Tourism in Forest Areas of Western Ghats

EQUATIONS
January 2011
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SECTION I: TRENDS AND KEY ISSUES IN TOURISM DEVELOPMENT IN THE WESTERN GHATS

Introduction
The Union Ministry of Environment and Forest formed the 14-member Western Ghats Ecology Expert Panel (WGEEP)\(^1\), to recommend measures and assist the government in the preservation, conservation and rejuvenation of the environmentally sensitive and ecologically significant regions of the Western Ghats. The panel’s mandate is to assess the ecological status of the Western Ghats region, demarcate areas within to be notified as ecologically sensitive zones under the Environment (Protection) Act, 1986, and recommend modalities for the establishment of the Western Ghats Ecology Authority under the Act. EQUATIONS was invited by the Western Ghats Ecology Expert Panel (WGEEP) to submit a paper on “Tourism in the forest areas of Western Ghats” and join the consultative process started by the WGEEP to fulfil its mandate.

Tourism is increasingly being located in natural areas and areas with fragile ecosystems like mountains, hills, coasts, forests and wetlands. Different tourism products like ecotourism, wilderness, wildlife tourism, are growing rapidly in pristine and less accessible forest areas - the national parks and wildlife sanctuaries. Tourism has emerged as one of the key economic activities in the Western Ghats due to the rich biodiversity and verdant landscapes acting as the natural resources for tourism to thrive in this region. What is emerging also from a review of many papers that have studied the ecological significance and the issue of tourism increasingly being recognised as a factor and as a threat to ecological sustainability and diversity of the region.

Approach and Methodology
Considering the short time-frame, we have attempted a rapid assessment of trends in tourism in the Western Ghats and provided broad-based recommendations based on a few field visits. We also relied quite heavily on other studies done in the region by EQUATIONS as well as other researches and organizations in the past 10 years. For the field visits, the locations were chosen on the basis of the different kinds of tourism practices followed, geographies, access to the destination, the short-time frame, and previous studies conducted in the locations. The case studies are a result of the field visits and are an attempt to understand the impacts of tourism at these destinations. This paper intends to set a framework of issues for closer monitoring and more detailed impact assessment of tourism in the Western Ghats.

1.1 The Western Ghats
The Western Ghats, extending along the west coast of India, covers an area of 160,000 square kilometers\(^2\) and is one of 34 global biodiversity hotspots for conservation as defined by Conservation International (the Western Ghats and Sri Lanka are the two on the Indian subcontinent, the third being the Himalayas)\(^3\). The Western Ghats, also known as the Sahyadri Hills stretch for 1,600 kilometres along the west coast of India, interrupted only by the 30 kilometers long Palghat Gap, through the states Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra and Gujarat. About 60% of the Western Ghats is in the state of Karnataka.
The area is extraordinarily rich in biodiversity. Although the total area is less than 6 percent of the land area of India, the Western Ghats contains more than 30 percent of all plant, fish, herpetofauna, bird, and mammal species found in India - over 5,000 flowering plants, 139 mammals, 508 birds and 179 amphibian species. Like other biodiversity hotspots, the Western Ghats has a high proportion of endemic species. At least 325 globally threatened species occur here. The region also has a spectacular assemblage of large mammals and is home to several nationally significant wildlife sanctuaries, tiger reserves, and national parks. The Western Ghats contains numerous medicinal plants and important genetic resources such as the wild relatives of grains (rice, barley, Eleucine coracana), fruits (mango, garlicias, banana, jackfruit), and spices (black pepper, cinnamon, cardamom, and nutmeg).
In addition to rich biodiversity, the Western Ghats is home to diverse social, religious, and linguistic groups. There is high cultural diversity of rituals, customs, and lifestyles in the region including a significant population of adivasis and forest dwellers. The ecosystem provides important services for human well-being, such as clean air and water, flood and climate control, and soil regeneration, as well as food, medicines and raw materials – and the dependency on it for livelihoods, cultural and spiritual sustenance is high. The approximately 50 million population in this hotspot on its approximately 1,60,000 sq km of land area results in a high population density of 260 people/km² and exerting huge pressure on land and forests for agriculture, plantations and perennial crops as well as forms of development, industrialization, mining and tourism.

The Western Ghats mediates the rainfall regime of peninsular India by intercepting the south-western monsoon winds. The western slopes of the mountains experience heavy annual rainfall (with 80 percent of it falling during the southwest monsoon from June to September), while the eastern slopes are drier; rainfall also decreases from south to north. The wide variation of rainfall patterns in the Western Ghats, coupled with the region’s complex geography, produces a great variety of vegetation types. These include scrub forests in the low-lying rain shadow areas and the plains, deciduous and tropical rainforests up to about 1,500 meters, and a unique mosaic of montane forests and rolling grasslands above 1,500 meters.

Dozens of rivers originate in these mountains, including the peninsula’s three major eastward-flowing rivers Godavari, Krishna, and Kaveri. The Western Ghats have several manmade lakes and reservoirs besides a number of streams. Smaller rivers which are west flowing include:

- Gujarat: Purna, Auranga, Par
- Maharashtra: Surya, Vaitarna, Damanganga, Ulhas, Savitri, Vashisthi, Gad, Kajavi, Kodavali
- Goa: Mandovi (Mahadavi), Zuari, Tiracol, Chapora, Talpona
- Karnataka: Kali, Gangavali (Bedthi), Aganashini, Sharavathy, Kollur-Chakra-Gangoli, Sita, Mulki, Gurupur, Netravathi
- Kerala: Chaliar, Bharatpuzha, Periyar, Pamba

The sources of these rivers, on mountain tops are traditional pilgrim sites. The rivers are important sources of drinking water, irrigation, and power. Several of them form remarkable waterfalls.

Because it is a largely montane area that receives between 2,000 and 8,000 millimeters of annual rainfall within a short span of three to four months, the Western Ghats performs important hydrological and watershed functions. Approximately 245 million people live in the peninsular Indian states that receive most of their water supply from rivers originating in the Western Ghats. The range forms the catchment area for a complex of river systems that drain almost 40% of India. Thus, the soils and waters of this region sustain the livelihoods of millions of people. With the possible exception of the Indo-Malayan region, no other hotspot impacts the lives of so many people.

1.2 Tourism in the Western Ghats

1.2.a Tracing the development of Tourism in the Western Ghats

Tourism in the Western Ghats began with pilgrimages and social forms of tourism and continues to contribute to the most significant numbers of tourists in this region.

The next significant development was the advent of the modern day hill stations in India which can be traced back to the days of the British and the East India Company. Ootacamund or Udagamandalam (Ooty) in the Western Ghats was ‘discovered’ in 1819 by John Sullivan, then Coimbatore’s collector. Charles Malet came to Mahableshwar in Maharashtra in 1791 and later Mahabaleshwar became the summer capital of the Bombay Presidency. Kodaikanal in Tamil Nadu became a summer retreat for American missionaries because Lieutenant B S Ward went there in 1821. The British constructed the first roads and also the mountain railways to these remote mountain areas.

Access to the destination has emerged as one of the most important factors in the expansion of tourism. The opening up and official designation as a tourism destination of these places has resulted in the movement of hoteliers and tourists into the surrounding areas. Proximity to urban centers has brought more footfalls into the remote areas of Western Ghats. Unplanned and unregulated urbanization that tourism promotes far beyond the carrying capacity of a place puts huge pressure in the context of scarcity of drinking water and the vastly inadequate sewage treatment facilities, air pollution caused by the massive influx of thousands of vehicles in the tourist, new roads and up-
gradation of existing ones through prime forest areas in the name of tourism poses a grave hazard to ecological integrity.

Unplanned, unchecked growth of tourism practices in the hill ecosystems that are frailer than other ecosystems have led to the saturation of many hill station destinations in the Western Ghats region. With the number of tourists increasing every year and people visiting these areas in bulk at a particular time of the year, predominantly in the dry season, the resources are unable to rise to meet the demands of the tourists. The rapid growth of an affluent rural and urban middle class which had the leisure and means to travel for enjoyment was one of the many reasons that resulted in a tourism boom which changed the very landscape of towns such as Udagamandalam, in the Nilgiris. This saw changing socio-economic scenario of the region with increased construction activity, destabilizing hill slopes and triggering landslips, and the competition for basic resources such as fuel and water between tourists and local residents. In the paper “Hill Stations in the Western Ghats” M. S. Viraraghavan of the Palni Hills Conservation Council gives a lucid account of the fate that has befallen Kodaikanal (on the Palani hills, the eastern spur of the western Ghats) and the central role of unregulated mass tourism in this tragedy.

**The Case of Kodaikanal**

The rise in the number of tourists is indeed alarming and far beyond the carrying capacity of Kodaikanal. According to the information furnished by the Kodaikanal Tourism Officer the number of tourists in 1999 was 20.5 lakhs, a decade later, in 2009 it had risen to 32.8 lakhs, which is an astonishing figure for a town with a population of around 30,000!!

The economic benefits of such mass tourism are largely illusory. Most of them are day trippers, who carry their own food and so do not add to the local economy in any way (except to litter garbage everywhere). A large number of resorts/hotels are mainly owned by outsiders and employ the hills people at best in menial jobs. Even such jobs are denied in more up-market resorts which prefer to employ more sophisticated plains-people. If the economic benefits are marginal mass tourism also acts as an incentive for those who profit from social evils, such as drugs. There is a drug circuit running from Goa and Hampi in winter to Kodaikanal (and Ooty, and Munnar, in Kerala) in summer. Large areas of inaccessible forest land are converted to ganja cultivation.

The alarming increase in the number of vehicles (most in poor condition) has a very significant impact on air pollution. The main Ghat Road runs through the pristine ‘Tiger Shola’ forest and a noted environmentalist had observed that many of the epiphytic plants in particular have disappeared. This is the same situation in the Nilgiri forests where orchids once abundant are no longer to be seen. The tourist influx has also resulted in the over collection of certain ornamental plant species, e.g. *Aerides crispum* orchid and woolly tree ferns have been collected almost to extinction.

The inadequate water supply arrangements of the town are severely strained by the mass tourist influx. Every year the municipality is forced to curtail water supply to the local populace from January onwards so that there is enough storage to cater to tourist influx in April and May, the so-called ‘season’. It is a common sight to see poor women walking several kilometers in search of a pot of water during the season. Mind you, these are daily wage earners who can ill afford the time away from normal work. Every water source in town, and many are polluted, are utilized by a large number of water tankers which cater to local lodges. It is indeed a miracle that no large scale epidemic has so far occurred.

*Source: Hill Stations in the Western Ghats, Kodaikanal – A Case Study, M. S. Viraraghavan, 2010*

Biodiversity in the Western Ghats is threatened by a variety of human pressures and development “priorities”. The incursion of human development into these forests is rapidly and dangerously pushing back its boundaries, fracturing the evergreen stretches into unviable fragments. The Western Ghats were once covered in dense forests. Today, a large part of the range has been logged or converted to agricultural land for commercial plantations of tea, coffee, rubber and oil palm, or cleared for livestock grazing, reservoirs and roads. Mining, power plants, nuclear power plants, industries, highways, dams are increasing threats. The growth of populations around protected areas and other forests has also led to habitat destruction, increased fragmentation, wildlife poaching and human-wildlife conflict.11
The urban centers of Bengaluru, Mumbai and Pune have a large base of operators offering eco-tourism, adventure activities and weekend getaways in various regions of the Western Ghats. Another trend that has emerged is tourism in the form of conservation education, where NGOs, wildlife photographers, and wildlife specialists for example herpetologists conduct camps in remote locations for the urban youth.

It is not only the unregulated and unplanned tourism development at a small scale that has taken its toll on the Western Ghats, but also the so called “planned world-class tourism projects”. Glaring example of such development are Sahara’s Ambey Valley and Lavasa Corporation Limited’s Lavasa city. A hill station city, as it is being promoted, is a 25,000-acre area, nestled in the Western Ghats. Billboards along the Mumbai-Pune highway as well as on the company’s website hail Lavasa, located 2000-3000 feet above sea level in the central Indian state of Maharashtra, as “Free India’s first and largest private hill station.” The Lavasa Corporation, a subsidiary of the Hindustan Construction Company, embarked on a massive tourism project - to develop resorts, five star hotels, vacation homes, health and wellness facilities and other amenities, various town centers, and 12 private mini dams, all set amidst seven hills and around 60 kms of lake front. Activist groups on behalf of adivasis and local communities however allege that the Corporation has used the legal loophole to avoid obtaining environmental impact assessment (EIA) clearance from the Union Ministry of Environment and Forests. A public interest litigation petition is ongoing in the Bombay High Court against the State government and Lavasa Corporation Limited (LCL). In the meanwhile the Ministry of Environment and Forests in January 2011 issued a show cause notice against LCL declared “The LCL project is in violation of the Environmental Impact Assessment (EIA) notifications of 1994... The construction is unauthorized and there has been environmental degradation and having regard also to the fact that various steps are required to be taken by LCL... it is further directed that the order of status quo be continued and reiterated and no construction activity by LCL be undertaken.” As we finalise this paper, Lavasa Corporation has petitioned the High Court against the order, and the battle for Lavasa continues.

1.2.b Trends in the growth of Tourism Destinations and Establishments

In recent years, the trends in tourism have shown variation in terms of both economic and socio-cultural values. With changing lifestyles, economy and paid vacations, there has been a change in the attitude and perception of people toward travel and tourism. With the increased pressure of urbanization and the growth of a significant middle class, urban masses look for new getaway locations, where they can get involved in active outdoor recreation. Thus, national parks and sanctuaries and other nature-based locations have emerged as favoured destinations.

A recent study\textsuperscript{12} by Karanth and De Fries (2010) on Nature Based Tourism in Indian Protected Areas quotes in its abstract

“Previous research indicates that numbers of visits to protected areas (PAs) are declining in wealthy countries while foreign visitation is increasing in less wealthy countries. We focus on India to discern trends and implications of nature-based tourism in an emerging economy. We interviewed 91% of tourist facilities around 10 PAs to assess visitation, employment, and practices. Average growth rate was 14.9\% (from \textasciitilde 7\% in Bandipur to 44\% in Periyar from 2002 to 2008) and 80\% are domestic tourists. Many facilities (72\% post 2000) are recently constructed and 85\% occur within 5 km of PAs. Clustering of facilities in some PAs might facilitate easier management of resource use and establishment of best practice guidelines. Contributions of facilities to local employment are marginal. Rules governing entry of people and vehicles vary widely”. Of the 10 PA’s investigated in this study 6 of them (Periyar, Mudumalai, Bandipur, Nagarhole, Dandel-Anshi) are in the Western Ghats making the findings and conclusions of the study very relevant for this paper.

Even a decade ago the 500 odd protected areas did not interest the holiday seekers as much. But, in recent times they have become "hot spots" for vacationers. As a result, the Government of India Ministry of Tourism and the states have brought out ecotourism policies and have pumped in money and effort to promote "ecotourism" products and destinations. From an approach of National Parks and Sanctuaries seen as 'for conservation only', state and central tourism departments as well as forest departments are increasingly promoting tourism and attempting to make the case that tourism aids conservation. Most ecotourism policies aim at increasing tourism by creating more services and facilities for the visitors around the protected areas.

