

**TOURISM IN THE RED PANDA HABITATS OF
SINGHALILA AND NEORA VALLEY NATIONAL PARKS,
DARJEELING HIMALAYAS – AN ASSESSMENT FOR
APPROPRIATE INTERVENTIONS**



**SUNITA PRADHAN
SARALA KHALING
AND
ROSHAN PRADHAN**

2014

Sunita Pradhan, Ph.D
Visiting Fellow
ATREE EASTERN HIMALAYAS REGIONAL OFFICE
Khangsar Villa, Development Area
Gangtok, Sikkim, India

Sarala Khaling, Ph.D
Regional Director
ATREE EASTERN HIMALAYAS REGIONAL OFFICE
Khangsar Villa, Development Area
Gangtok, Sikkim, India

Roshan Pradhan, MSc
Research Associate
ATREE EASTERN HIMALAYAS REGIONAL OFFICE
Khangsar Villa, Development Area
Gangtok, Sikkim, India



Photo courtesy of : Sunita Pradhan, Samuel Thomas, Tenzing Sherpa, Roshan Pradhan, Brin Chettri.

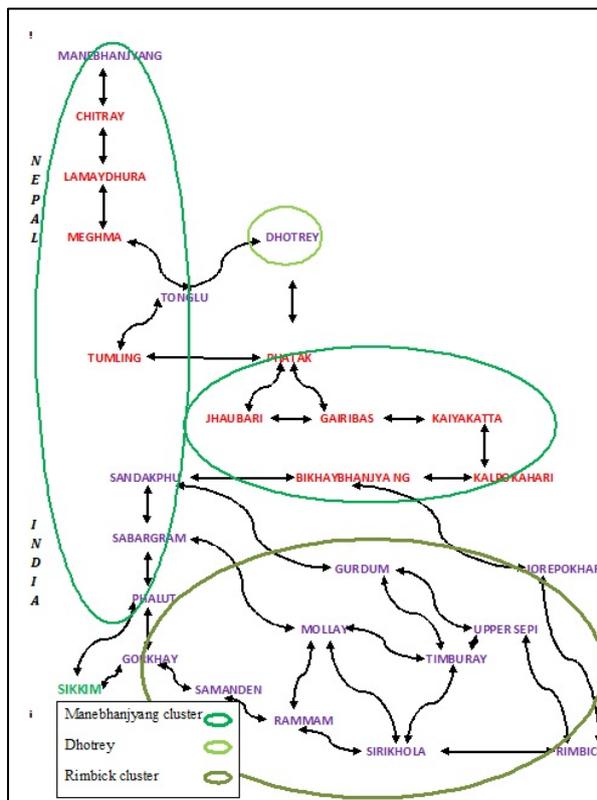


Figure 1. Schematic map of Singhalila Trekking Route

1. Background

Tourism in Darjeeling is not an uncommon phenomenon, where the history of tourism dates back to as early as mid 1800 when British, Europeans, Anglo Indians and Bengali aristocrats from Calcutta and Dhaka came to Darjeeling during the April-May and October-November seasons (Subbha 1989). Tourism holds vital economic importance to Darjeeling.

Some of the remote wilderness of Darjeeling has been significant attractions to tourists amongst which Singhalila is prominent. Visited by eminent British botanist and traveler Sir Joseph Dalton Hooker in the mid 1880s, Singhalila was officially open to tourists after it was declared a National Park around 1992-1993. Tourism thereafter saw an exponential growth in the first 10 years. Tourism is one of the few permitted uses of protected areas on the premise that tourism can be a useful effective tool for conservation and management to ensure the sustainability of the values preserved in protected areas (MoEF 2002).

Despite, tourism having high potential in yielding significant benefits in remote areas where traditional livelihoods come under threat, it has been found that tourism contributed little to poverty reduction in mountain areas, attributing this to policy failures, poor regulations, lack of human resource development, lack of supply facilities and management and leakages of tourism generated income from mountain areas (ICIMOD 2007). In face of such cases where tourism loses its purpose in sensitive habitats, it could yield negative socio-ecological effects.

With these facts in mind, the present project implemented by ATREE, sought to further understand factors influencing tourism in the Singhalila as a follow up the previous project “Development of draft strategy of Red panda, *Ailurus fulgens* conservation in Darjeeling Himalayas (Rufford Small Grants Project 2006).

