital**

Sustainability of tourism is part and parcel of sustainable development of this hill town in the larger context. The World Commission on Environment and Development (WCED) way back made sustainable development its core theme, and emphasized that ‘it is not an absolute state rather, it is a dynamic process. It is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs’ (WCED 1987). Later, UNEP also deliberated that ‘sustainable tourism requires a unique strategy for each destination where it needs to call upon all those factors which are inherently important to sustain tourism, while neutralizing all those factors that impede the growth of tourism at a given place. Sustainable tourism is a continuous process and it requires constant monitoring of impacts, introducing the necessary preventive and corrective measures whenever necessary’ (UNEP and UNWTO 2005).

In today’s Nainital there are many issues which need to be addressed in order to evolve in the direction of sustainable tourism.

### ***24.2.1 Naini Lake as the Focal Point of Nainital Under Environmental and Anthropogenic Stress***

Naini lake is curvilinear waterbody of natural origin of tectonic nature. It is about 1.4 km long with NW-SE orientation, its maximum width is 0.46 km, and the total surface area is 49 ha. The catchment of the lake is characterized by dynamic processes of mass wasting in the form of debris flow, landslides, soil creep, rock fall and land subsidence. The morphological features of the lake basin consist of a

transverse ridge dividing the lake into two parts—the lake plain and the lake deep along with the scarps, debris fans fringing the shores. The mean depth of Naini lake is 18.55 m, and the maximum depth being 27.30 m in northern half and 25.5 m in southern half. The mean water retention time or the residence time for the lake is computed as 1.16 years (EERC Report 2002).

Nainital as a town has witnessed growth around Naini lake, particularly the two ends of this waterbody, have grown as distinct clusters of settlement—Tallital, the lower end and Mallital, the upper end. Similarly, the two sides of the lake have also assumed different character, marked by the roads on either sides, the Mall Road—on sun facing side, more developed and regularly used by the people and the other one in the shadow zone of the Ayarpatta ridge, less frequented by people. Some of the significant problems associated with Naini lake are comprehended as:

- (a) The rapid rate of siltation in Naini lake is a matter of concern. It receives the rain water as runoff from the higher surroundings and the natural inflow from the springs in the peripheral areas. In 1895, the capacity of the lake was 31,699 m<sup>3</sup>. It became drastically reduced to 26,202 m<sup>3</sup> by 1979 that means the depth was less by 5491 m<sup>3</sup> in 84 years. This reduction in the capacity of the lake at the rate of 65.37 m<sup>3</sup>/year is due to the increasing rate of siltation. On the basis of the rate deduced, it was inferred that the lake would be filled completely in about 380 years (Rawat 1987). Though that sounds drastic in terms of its physical eventuality in about four centuries from here, nevertheless, the danger is evidently looming large.
- (b) Another issue of environmental significance is related to the sewage mass flowing into the lake water. At the onset of Nainital urban growth the sewage disposal system was planned for a modest size hill settlement. Rapid urbanization and inadequate sewer system led to the problem of overflowing of sewage into storm water drains, ultimately discharging into Nainital Lake. The underlying connection between sewers and storm water drains is found all over the town, which poses one of the serious concerns of pollution of Nainital Lake.
- (c) Discharge of untreated waste water, disposal of solid waste, building construction rubbish and litter by the tourists are some other contributors of the pollution in the lake. The accumulation of organic matter is responsible for the high concentration of nitrogen and phosphorus, and the concentration of dissolved oxygen is lower than the critical level of 0.9 mg/l during winter. (Pant and Bisht 1980). According to a water quality evaluation (Dash et al. 2008), the lake water cannot be used without treatment, which has high turbidity, dissolved and suspended solids and faecal contamination besides high magnesium hardness, making it unfit for drinking purpose.