We have highlighted below the number of official tourist destinations in the Western Ghats through a visual mapping of the forest areas, the tourist destinations and major urban hubs that act as a transit point to these destinations. As no baseline data was available across all these sites it has not been possible to show the explosion in tourism destinations in this fragile region.
Map 2: Tourism Destinations, Tamil Nadu

Tourism Destinations, Tamil Nadu

1. Hogenakkal Falls
2. Mettur
3. Yercaud
4. Mudumalai W.L.S.
5. Ooty
6. Coonoor
7. Kotagiri
8. Marudamalai
9. Velliangiri Hills
10. Velode Bird Sanctuary
11. Tiruchengodu
12. Namakkal
13. Viralimalai Sanctuary
14. Palani
15. Valparai (Anaimalai Hills)
16. Indra Gandhi NP
17. Kodaikanal
18. Srivilliputhur
19. Courtallam
20. Ambasamudram
21. Kallakad
22. Mundanthurai T.R.
23. Padmanabhapuram
24. Suchindram

Destinations
- Nature Tourism
- Religious Tourism
- Cultural Tourism

Map Reading Guide:
- Districts
- Railway
- Highway
- International Airport
- Domestic Airport
- Western Ghats Hotspot
- Key Biodiversity Area

Equations
Map 3: Tourism Destinations, Kerala
Map 4: Tourism Destinations, Karnataka

Tourism Destinations, Karnataka

1. Gokak Falls
2. Gokarna
3. Dandeli Wildlife Sanctuary and Anshi National Park (T.R.)
4. Magod Falls
5. Banavasi
6. Unchalli Falls
7. Sharavathi Backwaters
8. Jog Falls
9. Agumbe
10. Seringapatam
11. Kalsoa
12. Kudremukh National Park
13. Bhadrakali Wildlife Sanctuary and T.R.
14. Chikmagalur
15. Kemangundi
16. Belur
17. Halebid
18. Dharwad
19. Shiridi
20. Kukke Subramanya
21. Kumara
22. Shivasamudra
23. Siddikot
24. Dubare Elephant Camp
25. Talakaveri
26. Bhagamandala
27. Iruppu Falls
28. Nagarahole National Park
29. Sringeri
30. Shiradi Ghat
31. Somanathapura
32. Shivasamudra Falls
33. Talakad
34. Banerghatta National Park
35. Bandipur National Park
36. Biligirirangan T.R.
Map 5: Tourism Destinations, Goa

Tourism Destinations, Goa

1. Alorna Fort
2. Corjuem Fort
3. Shri Sapta Kolestwar Temple
4. Malhena Temple
5. Shri Datta Mandir
6. Yaguen Hills
7. Shri Mahalasa Temple
8. Narasimha Temple
9. Madei W.L.S.
10. Bramha temple
11. Ramnath Temple
12. Shri Shantadurga Temple
13. Bondla W.L.S.
14. Safa Masjed
15. Mahadev Temple, Tambdi Surla
16. Kamakshi Temple
17. Rachol Seminary
18. Shri Damdar Temple
20. Molem National Park
21. Dudh Sagar Waterfall
22. Mamai Devi Temple
23. Netravalli W.L.S.
24. Shri Mallikarjun Temple
25. Cotigao W.L.S.
Map 6: Tourism Destinations, Maharastra

Tourism Destinations, Maharastra

1. Jawhar
2. Tansa W.L.S.
3. Ambarnath
4. Khandala
5. Matheran
6. Bhima Shankar
7. Malhail Ghat
8. Kelsabai
9. Bhandardara
10. Lonavale
11. Alandi
12. Lavasa
13. Sinhgarh
14. Pratapgarh Fort
15. Wai
16. Mahabaleshwar
17. Panchgani
18. Koyna W.L.S.
19. Chandoli W.L.S.
20. Panhala
21. Radhanagar W.L.S.
22. Amboli
However other studies do provide an indication of the scale of the growth of resorts in typical tourist destinations. The study "Status Assessment of Tourism on the Segur Plateau, Tamil Nadu - Impacts and Recommendations" indicates the growth in resorts in a small area covering just six villages.

**Figure 1: Number of new resorts established on the Segur Plateau from pre 1955 until 2008**

![Number of new resorts established on the Segur Plateau from pre 1955 until 2008](source: WWF, 2008)

The all India figures for tourist categories based on the last Domestic Tourist survey (2003 Ministry of Tourism) is the highest in South India for leisure and holidays followed by religious-pilgrimages, followed by the Western region of India (particularly Maharashtra). In the North of India for instance social and business dominates as reasons for travel.

The Tourist survey for Karnataka in 2005-06 revealed that 47.7 % of overnight visitors came for leisure and holiday (cultural activities) whereas 14.8 % came for resorts and 13.8 for wildlife. The country’s largest eco and wildlife resort chain, Jungle Lodges and Resorts, has almost all of its 13 eco and wildlife resorts in the Western Ghats region of Karnataka. During fiscal 2009-10, the resorts had about 80,000 guests, including 40 per cent repeat customers.

**Figure 2: Tourist arrivals in the ten parks, six of which are located in the Western Ghats.**

![Tourist arrivals in the ten parks, six of which are located in the Western Ghats.](source: Karanth and Defries, 2010)
What is even more worrying is the location of the resorts. Karanth and Defries (2010) clearly indicate that the more recent the resort the more likely it is to be hugging the periphery of the PA.

Figure 3: Resorts classified by year of establishment and distance to protected area edge

![Figure 3: Resorts classified by year of establishment and distance to protected area edge](source: Karanth and Defries, 2010)

The issue of lacking of planning is also a key one. Tourism is pushed regardless of a lack of any sensible destination level planning, impact assessment or carrying capacity assessment. While these terms appear in most policy and even regulatory documents, there is rarely a moratorium on tourism development because of lack of adherence to policy guidelines.

A classic case of the impunity of the industry in violating even existing laws is documented in the case study of Kodaikanal in the infamous Pleasant Stay Hotel Case. (Viraraghavan 2011)

"While the Pleasant Stay Hotel Case had undoubtedly an impact on discouraging violations of the law and Master Plan for sometime, recent times have seen a sharp increase in violations. In response to a letter seeking details of violations of the Master Plan, the Kodaikanal Municipality reported that there are 1503 buildings constructed without sanction, of which there are 233 zoning restriction violations and 769 other violations”.

Most tourist destinations in the Western Ghats have gone beyond what can be observed commonsense fashion as the carrying capacity. Formal tourism planning is non-existent as state and central tourism policy focuses on expansion and promotion and does not consider regulation its mandate at all! Thus land use planning, permits and zoning controls, environmental and other regulations, community initiatives, and a host of other policy initiatives to shape tourism development are unfortunately also non-existent.

1.3 Forms of Tourism

We highlight here the two key forms of tourism in the Western Ghats region – Ecotourism & Wildlife and Pilgrim and Religious tourism. Other forms are cultural (and heritage) as well as social and business travel.

1.3.a Nature based Tourism: Ecotourism and Wildlife Tourism

The term ‘ecotourism’ has come to be used synonymously (and mistakenly) with tourism in protected areas and/or areas of significant ecological values like wildlife. Popular definitions of ecotourism have both economic and ecological values. According to IUCN, "ecotourism is environmentally responsible 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 negative visitor impact, and provides for beneficially active socio-economic involvement of local populations." According to The International Ecotourism Society, TIES, ecotourism is: “Responsible travel to natural areas that conserves the environment and improves the well-being of local people.”
Ecotourism is based on principles of participation; consultation and sharing of benefits among all stakeholders especially the local community on whose resources ecotourism thrives. The participation of local people in ecotourism projects is essential for reasons that cover ethical, environmental and economic objectives. It is important that local people play an important role in managing their own destiny rather than be imposed by decisions taken by policy makers from outside. The arguments have tended to privilege economic benefits as a means to improving cooperation of local communities in the venture. It must however be recognized that the resources that ecotourism relies on belongs to local people and their partaking of the benefits is only fair.

Basic principles for ecotourism as defined in the Ecotourism in India - Policy and Guidelines, 1998 include compatibility with, and lower impact, on the environment. Biosphere reserves and forests are identified as ecotourism resources. The guidelines highlight scientific planning based on the thorough understanding of local resources and carrying capacity as well as continuous monitoring and detailed codes of conduct for developers, operators, visitors, host communities, NGOs and research institutions.

Unfortunately the realities on the ground point more to green-wash than any form of ecotourism. A solar heating system, water recycling unit or use of paper bags is good enough for an hotelier to lay claim to the ecotourism label. However they would evade putting into practice certain broadly evolved and accepted norms of ecotourism. This applies to most of the tourist destinations in the Western Ghats.

EQUATIONS own research over years has raised concerns on the supposed community benefits of ecotourism as practiced in its current form. The growing popularity of ecotourism in India has paid scant attention to the rights of indigenous people and concerns of civil society organisations. Largely ignored are the core issues that constitute ecotourism: participation and benefits of communities in such tourism and negative impacts of tourism on biodiversity and ecosystems. A Forest officer from Kerala summarises thus, "It all starts as ecotourism and ends up as mass tourism."

1.3.b Pilgrim Tourism
From the earliest times, the mountains have been considered the abode of Gods and revered and worshipped. There are hundreds of shrines and temples built atop the hills and innumerable caves and monuments linked to Hindu, Buddhist and Jain traditions all over the Western Ghats. Mohan Pai an ecologist has documented some of the well known pilgrim sites in the Western Ghats. The smaller sites are too numerous to be documented here.

There are over hundred Tirthas (holy places in the vicinity of rivers) and eighty Kshetras (places of pilgrimage) in the Sahyadri range. Tryambakeshwar is located at the source of Godavari near Nasik and contains one of the twelve ancient and sacred Jyotirlingas in India. Ramayana features Panchavati on the banks of Godavari near Nasik where Shri Rama stayed along with Sita and Lakshaman.

River Bhima rises 40 km north of Khandala and at the source of this river is situated another of the twelve famous Jyotirlingas of Bhimashankar. Most of the famous Ashta Vinayaka temples of Maharashtra are located in the Sahyadris - Lenyadri, Siddhatek, Pali, Theur, Morgaon, etc.

River Krishna rises near Mahabaleshwar along with four other rivers - Vena, Kakudmati, Savitri and Gayatri. The Shiva (Mahabaleshwar) temple is about 5 kms from the main bazaar of Mahabaleshwar hill station. There are legends associated with this spot in Mahabaleshwar. Mahatmya Pandharpur situated 40 miles west of Sholapur on the banks of river Bhima also known as Chandra-bhaga is the foremost pilgrimage centre of Maharashtra that houses the famous shrine of Vithoba.

Alandi is situated on the banks of Indrayani river 12 miles north of Pune and has the Samadhi and shrine of the famous Maharashatra saint Jnaneshwar. On the mountain at Jejuri, high up the Karha valley is the temple of Khandoba. Kolhapur is situated near the banks of river Panchaganga and is known for the ancient temple of Goddess Mahalakshmi.

Goa has many ancient Hindu temples spread over at the foot of the Sahyadris. South of Goa there is Sringeri on the left bank of river Tungabhadra where Sri Shankaracharya established his chief monastery.
Temple sites are also connected to river sources. While the temples attempt to protect these river sources, the growing level of pilgrimage tourism to these sites due to better roads has become a serious impact on the ecological features of these river sources. Bhimashankar receives thousands of tourists during the Mahashivratri festival, causing pollution from food waste, faecal matter, plastic bags, bottles and oil from motor vehicles that pollute the crystal clear waters of the spring where the River Bhima originates.

North of Udupi, near the base of the Kodachadri hills is the famous temple of Goddess Mookambika at Kollur. Udupi in Dakshina Kannada is famous for Krishna temple founded by Sri Madhavacharya, the great Dvaita philosopher and teacher. Kukke Subramanya temple at the base of the Kumara Parvata is in Dakshina Kannada. River Kaveri rises on the Brahmagiri hill in Kodagu its source is a small pond and there is a shrine to Goddess Kaveri. The place is known as Talakaveri.

The legend of Parasurama is probably based on the lowering of sea level which resulted in the emergence of the coastal strip which is now referred to as Konkan and Malabar. There are few shrines to Lord Parashurama - Petha Parashuram in Konkan, one shrine in Goa at Painguinim and two in Kerala at Payanur and Thiruvallom.

Sabrimala the famous abode of Lord Ayyappa is situated in thick forested area of the Western Ghats in the upper region of river Pamba in Kerala. The famous ancient temple of Lord Krishna is situated in Guruvayur, about 30 km from Trichur. Kaladi, eight miles east of Alwaye, on the banks of river Periyar is the birth place of Sri Shankaracharya. River Tambraparni arises in the Agasthyamalai hills. After a few kms from its source downstream, it reaches the Papanasam tirtha which is considered a very sacred place. There is a temple of Subramanya at Palni hills on a rocky hill about 450 ft high.

The most famous Buddhist monument in the Sahyadris are the Buddhist caves at Ajanta and Ellora near Aurangabad in Maharashtra. Junnar, where the hill fort of Shivneri is situated was an old Buddhist centre and it still has several cells and chapels and believed to be as old as 3rd century B.C. The other important Buddhist caves are at the Bhore or Khandala pass at Karla, Bhaje and Bedse. The Gandhar-Pali caves are located near Mahad junction on Mumbai-Goa highway in the Sahyadris.

Shravanabelagola a famous Jain pilgrimage centre is located 51 km south east of Hassan. There are 14 shrines on Chandragiri hill. Karkala is another Jain pilgrimage centre in the Western Ghats. In Moodabidri is the Savira Khamba Basadi, the most well-known of the 18 Jain temples. Kumbhojgiri, is 35 km away from Kolhapur and has around 24 temples dedicated to Jain Tirthankars within the complex, sacred to both Digambara and Swetambara sects.

Kerala and Goa also have ancient pilgrim sites for Christian linked to the histories of St Thomas as well as St Francis Xavier. There are relatively fewer sites of Muslim pilgrimage in this region.

Source: http://westernghats-paimohan.blogspot.com/2008/07/spiritual-mystique.html

Temples are also connected to river sources. While the temples attempt to protect these river sources, the growing level of pilgrimage tourism to these sites due to better roads has become a serious impact on the ecological features of these river sources. Bhimashankar receives thousands of tourists during the Mahashivratri festival, causing pollution from food waste, faecal matter, plastic bags, bottles and oil from motor vehicles that pollute the crystal clear waters of the spring where the River Bhima originates.

Pilgrimage tourism is one of the most popular forms of tourism in the Western Ghats. Very few regulations have lead to huge number of tragedies like the recent stampede and loss of over 100 lives at Pullumedu, in Kerala's Idukki district. While the Kerala government has ordered a judicial probe into the horrific tragedy that occurred in the reserved forest region part of the Periyar Tiger Reserve, unauthorised vehicular traffic, lack of basic amenities for the huge crowds that flow in on days of religious significance, inadequate crowd control measures and deployment of police and disaster management trained personnel, contribute in hindsight to such tragedies.
The scale of pilgrimages have increased and the impact of such large numbers of people on resources and the ecology and quality of life of local people becomes a complex and highly charged political issue.

A study on forest disturbance analysis shows a distinct correlation between increase in pilgrims travelling through ecologically sensitive areas and decrease in forest cover.

Indiscriminate anthropological activities result in devastating impacts on forests, especially in hotspots of biodiversity like the Western Ghats (Roberts et al., 1998). Various levels of applications of geo-informatics on biodiversity conservation and management have been reported from all over the world (Riitters et al., 1997).

Periyar Tiger Reserve (PTR) is the largest protected area in the state of Kerala with an area of 925 km². Sabarimala Sastha Temple, a famous Hindu pilgrimage centre, is situated in the deep dense forests in the Pamba range in the south west portion of PTR, at an elevation of 461 m above mean sea level. It records an inflow of more than 500,000 pilgrims every year (Kerala Forest Department, 1999). The Pamba range of PTR was composed of forest types which included tropical evergreen, semi-evergreen, moist deciduous and grassland and the area supports rich biodiversity, amongst which are a large number of endemics (KFD, 2007). The temple and the major trekking paths come under this range. There are only few studies on the pilgrimage activity in relation to forest disturbance in PTR. The land use/land cover analysis of the study area using remote sensing data revealed that significant extent of the forest area was converted to non-forest land uses during the last few decades. The forest area decreased from 98.58% in 1967 to 54.43% in 2004 due to the increasing pilgrimage activity in the area (Table 1). The forest area has been converted to other land uses like construction of temporary and permanent buildings, open forests with cleared undergrowth to provide resting place for pilgrims, grasslands and barren area. The total removal of trees led to the increase in the barren area and grasslands. The increasing number of pilgrims in the recent years (Sathyapalan, 2002) shows a direct correlation with decreasing natural forest cover.

Source: Forest Disturbance Analysis Using Geoinformatics in Pamba Range of Periyar Tiger Reserve, Kerala, India, Abin Varghese, John C. M., Punnen Kurian and Thomas A. P

1.4 Tourism Impacts
Tourism is gaining the dubious distinction of being mentioned almost without exception as a threat in most scientific papers on threats to ecologically sensitive areas. The negative impacts are primarily environmental, socio-cultural and economic.

Tourism Impacts in the Northern Western Ghats
Some high pressure tourist areas in the northern Western Ghats are Sanjay Gandhi National Park, Mahabaleshwar-Panchgani, Mathern, Panhala, Sinhgad, Bhima-shankar, Saputara, Radhanagari and Goa. All the PAs have some level of impacts of tourist facilities on the edges of these PAs. The impact of day visitors are different from the pattern of impact of overnight stay visitors. Both these groups require different management strategies. Based on the number of tourists alone, there are three high impacts, two medium impacts and three low impact PAs due to tourism.

In these PAs, 2 have major tourism development plans through the MTDC and several others are in the offing. These plans tend to increase generalized tourism and are only ‘ecotourism’ in name. This is probably one of the most serious concerns in which the two concerned line agencies, the Forest Department and the Tourism Department, require intense interactions to appreciate that tourism itself can form a major impact on the resource on which it depends, viz. wildlife. While its impact on the glamour species that tourists wish to see can be quantified to some extent, it is the less known species, such as endemic plants, insects, etc. on which there are likely to be cryptic impacts which could lead to their extinction and/or to serious loss of critical habitats of endemic species. Other issues related to animal breeding behaviour, territorial behaviour, migration routes, etc. require more detailed studies as this is linked to the level of tourism pressure.
Any tourism activity must be based on the principles of real ‘ecotourism’ which means that the strategy and activities must minimize its impacts on ecology and that the income generated must go to local people as a means towards alternate income generation and low impact form of home stay tourism rather than five star tourist complexes where the income generated goes to big business.