2. Project Activities

The 15 months study project (April 2013 – June 2015), officially stated from 1st April 2013. The project the Singhalila Trek Route (Figure 1) was conducted in four major phases which comprised of :-

- i) compiling baseline information on the current status of Tourism in Singhalila during which 350 households, 1258 visitors, 56 hotels and 72 shops and business establishments were surveyed (2 - 3). This was also coupled with a number of focal group discussions at all stages of the research (Figure 4 - 5). Some of the aspects covered was contribution of tourism to local economy, to the socio-ecological environment, review of the existing governance related to tourism, existing demand and supply along with an assessment of visitor experiences.
- ii) holding a series of consultation meetings with the local communities. During the study, we found that there were three clusters of tourism destinations in the region - Rimbick and adjoining areas, Dhotrey and Manebhanjyang and adjoining areas, based on their tourism related issues and geographical location. Hence the consultation meetings were held with the three clusters at Rimbick, Manebhanjyang and Dhotrey (Figure 6 – 10).
- iii) holding a district level consultation with stakeholders to share and discuss the information thus generated from the study to build a strategy (Figure 11) .
- iv) Focal group discussions with key informants such the Forest Ranger, Panchayat Pradhan, representatives of the Hotel Association and local community representatives in Neora for a scoping (Figure 12).



Figure 2. Local community being interviewed



Figure 3. Tourists providing their feedbacks



Figure 4. Consultation at Dhotrey and (Figure 5)Rimbick before implementation of the research project



Figure 6. Participants in Rimbick



Figure 7. Consultation in Progress in Rimbick



Figure 8. Participants of Consultation Meeting in Dhotrey



Figure 9. Meeting in progress



Figure 10. Participants at the Manbhanjyang meeting



Figure 11. District level Meeting in progress in Darjeeling



Figure 12. In Lava with Forest Ranger and staff

3. Outcome

3.1 Putting words into action: Follow up on the action points of the Strategy Plan to Conserve the Red panda, *Ailurus fulgens*, in the Darjeeling Himalayas.

“Tourism” was one of the identified threats in the Red panda habitats of Darjeeling Himalayas. To understand and reduce the impacts of tourism in the Red panda habitats was one of the action points in the draft strategy developed for management and conservation of Red panda in the Darjeeling Himalayas (Pradhan 2012a), through a project supported by Rufford Small Grants - 2006. The present project followed up on the action point of the then developed Strategy Plan for Conservation of Red panda in the Darjeeling Himalayas.

It is also worth mentioning here that the present project is a pioneering effort towards understanding and analysing an identified threat “Tourism” in the Red panda habitats of Singhalila and Neora in Darjeeling Himalayas. This will in future help to develop clear and explicit linkages between community development programs and threat reduction (Alers *et al* 2007).

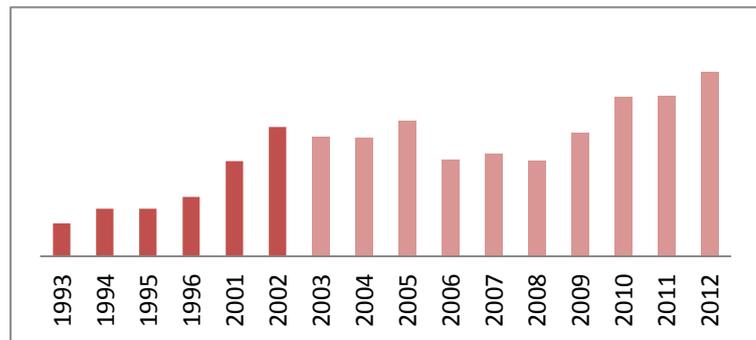


Figure 12. Tourism growth trend in Singhalila

The most important question the present project sought to answer was about the challenges in developing a responsible and sustainable nature tourism strategy in Singhalila, which contributed to conservation, local livelihood and local economy.

It was found that tourism in Singhalila was growing at a decadal growth rate of 54% (Figure 12). Tourism in Singhalila had several challenges in developing a responsible and sustainable nature tourism, amongst which were very basic and obvious issues, but were actual root causes and impediments which needed first line interventions.

The issues which are briefly discussed below, came up very strongly across all consultations we held, survey results and visitor feed backs.