### ***24.2.2 Infrastructure—Inadequate Road Network, Parking Space Constraints and Vehicular Traffic Congestion***

The road network connecting Nainital is quite diverse from the point of access. Nainital town can be approached from different directions. The major issue related to roads at Nainital is the problem of vehicular traffic through the town, particularly on the Mall road, and the parking space for the vehicles entering the town from all the access points. Inadequate width of roads, encroachments by hawkers and vendors, mixed user pattern and continuously increasing number of vehicles owned by the permanent as well as the floating population including tourists, are the points of concern. There is no regulation or monitoring of the carrying capacity of the roads, as a result any number of vehicles enter the city till the roads are totally choked and the traffic spill over results into long trails of stranded vehicles onto all the roads entering the town, sometimes stretching over 5–8 km. In order to ease out the vehicular traffic including cycle rickshaws, the restriction is imposed on Mall road from 6 pm to 9 pm, which is ridden with another set of complications. The Uttarakhand Tourism Masterplan Report takes a stern cognizance of this, ‘the vehicular traffic along the mall is horrendous and not conducive for a leisurely hill resort ambiance. Even the promenade is taken up by vehicles all day and is a dangerous place to walk. In the evening no cars are allowed, which however is a nuisance for residents and visitors alike who well might have a legitimate reason to drive out or into town.’ More so, the parking space constraints in this lake town are quite serious. Most of the water recharge areas in Nainital are being eaten up by the settlements and parking spaces. In locations like Sukhatal, Oak Park, Sleepy Hollow, Sherwood, such recharge areas have been significantly reduced. The alternative parking spaces are earmarked away from the core of the town but without any Intermediate Public Transport provided to pick and drop, leaving the motorists exasperated.

As per a survey in 2001 by RITES the projected volume of vehicular traffic for 2011 and 2021, only for Mall road was 20,900 and 26,000, respectively. Similarly, on the basis of growth of tourist arrival the projected pedestrian traffic on Mall road for 2011 and 2021 were estimated as 30,955 and 35,360, respectively. RITES study indicates the Parking demand in peak season for 2011 and 2021 estimated as 1500 and 1925, respectively. Though these projections could not be coordinated with any data on actual basis for 2011, but there has been undoubtedly a steady rise in the tourist arrival in Nainital with annual average growth rate of 7–8%. Tourist influx reaches maximum in the months of May and June, making summer as the peak season. Another indicator of vehicles entering Nainital reflects in the revenues of toll tax of Nainital that has increased from 8 lakhs in 2002 (EERC 2002) to 21 lakhs in 2014, in the peak season. It directly bears implications of the increase in environmental pollution in Nainital.

### ***24.2.3 Civic Amenities Under Stress to Meet Total Requirements***

In Nainital the floating population, consisting of tourists, institutional population and daily commuters for work, is higher than permanent population. In the report by NCDP (2007), the floating population is estimated as 57,120 in comparison to the estimated permanent population of 45,320 in 2006. This implies that the floating population is much more than the permanent population of Nainital, and that has a significant role in using the civic amenities besides the total 9753 households according to 2011 census.

**Water supply**—Since all the shallow tube wells and infiltration well are being directly recharged by lake water, for all practical purposes, lake is the main source of water for Nainital at present. Ninety three percent of the total water supply comes from infiltration and bore wells located at the periphery of the lake, remaining 7% of water comes from surface source. However, the water through infiltration also needs to be treated sufficiently before being supplied to households. As indicated by the Census (2011), though 92.8% of households in urban areas have tap water from treated source yet 4.05% have tap water from untreated source, which is a grey area of water supply. Though most of the households have an access to piped water supply but the people Below Poverty Line (BPL) and other urban poor still depend on fetching water from the public standpost. The issue of potable and safe drinking water in the town is a serious concern.

**Electricity**—The electricity supply in the town is said to be stable and regular, except the times of heavy snowfall and stormy weather. Nainital town, as a seat of administrative power boasts of regular supply of electricity in comparison to its surrounding areas. In the District Census Handbook (2011) the electricity facility is 98.39% in urban areas and 90.6% in rural areas of Sub-district Nainital. Though the non-conventional source like solar is merely 0.08% in urban areas and 0.72% in rural areas, showing huge scope for the non-conventional sources to be developed to achieve sustainability in this hill town.