1.4.a Environmental Impacts of Tourism in Western Ghats

In recent years, the growth of India's consumer class, combined with increasing access to private and public transport, has led to damaging new tourist developments. Problems include the clearance of natural vegetation for hotels and facilities, the cutting of trees for fuel wood, increased pressure on water and electricity resources, pollution from vehicles, overcrowding and litter. These are serious concerns, due to the fragility and ecological importance of the forests. Tourism causes increasing congestion and pollution as thousands of visitors flock to parks and sanctuaries in motorised vehicles; there are changes in accessibility, landscape and the ecological balance between man and nature. The benefit of revenue from tourism does not always redress these problems but goes towards the cost of administering the project.

Nature based tourism in the Western Ghats is being developed in two modes – either accessing core areas in Wildlife Sanctuaries and National parks with permissions from the Forest Department / tourism by the Forest Department or by "allowing" access at the periphery to private ventures.

The Forest Departments of respective states have been instrumental in developing tourism inside Protected Areas and unprotected areas under their jurisdiction. This activity has intensified under the guise of "ecotourism" wherein more and more areas are being opened up. To support ecotourism, additional infrastructure has also been installed in the form of roads, guest houses, cottages, camping sites and watch towers for wildlife viewing within Protected Areas.

Tourism remains largely unregulated while both government and private establishments often claim self-regulation. While there may be the occasional individual establishment that is mindful of the law, the cumulative impact of a number of establishments on the local area gets paid less attention with the showcasing of a few eco-friendly practices. Conservation stewardship is often hijacked with these few practices by the tourism industry.

Uncontrolled proliferation of establishments around forest areas has lead to habitat fragmentation. This may cause or increase human-animal conflicts as fragmentation may lead to displacement of animals and their subsequent entry into human habitation and agricultural areas. The issue is further aggravated when many shops, restaurants and other smaller establishments come up on access roads and resting places. Apart from adding to fragmentation problem, there also tends to be a problem with constant garbage pile-ups, especially disposable plastic containers & packaging material. Garbage also attracts other wild animals especially scavengers and monkeys which may create management challenges and issues of tourists' safety.

Source: Current Ecological Status And Identification Of Potential Ecologically Sensitive Areas In The Northern Western Ghats, Institute Of Environment Education And Research, Bharti Vidyapeeth Deemed University, Pune, Maharashtra, October 2010
Rural and agricultural land is being diverted for constructing tourism establishments around forest areas. The impact of this on the local economy is escalating land prices which local people cannot afford and the loss of occupational sources (farming & agriculture). Eventually the owners are employed as security, housekeeper or other menial jobs on the premises which once belonged to them.

Increasing number of tourists and their vehicles will create disturbances to wildlife, and in some cases like Bandipur and Nagarhole, pose collision risks to animals.

With tourism revolving around how many tourists can be made to visit, quality of tourists is overlooked and a meaningful utilization of this opportunity to convey message of conservation is lost. Tourists are not even educated about basic behaviour that needs to be adopted inside forest areas. Instead what is offered, and therefore expected, is just a safari ride into the forest to try and spot flagship species.

1.4.b Socio-Cultural Impacts of Tourism in Western Ghats
There are both direct and indirect impacts of tourism and development on tribal and other local communities. Many resorts serve weekend customers, during festival time and corporate getaways. Tourists indulging in loud parties with music blasting and under the influence of alcohol also disturb the quiet and peace of local people whose homes are in tourist destinations. This trend is particularly noticed during weekends and festivals and instances have been reported in various tourism sites in all over the Western Ghats. Another impact of tourism on local communities is the commoditisation of the adivasi culture and tradition by tourism promoters through “tribal dance and cultural show”. Mr. Tony Thomas of One Earth, One Life, an organization in Kerala working on environmental issues and education noted that, such instances of “tribal dance” being conducted was rampant in many parts of the forest areas in Kerala and bordered on exploitation. He also was of the opinion that the tribal youth were being misguided by tourists and tourist operators, and were vulnerable to alcoholism and other forms of substance abuse.15

The WWF study16 notes "Although around 60% of the resorts take their guests into the tribal villages, it is unclear as to whether or not any thought is put into these visits, such as the impact it may have on the people living there and whether they actually want to host visitors. A number of the facilities organise for tribal people to come and perform their traditional dance for their visitors. Some of the proprietors feel, however, that the tribal people are not proud of their culture; sometimes they arrive at a facility seemingly drunk, without any ‘traditional’ dress for which they charge a lot. This has caused a negative attitude toward the tribal people by a few of the proprietors".

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**Impacts of tourism in the Segur Plateau**

The low effort of energy and water conservation, as well as a lack of waste segregation by the tourist facilities, shows there is little mitigation of negative environmental impacts occurring on the Segur Plateau. Given only 40% of the tourist facilities are connected to the municipal water supply, 60% of water use by this sector is actually unmonitored and/or unpaid for. Water in India is in limited supply and the demand is great, therefore, if such a large percentage of use continues to be unmonitored and unpaid for, more and more water will be drained from the water table diminishing the supply available for the environment and also for the local communities.

Nearly 50% of the tourist facilities discharge their grey (non-toilet) waste water directly onto vegetation or open pits, and while many of the facilities see this as direct recycling of the water there are potential risks associated with this activity. Untreated waste water can carry bacteria and chemicals that can pollute the surface and ground water, causing problems for later consumption by humans and wildlife. In addition to discharging untreated grey water, the low amount of biodegradable waste composting and the high percentage of resorts throwing this waste into a dump or pit (and later burnt or covered) means that any wildlife that accesses the property also has access to this waste. Bacteria and disease may be eaten by wildlife, such as deer, and then passed up the food chain, consequently potentially affecting the health of the wildlife population. Domestic animals such as cattle also eat waste which is problematic in the Segur Plateau as the local people rely on these cattle for their milk supply.

**Source:** Status Assessment of Tourism on the Segur Plateau, Tamil Nadu - Impacts and Recommendations. A report compiled for the Nilgiri and Eastern Ghats, Landscape Office of WWF India, Inneke A Nathan 2008

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Rural and agricultural land is being diverted for constructing tourism establishments around forest areas. The impact of this on the local economy is escalating land prices which local people cannot afford and the loss of occupational sources (farming & agriculture). Eventually the owners are employed as security, housekeeper or other menial jobs on the premises which once belonged to them.

Increasing number of tourists and their vehicles will create disturbances to wildlife, and in some cases like Bandipur and Nagarhole, pose collision risks to animals.

With tourism revolving around how many tourists can be made to visit, quality of tourists is overlooked and a meaningful utilization of this opportunity to convey message of conservation is lost. Tourists are not even educated about basic behaviour that needs to be adopted inside forest areas. Instead what is offered, and therefore expected, is just a safari ride into the forest to try and spot flagship species.
1.4.c Economic Impacts of Tourism in Western Ghats

The traditional sources of income in the various areas of Western Ghats region has been agriculture, plantations like tea, coffee, arecanut, rubber and spices. Employment with the Forest Departments in the various forestry and allied activities is also a source of income. The region is facing agricultural labour shortage akin to rest of the country, and two of the common reasons are migration to urban centers and low wages and the overall crisis in agriculture. Climate change has also been a factor in the decline of agricultural yield and also creating uncertainty in the sector.

Given this backdrop, the local communities are looking at alternative sources of income and tourism has emerged as one of the alternatives.

Tourism has the potential to provide additional income sources to the local communities. Running small-scale home stays, naturalists, guides, drivers, handicrafts, cooks are some of the options that are taken up. There are few examples of Rural Tourism ventures in Karnataka which would be examined in detail, in the section on case studies, where tourism is conducted in a sustainable manner, and the income from tourism is used as a supplement to the main economic activity, which is agriculture and plantations. There are instances in Wayanad, Kerala, where the resorts purchase their requirements from the local market, thereby creating backward linkages to the local economy. Also, examples exist of local handicraft being purchased by tourists and the hoteliers.

However these are exceptions and not the norm. Capacity building of the local communities for engaging successfully in tourism activities, local ownership and the ability to influence decision making of plans and schemes vis-à-vis tourism by local people remains woefully inadequate, resulting in few economic benefits accruing to local communities. The trend remains that, the benefits of tourism are accrued by an elite few, and the equitable distribution of the benefits from tourism and allied economic activities to the local and indigenous communities, remain unfulfilled.
SECTION II: LEGISLATIVE, POLICY AND INSTITUTIONAL TRENDS AND THEIR IMPLICATIONS

This section focuses on laws and policies at the intersection between tourism development in natural ecosystems and protected areas and the conservation and protection of these ecosystems. Much of the tourism in the Western Ghats is located in these fragile ecosystems.

2.1 Legislative Framework

2.1.a Environment (Protection) Act, 1986

The Environment (Protection) Act (EPA), 1986, under the jurisdiction of the Ministry of Environment and Forests (MoEF) is officially considered to be the umbrella legislation to regulate environment degradation and pollution. It also attempts to provide a critical framework to enable the coordination of bodies such as Pollution Control Boards set up through air and water related legislations that precede the EPA. The EPA primarily empowers the central government to take measures necessary to protect and improve the quality of environment by setting standards, regulating the siting of industries and so on. Under the Environmental Protection Act, 1986 (EPA) the two key notifications closely linked to the development of ecotourism are the Coastal Regulation Zone Notification (CRZ), 1991 and Environmental Impact Assessment Notification (EIA), 1994.

The EPA is less known for its role in environmental protection and prevention of damage through land use planning and safeguarding certain areas against the pressures of commercial exploitation. Section 3(2)(v) of the Act empowers the central government to take all such measures that it deems necessary to protect and improve the quality of the environment and prevent environmental pollution. It allows for the restriction of areas in which certain developmental activities can be prohibited. Further, section 5(1) of the Environment (Protection) Rules (EPR), 1986, specifies certain criteria like topographic and climatic features of an area, biological diversity of the area, environmentally compatible land use, extensive cultivation, proximity to the protected areas, etc. that can be considered while prohibiting or restricting certain operations in different areas.

Section 3 of EPA gives power to the Central Government i.e. MoEF to take all measures that it feels are necessary for protecting and improving the quality of the environment and to prevent and control environmental pollution. To meet this objective, MoEF can restrict areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards [Section 3(2)(v)] Section 5(1) of EPR, states that the Central Government can prohibit or restrict the location of industries and carrying on certain operations or processes on the basis of considerations like the biological diversity of an area (clause v) maximum allowable limits of concentration of pollutants for an area (clause ii) environmentally compatible land use (clause vi) proximity to PAs (clause vii). Section 3(2)v of the Environment (Protection) Act (EPA), 1986, and Section 5(1) of the Environment (Protection) Rules (EPR), 1986 give the Central government the power to restrict "industries, operations, or processes or class of industries" on "the basis of considerations like the biological diversity of an area". The government and non-governmental sectors have used these clauses to highlight the sensitivity of a region and thus grant it a special status, "to protect and improve quality of the environment". In the more recent instances, these areas have been called Ecologically Sensitive Areas (ESAs) or Ecologically Fragile Areas (EFAs).

One of the earliest recorded instances of the effective use of these clauses was in 1989, in the categorisation of industrial activity in Doon Valley in Uttarakhand. The notification first specified that any mining, tourism and grazing activity and other types of land use can be taken up in the valley only after the management plans were drawn up by the State Departments concerned and these were approved by the Central government. It categorised industries as Red, Green and Orange on the basis of the extent of pollution they may cause and its impact on the valley. In the subsequent years, a sustained campaign by environmentalists resulted in the declaration of Mahabaleshwar-Panchgani (2001) and Matheran (2002) in Maharashtra as ESAs. Both these areas had been experiencing the impact of large-scale, unplanned tourism and related development. In both cases, the Supreme Court ordered, among other things, the preparation of a zonal master plan for the area, by the State government, and the appointment of a monitoring committee.

The paper by Kapoor, Kohli and Menon (Kalpavriksh, 2009) gives an extensive documentation of the ESA process and challenges. We have extracted below in toto portions of the paper relevant to tourism development in forest areas of the Western Ghats.
On March 21, 2002 the Expert Committee to Identify the Parameters for Determining Environmental / Ecological Sensitivity of Hill Stations, was constituted. In 2003 the Hill Stations Committee submitted its report to the MoEF. This however remains in draft stage and copies of the draft are not accessible on MoEF website.

The National Wildlife Action Plan (NWAP) 2002-2016 states under its policy imperatives that the Plan cannot be executed in isolation and wildlife conservation cannot be restricted to National Parks and Sanctuaries. It states therefore "Areas outside the protected area network are often vital ecological corridor links and must be protected to prevent isolation of fragments of biodiversity which will not survive in the long run. Land and water use policies will need to accept the imperative of strictly protecting ecologically fragile habitats and regulating use elsewhere."

In section III (5.2) 1, the NWAP states, “All identified areas around Protected Areas and wildlife corridors to be declared as ecologically fragile under the Environment (Protection) Act, 1986.” As per section XI (5.2) of the Plan this task was to be completed by the MoEF by the year 2004. The NWAP further states "Extend 'Ecologically Fragile' status under EPA 1986 to adjoining areas of PAs, 'crucial wildlife corridors' and to all Biosphere Reserves, World Heritage Sites, Ramsar Sites and other areas notified under international conventions and treaties.”

Section 9 of the Wildlife Conservation Strategy 2002 states "Lands falling within 10 km. of the boundaries of National Parks and Sanctuaries should be notified as eco-fragile zones under section 3(v) of the Environment (Protection) Act and Rule 5 Sub-rule 5(viii) & (x) of the Environment (Protection) Rules”.

The Supreme Court and ESAs
In response to a Writ Petition (No. 460) (Goa Foundation v/s Union of India) filed in 2004, the Supreme Court in its order dated December 4, 2006 gave specific directions on declaration of an area of 10 km around Protected Areas as ESAs. Most state governments had not responded to the earlier orders/directions of the Court. The order clearly stated the need to notify the areas within 10 km of the boundaries of wildlife sanctuaries and national parks as Ecologically Sensitive Areas with a view to conserving forests, wildlife and the environment, and to give due regard to the Precautionary Principle. Presently, state governments are in the process of submitting their responses to the Supreme Court. Only Goa had sent its proposal to the National Board of Wild Life for its approval. But recently Haryana, Sikkim, Chattisgarh, Assam, Karnataka and Gujarat have also sent in their proposals to the MoEF. After all these plans are submitted by the state governments, they are sent to the Supreme Court for final approval. This matter is still pending with the Supreme Court.

2.1.b Wild Life (Protection) Act, 1972, Amendment 1993 and 2002
Section 28(d) of Wild Life (Protection) Act 1972 (WLPA) gives power to the Chief Wildlife Warden of the State to grant permit to enter or reside in a sanctuary for tourism purposes.

Through an amendment in 2003 specific regulatory measure were introduced in the Act under Section 33 (a). This section prohibits construction of commercial tourist lodges, hotels, zoos and safari parks inside a sanctuary except with the prior approval of the National Board of Wildlife (NBWL). According to Section 5C WLPA the task of the NBWL is to promote the conservation and development of wildlife and forests. It has been constituted by the Central Government with effect from 22.09.03.

The Director General of Tourism, GoI is a member of the NBWL. This potentially opens up the possibility of including mechanism/ policies to regulate the kind and form of tourism operations in Protected Areas. The same applies with regard to the inclusion of the Managing Director, State Tourism Development Corporation as a member of the State Board for Wild Life (SBWL).

The report of the Tiger Task Force “Joining the Dots”, a team constituted in 2005 by the National Board for Wildlife for reviewing the management of Tiger Reserves have commented strongly on the ill effects of unregulated tourism in tiger reserves. According to the report "While tourism itself remains unchecked, so does the impact of tourism on the
reserves. The most basic data that should be calculated for each park is the carrying capacity of the parks and the delineation zones where tourism is permitted and where it is banned. Their recommendations include issues such as: "Each protected area must have its own tourism plan that should indicate the area open to tourism in the reserves; tourism activities should not be allowed in the core of the national parks and the tiger reserves; there should be a ceiling on the number of visitors allowed to enter at any time in a given part of the reserve. The ceiling has to be decided by the field director of the park keeping in mind the carrying capacity of the habitat and the availability of facilities, transport and guides". The recommendation also states "Wildlife tourism should not get relegated to purely high-end exclusive tourism." The report refers to The National Wildlife Action Plan (2002-2016) that says "ecotourism must primarily involve and benefit local communities and the first benefits of tourism activities should flow to the local people".

2.1.c The Forest (Conservation) Act, 1980

The Forest Conservation Act (FCA) also has the potential to regulate tourism development in forest areas. However, certain provisions in FCA – namely Section 2(ii) and 2(iii), have been used for allowing tourism related activities in forest land.