3.1.1 Local Tour Guide capacity building

There were around 100 local guides and porters from the region, some of them registered with the Forest Department and others with the Guide Association. Despite the local tour guides and porters being mandatory and important components of tourism in Singhalila, the highly undermined role of nature guides in promoting responsible and sustainable nature tourism in Singhalila, was no less than a root cause to tourism being a threat to the conservation value of Singhalila.

This had been hampering the delivery of quality service and information to tourists, which were reflected in the visitor feed backs, we got during the present study. This issue also strongly came up during all the community consultations, and was also seconded by the Travel entrepreneurs during the meetings and interviews. The inadequate service quality of the local guides was grossly hampering business of the travel entrepreneurs, rendering tourism to Singhalila unsustainable.

3.1.2 Inadequate Welfare of the local tour guides

The local guides had been operating in Singhalila for the last 15 years. The guides and porters operating was an unorganised sector and did not have any personal safety coverage, incentives and logistic facilities like basic accommodation during their trips to Singhalila, in place. Proper welfare and adequate incentives was important also to encourage them to improve their skill and increase their livelihood opportunities.

It was found that local guides who were educated and self trained got the same pay packet, which an untrained indifferent guide got. Hence this issue of incentives was an opportunity to encourage the guides to be trained for their profession, where the pay packets to better trained guides would be better than for the ones not trained.

3.1.3 Garbage Management

Garbage accumulation and littering due to tourism in all destinations, trekking trails and some wilderness areas in Singhalila came up as a pertinent issue. Visitors showed the greatest dissatisfaction in garbage management of Singhalila, with as much as 89 percent of the visitors thinking that the garbage management in the Singhalila Trekking Route was 'Very Bad'. As much as 78 percent and 62 percent were 'Willing to Pay' more for a garbage management system in place and for better guide services respectively in Singhalila. This indicated an urgency to respond to the visitor feed backs for sustenance of tourism to the Singhalila, where the livelihood dependence of the local communities was as high as 70 percent. Currently no system was in place to address these issues, albeit oft and on cleaning efforts by local NGOs.

3.1.4 Regulations required

Regulation of Food Prices along the entire Singhalila Trek Route was expressed as a major need. This was an issue with the local hoteliers of different destinations and also with the tourists, that food prices varied from destination to destination and also from hotels in the same destinations, bringing about unhealthy competition and conflict in the community. High food prices in some of destinations were one of the major complaints of visitors visiting Singhalila.

Singhalila Trek Route has couple of circuits. However, there was little organisation or regulation as to how these are informed to the tourists who can choose circuits and have an itinerary. In such cases, the entire trek depended on the whims and convenience of the local guides as to where the tourists are taken and which destinations can become the stop-overs.

This was impacting local business in the destinations, and becoming a major concern, even leading to conflicts within the community of destinations.

3.1.5 Resource extraction and Firewood use

Firewood was still the predominantly used source of energy along this Singhalila Trek route, an important issue which was thought to be looked into. Most of the high altitude extraction happened from Red panda habitat, either it be on the Nepal side of the border or on the Indian side.

3.1.6 Change in tourists profile and concerns:

A change in the profile of the tourists over the years was noticed in Singhalila. The present tourists were more Leisure Seeking with greater demands for vehicles, rooms with attached bathrooms, geyser, hotwater bags, and other modern facilities as compared to the minimal trekkers of the early 1990s. This could have an implication on the conservation and environment of Singhalila and would require further research and monitoring.

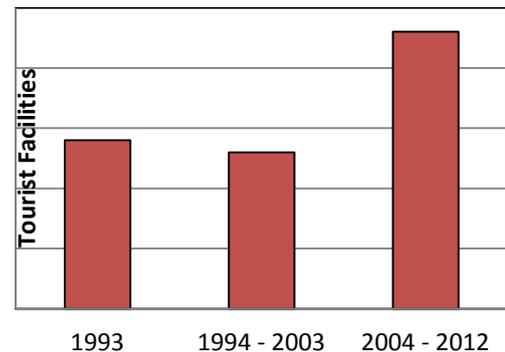


Figure 13. Tourists facilities in Singhalila (1993-2012)

And the hoteliers had already started responding to the demands of the tourists with plans to expand, construct attached bathrooms, install geysers, heaters as demanded. Keeping in view the culture and fragile environment of the region, the type of infrastructure being developed was a matter of concern.