**Sewerage system**—At present, the town has its sewers covering the old and new parts of the town but the sewage disposal poses serious environmental challenge. Though more than 90% dwellers have toilet facilities, but the squatters often dirty the lake sides with open defecation. Very often the casual tourists without proper lodging facility make it worse in the peak season.

**Solid waste disposal**—The solid waste management of Nainital is the responsibility of Nainital Nagar Palika/Municipal Corporation but it needs to enhance the level of efficiency. The manual methods of garbage collection make it a slow and tardy process, particularly considering the touristic nature of the place. The quantity of MSW generation for the city varies during peak and non-peak tourist period due to variation in the number of tourist population. The solid waste is mostly generated by domestic households, commercial units like hotels and restaurants, institutions like offices, fruit and vegetable markets, construction waste and the rubbish dumped by the tourists. The negligence of the people makes the things worse for solid waste

management. The garbage is often littered by the sides of the lanes or thrown directly into the drains which are meant for storm water drainage. In Nainital town so far there is no solid waste disposal system like scientific landfill. There is no segregation of solid waste at source, more so recycling is non-existent. The bio-medical wastes are also managed locally by the concerned authorities. The huge solid waste is dumped on the hill side near Hanuman Garhi in the outskirts of Nainital town. Besides the solid waste, the waste water connectivity of the households in Nainital sub-district as per Census (2011), accounts for 78% for closed drains and about 19% for open drains, leaving more than 2% households with no drainage connectivity. There have to be civic measures adopted to provide closed drains to all the households in Nainital.

#### ***24.2.4 Urban Growth with Little Scope of Physical Expansion***

The settlement of Nainital occupies the slopes of catchment area of the lake. The urban growth in its physical manifestation looks quite haphazard, stacked over each other precariously without leaving any breather in space. The quality of construction was also not monitored in the case of most of the hill residences during the time of urban upheaval. Nainital somehow lacks the ambience which was its most distinguishable character in the older times. The Uttarakhand Tourism Master Plan Report observes, ‘a common perception among operators in Nainital is that the types of tourists visiting the town, mostly day or weekenders, are not segments that are high spending or allow promotion of quality tourism. This is manifested by the increasing sprawl of stalls, cheap amusement parks and budget hotels, which do not inspire Nainital to become a more sophisticated tourism gateway town. For this to happen, a more desirable urban environment and better interpretation/information facilities are needed.’

NLRSADA is the regulatory body of the urban development in Nainital and management of the Naini lake. Ecologically sensitive areas which are unsafe for any construction activities have been declared as ‘Prohibited Areas’ which form a considerable part of Nainital NPP, spread over 11.73 km<sup>2</sup>. This leaves very little room for physical urban growth in safe category. Although ecologically sensitive areas have been earmarked as ‘prohibited areas’ in the Master Plan, there is high incidence of unauthorized construction in these areas by residential as well as commercial establishments. About 1200–1300 notices for demolition of unauthorized buildings have been issued by order of NLRSADA (CDP, Nainital 2007). According to the Census (2011) in the urban area of Nainital sub-district 95.47% of households are in permanent houses, whereas 3.5% are in semi-permanent and a negligible 0.64% in temporary houses. This indicates the limited scope of new construction activity in Nainital town, but reconstruction activity has to be watched over. Nainital urban development needs a strong policy support and relocation plan



for removing unauthorized buildings from the prohibited area. Though there are elaborate building by-laws of NLRSDA which divides the town in four categories on the basis of slope gradient where new construction and reconstruction activities are regulated, but on ground reality the corruption in the government machinery dilutes the entire motive.