According to Section 2(ii), "notwithstanding anything contained in any other law for the time being in force in a State, no State Government or other authority shall make, except with the prior approval of the Central Government, any order directing any forest land or any portion thereof may be used for any non-forest purpose". Most state governments have interpreted tourism as a forest related activity that is related to or ancillary to conservation, and through such an interpretation "misused" the Act to allow tourism. This has resulted in spread of tourism activities on forest land. Except for some very recent developments, the Central Government has not invoked its powers under this section to regulate tourism in forest areas.

As per a recent media report, in a letter to Himachal Pradesh Government, the MoEF has said, "Eco-tourism has been regarded as a non-forest activity and, as such raising permanent structures to promote eco-tourism amounts to violation of the provisions of the Forest (Conservation) Act 1980." C D Singh, a Senior Assistant Inspector General of Forests in the Ministry, has in particular come down heavily on the state governments allowing non-forest activities without the prior approval of the Ministry. Singh has asked the Haryana government in particular, to provide details of all such activities undertaken in forest areas and told other state governments including Himachal Pradesh to refrain from allowing similar violations on forest land.

According to Section 2(iii) of FCA, any forest land or any portion thereof may be assigned by way of lease or otherwise to any private person or to any authority, corporation, agency or any other organisation not owned, managed or controlled by Government. This section is ambiguous pointing to a loophole by which tourism and tourism related operations can enter forest areas. In certain cases it can also be used to stop tourism related development in forest land.

The writ petition filed by the Nagarhole Budakattu Hakku Sthapana Samithi and others, in 1996 against the State of Karnataka and M/s. Gateway Hotels and Gateway Resorts Ltd was against State Government leasing out 56.41 acres of forest land to M/S Gateway Hotels and Gateway Resorts Limited, a division of the Taj Group of Hotels. The initial permission to the project was granted in violation of the rules of the FCA and the WLPA. A single Bench of the Karnataka High Court allowed the plea and directed that the possession be reverted to the State Government. Aggrieved by the order the respondents appealed in the High Court. The division bench of the High Court set aside the earlier judgement and allowed the appeal with some conditionalities. Aggrieved that this implied a post facto clearance by the Central Government under the FCA, Nagarhole Budakattu Hakku Sthapana Samithi and others, filed a Special Leave Petition before the Supreme Court of India. The Supreme Court reserved judgment until the decision of the Central Ministry of Environment and Forest regarding clearances was at hand. In 1998, MoEF rejected the application of M/s. Gateway Hotels and Gateway Resorts Ltd under the FCA and the project was stalled.

2.1.d The Biological Diversity Act 2002

As part of India’s endorsement of the UN Convention on Biological Diversity, the Biological Diversity Act came into being in 2002. The Biological Diversity Act 2002 is a law meant to achieve three main objectives: a) conservation of biodiversity; b) sustainable use of biological resources and c) equity in sharing benefits from such use of resources.
The Act does not explicitly mention tourism. Article 37 of the Act deals with the issue of declaring a Biodiversity Heritage Sites. However, it is not clear whether tourism is an activity that will be allowed within these areas and what role the local communities would play in the management of these areas.

2.1.e Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006
The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA) does not have any specific mention about tourism. Section 5 of FRA empower the holders of forest rights to stop any activity that has detrimental impact on the wildlife, forest, biodiversity of the area and negatively impacts their natural heritage and culture. With ample examples of negative impacts of tourism on environment and lives of the local communities, Section 5 of FRA needs to be interpreted for making Grama Sabha approval mandatory for tourism projects.

2.1.e Article 244 of the Constitution of India, the Fifth Schedule and Panchayats (Extension to the Scheduled Areas) Act, 1996
The Constitutional Provisions (Fifth Schedule with Article 244) empower the Governor of a State to regulate and make regulations for Scheduled areas for Scheduled Tribes so that what rightfully belongs to the tribals cannot be taken away. It disallows the transfer of indigenous peoples’ lands to non-indigenous peoples. The 73rd Amendment of Constitution of India is applicable in Schedule V Areas through the Panchayat Extension to Scheduled Areas Act, 1996 (PESA) to improve the system of participatory governance in the Scheduled Areas. PESA was introduced to ensure effective participation of the tribal inhabitants in public affairs, including policy making, as the original statements of the Constitution do not precisely clarify what “planning and decision making” means. The Act was designated to be a legislative means of promoting self-governance in tribal areas through the creation of local village bodies (Grama Sabhas). The PESA Act in recognition of the traditional and customary laws of the tribal areas mandates the Gram Sabhas to:
- Approve the village’s plans & projects for social and economic development before they are implemented by the Gram Panchayat.
- Identify beneficiaries for poverty alleviation programmes.
- Give certification for utilization of funds by the Panchayat for the mandated activities, thus making the Gram Sabha a powerful instrument in socio economic development of the tribals.
- The Gram Sabha or Panchayat at the appropriate level has to be consulted and approval taken before any land acquisition is done for development projects in Scheduled Areas.

EQUATIONS research in tribal dominated areas shows that the panchayats are not consulted when tourism projects or plans are prepared by the governments, private investors or companies. The panchayats get to know about the project or plans at the implementation stage only after all clearances have been given by various other departments. While clearances on power, water supply and sewage are given by the electricity department and public works department respectively, the issue of land allocation and conversion if any is done at the District Collector’s level. The role of the panchayat is then reduced to a formality when a letter of intent is written to the panchayat for specifying purpose of land-use and a ‘No Objection Certificate’ is requested from the panchayats. At this stage, the panchayats practically have hardly any say as clearances have already been given by other departments. In many such places tourism is currently being pushed where indigenous and local communities are struggling for basic rights for land, autonomy and access to resources on which their lives and livelihoods are dependent.

EQUATIONS’ research also shows that administration in these states promote the growth of tourism privileging this over the rights of the panchayats to decision making and control over resources like land and water bodies – many of them common property resources. It is a matter of serious concern that governments, both at state and central level are seen to be privileging the promotion of tourism over people’s rights and in violation of the democratic principles enshrined in our constitution through the 73rd and 74th Amendments.

2.2 Policy Framework

2.2.a National Tourism Policy 2002
The National Tourism Policy (NTP), 2002 states - “wildlife sanctuaries and national parks need to be integrated as an integral part of an India tourism product, and priority needs to be given to the preparation of site and visitor management plans for key parks, after a prioritization of parks”.

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NTP acknowledges the environmental impacts of tourism but has not clearly stated what it proposes to do about it. Moving beyond realizing sustainability as an important objective, NTP does not lay down specific do’s and don’ts in terms of actual policy measures. A recent move by the Ministry of Tourism to adopt or adapt the Global Sustainability Tourism Criteria maybe a move towards mitigating the negative environmental impacts – but it is too early to say what substantive action will come from this initiative.

### 2.2.b Ecotourism in India – Policy and Guidelines, Ministry of Tourism – Government of India, 1998

The guidelines were formulated to ensure regulated growth of ecotourism with its positive impacts of environmental protection and community development. The policy and guidelines are addressed to all state governments, industry associations and those involved in tourism development and preservation of environment and natural resources.

The policy draws heavily on the definition provided by the United Nations World Tourism Organisation (UNWTO) and enlists the key elements of ecotourism as being: natural environment as prime attraction, environment friendly visitors; activities that do not have a serious impact on the ecosystem and positive involvement of local community in maintaining ecological balance. The policy states that a selective approach, scientific planning, effective control and continuous monitoring are required for ecotourism development.

The policy spans all ecosystems of India and considers these as major ecotourism resources, with the assumption that the natural resources have been well protected and preserved. It indicates that all of these ecosystems are potential ecotourism destinations.

The policy identifies all seven Biosphere Reserves, including Nilgiris, as ecotourism resources. Nilgiris as several case studies show is under immense pressure due to unregulated tourism development and the pressure is on the rise. The expansion of tourism has not been selective or scientifically planned. There has been no control or monitoring as prescribed in policy and guidelines.

### 2.2.c The National Environment Policy 2006

The National Environment Policy (NEP) recommends that forest and wildlife areas be targeted for promotion of ecotourism and overlooks tourism as an impacting agent. The Policy accuses poverty as the main factor behind depletion and destruction of natural resources. The commercialization of environmental services and assigning an economic value to wildlife as suggested by NEP supports commoditisation and privatisation of resources, including wildlife and ecosystems. The result is opening more areas for more tourism.

### 2.3 State Policies

#### 2.3.a Karnataka

In 2004 the state formulated a Wilderness Tourism Policy which states that wilderness tourism is a constituent of ecotourism. The recently introduced Karnataka Tourism Policy 2009-14 states that the Wilderness Tourism Policy shall be part of the overall tourism policy of the state. The wilderness tourism policy in its objectives section states that the reason for encouraging and permitting wilderness tourism is for furthering the cause of conservation through appreciation, respect and enjoyment by the public. Hence specified areas of national parks, wildlife sanctuaries and forests will be opened up as conservation tool. Casual tourists will be discouraged. It is further stated that wilderness tourism should benefit the local community, especially tribals. The Forest Department will work out ways and means by which such benefits are accrued. Coming to wilderness tourism operators, the policy names certain agencies through which wilderness tourism may be operated, like Jungle Lodges and Resorts Ltd and Youth Hostels Association. The policy states that private resorts will not be permitted to operate within National Park/ Wildlife Sanctuaries (WP/WS) or their enclosures. It however states that private sector players will be invited to develop themed projects that will have minimal impacts on the environment and on projects that will help nurture the existing environment.

However the Policy does not clarify where the private players will be invited to develop these themed projects and has no guidelines to ensure that the environmental impacts of these themed projects are minimal! It talks about establishing an eco-tourism zone stretching from Coorg to Karwar – a considerable part of the Western Ghats – with chain of nature camps branded as Jungle Trails.

Karnataka Tourism Policy 2009-14 mentions that “ecotourism will be developed and promoted as a core activity and could also be done through Public Private Partnerships (PPP) and in close collaboration with the forest department.
Experiences from other states show that PPP models end up promote privatisation of what are often public resources. The essential component of involvement of "public sector" is relegated to providing the logistic support of providing land, necessary connections to water, electricity, connectivity and the necessary legal clearances for the project. The Karnataka Tourism Policy reconfirms the point where it states that all tourism developments will be mainly undertaken by the private sector with the government playing the role of the facilitator through formation of land banks, Special Tourism Areas (STA), formation of Development Authorities (DA), and streamlining procedures for maximum expansion.

On the whole, the policy framework for tourism in the state of Karnataka is one towards mega expansion of tourism and tourism infrastructure. There is cursory mention of conservation, community benefit and regulation, but does not spell out the mechanisms towards this.

2.3.b Kerala
The defining framework for ecotourism in the state of Kerala is the Kerala Tourism Vision, 2025 formulated in 2001. The Vision states as one of its objectives, "To promote sustainable and eco-friendly tourism in the State based on the carrying capacity of the destinations. The strength of Kerala Tourism is its excellent natural resources in the form of backwaters, hill stations and beaches. Having understood the need for looking into the sustainable development of these destinations, Kerala Tourism focuses on the conservation of ecology to reduce the negative impact of tourism on the environment and intends to promote development of tourism based on the carrying capacities of the destination. The development of the tourist destinations will be controlled and regulated based on the guidelines formulated through Area Development Plans to have a planned development.

This approach requires a stock taking of current practices and lessons learnt from the ground to realise what aspects have contributed to ‘non-sustainable development of destinations’. Moreover, ‘carrying capacity’ is only one of the components for sustainable and eco-friendly tourism. Other components also need to be explored. The case studies in this paper are pointers to what is actually happening on the ground.

2.3.c Tamil Nadu
The Tamil Nadu Tourism Development Corporation, based on the tourism policy note 2010-2011 has established an Eco-Tourism Wing with the objective of promoting Ecotourism in Tamil Nadu in a big way. In 2010 this wing came out with Ecotourism Policy for Tamil Nadu in consultation with the State Environment and Forest Department.

The policy mentions local community playing a vital role in organising ecotourism activities and conservation of environment. It also talks about economic growth of local communities by engaging in the process as hosts and local benefits. However the policy does not talk about community participation in deciding if a particular place should be developed as tourism destination. Once the destination is finalised, the development and management of the same will be preferably done by the forest department, involving the local community. It does not seem to envisage a role for local communities in planning for physical infrastructure, zoning exercises, evolving tourism management plan and monitoring and impact assessment. The policy talks about standards, continuous monitoring and codes of conduct for visitors. However the kind of ecotourism envisaged is high value low volume, banking on the tourists’ willingness to pay.

The Policy also envisages opening up of new areas. Opening up newer areas without proper monitoring mechanisms have shown that it can lead to negative environment and social impacts. The guiding principles of the policy states that “resources that are traditionally used by the local community are to be harnessed for ecotourism wherever required”. The government will help the sector to set up hotels in potential eco tourism spots outside the wilderness/protected areas. As evident from the examples of other national parks this only paves the way for unregulated proliferation of resorts and establishments and the gradual privatisation of common property resources.

2.4 Institutional Frameworks and Implications
The Ministry of Environment and Forest (MoEF), Government of India (GoI) set up Protected Areas (PAs): national parks and wildlife sanctuaries and later community reserves and conservation reserves under the Wild Life (Protection) Act, 1972 and its subsequent amendments. In the process, large populations of indigenous people and forest dwelling communities were forcibly displaced and alienated from traditional lifestyles and access to forest based resources. The irony is the same protected areas were later opened up for tourism activities. These are largely driven by the forest department with little or no control and participation by local communities in regulating, decision making or reaping benefits from them. Current national policies and tourism policies of various states and union territories in
India prioritise infrastructure driven tourism, and rarely address in practical terms the issues of impacts, regulation, and management. The trend towards more centralised forms of decision making such as special tourism zones and development authorities accentuates top down forms of decision making and a further alienation of local communities from their rights to decision making and control of natural resources.

The WGEEP itself has as one of its mandates the proposal for a Western Ghats Ecology Authority. There has been a recent trend among civil society conservation groups to call for the establishment of a Western Ghats Conservation Authority. We believe that such a move may be well intentioned but can have many negative (unintended) consequences that have to be cautioned against.

One of them is to balance between ecological and conservation led concerns with concerns of people particularly forest and nature dependent forest people and forest dwellers. Often environmentalists see people as a nuisance in their bid for purist form of conservation. In the documentation of India’s Ecologically Sensitive Areas34 (Kapoor, Kohli, Menon 2009), the critical role played by NGOs such as BEAG is commendable. The role of apex institutions like the Supreme Court is also evident. However what is disconcerting is the lack of representation of wider peoples movements and concerns.

Our concerns are also derived from our experiences with tourism based or tourism centric development authorities such as those established in Kevadia, Chilika or those proposed by the Kerala Conservation and Preservation of Tourism Act (or Special Tourism Zones) which favour tourism led development process that prioritizes and privileges tourism centric "development" activities over other forms of development. These development authorities transfer the powers from Local Self Governing Institutions (LSGIs) to Development Authorities. They are also known to usurp powers and mandate of Local Self Governing Institutions that have been bestowed on them by the 73rd and 74th Constitutional Amendments of the Constitution of India and PESA.

Authorities in this country have rarely been bottom-up and mostly function in top-down ways. It is also known that an authority may arrest detrimental projects but is prone to political and economic manipulations which may hamper the aims of conservation. Irrespective of their role – conservation or development, the powers such 'Authority' is endowed with overrides powers of other local government institutions. We need to discuss more thoroughly the roles and powers of the proposed authority and ensure accountability to a democratic monitoring and influence. We need to be careful regarding the structuring of this proposed authority so that local communities, gram sabhas and LSGI’s have adequate powers and not just representation.

The process of setting up Authorities also promotes centralizing power of decision making on issues such as control of natural resources like water and land (on which the tourism industry for one is highly dependent). The issue of control on natural resources can be seen in the case of the National Tiger Conservation Authority whose mandate is to conserve tigers and their habitats through eco-development and people’s participation as per approved management plans. However in the name of eco-development, tourism is also pursued without any adequate regulations to protect the wildlife and the ecosystem from unregulated tourism activities. On the other hand the local people have to face the brunt of restricted access to forest areas and Non Timber Forest Product (NTFP) or Minor Forest Product (MFP) for their livelihood. In the long battle for ensuring the enactment of the Forest Rights Act, which was largely led based forest based peoples movements. This act has transformed the paradigm of forest ownership and governance principles, and it is not surprising that peoples entitlements under the act have been slow to come. However the rush to declare "inviolate" zones such as Critical Tiger Habitats has been extremely fast.

A sector like tourism, which needs to be localised and site-specific to ensure maximum benefit and least negative impacts, requires the consultative, regulatory and implementing powers to rest with local communities through the institutions of the panchayat and gram sabhas.

The other institutional and policy mandate of the WGEEP is in relation to the declaration of ESAs. In the context of tourism, as the paper by Kapoor, Kohli and Menon (2009) comprehensively documents – the acceptance of ESA by local communities has been mixed depending on multiple interests.