3.1.7 Development of tourism induced infrastructure

Development of tourism induced infrastructures such as hotels, and lodges had increased over the years in Singhalila (Figure 13). It has been seen that 46 percent of these infrastructure came up between 2004-2012, with as much as 50 percent established in the last 2-3 years (2010-2012), with expansion of tourism to new locations (Pradhan 2013).

3.1.8 Forest Department /Tourism Department /other stakeholder - Community relationship: need for better communication and interactions

The community strongly felt a disconnect with other stakeholders such as the Forest Department, Tourism Departments and the travel agents and perceived that their contribution to tourism in Singhalila was minimal.

3.1.9 Inadequate interpretation and conservation education

This was yet another aspect of Ecotourism which got strong negative feed backs from the visitors of Singhalila. The mechanism as to how the visitors to Singhalila would be conveyed

the conservation value of the place was inadequate, albeit the interpretation center of the Forest Department. In this regard, visitor surveys showed that 48% of the visitors did not know or were not informed that Singhalila had Red panda – the icon species of the Landscape – which speaks about the conservation message being imparted to the visitors.

3.2 Engagement and knowledge mobilization: Awareness building of local communities for development and promotion of responsible and sustainable nature tourism in Singhalila

Engagement of the project was a key priority to make the research and its outcome as relevant and useful to the society as possible. We engaged the local communities at all stages of the research project (Figures 2-12).

We shared the findings of the year long study to the communities. The purpose was to share the findings and validate our findings but the meetings served more as an awareness building exercise, by positively influencing communities knowledge of their own resources, livelihood, and place. As the research findings was able to provide leads, the communities were better able to share their insights on issues which strongly stood as challenges to developing responsible and sustainable nature tourism in Singhalila.

These issues along with our own research findings were then shared with other stakeholders such as Department of Forests, Department of Tourism, Gorkha Territorial Administration, prominent Travel houses, Guides Associations, Transport Associations , Hotel Associations of Singhalila and local NGOs.

The findings would also soon be shared with greater audience through publication in scientific journal.

3.3 Engagement and commitment to Action: Short Term Action Plan drawn up – as a start to address the challenges to developing a responsible and sustainable nature tourism in Singhalila.

During our district level meeting and engagement with governmental organisations such as Department of Forests, Department of Tourism, Gorkha Territorial Administration, Himalayan Mountaineering Institute, prominent Travel houses, Guides Associations, Transport Associations , Hotel Associations of Singhalila and local NGOs (Annex 2), the challenges issues to tourism in Singhalila, along with the findings of the yearlong research in Singhalila were shared to illicit discussions, to inform and enhance informed decision-making.

The stakeholders were supportive and committed, which led to drawing up a Short Term Action Plan for development of responsible and sustainable nature tourism in Singhalila (Annex 1). As a follow up of the action points, the Himalayan Mountaineering Institute is already in talks with ATREE to kick start the capacity building program for nature guides.

This engagement and collaboration garnered during the project, is also a significant outcome of the project. This will ensure sustenance of the initiatives taken by ATREE, through this project.

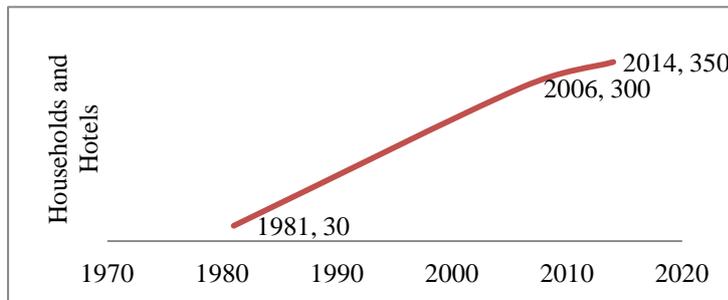


Figure 13. Development (houses, hotels and restaurants) of Lava

4. Tourism in Neora

Upper Neora Valley which consisted of 45% of the total Neora Valley National Park, range from 2200 – 3100 m and supports two broad vegetation types namely the Lower temperate evergreen forest (2200 – 2800 m) and the Upper

temperate Broad-leafed deciduous forest (>2800 – 3100). The lower temperate forest is, dominated by Oak species such as *Quercus lineata*, *Q. lamellosa* and *Q. pacyphylla* while the Upper temperate forest is dominated by deciduous tree species like the Birch (*Ulnus utilis*), *Sorbus* sp. *Acer* and *Rhododendron* spp. And these forests in Upper Neora forms one the most pristine habitat of Red panda.