### ***24.2.5 Environmental Hazards in the Lake Town***

The environmental hazards of landslide, soil erosion, and subsidence are widespread in Nainital, particularly in the periphery of the Naini Lake. Such situation rises due to a combination of factors like instability of land, lithological character, lack of vegetation cover, geological dynamics, structural weakness, water seepage and intense weather conditions. Landslide and soil erosion from the adjoining hills cause heavy silt deposition in the lake. The protective measures to control such environmental threats need civil works as well as preventive practices.

Most of the storm water drains carrying rain water from the upper reaches of hills with very steep slopes, develop very high velocities flushing along loads of soil debris and boulders. The catch pits and cross walls should be effective to cut down the velocity and to arrest the debris and boulders. With the erratic construction activities more and more grit, clay and boulders are likely to come down the hill with runoff during heavy rains. Such debris flows very often block the arterial roads in the town. The recent incidence occurred in July, 2015 when huge debris flow came down through a storm water drain from Upper Mall road and completely disrupted the vehicular traffic in peak tourist season. It is important to ensure that the carrying capacity of these drains is able to cope with the increased runoff. The issue is further accentuated by the fact that Nainital lies in high seismic zone and has constant threat from landslides from the surrounding hills.

### ***24.2.6 Heritage Resources in Absence of Protection and Conservation Measures***

The heritage resources of Nainital have a profound value. It is an irony that the cottages built in the nascent years of Nainital never found a place in the agenda of tourism development in Nainital. The heritage conservation could not be envisaged in any development so far. In the Executive summary, Uttarakhand Tourism Master Plan has taken a serious view of this, 'there seem to be absence of protection and conservation efforts with regard to the many historic and culturally important public and other buildings and structures in the city areas.' Unfortunately, this lake town had not retained its classical character of old times; the wooden slopey roofs, sit-outs in balconies, bay windows, ornamental ledges, railings and traditional

monograms on the walls, etc. There has to be a conscious effort to restore that character.

The old cottages which date back to 1840s and subsequent years have been referred by local people all these years as landmarks, and they continue to do so even if many of them do not exist anymore in present landscape of Nainital. Some of these esteemed heritage structures include Pilgrim lodge, the first cottage in 1841, residence of Jim Corbett, Nainital Nagar Palika building, Boat club, Old churches and many private cottages of colonial times. The urban built up areas have obscured most of them. The Cultural Resource Mapping of Nainital District carried out by INTACH lists the important cultural and heritage resource. Nainital boasts of some of the most revered buildings such as Rajbhavan, High Court, etc. Other heritage structures in the city include churches such as St. Johns Church and Union Methodist Church.

The natural disaster of 1880 had substantially damaged the old settlements on the slopes of China peak, and the end result of this massive landslide was delivered to Nainital as 'Flats', which has become a place of multiple uses such as public parking, informal market, playground, etc. It is very important to restore their past glory for the sake of heritage worth of Nainital. Such buildings have lot of potential to be part of Heritage tourism in the hill state of Uttarakhand. It direly needs the priority in tourism development of Nainital. Uttarakhand Tourism Master Plan ( recommends an inventory to establish which neighbourhoods or single buildings are of historic and/or architectural importance and which are not. This should be followed up by a heritage classification and introduction of incentives for urban refurbishment with the purpose to protect the image of the city as one of the most important historic hill stations, family resorts and educational centres in India.

### ***24.2.7 Community Awareness and Partnership in Development Process***

Local community is the stakeholder of tourism development in Nainital who bear the advantages as well as disadvantages of prevailing tourism scenario at this destination. A 2012 study by The Travel Foundation and Forum for the Future claims that 'a more holistic approach is being born in terms of blending responsible tourism with the destination, i.e. the idea of 'destination partnerships' (rather than any one party being responsible for protecting a destination, this is a multi-stakeholder approach whereby all parties interested in a destination as a resource look at how they can work together to achieve a common goal of sustainability).'