"In both the cases of Matheran and Mahabaleshwar – Panchgani, “The notification has incurred strong opposition by shopkeepers and hoteliers as these restrictions hamper their business interests. The most affected group is the migrant labour population. Because of the clause in the notification prohibiting change in land use, they cannot build their houses in the area, although this does not mean that Matheran has seen no change in its land use. Illegal
structures (hotels, resort extensions) are being constructed by powerful hotel owners in Matheran violating the regulations of the notification”.

In the case of ESAs the authors also go on to highlight areas and concerns similar to those highlighted by us in the case of a Conservation or Development Authority.

Kapoor, Kohli and Menon (2009) draw attention also to the process of the declaration of ESAs. In three of the declared ESAs, the notification was the outcome of the opposition of some individuals or groups to a specific developmental project. In the remaining five, developmental activities that had been taking place over long periods of time but which had expanded or gained in intensity in the immediate past were seen to be threatening the region in question. The early declarations are a result of the triangulated relationships between the judiciary, the politician and the environmentalist. Following the preparation of the parameters for declaring ecologically sensitive areas, the role of the environmental bureaucracy and the expert gained significance. Both Mahabaleshwar and Matheran declarations came out of court cases filed by the BEAG. The Aravalli declaration is linked to a case filed by Vikalp Samiti and the Doon Valley declaration came out of the litigation by a group of citizens and NGOs like RLEK and FoD. The Mount Abu declaration is also associated with an order passed by the Supreme Court of India. Same is with the setting up of the Taj Trapezium Zone Pollution Authority, following a case filed by environmental lawyer, M.C. Mehta.

The process of declaration of ESAs relied on seeking urgent judicial/political intervention and bureaucratic action. This is especially true for the earliest ESAs, where in notifications were issued without any discussions or deliberation in the area where they were to be implemented. They were in response to perceived threats to the environment (and livelihoods of orchard farmers in Dahanu) from infrastructural, industrial or tourism related activities. However, it does raise questions of compromising a larger democratic process for the purpose of the end result.

Negotiations have also occurred at another level. This is between those proposing the ESAs and the MoEF. In cases like Matheran, the area declared as ESA was much smaller than the originally proposed boundaries. Discussions with Regional Planners revealed that this made it difficult for them to devise development plans for Matheran, as the pressures in the area not within the ESA would have a constant bearing on areas where the ESA stipulations are applied. Specific details on this issue have been dealt with in the chapter on Matheran ESA in Kapoor, Kohli and Menon (2009). However, at the time of the declaration of the ESA what was of prime importance for the environmentalists was to get a legal protection for any portion of the area that was under severe threat from tourism.

The constitution of the committees or authorities for an ESA is optional and only takes place where the MoEF deems it fit. If set up, the composition of these committees and the powers granted to them become critical in determining the compliance of the notification clauses. Many important issues like the preparation of a Master Plan, or a Tourism Plan, or carrying capacity studies of these areas and sometimes granting of clearances to the developmental projects are left to the discretion of these committees. If the committees are designated as mere monitoring bodies without any powers to take action against violators, they remain mere reporters of non compliance to the MoEF. Further, committees and authorities are dependent on the central government for the renewal of their term and finances that might limit their functioning. Finally, there is also the question if the implementation of the ESA clauses would be more effective, if the individuals who were instrumental in drafting the notification or initiating the process were part of the monitoring or implementation related committees. One cannot conclude on this, but it is surely an aspect that needs to be considered while deciding on the composition.”
Section III: CASE STUDIES

Case Study #1: Masinagudi, Tamil Nadu
Masinagudi is a village that lies at the foothills of the Nilgiris. Until 10 years ago, it was a small village that housed a population of a couple of thousand. Over the past few years it has become one of the hubs of tourism, with an alarming increase in the number of resorts. Masinagudi and the surrounding villages form the Segur Plateau that borders the Mudumalai Wildlife Sanctuary and National Park, which has been declared a Tiger Reserve. It also lies in the elephant corridor.

The Mudumalai Wildlife Sanctuary was the first sanctuary to be declared in Southern India in 1940. It is spread over an area of about 321 sq. km. It is situated at an elevation of 1000m above mean sea level. The average mean temperature is 24.3°C in the hot season and in the cold season is 4.8°C. Masinagudi range is spread over about 80.4 sq. km in Mudumalai Wildlife Sanctuary and is located in the southeast part of the sanctuary. These areas are declared as reserve forest areas. The eastern part of the sanctuary, beyond Masinagudi, gets very low precipitation; about 800 mm. Dry cultivation is practiced in Masinagudi. Kurumbas, Irulas, Chettis and Paniyas are the hill tribes who have been living in the sanctuary and near Masinagudi for a long period of time.

The animals that are seen there include elephant, gaur, bison, chital, sambar and occasionally one sees a tiger or a leopard. There are three main forest types seen in the Mudumalai National Park: tropical moist deciduous, tropical dry deciduous and southern tropical thorn. In certain places mixed vegetation types are present. Mudumalai tiger population is part of the single largest tiger population in India. It acts as a source for populating the Northern and Eastern parts of the Western Ghats landscape complex. This tiger population is capable of existing at reasonably high density due to the deciduous nature of its forests.

Water sources in Mudumalai and adjoining areas are the Moyar, Bidharahalla, Kakkenhalla and Avarhalla rivers and Maravakandi reservoir. Some of the resorts have their own private bore wells, which may be more than one in number.

Over the past few years, it has been seen that tourists are flowing into the area in large numbers. This has caused the natural ecology of the area to be disturbed by the increase in noise and pollution levels as well as the excessive utilization of natural resources. Many of the resorts that are present in Masinagudi are found to be lying on the periphery of the Wildlife Sanctuary, and are therefore very close to the habitats of the wild animals. There have been reports of the resorts playing loud music and throwing parties in the wee hours of the night. This has caused a lot of disturbance to the animals, although none of it has been documented; neither is the Forest Department doing anything about this.

There have also been reports of hunting of deer in these resorts. While there seems to be nothing that the Forest Department can do, the existence of laws that control or curb this hunting may be used to prevent it. The problem seems to be that people are aware that they can flout the law, just because there is no one to stop them. Any drive through the Bandipur-Mudumalai sanctuary from Ooty to Mysore will provide evidence of devastating damage. There are always a few victims — peacocks, deer, small game and even occasionally a leopard — hit by a speeding truck, bus or car.

Scientists from the Bombay Natural History Society and the Indian Institute of Science have documented the ravages. Although the highway is closed during the night, from 9.00 p.m to 6.00 a.m, the minute the gates open, one can notice a huge rush of vehicles plying on the road with excessive honking and over-speeding.

One contentious issue between the Forest Department and the private resort owners is the fact that Masinagudi is a part of the elephant corridor. Now, with human encroachment into the habitat of these large mammals, there has been widespread documentation of man-animal conflict.

Elephant herds complete with tiny calves are forced to wait increasingly long periods to cross the road to the waterholes. Their natural corridors are blocked. Local adivasis have noted that animal behaviour patterns have changed. The elephants are more angry and aggressive than ever before. Where earlier adivasis walked confidently through the herds, now they must be careful. In 2008, an elephant killed a local young man and injured a woman in Mudumalai and earlier this year a foreign tourist was killed by an elephant from the Blue Valley resort, as she was taken to a remote area by the guide.
The 11 government tourist facilities lie within Mudumalai Wildlife Sanctuary or within reserve forest or revenue land and none of them are fenced. Of the private facilities, 69% have a boundary connection to government revenue land or reserve forest. They cover an area of 791 acres, and 91% are fenced (usually with electric wires). The percentage of private land fenced ranges from 68-100% of the area, with the exception of Singara village which only had 5%. None of the 11 government tourist facilities are fenced and as a result they pose very little obstacle to the movement of animals. Private facilities, on the other hand, have a large amount of area fenced. On the Segur Plateau this may have an important negative impact on wildlife because the majority of the resorts are situated in a crucial corridor for the movement of many species, especially elephants. Therefore, there is a high possibility that the movement of wildlife is being hindered, and that further movement restrictions would be likely with unchecked development of tourist facilities.

The table below shows the visitation details of the Mudumalai Wildlife Sanctuary and National Park, Udhagamandalam.

<table>
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<th>Year</th>
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<th>Foreign</th>
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<tr>
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<td>119824</td>
<td>578</td>
<td>120402</td>
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<tr>
<td>2006-07 upto Jan 2007</td>
<td>122790</td>
<td>657</td>
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Masinagudi has a total population of 15,000. It was originally a tribal area. But hydroelectricity projects in Singara and Moyar hamlets brought a lot of immigrant labour who stayed back. Today there are just 600 tribals in the area. About a fifth of the people in the village rear cattle, most of the bovines are scrub cattle that are valued only for their dung that is sold in neighbouring Kerala. The cattle are also sold for meat in neighbouring Kerala. The 500-odd families in Moyar are particularly dependent on cattle rearing—the village has 2,500 cattle.

Masinagudi residents are apprehensive of what Mudumalai tiger reserve holds for them. The panchayat of Masinagudi in Nilgiri district has dug its heels against the notification of a buffer zone of the tiger reserve. In a Tamil Nadu government notification of December 2007, the entire 321 sq km of the Mudumalai protected area was designated a critical wildlife area or core of tiger reserve—parts of it was earlier formed a national park and parts a wildlife sanctuary, each with different implications for people living in its vicinity. On the anvil is also a proposal to declare 500 sq km of contiguous area as a buffer zone. The declaration is causing much heartburn in Masinagudi. Although no relocation has been proposed, people in Masinagudi fear that a buffer zone notification will prevent them from grazing cattle and that they will not be able to take tourists in jeeps to the tiger reserve. To date, no buffer zone has been created in Mudumalai, and it is only the core zone or critical tiger habitat (321 square kilometres) that has been declared.

There has been strong opposition to the proposed buffer zone and elephant corridor. “There are vested interests behind the opposition to the declaration of the buffer zone. Every day people trek into forest illegally. If a village forest committee with forest officer is made in charge of tourism, this will stop. At present resort owners control trekking and tourist jeeps. They are those who stand to lose once a buffer zone is declared,” contends N Mohanraj, Coordinator for Nilgiris and Eastern Ghats Landscape of the World Wildlife Fund, Masinagudi. He has a point. There are 50 resorts/hotels in Masinagudi and the adjoining villages of Bokapuram, Mavanhallam, Vazhaithotam and Chokanhalli. In Bokapuram, buildings erected by outsiders have come up too close to the protected forest. Tourism has its downside.

Nilgiris Biosphere Fading Glory, a study by EQUATIONS in 2006 notes that prostitution is reported to be growing in the resorts. Local people are employed in mostly menial jobs. The report notes more than 150 wild animals are killed
on the Mysore-Ooty road between April and June every year. Wildlife experts say that the resorts have mushroomed because the forest department has not provided accommodation in the protected area. “Some resorts that will stand to lose some of their treks and other activities once the buffer zone is notified, but there also resorts that want their activities legalized,” says Nigel Otter, a wildlife enthusiast from the region.  

The Bokkapuram Panchayat President, Ms. Saroja agreed that there have been gross violations in the name of tourism, but added in the same breath that a lot of locals preferred to be employed in the tourism sector now rather than in estates in other areas. Unregistered establishments providing accommodation lure tourists using guides stationed near the Tiger Reserve, who get a healthy commission for bringing in the tourists. Night Safaris are common where private jeeps from the resorts take the tourists in the night, on the roads surrounding the Mudumalai Sanctuary to spot wildlife against the rules set by the Forest Department. Some of the tourists are taken on illegal trekking paths in the forests leading to conflicts with the wildlife. There seems to be general agreement among the locals that tourism needs to be monitored whereas resorts claim that it is the advent of tourism that led to development in this region. These are crucial days ahead in how tourism is dealt with in this region, and it is to be seen if the ongoing impasse between the tourism industry and the forest department will be resolved.

**Case Study #2: Wayanad, Kerala**

The district of Wayanad is of an area of 2126 sq. km. It is bound on the east by Nilgiris and Mysore districts of Tamil Nadu and Karnataka respectively, on the north by Coorg district of Karnataka, on the south by Malappuram and on the west by Kozhikode and Kannur. The altitude of Wayanad varies from 700 to 2100 meters from sea level. The hill ranges of Vythiri taluk, through which the road from Kozhikode ascends the Wayanad plateau over mind-boggling bends and ridges are the highest locations. From the highest altitude of the Western Ghats on the western boarder of the district, the plateau of Wayanad gradually slopes down eastward. Further from Mananthavady, it becomes a common plain of paddy fields with the swift flowing River Kabani coursing through it. The reserve forests through which the river flows are Begur, Rampur, Kurichiyat, Kuppadi and Mavinhal region in Kerala and Kakankote and Begur in Karnataka. Its geographical position is peculiar and unique. The difference in altitudes of each locality within the district presents a variation of climatic conditions. The idyllic nature of Wayanad, its nearness to Udagamandalam and Mysore with metalled roads to these centres has led to tourism becoming popular in this district. Wayanad is one of the principle areas in Kerala for tourism. Over the past ten years, tourism has been seen to be growing steadily, and more and more resorts and hotels have been sprouting up in the area. There are three main taluk areas that have been distinguished in the district and these are Sulthan Bathery, Vythiri (Kalpetta) and Manathavady.

The following are some of the tourist attractions of the region, which are popular.

- Chembra Peak, Pakshipathalam: Trekking
- Edakkal Caves: Heritage
- Wayanad Wildlife Sanctuary – Tholpetty and Muthanga ranges: Wildlife Sanctuaries
- Kuruwa Island
- Pookode Lake, Banasura Dam: Boating
- Soochipara, Kanthanpura, Meenmutti and Chethalayam: Waterfalls
- Thirunelly, Thrissiley, Valliyorkavu, Jain: Temples

It has been documented that the number of resorts and homestays in Wayanad has increased manifold in the recent past. The officials of District Tourism Council say that there are at least 350 homestays in Wayanad and many more unregistered establishments come up every other month. There are allegations of fraudulent land transactions and also a number of land transactions in the Wayanad district part of which is attributed to the booming land rates associated with tourism. The Responsible Tourism initiative started by the Tourism Department in Wayanad has petered off and there has been no further follow up on the evaluation of the initiative. The Wayanad Tourism Organisation (WTO), a council of the tourism industry with resort and homestay owners of Wayanad, claims that they are eager to be part of a Responsible Tourism initiative, but the tourism department has lacked initiative. Some of the resorts own large swaths of plantation land and follow a model of “enclave tourism”, where the tourists are within the property of the resort for the complete period of stay and whatever money they spend remains within the private establishment with very few benefits to the local community.
Wayanad Wildlife Sanctuary

The Wayanad Wildlife Sanctuary is the area that is contiguous with the Nagarhole National Park and the Bandipur Tiger Reserve in Karnataka and the Mudumalai National Park in Tamil Nadu. Wayanad Wildlife Sanctuary is present in the north eastern part of the district with discontinuous patches of Reserve Forest. The tourism zones are divided into two ranges: Muthanga and Tholpetty. The vegetation that is seen is mostly moist deciduous forests with patches of semi evergreen forests. The faunal variety is the same as the rest of the Biosphere Reserve and it is reported that the tiger sightings are quite common in the Tholpetty, Rambur and Mavinhalla regions. Elephant migrations are also common between the different states that have integrated the Biosphere Region. The government claims to give importance to the scientific conservation of the sanctuary with special emphasis and regard to the tribal populations that live in the area.

The major tribes in Wayanad are Paniyas, Adiyas, Kattunayakan, Kurichiyans, Urali Kurubas, Mulla Kurubas and Jen Kurubas. They mainly dwell in the forest areas of Wayanad. The Muthanga Range of the sanctuary has a population of approximately 2400 tribals in 110 settlements. Since, being in a protected area, according to the Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972 the tribals are not allowed to earn a living or harvest NTFP from the forest. To address this, Eco Development Committees (EDCs) have been formed at every settlement. Every tribal household can have up to 2 members in an EDC. The problem is most of the EDCs are non-functional. In Muthanga, one of the EDCs’ is fully functional and they generate income via tourism. Whereas, in Tholpetty range, none of the EDCs are currently functional as tourism has come to a halt for the past year due to deeply mired local political issues. The issues started with agitations led by local taxi drivers against attempts by the Range Officer in Tholpetty to regulate tourism, and protests by a political party after one of their local leaders’ vehicles was searched at the forest check post. Due to the volatile situation, the Forest Department took a decision to put a halt to tourism activities.