Tourism in Upper Neora is at a scale lower than in Singhalila (Table 1). However, the likelihood of growth in tourism to Upper Neora Valley is suspected to be possible with the nearest town of Lava (14 kms away) being the hub of tourism in the area.

Hence, a scoping of the current scenario of tourism in Neora was done. It was seen that there has been substantive growth and development of Lava over the last 20 years (Figure 13). Household numbers in 2006 and 2014, includes as many as 34 hotels, and 19 restaurants catering to tourists. Increase in tourist flow was also seen in Lava (Table 1). However, it was also seen that only about 1.14 percent of the tourists visiting Lava were actually going to Upper Neora for their day trips and treks.

Table 1. Tourism growth in Lava, Neora and Singhalila, Darjeeling

	1996	2006	2013
Lava	No data	204009(appox)	28500 (approx)
Neora	No data	349	1326
Singhalila	2700	4419	8415

Forest Department Regulations:

The low visitation to Upper Neora which supports a pristine red panda habitat, has no infrastructure development as proper roads, accommodation facilities, shops etc. The visitors visiting Neora has to make do in the Forest camps within the Park. International visitors are not given permits from the Lava Wild Life range office. Permits for trekking in Upper Neora is issued from the office of the Divisional Forest Officer, in Jalpaiguri. This has largely checked international trekkers to Upper Neora. Despite this, as can be seen in Table

1., there has been an increasing trend in day visitors, whole day trekkers and halting trekkers to Upper Neora (Figure 14).

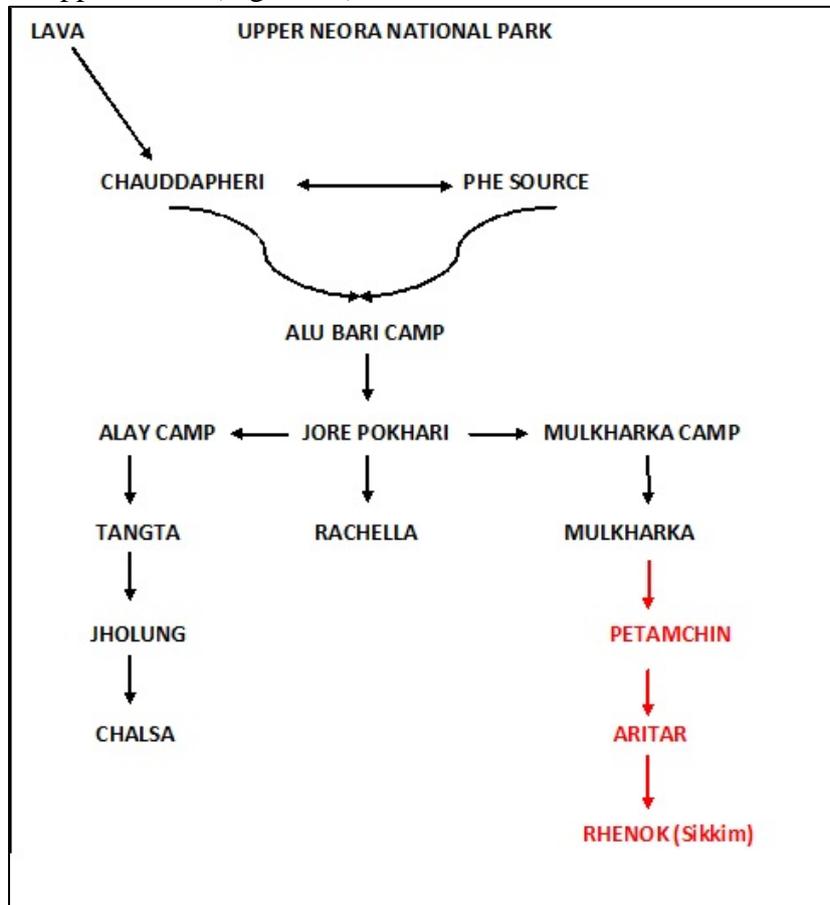


Figure 14. Schematic trekking map of Upper Neora

Local community perception indicate that they see a huge potential in tourism and as much as 77 percent would opt for tourism as livelihood if given a chance. Tourism as livelihood stood as a second choice only after Government Service, which was secure.