Public awareness of the hazards inflicted by the haphazard growth of tourism is very important. The instance of campaign of 'Ban polythene' in Nainital town has received a broad public support, making it a people's choice rather than a disciplinary drive. The cultural traditions of Nainital are also enriched through the participation of people in events like Naina Devi procession and fair over many decades now, marked by unique harmony. Uttarakhand Tourism Development Master Plan (2008) recommended that a permanent trust be created in order to promote visitor and environmental management and sustainable tourism in Uttarakhand. The trust should aim to protect and enhance the natural and cultural resources of the region and promote a sustainable tourism industry. It should bring together a range of different organizations whose collective goal would be to promote sustainable tourism in partnership with the goals of protecting the environment and enhancing community development.

These issues need to be addressed in the direction of developing sustainable tourism in this lake town. The foremost consideration should be directed towards the physical condition of the lake which is the focal point of this destination from aesthetic point of view, and much more importantly, as the prime source of water in this habitation. Secondly, the destination management of Nainital needs to be revamped and reviewed completely in terms of regulation of vehicular traffic, road alignments, pedestrian zone demarcations and monitoring of carrying capacities with the expertise, positioning systems and satellite surveillance. Since there is no further scope of physical expansion of this lake town, the alternative spaces should be developed in a planned manner with smart technology along the lines of smart city development. The older parts should be conserved as classical type with better heritage values. Thirdly, all the civic amenities should be upgraded effectively with better technology for water supply, sewage system and garbage disposals. At many places the older system needs to be replaced in a phased and organized manner with public cooperation and administrative support. Finally, the ecological integrity of this place with a natural water body surrounded by forests and mountains has to be managed in a specialized manner with a proper coordination among all the stakeholders.

### **24.3 Challenges of Sustainable Tourism in Nainital**

It is true that towns also grow like an organic entity and expand in their physical bearings. The erstwhile Nainital was a small hill settlement with local hill folks, small service community, some people who had come from outside to settle here driven by their own instincts, and some occasional travelers and holidaymakers. At that time Nainital had everything to cater to the needs of the people living here—a picturesque natural lake, roads wide enough to walk through, shops with all necessary provisions, educational institutions, sufficient water supply and sewer network, Boat Club as the social interactive centre and recreational activities in the lake. The older people recall the charms of salubrious weather, greenery, pathways, small all needs shops and social warmth. Why sustainability was not a concern at

that point of time? Because at that time the system was not under any kind of pressure to cross over various thresholds of growth. Nainital till 1960s was not labelled as a tourist destination, though it enjoyed a reputation of a hill station for those who had access in some or the other pretext of being there. As per Records of Nagar Palika Nainital, the growth of population of Nainital town witnessed a steep rise of 56.5% net change during the decade of 1960–1970. In the recent times Nainital has emerged as a major tourist destination in the northern region, again marking 29.49% net change in population growth in the decade of 2001–2011. Though such upsurge of tourists has paid good dividends in the economic terms but it has evidently caused greater concerns of sustainability.

Many destinations are now pursuing strategies that aim to ensure a sensitive approach towards tourism. Such strategies, by and large, follow the principles of sustainable tourism. (Bansal and Gautam 2007). In case of Nainital for the development of sustainable tourism the guidelines can be adopted as:

1. Sustainability of resource base: Sustainable tourism cannot make a ground unless the local resources particularly water, energy and forest are used on the basis of equity among present and future generations.
2. Stakeholder involvement: The local community and authorities must be committed to the goals of sustainable tourism development. Residents and all other concerned bodies at the destination should emerge as the first stakeholders of tourism and understand their rights and more importantly their duties well.
3. Participation: All stakeholders must actively participate in tourism services, facilities and infrastructure, and also implementation of development schemes.
4. Local employments: In tourism sector the issue of suitable employment opportunities for the local residents is one of the most significant considerations. They should qualitatively and quantitatively grow with time.
5. Establishing local business linkages: Local businesses in tourism facilitate the development of vital linkages among the service and good providers within the destination. Such business linkages should be strengthened by suitable government policies.
6. Carrying capacities: The physical, environmental, social and cultural limits should be ascertained properly. The carrying capacities should not be compromised with the monetary returns at any given time in a mountain environ like this, where the recuperative processes take extra long time.
7. Monitoring and Assessment: The periodical impact assessments along all the vital parameters such as environment, resource use, infrastructure, quality of life, social integration, etc., are important check points of sustainability.
8. Accountability: The accountability for public property, environmental quality and local resources should be clearly fixed for all those who have a stake in tourism development, and all those who stand benefitted by it.
9. Training and awareness: The training for better tourism services and skill development are important parts of the tourism system in order to enhance the sustainability. The community awareness is complementary to the education

and training programs, which needs to be enhanced through public campaigns and drives.

10. Cooperation and harmony: The cooperation among hosts, visitors and government agencies is highly desirable to set a synergy in the tourism system. The conflicts and confrontations can seriously tarnish the prospects of sustainable tourism.
11. Ethics and fair practices: At any tourism destination the ethical and fair practice in the business and services make it sustainable with long-term goals.
12. Positioning: Sustainable tourism involves reinforcing the sense of place, landscape character and community identity.

Though some beginning is made towards the goal of sustainable development with the implementation of 2011 Master Plan, which clearly lays down land use policy and development guidelines for the entire lake region and more specifically for the Nainital NPP area, Nainital Lake Region Special Area Development Authority (NLRSA) is responsible for management of the Naini Lake. NLRSA was established in 1989, under The Special Area Development Authority Act (1986). The planning area was revised in 1994 to further include Bhowali municipal area and surrounding villages. NLRSA is commonly known as Lake Development Authority (LDA). The five planning zones envisaged under this are: Nainital (including Khurpatal), Bhowali, Mehragaon—Khas, Bhimtal (including Sattal), Naukuchiatal, areas falling under 220 meters on both sides of the roads connecting these lakes. Nainital planning zone (NPP) was given top priority considering the presence of ecological sensitive areas, high rate of urbanization and increasing resident as well as tourist population. The guidelines in reference to the five planning zone of NLRSA are indicative of a futuristic plan towards sustainability.

- Development of non-polluting industries shall be promoted in Bhimtal Planning Zone.
- Development of tourism based infrastructure to be promoted in Naukuchiatal Planning Zone.
- Development of tourism and commercial activities to be promoted in Sattal planning zone.
- Bhowali Planning zone lies in the centre of the Nainital Lake Region Special Development Area and has the capacity to fulfil the demands of high level government offices.
- Nainital Planning division including the NNPP area should have development to the extent of its carrying capacity and surrounding areas of Khurpatal, Kuriyagaon and Bhavanipur should be developed to accommodate additional population growth.
- Khurpatal area is proposed to have development in the sectors of residential, tourism, education, entertainment, government offices and commercial establishments.

The development policy restricts further non-residential structures and allows residential development only to the domicile of Nainital. Only reconstruction or renovation activities are permitted for the existing residential units. So far very limited implementation of this policy has taken place with the shift of some administrative and institutional set ups shifted to Bhowali planning zone leaving out much to be desired. At the state level, Forest departments are the lead public agencies which undertake the policy about the forests. Such policy framework embodies most elements of sustainable forest management, concentrating on conservation and strengthening of the role of communities. Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) is mainly responsible for advising the state government in environmental pollution related issues and monitoring of environmental pollution of the state.

Despite the development and management measures adopted by various government agencies, on the ground reality sustainability seems to be distant goal. Nainital as a tourist destination is facing challenges which if not countered in time, may lead to serious consequences posing a serious threat to tourism to sustain here for a long time to come.