The DFO and Wildlife Warden, Bathery, Srivalsan stated that uncontrolled tourism has been a problem in Wayanad Wildlife Sanctuary. Earlier, safaris were allowed at the Muthanga range throughout the day, causing increased pressure on wildlife. Private vehicles and taxi jeeps were allowed in the safari. There were incidents of tourists getting down from the vehicle during the safari on sighting of elephants. Now the forest department has reduced the safari timings to 2 slots of 3 hrs each in the morning and evening. Even then, the numbers of jeeps and vehicles going on the safari have not been regulated. The jeeps travel to almost 20 kms inside the sanctuary amounting to almost 150 jeep trips in a day. The forest officer in Tholpetty notes that due to increased exposure to tourists, the animals have moved away from the area into deeper forests. The elephants in the region have turned aggressive in face of the constant disturbance due to safari. She is of the opinion that what starts as ecotourism ends up as mass tourism hampering the cause of conservation. The DFO has proposed for a study to be conducted for carrying capacity and visitor management of the Wayanad Wildlife Sanctuary, so as to have a control on the number of visitors and vehicles allowed for the safari. A training program has also been planned to train tribal EDC members as guides and trackers. It is to be seen if the carrying capacity study will be conducted scientifically and the recommendations implemented.

Photo 2: The weekend crowd arrives at Banasura Dam (left) and Kuruva Island (right)
Lack of Visitor Management
The number of tourists visiting destinations like Kuruv a Islands, Edakkal Caves, Pookode Lake, Soochipara and Meenmutty waterfalls are unprecedented and out of control. Pookode Lake is part of the ‘Clean Destination Programme’ launched by the District Tourism Promotion Council (DTPC). Kudumbashree women are part of the Clean Destination Programme, where they come and collect the litter and maintain the cleanliness of Pookode Lake. They work from morning to evening to achieve this, but the number of tourists that arrive are so high compared to the number of women working there, that it is an uphill task for these women. Added to working hard daily, they are not paid their wages on time, sometimes the delays extending to months.

Photo 3: Lakeside resorts coming up at Banasura dam

At the Banasura Dam, the Kerala State Electricity Board runs a hydel-tourism project. This involves taking tourists on speed-boats around the islands created by the reservoir. The speed boats are extremely noisy, can be heard kilometers away, and leak oil onto the waters of the reservoir. Moreover, the surrounding Banasura hills have been identified as an important Elephant Corridor. One can only imagine the disturbance the sound of the speed boat would cause to the wildlife. In the hills surrounding the dam, many resorts are being built to cash in on the lovely views. Outside the dam, lot of vendors queue up selling their wares to the tourists, and the packaging of whatever they buy is promptly littered around. The same is the case at other destinations in Wayanad, the numbers of tourists that arrive are far more than what the authorities can handle and littering is one of the biggest problems. At Kuruva Island, tourism is managed by the Vana Samrakshana Samiti (VSS). The footfall of tourists is more than 2 lakh visitors a year, with an average of 3000 visitors daily. The VSS have tried their best to regulate entry of tourists and their activities on this fragile island ecosystem with its bamboo forests, on the Kabini River. They have fenced of parts of the island, and tourists are allowed only on a certain path. But the path itself had to be widened due to the increasing number of tourists. Forests are meant to be seen and heard, and not the other way round of tourists being heard by the forests. But that is exactly what is happening at Kuruva islands. Some of the tourists come drunk, though the VSS tries to confiscate bottles of alcohol, it is still smuggled in. The VSS members clean the destination daily, but it’s a humungous task to monitor thousands of people who litter the destination. The only positive from the Kuruva island experience is the management of the destination is in the hands of the local community and the funds generated are being used for development of the surrounding villages. They are managing many destinations like the Chembra peak, Meenmutty waterfalls apart from Kuruva Islands. But, with the growing rate of tourists visiting Wayanad, the sustainability of tourism is at risk. To add to the woes in Wayanad, the tourism department opens up new destinations at ecologically fragile destinations every year, without having proper mechanism to manage and regulate tourism at existing destinations. As a resort owner noted, it’s the only way to garner more funds.

Case Study #3: Parambikulam Wildlife Sanctuary, Kerala
Lying in the southern part of Western Ghats, immediately south of Palghat gap, Parambikulam Wildlife Sanctuary exhibits mountainous terrain. The sanctuary lies between the Anamalai hills and Nelliampathy hills. The altitude ranges between 300m and 1438m above MSL. There are 7 major valleys and 3 major river systems. Geologically the sanctuary has Hornblende biotite gnesis and charnockites. Major peaks in the sanctuary are Karimala (1438m), Pandaravarai (1290m), Kuchimudi, Vengoli (1120m) and Puliyarapadam (1010m). Apart from the natural rivers and streams, the sanctuary possesses three man-made reservoirs namely Parambikulam, Thunacadavu and Peruviripallam whose cumulative water spread is 20.66 sq. km. The reserve is the most protected ecological section
of Anamalai sub-unit of Western Ghats, surrounded on all sides by protected areas and sanctuaries of Kerala and Tamil Nadu, the reserve is endowed with a peninsular flora and fauna. The region being a major ecological continuum from Peechhi to Eravikulam through Anamalai aids the large viable populations of wildlife.\textsuperscript{52}

The Parambikulam Tiger Reserve was inaugurated, the second in the Kerala State after the Periyar Tiger Reserve, on February 17, 2009. The new reserve has a total area of 648.5 sq km, with a buffer zone of 225.3 sq km. The newly added core area measures 188.2 sq km. and the existing core of the Parambikulam Wildlife Sanctuary is 235 sq km.\textsuperscript{53} In the Parambikulam Reserve, 250 families were living in the core area. Of this, 78 had expressed 'initial willingness' to relocate in February 2010.\textsuperscript{54}

The management of the Reserve has undergone positive changes brought about since Sanjayan Kumar, an officer of the Indian Forest Service, took over as warden in 2006. Prior to that, tourism was unregulated, and tourists drove around in their vehicles unmonitored. They also discarded garbage, particularly plastic water bottles, along the forest trails. The park was opened to tourists with a boarding and lodging facility with seven tents in Anappady, the main administrative centre of the sanctuary. Six other facilities were also made available, in machans (platforms), watch towers and dilapidated foresters' quarters in the interior parts of the sanctuary, where visitors could stay or look at wildlife or just enjoy nature. Adventure trails were opened up for trekking. The number of vehicles entering the sanctuary was restricted to 30 a day. In order to eliminate the plastic menace it was made mandatory for tourists to surrender all their plastic bags and water bottles at the entrance at Anappady. The sanctuary management instead started providing tourists with Parambikulam mineral water bottles, each costing a nominal Rs. 5. The bottle has to be returned on exit, failing which a fine of Rs.100 is imposed on the tourist. A curio shop at Anappady, managed by tribal people, sells products such as honey, eucalyptus balm (made of eucalyptus oil and beeswax) and caps and T-shirts bearing the logo of the sanctuary. In order to cut down on the disturbances caused by the vehicles taking tourists around, the sanctuary bought four 14-seater vans on loan. The profit they fetched enabled to repay the loan within a short period. The number of visitors to the sanctuary is now limited to 200 a day. The core has six settlements, with a total human population of about 1,100. The buffer also has at least 600 people in different settlements.\textsuperscript{55} Tourism is being managed by Village Eco-Development Committees in these six settlements along with the Forest Department. There are 6 presidents of these Eco-Development Committees who report to the Warden.

\textbf{Photo 4: Tea Stalls and shops set up by Eco-Development committees at Parambikulam}

The fact that Parambikulam is surrounded by Protected Areas has also curbed private establishments coming up around the Reserve. But, recently the Forest Officer in charge of Parambikulam Tiger Reserve has changed. It is to be seen that the controlled tourism that was being conducted will continue. The Forest Department has to make sure that further expansion and construction of additional accommodations does not take place. There are shortcomings in the capacity building of the tribal communities that needs to be addressed.
Photo 5: Wild boars coming towards tea stalls and dustbins are a common sight in Parambikulam Tiger Reserve

Waste management, though far ahead than many other destinations in the Western Ghats, needs improvement as wild boars and monkeys are being attracted to the waste generated by the tourists and the settlements. Environmental education in the form of effective interpretation centres and other educational content along with well-trained staff should be developed. Parambikulam Tiger Reserve heralds a hope for better management of tourism in Protected Areas with involvement from the local communities, and it should be ensured that the good work continues in spite of change in administration. The issues of settlement and displacement due to the declaration of the Tiger Reserve should be handled sensitively and justly in accordance with the Forest Rights Act of 2006.

Case Study #4: Uttara Kannada Circuit: Yana-Sirsi-Yellapura-Dandeli, Karnataka

Yana-Sirsi-Yellapura

Sirsi is a town in the Uttara Kannada district in the Indian state of Karnataka. It is a hill town that is surrounded by lush green forests of the Western Ghats and the region is popular for a large number of waterfalls. Hubli is the nearest town, and the main businesses around the town are mostly subsistence and agriculture based. Adike (Supari) (Areca nut) or (Betel nut) is the primary crop grown in the villages that surround the town, making it one of the major trading centres for Arecanut. The region is also popular for many other spices like cardamom, pepper, betel leaves and vanilla. The major food crop is paddy and rice is the staple food of the people. In the recent past, there have been demands to grant Sirsi the Uttara Kannada district headquarters status, which currently is with the coastal town Karwar. Other towns close to Sirsi falling in the Uttara Kannada district and Western Ghats belt are Yellapura and Dandeli.

Tourism Trends - in and around Sirsi

Tourism in and around Sirsi is centred on two categories of destinations: Pilgrimage spots and Nature-based tourism. The major Pilgrimage spots are the Marikamba Temple, Sahasralinga, Madhukeshwara Temple in Banavasi and the three Mathas- the Swarnavalli Mutt, the Vadiraj Mutt and the Jain Mutt near Sonda. The major nature-based tourism spots are rock formations at Yana, Unchalli Falls, Magod and Sathodi falls near Yellapura. The rock formations at Yana house a famous Shiva temple, which also attracts a sizeable number of tourists. There are many other lesser-known waterfalls and view points around Sirsi and Yellapura. One of the reasons for the rise of tourism in Sirsi has been attributed to Anubhav Travels, now Anubhav Holidays, which started the concept of package tours for tourists largely from Maharashtra, almost ten years ago. Other reasons are the high volume of domestic tourists due to the presence of the pilgrimage spots, and improved connectivity via road to Goa and Maharashtra, Coastal Karnataka, and other urban centres like Hubli and Bangalore. Also new roads have been made in the recent past to previously inaccessible tourist spots like Yana and Unchalli Falls. The concept of resorts is still alien in the region. There’s only one resort, Banana County which is in Yellapura, and is run by the Anubhav Holidays. The same group is building another hotel on the Sirsi-Hubli road. Most of their clients are from Maharashtra and urban centres in Karnataka. Lately, there have been instances of the concept of homestays and rural tourism that have emerged in this region.
Environmental Aspects

The Uttara Kannada district has been a region of high ecological importance due to the presence of rich biodiversity in the thick forests. This hilly district, with the highest proportion of its area under forests in South India, is divided into five ecological zones: coastal, northern evergreen, southern evergreen, moist deciduous, and dry deciduous. The evergreen forests are particularly rich in the diversity of plant species which they support — including wild relatives of a number of cultivated plants. They also serve a vital function in watershed conservation. The moist deciduous forests are rich in bird species; both moist and dry deciduous forests include a number of freshwater ponds and lakes that support a high diversity of aquatic birds. The region also gave birth to the famous ‘Appiko Movement’ inspired by the earlier ‘Chipko Movement’.

Impacts of Tourism

Due to growing tourism, there has been increased pressure on the environment. At Yana, the unique rock formations are surrounded by thick evergreen and moist deciduous forests, have witnessed a rapid increase in number of tourists over the past years. Not less than 5 years ago, Yana was reachable only via trekking, and there used to be a dirt road till the nearest village. The volume of visitors was considerably low taking into account the accessibility of the destination. Now, there’s a metalled road that stops 500m short from the foot of the rock formations. This road was constructed despite vehement opposition by local activists. Yana now attracts approximately 15,000 visitors a year and the change shows through in a very apparent fashion. Waste has become a huge problem, with tourists littering plastic packaging of eatables either bought at the tea shop at the destination, or which they carry. Also hordes of tourists arrive on holidays in large groups for picnics and throw their plates and other wastes at clearings in the forest or by the numerous streams in the area. There is no proper garbage collection and disposal mechanism in place. The locals from the nearby village collect the garbage from the area (1 or 2 villagers) on a nearly daily basis and burn it. The Eco Development Committee (EDC) is practically non-functional. A middle-aged gentleman, from the town of Karwar who had come visiting to Yana after a gap of 6 years, found the place unrecognizable with the newly constructed roads, adjoining building at the Shiva temple, and the hustle and bustle of tourists. He bemoaned the loss of a once pristine habitat.

Similar is the case with places like Unchalli Falls, where a local villager, Mr. Hegde owns a refreshment stall, located 500m away from the falls, at the gate where the metalled road ends and the dirt track starts. He tries his best to educate tourists passing by asking them not to litter. This is of no avail as within a matter of hours, more litter appears on the path. At Unchalli Falls, the Forest Department has constructed a gate, pathways, steps and viewpoints. But what lacks is a destination management plan and structure, which would ensure there are regulations on the number of people visiting at particular timings, staff to educate and enforce the rules on the visitors, and involvement of the local villagers in the management of the destination and an equitable distribution of tourism revenues with them. The Magod Falls near Yellapur shares a similar story, but at least the local Village Forest Council (VFC) along with the Forest Department has attempted to keep the destination clean. The situation, though far from ideal, is better than at Yana and Unchalli Falls. Sahasralinga, near Sirsi, a place where 1000 Shivalings have been carved on the rocks in the river, is also a spot that attracts a large number of pilgrims. The serene river banks have turned a dumping yard for all kinds of litter including plastic, bottles, and discarded clothes and so on.
issue that repeatedly crops up is the disposal and waste management at tourist accommodations. A year ago, a PWD Yatri Nivas was constructed near the Swarnavalli Mutt. It has been noted that all the grey water and untreated waste is directly left into the river causing pollution. Also, the Yatri Nivas constructed is RCC and does not fit aesthetically into the village scene. Even the larger resorts like Banana County do not subscribe to the green building concepts of using environmental friendly building materials or renewable energy. The recent spate of expansion of the road network extending till pristine destinations like Yana and Unchalli Falls has caused fragmentation of the forests and the forest ecosystems.

Rural Tourism
The economic activities in the surrounding areas of Sirsi in the Uttara Kannada district are primarily agriculture and plantations of arecanut, coffee and spices. Majority of the land holdings are small in nature. There are also problems arising due to very competitive rates in the export market of spices. Added to this, the real threats of climate change, and changing seasonal patterns which has become unpredictable, coupled with unscientific methods, and falling yields. This has partly led to the local communities looking at tourism as an additional source of income. The concept of homestays has caught on in Sirsi.

One such example is, Mr. H.D Hegde, a chartered accountant based in Sirsi, along with a group of other residents of Sirsi have taken the initiative to make tourism’s benefits reach the local communities and not just in the hands of an elite few. They have a registered a Co-Operative society to conduct a rural tourism venture called Spice Route Souharda Sahakari Niyamita (Spice Route). Spice route has tied up with the U.K-based Village Ways, a responsible tourism initiative.

Their first guests arrived in November 2010. Spice Route has received an interest-free loan from Village Ways to construct a guest house that accommodates 6-10 tourists at a time. The Co-operative society has been registered, and the members are from local villages.

The salient features of the initiative as told by Mr. H. D Hegde are:

- All members become shareholders by depositing Rs.100.
- This concept is different from the homestays as the guests do not stay in a village farm home, but at a separate guest house in the village. This decision has been consciously taken so as not disturb the village culture and the privacy of the community.
- They wish to generate tourism revenue without disturbing the village economy and ecology.
- The guests will comprise of foreigners and they might look to cater to urban Indians at a later point in time.
- Only local food would be served to the guests, acquired from the village farms. The food will be cooked by the village women.
- They would train 6-8 guides per village, and use their services in a rotational basis. The guides would be trained as naturalists, on local culture and customs and imparted language skills in English. The guides would primarily be talented local youth.
- In addition, they would employ housekeeping staff for the maintenance of the guest house.
- They would also look to sell local products and handicrafts to the guests.

The Co-operative society has an ambitious target of achieving occupancy of 300 days in a year. On successful implementation in one village, they wish to expand to more villages in the region, and provide additional income to the local communities and households. Occupancy is usually percentage.

Another example of rural tourism in Sirsi is conducted by Vanastree. Vanastree is a small collective dedicated to promoting forest garden biodiversity and food security through the conservation of traditional seeds. They mainly involve themselves in nurturing local food production traditions by promoting the concept of the forest home garden within the village farm homes and working on value addition of food, other allied agricultural products and crafts. As an offshoot, they started the concept of an eco-homestay, where the guests would be involved in activities of the household they visit. Sunita Rao of Vanastree says, ”We are very particular about the kind of guests we host at the homestay why (Nellithota Forest Retreat, near Mathighatta village). We initially started by inviting only friends and people whom we knew. Later, the interns who worked with Vanastree were also accommodated. We made sure that the guests who came were educated about certain rules and acceptable limits.” The Nellithota Forest retreat has been doing well, with increasing requests and enquiries for stay.
However, all is not well, inspite of being careful; Vanastree has had to deal with tourists who consume alcohol against their wishes. There are dangers associated with this form of tourism, and unless strict regulation and awareness is created among both the local communities and the tourists, there tends to be a very high potential for things to go out of control. Some of the issues of what can actually go wrong will be discussed with the example of Dandeli.