The Tourism entrepreneurs saw opportunities in having and increasing new products and attractions for tourists, out of which one of them was opening up the Neora Valley Trekking path and make Rachella – one of the highest point within Upper Neora at 3100 m.

Rachella is the trijunction between Sikkim, West Bengal and Bhutan and can be a huge attraction to tourists. On the other side, Rachella and its adjoining areas are also important red panda habitats (Pradhan 2012 a).

There was a huge demand and pressure on the Forest Department in this matter from the communities which had the chances of creating conflicts. The livelihood demand of the communities came with a with a huge risk of damaging the habitats in Upper Neora with the flow of tourists and associated infrastructure growth.

With no adequate regulations in place for responsible and sustainable nature tourism in place for Neora, currently, the restrictive measure taken so far by the Forest Department seems appropriate for now. It would be premature to open the Upper Neora Trek without prior preparatory measures for responsible and sustainable nature tourism.

5. Conclusion

The main objective of the present project was to understand patterns of tourism-induced contribution to the conservation and local livelihood along with the challenges of developing a responsible and sustainable nature tourism in Singhalila and Neora Valley National Parks,

both significant habitats of Red panda. Singhalila was studied in detail while a scoping of issues in Neora was done.

As the present project fulfills one of the enlisted action points of the Conservation Strategy of Red panda in Darjeeling Himalayas, and the information that has been generated was required to support location-specific mitigation interventions, as well as provide inputs for development of suitable tourism policies in the region. Some of the pertinent root causes as challenges to development of responsible and sustainable nature tourism in the region has been discussed above. As a way forward, some of these location-specific issues would now be targeted as follow ups, to mitigate the threats from tourism in Singhalila and its Red panda habitats.

References

Alers, M., Bovarnick, A., Boyle, T., Mackinnon, K., Sobrevila, C. (2007). Reducing Threats to Protected Areas. Lessons from the Field. Joint UNDP and World Bank GEF Study Report, USA.

ICIMOD (2007). Mountain Tourism. <http://www.icimod.org/> mountain livelihoods/mountain tourism 1252. Accessed 12.3.2010.

MoEF (2002). Guidelines for Ecotourism in and around Protected Areas in India. Ministry of Environment and Forests, Government of India.

Pradhan, S. (2012 a). Conservation and Management Strategy Plan for Red panda, *Ailurus fulgens*, in the Darjeeling Himalayas. Report submitted to the Rufford Small Grants Foundation, UK.

Subbha, T. B. (1989). Socioecological consequences of tourism in Darjeeling. In: Impact of tourism on mountain environment. Ed. S.C. Singh. Pp. 305-14. New Delhi: Vikas.

Acknowledgements

Dr. Sanjay Nepal, from the University of Waterloo, Canada is gratefully acknowledged for his valuable guidance in this project. All community members of all the villages we worked in, supported us. We thank them. All the invited stakeholders who would make a difference, actively participated in the discussions, meetings and interviews. They are thanked profusely. Preeti Rana is thanked for her contribution in data collection and facilitation in Manebhanjyang. Allwin Jesudasan, ATREE Bangalore, is thanked for his inputs on Tourist Survey questionnaires. ATREE staffs - Tenzing Sherpa, Michelle Gurung, Samuel Thomas, Chirag Rai, Sunil Dahal, Brin Chettri and Karma Sherpa are thanked for their support. Finally, it is Rufford Foundation who made all these possible and their support is gratefully acknowledged.

Annex. 1 Short Term Action Plan for developing Responsible and Sustainable Nature Tourism in Singhalila

STEPS	Possible Responsibilities of Stakeholders	Timeline
Objective 1. To work towards the capacity Building of the Local Guides and Porters and enhance their role in promoting sustainable tourism in the region		
a. Arrange Meeting with the Porters and Guides to understand their capacity and skill needs, analyse and understand interpretation needs of the Forest Department in projecting the conservation value of Singhalila	Tourism GTA (Gorkha Territorial Administration) FOREST DEPARTMENT ATREE Himalayan Mountaineering Institute (HMI)	2014 - 2015
b. Develop a training curricular	GTA Tourism Forest Department ATREE HMI Travel Houses	2014 - 2015
c. Conduct 1 st Batch of training to the local guides	Selected Resources Persons GTA Tourism Forest Department ATREE HMI Travel Houses	2014 – 2015
Objective 2. To look into Welfare of the Local Guides and encourage quality service delivery		
a. Looking into the accommodation woes of the guides and porters while on their treks	GTA Tourism Forest Department	2015 onwards
b. Work towards appropriate incentives to the guides inorder to improve quality of service that they would deliver to the tourists	GTA Tourism FOREST DEPARTMENT	2014 – 2018
Objective 3. To minimize waste generation and manage the Waste generated in the Singhalila Trek Route.		
a. Arrange a meeting and form a committee on Waste Management in Singhalila Decide on the plan of action	GTA Toursim Forest Department ATREE HMI Local Communities, Local NGOs and CBOs	2014- 2015