1. If the environmental degradation, mass wasting and ecological imbalance are allowed to continue at the pace prevailing today in the catchment of the Naini lake basin, it would lead to complete siltation in the lifetime of coming few generations, which implies that the very central nerve point of this location would be gone, and future of tourism would seize in face of such eventuality.
2. The traffic system and road system may reach a point of congestion where no further scope would be left to use any intervention to manage the mobility for the locals and visitors, creating a serious constraint in the destination management of Nainital.
3. The seismic vulnerability accentuated by the hazards of unauthorized, sub-standard and faulty construction of buildings precariously stacked over steep slopes, may pose a serious danger to the built up areas in Nainital, which may take a shape of a disaster that would be more attributed to anthropogenic reasons than natural.
4. The dissatisfaction of tourists with basic amenities of this hill station may repulse them not to visit, and the touristic interests may shift to other destinations with better value for money and time.
5. The long-term consequences of inadequate tourism services may take the scores of hotels toward the diminishing returns, and the character of this tourist destination may transform to something else.
6. The constant inconvenience in living with congestion, chaos and impersonal contact with floating population of tourists may gradually prompt the younger generations to migrate and settle in better places.
7. Due to acute pressures on the infrastructure, accommodation and amenities there may be clash of interests between the local population and the visitors leading to social unrest and intolerance.

Nainital today, is standing at the crucial juncture where it has to make a deliberate choice for the cautious path of sustainability with moderate and measured tourism rather than making fast of the indiscriminate and uncontrolled demand by the market, however lucrative it may be. The issue of sustainability stands out in public consciousness when one starts seeing the end of the road. The time for Nainital to get started on the road of sustainability is now or never.

## References

- Bansal SP, Prashant Gautam (2007) Sustainable tourism development: a Himalayan experience. Indus Publishing Company, Delhi, pp 34–37
- Dash RR, Malhotra I, Kumar P, Grischek T (2008) Lake bank filtration at Nainital, India: water quality evaluation, *Hydrogeol J* 16:1096
- District Census Handbook, Nainital (2011) Uttarakhand, series 06, part XII-B
- East P, Luger K, Inmann K (1998) Himalayan tourism on the sustainable trail? In: Sustainability in mountain tourism-perspectives for the himalayan countries. Oeko Himal Publication, p 3
- EERC Report (2002) Integrated management of water resources of lake Nainital and its watershed: an environmental economics approach. EERC, Indira Gandhi Institute for Developmental Research, Mumbai
- Forum for the Future and The Travel Foundation (2012) Survival of the Fittest: sustainable tourism means business. UK, Bristol, p 17
- Nainital City Development Plan (2007) Revised under Jawaharlal Nehru National Urban Renewal Mission (JNNURM), GHK International, UK. [http://www.jnnurmmis.nic.in/toolkit/CDP\\_NAINITAL](http://www.jnnurmmis.nic.in/toolkit/CDP_NAINITAL). Accessed 18 Dec 2015
- Nainital District Population Census (2011) Uttarakhand, <http://www.census2011.co.in>. Accessed 17 Feb 2016
- Pant MC, Bisht JS (1980) Impact of the changing environment on the lacustrine fisheries of Nainital. Nainital, Gyanodaya Prakashan, p 441
- Rawat JS (1987) Morphology and morphometry of Nainital lake basin. *Geol Soc India* 30:494
- RITES Ltd. (2001) Transport Plan for NLRSA, p 55 [http://jnnurmmis.nic.in/toolkit/CDP\\_NAINITAL.PDF](http://jnnurmmis.nic.in/toolkit/CDP_NAINITAL.PDF)
- The Area Development Authority Act (1986) 21st October 1989 vide GO 5148/11-5-89-69 Special Meeting/89
- The Times of India (1997) Nainital is no longer a green valley, Mar 04, New Delhi
- UNEP and UNWTO (2005) Making tourism more sustainable—a guide for policy makers, pp 11–12
- Uttarakhand Tourism Development Master Plan 2007–2022 (2008) Executive summary, Vol I
- World Commission on Environment and Development: Our common future, Policy Draft (1987) p 18