Dandeli
Dandeli is a town in Uttara Kannada district of Karnataka in the Western Ghats, near to Goa. Dandeli is located 117 km from Karwar, 75 km from Hubli, 98 km from Sirsi, and 481 km from Bengaluru. Dandeli is promoted as a tourist spot for nature lovers. It is well known for the Tiger Reserve, paper mills, dams and tourism. A significant part of Dandeli’s population consists of economic migrants from all over India. The Kali river which is the main water source, is also one of the most popular white-water rafting destinations in South India.

Dandeli-Anshi Tiger Reserve
The Dandeli Wildlife Sanctuary along with the Anshi National Park was declared as the Dandeli-Anshi Tiger Reserve. Recently, it has also been notified as a Hornbill Reserve. Both Dandeli Wildlife Sanctuary and its adjacent Anshi National Park house huge tracts of moist-deciduous and evergreen forests. Although a known habitat of the rare black panther, the large size and the density of the forest make spotting them very difficult. The forests of Dandeli and Anshi are home to over 200 species of birds and many large mammal species. The main tourist attractions apart from the safari and white-water rafting are the Kavala Caves, Syntheri Rock, Molangi, Sykes point and the Supa Dam. The reserve has a population of more than 20,000 people living within and on the periphery of its boundaries. There are pockets of revenue land within the reserve boundaries, where agriculture is practiced. The number of revenue settlements is 54. A Tiger Conservation Foundation has been set up in order to facilitate and support the management of the tiger reserve for conservation of tiger and biodiversity and, to take initiatives in eco-development by involvement of people. Tourism in the reserve has increased rapidly over the past 5 years. People visiting the Dandeli-Anshi Tiger Reserve alone has increased from 6000 in 2001 to more than 25,000 presently. This has also led to increased tourism revenues and the Tiger Conservation Foundation has funds of Rs.22 lakhs allotted for the 24 villages in the reserve. Each of the 24 villages has an Eco Development Committee (EDC) constituted of the local communities. These EDCs are engaged in tourism and forest management activities. The EDC at Syntheri Rocks has been particularly effective in managing the destination and utilizing the tourism revenue. However, many of the EDCs have not been functional and some locals allege that some of the office-bearers of the EDCs are influential people who are not bringing any benefits to the local communities. The DFO agrees that there are problems, and he is slowly trying to reform the situation and make the EDCs more effective.

Figure 2: Tourists Visitation data: Dandeli-Anshi Tiger Reserve – 2001-2007

The Dandeli-Anshi Tiger Reserve has two tourism zones - Kulgi and Anshi camps. At the Kulgi camp, safaris are conducted in the mornings and evenings. Private Jeep taxis and private vehicles are allowed in the safari. The reserve does not own vehicles of its own for conducting the safari. Though, there are rules that the visitors should not disembark during the safari, it is openly flouted by the tourists and the guides. The Forest Department has tried to educate the tourists about this through their website, by asking the tourists to focus on the rich biodiversity of bird species, reptiles, amphibians, insects and trees. But this has not translated on the ground. Spreading the message to the tourists and the tourist establishments in the area has been challenging. The tourists can be regularly heard
complaining about how they were not able to sight anything substantial. The manager of the Bison Resort, one of the many popular resorts in the region, when asked about the problems in the Reserve, cited that the “sightings are very poor, and the forest department should take necessary steps so that the situation is improved”, without understanding and appreciating the nature of the forest.

The Tourism Boom and the after-effects
Over the past few years, owing to the increased tourism activity, many resorts and homestays have sprung up around the Dandeli Wildlife Sanctuary. Many of these establishments are cheek by jowl by the boundaries of the reserve. It was observed that some of the resorts situated in the forest were using noisy and polluting diesel generators for electricity backup. There have also been complaints about night safaris being conducted, where the tourists start either much ahead of the scheduled time at 5.30 a.m or continue late into the night, for a better chance of “sighting”.

Photo 7: Profusion of resorts jostling for advertising space near Dandeli-Anshi Tiger Reserve

Some of the local people have come together and formed an association of homestays with a common set of guidelines focusing on eco-homestays. They have named it the Kali Parisara Pravasam Samasthana (Kali Eco-Tourism Organization). The homestays are situated at a farm house without the guests staying with the family or home. The basic idea behind this separation is to minimize the exposure of their families to tourists. Local youth have been employed as cooks cum house-keepers of the homestay. Kadumane, a homestay situated around 4 kms away from the Kulgi Nature Camp is run by Mr. Narasimha Chapkhand. He is one of the main persons behind the Kali Eco-Tourism Organisation. He is a farmer by occupation and also conducts street plays and awareness programs on environmental issues. Kadumane was started 2 years ago, with a strict focus on ecotourism. Narasimha accommodates his guests in a small farm-house which is surrounded by his own farm and plantations. He uses most of whatever he produces to prepare food for the guests. He also does bee-keeping and grows many fruit trees to attract the birds and mammals like the Malabar Giant Squirrel. He uses whatever solid and liquid waste generated as manure for his farm. He takes his guests on bird-watching walks, boating (on a raft made by him), treks and wildlife spotting.

Initially, when it started out, Kadumane had a strict no-alcohol policy. But Narasimha says that a very large majority of the tourists who come to Dandeli want to indulge in alcohol and he had to grudgingly tweak his policy and allow consumption to become financially viable. He noted that alcohol consumption and illegal activities like drug abuse were on the rise in the local communities and tourists. This view was vouched for by another local, who’s a jeep owner and driver. He also went on to say that there were stray cases of prostitution.
The DFO noted that tourists’ were being cheated by some of the tourist establishments and drivers. The DFO of Dandeli, Sunil Panwar, has taken a few initiatives to involve the local communities through EDCs and VFCs, and a mechanism to share the revenues generated by tourism with the communities through the Tiger Conservation Foundation. There are plans in place to test this model at the Kulgi Nature Camp. Also, the example set at Syntheri Rocks is planned to be emulated at other tourist destinations in the reserve. It is to be seen whether these plans will be implemented. But the larger issue of unregulated tourism continues unabated.

The Uttara Kannada district, one of the most forested districts in South India, is slowly waking up to both the benefits and negatives of tourism. Tourism around Sirsi has still not developed to the stage of being unmanageable like many other destinations, and it is the right time for policy makers and stakeholders to step in before it is too late.

**Case study #5: Homestay Tourism in Kodagu, Karnataka (based on a study by EQUATIONS in 2007)**

The picturesque Kodagu district, is one of the smallest district of Karnataka covering an area of about 4,104sq.km (around 2.2% of the area of the state). Kodagu consists of three administrative units or taluks of Madikeri, Virajpet and Somwarpet with Madikeri city (previously known as Mercara) as the district headquarters. It is surrounded by Hassan district in the north, Mysore in the east, Dakshina Kannada on the west and the state of Kerala to the south.

The name Kodagu originated from "Kodinalenad" which means "dense forest land on steep hills". Nestled on the slopes of the Western Ghats, its pleasant climate and natural beauty have given Kodagu epithets like the Scotland of India and the Kashmir of the South. The land is covered with lush green forests, interspersed with coffee plantations and orange groves and valley cultivated with paddy. It is the birthplace of the river Cauvery. There are basically three forest types – wet evergreen forests, moist deciduous forests and dry deciduous forests. The district has three wildlife sanctuaries: Brahmagiri Wildlife Sanctuary, Talakaveri Wildlife Sanctuary, and Pushpagiri Wildlife Sanctuary, and one national park, Nagarahole or Rajiv Gandhi National Park. The forest cover of Kodagu has reduced considerably over the last few years comprising of not more than 30 percent of the total area. Increasing pressures have led to the conversion of even reserve forests and sacred groves into agricultural lands and plantations.

Most of Kodagu’s economy has been based on agriculture, plantations, and forestry. The coffee boom, in the nineties, led to the shrinkage of the paddy area, as paddy fields were converted into coffee estates. With the coffee prices now declining, the farmers have begun cultivating ginger in the paddy fields. Kodagu was once synonymous with oranges but have now become scarce due to pest and disease.

In recent years, however tourism, especially homestays has started to become more important. Kodagu being just 5 hours away by road from Bangalore and about 2 ½ hours from Mysore, weekend stays are booked in advance, mostly from employees of the IT sector for leisure or for corporate getaways.

**Homestays in Kodagu**

The Home stay concept of “Atithi” was launched by the Karnataka State Tourism Department in the state in 2002. It is believed to be a strategy developed by the government to overcome shortage of accommodation given the growth in the tourism industry. Besides providing an insight into the local culture and cuisine, homestays claim to be an inexpensive proposition when it comes to other forms of accommodation such as hotels.

There are varied assessments about the number of homestays. As no set guidelines specific to homestay exists, there is a lot of disparity regarding registration, criteria, taxes and tariff, even the number of homestays operating in the district at present. According to the media, around 700 odd homestays are operating in the district at present. The District Commissioner (DC) has quoted a figure of 900 homestays. The number, however, is only around 350-400 according to the Kodagu Tourism Promotion Council (CTPC). The official website (http://kodagu.nic.in/tour/lodges.htm) notes 23. According to the DC, out of the total 900 home stay operating in the district, only 43 are registered ones - either registered with the Commercial Taxes Department or the Tourism Department. However, only a few qualify as a genuine homestay option. The existing houses and small buildings in and around Madikeri city particularly, are often converted into temporary homestay options during the peak tourist season. Besides, in the absence of regulatory guidelines, issues such as security, commercial taxes, excise duty, liquor licensing, policy harassment, and cultural issues among others have cropped up.

40
At present, there are 37 registered hotels, lodges, guest houses and holidays homes and 4 resorts in Kodagu of which resorts like Orange County are spread over an area of upto 300 acres. With homestays emerging as an equally popular option among tourists, there exists a competition not just between the hotels, resorts and homestays but also within homestays.

Other issues of concern linked with tourism
The conversion of agricultural land for commercial purposes particularly tourism has been on the increase. Ever since the Class C & D lands (degraded forest lands) were handed over by the Revenue Department to the Forest Department in the late 1990s, buying private lands has become an expensive proposition especially in Madikeri city and nearby areas. As a result, vast expanses of agricultural land are being acquired and converted into resorts, holiday homes and other tourist facilities by business magnates mostly from outside the state.

The laws relating to the selling of land and even the cutting of trees on private lands in Kodagu are complex. It has to do with the complicated land tenure system that exists in the district. The conversion of any land (excluding forest land) for commercial purpose requires the permission of the District Commissioner with the recommendation made by the City Municipal Council (CMC) or the Madikeri Urban Development Authority (MUDA) depending on the area of jurisdiction in which it falls. Madikeri and surrounding areas (within 5 km radius) including 9 villages fall under the CMC’s jurisdiction, while the rest fall under MUDA.

License is granted under the Section 256 of the Municipal Corporation Act as per its adherence to the zonal regulations that exists under the Comprehensive Development Plan (CDP).

As per Section 21 of the Karnataka Town & Country Planning Act 1961, Comprehensive Development Plan (CDP) indicates the manner in which the development and improvement of the entire planning area is to be carried out and regulated. CDP is generally developed for a period of 10 years. The CDP (1996-2006) was developed without carrying out an extensive geological survey to determine the stability of the region and its drainage patterns and so on. Kodagu being a hilly terrain, unplanned development can lead to landslides. Besides, it can also obstruct the natural drainage flow, flooding the entire region. The flooding of Madikeri city in 2006 was a result of a heavy rains and the obstruction of the natural drainage pattern.

The CDP has identified areas for development in Madikeri. Within the earmarked region, pockets of agricultural land, forest land and water sheets have also been identified. The CDP has specified that these areas needs to be preserved in their existing status. Land requirements for the year 2011 was developed based on the existing development pattern and also taking into consideration the likely population of 2011. The land use analysis of the year 1996 & the proposed land use for the year 2011 are given below:

### Land Use Analysis – 1996

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<th>S. No</th>
<th>Nature of Land Use</th>
<th>Area in hectare</th>
<th>% Total Developed area</th>
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<td>57.10</td>
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<td>2.</td>
<td>Commercial</td>
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<td>3.</td>
<td>Industrial</td>
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<td>4.</td>
<td>Public &amp; Semi public</td>
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<td>7.09</td>
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<td>5.</td>
<td>Parks &amp; open space</td>
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<td>8.77</td>
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<td>6.</td>
<td>Traffic &amp; Transportation</td>
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<td>9.</td>
<td>Forest land</td>
<td>206.68</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Water Sheet</td>
<td>14.50</td>
<td></td>
</tr>
</tbody>
</table>

### Proposed Land Use – 2011

<table>
<thead>
<tr>
<th>S. No</th>
<th>Nature of Land Use</th>
<th>Area in hectare</th>
<th>% Percentage of Total Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Residential</td>
<td>417.97</td>
<td>41.63</td>
</tr>
<tr>
<td>2.</td>
<td>Commercial</td>
<td>28.44</td>
<td>2.83</td>
</tr>
<tr>
<td></td>
<td>Industrial</td>
<td>22.22</td>
<td>2.21</td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>4.</td>
<td>Public &amp; Semi public</td>
<td>39.35</td>
<td>3.92</td>
</tr>
<tr>
<td>5.</td>
<td>Parks &amp; Open spaces</td>
<td>44.50</td>
<td>4.43</td>
</tr>
<tr>
<td>6.</td>
<td>Traffic &amp; Transportation</td>
<td>119.77</td>
<td>11.93</td>
</tr>
<tr>
<td><strong>Total area to be developed</strong></td>
<td><strong>672.25</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Agricultural land</td>
<td>15.28</td>
<td>1.52</td>
</tr>
<tr>
<td>8.</td>
<td>Forest land</td>
<td>302.03</td>
<td>30.09</td>
</tr>
<tr>
<td>9.</td>
<td>Water Sheet</td>
<td>14.50</td>
<td>1.44</td>
</tr>
</tbody>
</table>

As per the above statistics, if the rate at which Madikeri and surrounding areas are being developed continues then the area with respect to residential will be doubled and commercial will be tripled. Most of the vacant area is being used up for the expansion. However, the decrease in agricultural land suggests that some of the agricultural might also be used for the expansion of residential, commercial and industrial area.

Club Mahindra got permission for the conversion of 30 acres of agricultural land for constructing around 120 cottages under these regulations. Other similar projects under consideration are: a proposal of 50 cottages by the Cauvery Resorts; 24 cottages by the Coorg International Hotel, Sahara’s proposal of 120 acres of land in Kaloor, 20-40 cottages by a Delhi operator in Hatti, a proposal of developing 110 acres of land in Tiger hills and 120 acres in Kattekadu. Places like Mookudlu, Bettathur and Bhagamandala also are being considered for such projects.  

Unregulated development is slowly transforming the entire landscape of Kodagu and degrading its environment subsequently. The tourist spots are strewn with garbage and plastic bags. Talacauvery which is the birthplace of the river Cauvery and also one of the main sources of drinking water is polluted. This apart, the conversion of agricultural land to build resorts, holiday homes and other tourist facilities has adversely impacted agricultural production, food security and the livelihood of farmers as well as poor labourers who depend on those lands.

Even though Kodagu receives high rainfall, due to the terrain most of the rainwater gets wasted as surface run-off. Very little of it seeps into the ground and helps in ground water recharge. Kodagu already faces a problem of water shortage during summer. The increasing demand for water with the increase in the inflow of tourists, will only add to the problem.
SECTION IV: RECOMMENDATIONS

The pilgrim sites, hill stations, National Parks and protected areas of the Western Ghats have been popular tourist destinations. In recent years, the growth of India's consumer class, combined with increasing access to private and public transport, has led to a rash of growth in tourism of all kinds and in tourism linked infrastructure. The trend towards resource intensive mega tourism projects—Lavasa, Ambey Valley, amusement parks, golf courses is even more alarming.

Problems include the clearance of natural vegetation for hotels and tourist facilities, increased pressure on water and electricity resources and fuel wood, pollution from vehicles, noise, overcrowding, poor waste management and litter. These are serious concerns, due to the fragility and ecological importance of the forest, rivers and scrubland in the region. The character of many of these destinations have changed, from a tranquil place for relaxing and appreciating nature, to becoming commercialized and polluted and spent destinations. Few people want to limit the growth of tourism in the region but most business owners and government planners favour the continued growth of mass tourism and little effort has been made towards community involvement and benefit as well as sustainable and responsible forms of tourism.

Our recommendations fall into three categories:
A: Developing a clear vision and strategies for tourism, conservation and community rights and participation
B: Regulation, policy, guidelines and institutions
C: Ensuring sustainability in tourism

A: Developing a Clear Vision and Strategies for Tourism, Conservation and Community Rights and Participation

There is an urgent need to shift priorities in the vision of tourism from merely increasing tourist numbers, number of multiple category hotels / resorts and infrastructure to addressing critical issues such as sustainability. The tourism industry is not, and cannot, be the standard-bearer of conservation stewardship. Ways and means to transfer this to local communities need to be worked out with the state playing a facilitative and regulatory role. Several national and international guidelines could be referred to wherein attempts by communities to arrive at vision and principles of tourism development are reflected in the form of charters and codes. There are inspiring examples of people's charters on tourism from other states in India.

- We recommend that the Ministry of Tourism (MoT) takes the lead to support a detailed and participatory visioning and strategising exercise that lays out general guidelines for tourism in the whole Western Ghats region, takes into account the perspectives and needs of different stakeholders and allows varying and even conflicting interests to come into play. A comprehensive broad tourism vision and guidelines document for the Western Ghats should be the final outcome of this process, which can be used as a guideline for the states to form their ecotourism/tourism policy in the Western Ghats region.
- This comprehensive visioning and strategic planning exercise should be prioritised and privileged as a critical step prior to announcing/approving any further policy/ scheme given that the adverse impacts of unplanned and unregulated tourism on the Western Ghats are evident.
- Policy to consider the aspects of conservation of the rich natural heritage and biodiversity, protect and respect the socio-cultural heritage and rights of indigenous people, responsibility in tourism, people centeredness and equity in the way tourism is envisioned; governance and coordination between different states and forest departments, strengthening role of local elected governing bodies in tourism, building capacities and skills of people to participate and to engage in tourism.
- To supplement such strategic exercises, partnering with the MoEF, NGO, academic institutions etc for detailed technical studies to be undertaken on carrying capacity and tourism impact assessments (not only Environmental Impact Assessments) and/or limits of acceptable change.

B: Regulation, Policy and Institutions

Nature-based tourism potentially can generate public support for conservation but adds to existing challenges of managing PAs and eco-sensitive areas already facing pressure. This is particularly true for the Western Ghats where 80% of the tourists are domestic. Based on the trends of increased tourism and opening up of more and more areas, as well as the damage that unregulated tourism has caused, there is an urgent need for establishing and enforcing
The opening up of more areas within the Western Ghats for tourism is an aspect that calls for serious relook and stringent regulation, since research points to the fact that current forms of tourism in the Western Ghats do not create strong links between tourist numbers, conservation of biodiversity and sustainable local benefits. The states and their respective Tourism Departments along with the Forest Departments and Tribal Affairs Departments must ensure a regulatory role in addition to being a facilitator of tourism.

Managing and minimising negative impacts (environmental, socio-cultural and economic) are the most important factor in ensuring sustainability. Also, the focus and resources spent on opening new tourist destinations should be shifted towards making existing tourism destinations sustainable. Most tourist destinations in the Western Ghats flout a general understanding of carrying capacity. There is hardly any tourism planning that considers these parameters. Managing tourism destinations is an important part of controlling tourism's impacts. Destination management includes land use planning, permits and zoning controls, environmental and other regulations, community initiatives, and a host of other techniques to shape the development and daily operation of tourism-related activities. Tourism plans (both perspective plans and management plans) need to be laid down and made open to consultation before any expansion of tourism is considered.

Another important regulatory role is balancing between local residents’ needs, conservation needs and the needs of tourism – particularly to access to resources, services and facilities.

Existing laws and policy, in whatever shape, needs to be implemented rigorously. Tourism establishments should be 10 km away from the periphery of forest areas, especially Protected Areas. Migratory routes should be prohibited for occupation by tourism establishments. Research to determine the number of resorts the parks and the local communities can sustain without damage. Megaprojects and resource intensive tourism projects should be scrutinised particularly carefully.

The issue of establishing the Western Ghats Ecological Authority or Conservation Authority is a complex one because of the nature of these Authorities being top down and allowing very little genuine space for multiple interests and peoples voices. One of the mandates of the WGEEP is to take a call on the declaration of ESAs. As indicated in the main paper, while tourism is seen as a significant cause for rapid destruction of fragile ecosystems, and in fact has been the principle reason why Matheran and Mahabaleshwar-Panchgani in the Western Ghats were given ESA status, the process of declaring a place as an ESA requires nuancing. The political factors and interests (particularly pro-tourism expansion interests) become the key reason why many of the committee and regulations are paid no heed to. Therefore merely declaring a region as an ESA is not enough and the various interests need to be negotiated in the process and continually thereafter.

Tourism infrastructure, particularly accommodation, should be encouraged to be eco-friendly, with careful use of locally available materials. Incentives for the same need to be given in the form of subsidies and also further scientific research in this field should be encouraged for innovations. At the same time, the use of local material must be regulated to ensure that these are not being consumed unsustainably. If awareness schemes have little impact on monitoring, the prospect of stringent regulation should be resorted to.

Renewable energy methods, such as solar/ biogas/ biomass systems should be encouraged. Natural topography of the land to allow water catchment basins and soil conservation systems should be preserved. If there are none, then the architect and landscape planner should create water catchment and soil conservation methods.

Regional criteria as to how tourist facilities can become more sustainable need to be created. Establish indicators through a multi-stakeholder process to investigate the use of tax break, subsidies, and reward schemes from the Government to support resorts in their endeavour to become more sustainable.

While regulating the growing number of tourism establishments, subsidies to small and medium enterprises in tourism, on investments in environmental management systems like solar, water harvesting, sewage and solid waste management may be considered.

The forest departments should consider taking steps such as closing certain over-visited protected areas for rejuvenation; regular monitoring and checking repeatedly for signs of damage.

The issue of growing number of pilgrim “tourists” requires special attention. The need for special regulations that would be sensitive to faith based responses as well as put in place practical guidelines and facilities that cater to burgeoning numbers are essential. But this needs to be negotiated carefully between the different government departments and temple boards in relation to issue like the devastation of fragile areas, the provision of facilities. This is critical to avert both human and ecological disasters.
A reliable base of information is required to be developed on which tourism plans are made and implemented. Registration of establishments and collection of data from tourism establishments to corroborate official data must be done. A system for regular collection, publishing and analysis of tourism statistics needs to be put in place. This should include critical indicators like revenues from tourism, number of people directly and indirectly employed in the sector, occupancy rates in accommodation units and profits of tourist business.

Bridging gaps in information through local research as well as secondary research to put together the big picture. Undertake collaborative & participatory rapid impact assessments (RIA) as a first round. Tourism impact assessments, assessment of the number of tourists into the various destinations carrying capacity studies and a scientific approach needs to be undertaken before setting up any establishment rather than just demand vs. supply principle.

Capacity building and facilitating the emergence of community based institutions to assess tourism impacts at local level (to monitor, manage and regulate impacts) will help in systematically documenting the tourism impacts at the local site level, establish community based methodologies for studying tourism impacts and provide the base to develop regulatory and management measures. Development of tools to assess tourism impacts and sustainability of these assessment tools in the long term with an emphasis on local assessment and ownership. As these are through participatory methodologies, it will ensure ownership, establish meaningful relationships and build capacity of local communities to take forward the activities into the future.

Training of guides to ensure compliance by them and tourists is important. Educating tourists on safaris and adventure tourism activities like trekking should be mandatory so as to avoid conflicts with the wild animals and also regulate environmental and noise pollution. Interpretation centers could also be located outside the park premises. Tourism Operators and Forest Departments need in particular to make special efforts to increase public awareness on not to look out for sighting of tigers and other large mammals as the sole purpose of wildlife tourism. Night time movement of tourists should be regulated and monitored in and around protected areas to avoid disturbance to wildlife.

Strengthening role of local governing bodies and peoples participation in tourism is the other pressing need. There is a rush to open up new tourism destinations while the existing destinations are in shambles due to the absence of an effective management and democratic decision-making systems.

- The Panchayats need to engage in the design and implementation of tourism more directly. The ability of local communities through grama sabhas to engage with the representatives and negotiate power structures and dynamics is a crucial factor for tourism to be more reflective of their aspirations and interests and take cognizance of their rights and responsibilities. Their capacities for the same also need to be built.
- Other local institutions such as Eco Development Committees and Village Forest Councils should also play an increasing role in management of tourist destinations in forest areas. Regulations must take into account the fact that JFM Committees/ VSS-VFC/EDC are under the control of Forest Departments with little evidence of a broader democratic process of direction setting and decision making.
- Land acquisition for tourism resorts needs to be studied and monitored and the Panchayats need to have a say in allotment of revenue land for tourism purposes. Imposing a moratorium on further expansion of tourism till such time when the vision, strategies and policy making steps are taken, is necessary.
- Consultation between the tourism industry and local communities, organizations and institutions is essential if they are to work alongside each other and resolve potential conflicts of interest.
- Improved communication between tourist facilities, NGOs, forest department and other stakeholders and the education of all stakeholders as to the importance of sustainable and responsible tourism.

C: Ensuring Sustainability in Tourism
Tourism promotion in Western Ghats should target tourists both domestic and foreign who meet the criteria of being sensitive to the ecological fragility, respect the socio-cultural context and willing to contribute to the local economy, such that those coming to visit realise that they are privileged to be visitors. Tourism infrastructure, marketing and policies need to consistently align to such a positioning. The manner in which the Western Ghats are promoted, facilities on offer, regulations in place and their enforcement and visitor awareness must gear itself to wean out tourists who do not appreciate these core aspects of the Western Ghats.

Environmental Impacts
The tourism industry in the Western Ghats needs to be moved to sound environmental practices. The conservation and sustainable use of resources – natural, social and cultural – is crucial and makes long-term business sense.
• Using resources sustainably. Specific species of wood that can be grown on property for use/consumption. All new developments to use sustainably harvested local materials (where possible) during construction and maintenance. All new developments to use ecologically friendly technologies & materials, incorporate the use of sustainable architecture (e.g. light/air flow) to reduce energy consumption, minimise pollution (incl. noise & light)

• Water usage by tourism establishments is a serious problem. A strategy for water conservation and water management systems needs to be prepared. Engage in water harvesting and recycling. Engage in recycling/treatment practices of water, encourage use of environmentally-friendly chemicals and biodegradable soaps/detergents. To meet shortage of water for local consumption, in accordance with building bye laws, rain water harvesting and recycling of water should be ensured for all establishments, especially tourism establishments.

• A waste management and garbage disposal strategies for tourism intensive areas needs to be worked out. Segregation of wastes and recycling are important options, and also the safe transportation of the waste to notified areas with recycling plants. The zero waste concept may also be adopted. A ban on polythene bags and plastic should be affected immediately and implemented in true spirit along with spreading of awareness. Encourage tourist facilities to work with product importers/sellers to reduce level of packaging and to increase recycling.

• Treatment of sewage must be made mandatory for all establishments.

• Reduction of over-consumption and waste avoids the costs of restoring long-term environmental damage.

• Ensure tourist facilities set targets/goals towards the reduction of energy, water and waste, increase use of renewable energy sources, install 'smart' valves and shower heads regulate water flow, reduce overflow and release water only when required; install duel flush or low flow toilets; fix leaks and maintain regularly, CFL lighting, no air-conditioners must be the norm.

• Promoting native vegetation growth especially those that will encourage wildlife, stop the planting of exotic species, reduce or remove fencing from the property.

• Only manually-powered or sail boats should be used in the various water bodies for tourism purposes and motor/speed boats should be avoided, restricting it to rescue operations.

• Widening of roads and developing other related infrastructure to boost tourism and increase access to more interior destinations in the Western Ghats should be carried out only after sound research on pros and cons and proper public consultations.

Socio-Cultural Impacts

• With the privileging of tourism social impacts of displacement, changing social structures, acculturation, loss of traditional livelihoods and cultural practices are visible.

• Regulation and monitoring of tourist activities in the forests needs to be done and punitive action taken against both tourists and locals who are engaged in alcohol abuse, drug abuse or sexual exploitation.

• Tourism Operators need in particular to make special efforts to not commoditise adivasi culture in the form of showcasing tribal dance in tourism establishments. More sensitive and dignified forms of engagement with authentic tribal culture should be explored.

• Greater involvement of local communities in the tourism sector not only benefits them and the environment in general but also improves the quality of the tourism experience. Some activities could be the increased use of local labour, ensuring local economy multipliers, encourage local village visits by tourists in consultation with local people, develop a guide licensing system for local people, consult local people when trekking routes are established, using local knowledge. Also be sensitive to cultural and religious practices such as local deities, sacred groves.

Economic Impacts

Tourism in the Western Ghats needs to support a wide range of local economic activities, and takes environmental costs/values into account in its economics and pricing. There are many stakeholders and sections of the government and industry who hope that tourism will become one of the pillars of the development in many interior regions in the Western Ghats. A more sound economic analysis of the current and likely economic impact of tourism, and taking cognizance of the high degrees of vulnerability is necessary before such views are nurtured.

• The states and Panchayats can, through appropriate policy measures and taxes, ensure that benefits accruing from growth in tourism are equitably distributed in the Western Ghats, both regionally and across sections of people.
• Considering that the degree of local benefit derived from tourism activities has strong links to the ownership pattern, the states and the local self-governing institutions (LSGI’s) should consciously take steps to improve local entrepreneurship and ownership and development of sustainable eco-cultural sensitive forms of tourism. This can be achieved through speedy access to soft loans and credit for those locals, who are keen on venturing into the tourism, but do not have collateral.

• Another important measure for the states to consider would be the creative use of information technology like website and the internet to ensure that small operations get visibility and are able to attract tourists. Interpretation centres and facilities for online booking would help smaller community owned tourism establishments to run tourism business more effectively.

• Support the making and selling of sustainably produced traditional handicrafts and other produce and increase the quality of local produce, so that more can be sourced locally. To ensure strong backward and forward linkages, the states, in consultation with institutions of local self governance, could identify those raw materials that are available locally in sufficient measure, over and above the regular requirements of the local communities, and encourage their use by tourism businesses like resorts, hotels and homestays. The states and Panchayats could consider making local sourcing of some raw material mandatory. Tourist facilities to consciously increase percentage of goods and services sourced locally.

• Encourage positive attitude towards local people learning skills and support the investment in in-house training so local employees can progress to more highly skilled jobs.

• Building capacities and skills to engage in tourism. Areas where capacity building of local community could be enhanced are in the management of tourism enterprises and destinations, tourist–community interface, business and entrepreneurial skills, handicrafts and running micro-enterprises. Capacity building and training opportunities, especially to be trained as naturalists, guides, conservationists with language skills need to be provided by the Department of Tourism and the industry, to the local community, especially youth and women.

**Education, Awareness and Sensitisation about Sustainable Practices**

• Personnel, who are engaged as guides as well as establishments and operators in contact with tourists need to be trained on aspects of Western Ghats’ ecology, indigenous peoples, local communities and also the rich cultural heritage of the many communities that have inhabited Western Ghats. Education of both the local population and tourists about the fragility of the Western Ghats and the urgent need to comply on use of plastics, consumption of natural resources and energy, waste and litter, noise pollution, the kind of facilities and service they demand, general tourist behavior etc is also important.

• The interpretation centre needs to be made an integral part of the tourism activity in Western Ghats with tourists encouraged to make it as part of their tourist itinerary. There is a need to produce more quality, innovative and creative awareness and education material.

• The Department of Environment & Forests may also consider organising more nature camps and awareness campaigns for various groups ranging from school and college students, local community peoples, tourists and others.

• Marketing that provides tourists information that increases respect for the natural, social and cultural environments of the area.

• Staff training which integrates sustainable tourism into work practices. Engage in visitor education through signage, guidebooks, investing in trained guides. Ensure visitor briefing on social & ecological impacts, rules/regulations (park & tourist facility) and safety issues. Encourage tourist facilities to inform guests as to what they are trying to achieve (i.e. steps towards responsible and sustainable tourism).

The Western Ghats are our country’s unique natural and cultural heritage. There are pockets where local communities and organisations, committed forest officials and conscientious industry players are taking good initiatives in tourism, but these are few and far between. Unplanned, thoughtless and unregulated tourism development in the Western Ghats is threatening to put this heritage at serious risk. It is high time that the Ministry of Tourism, the Ministry of Environment and Forests, the states of Maharashtra, Goa, Karnataka, Tamil Nadu and Kerala, the local communities residing in the rich ecosystem, took bold and decisive steps and demonstrated leadership to prevent this from happening.
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Different sources estimate this as 140,000 to 160,000 square kilometers. A biodiversity hotspot holds at least 1,500 endemic plant species, and has lost at least 70 percent of its original habitat extent. Overall, the 34 hotspots once covered 15.7 percent of the Earth’s land surface. In all, 86 percent of the hotspots’ habitat has already been destroyed, such that the intact remnants of the hotspots now cover only 2.3 percent of the Earth’s land surface.

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