STEPS	Possible Responsibilities of Stakeholders	Timeline
b. Conduct the 1 st Phase of Waste management in Singhalila as planned out by the committee c. Establish Waste disposal booths at three strategic entry-exit destinations to start with	Waste Management Committee of Singhalila	2015 onwards
Objective 4. To have Regulation of Food Prices of destinations in place and minimize conflicts, unhealthy competition and enhance visitor satisfaction.		
Arrange a meeting with Hoteliers of destinations and decide on the menu and their prices	Hotel Associations GTA Tourism FOREST Department Representative of local communities	2014 -2015
Objective 5. To minimize resource extraction especially firewood along the Singhalila Trek Route		
Encourage use of energy efficient alternate technology in the Singhalila Trek Route	ATREE GTA TOURISM Forest Department NGOs in Nepal and India	2014 – 2016
Objective 6. To enhance visitor experience through maintenance of the existing accommodation facilities.		
a. Repair and maintenance of all Trekker Huts	GTA Tourism	2014 -2018
Objective 7. To improve the interpretation and education activities of Singhalila to enhance visitor experience, and positively influence their knowledge about the conservation value of Singhalila		
a. Improve the Interpretation Center of the Forest Department b. Install information and interpretation signage on the trekking routes in Singhalila c. Conduct a Red Panda Festival on International Red Panda Day on 3 rd week of September – to raise awareness	ATREE Forest Department GTA Tourism Representatives of local communities Local NGOs	2015 onwards
Objective 7. To look into the welfare of the Pack animals being used in the Singhalila Trek Route		
a. Horse sheds required in few points along the trail	Forest Department	2014-2018

Annex 2. Participants in the District level meeting in Darjeeling (25.6.2014)

Government	
Mr. Sonam Bhutia , WBCS Executive Director Department of Tourism Gorkha	Colonel Gulshan Chadha Principal Himalayan Mountaineering Institute Darjeeling
Mr. Bhusen Biswakarma, WBFS, ADFO Darjeeling Forest Division DArjeeling	Mr. Narendra P. Lama Tourist Officer Department of Tourism Darjeeling
Mr. Barendra Dubey Forest Ranger Officer Wildlife Division Department of Forest Darjeeling	Mr. Benoy Mokthan Staff, Trekker Hut Tourism Department Gorkha Territorial Administration Darjeeling
Travel Houses	
Mr. Suresh Periwal CEO Clubsides Travels Darjeeling	Mr. K. K. Gurung CEO Himalayan Travels Darjeeling
Dr. Sujama Roy Research & Development Coordinator Help Tourism Private Limited Siliguri	Mr. Gautam Shrestha Manager (Sales & Field) Adventures Unlimited Darjeeling
Local Community Representatives	
Mr. Sukumar Tamang Guide – Singhalila National Park Manebhanjyang	Mr. Chandra Prasad Chettri Guide – Singhalila National Park Manebhanjyang
Mr. Tshering Sherpa Guide – Singhalila National Park Manebhanjyang	Mr. Uttam Gurung Guide – Singhalila National Park Manebhanjyang
Mr. Bikram Chettri Guide – Singhalila National Park Manebhanjyang	Mr. Binod Tamang Guide – Singhalila National Park Manebhanjyang

Associations	
Mr. Mahendra Pradhan Vice President Hotel Owners Association Rimbick	Mr. Toshan Gurung General Secretary Eastern Himalaya Guides Welfare Association Darjeeling
Mr. Rohit Andrew Pradhan Member Eastern Himalayas Guides Welfare Association Darjeeling	Mr. Anil Tamang Coordinator Land Rovers Association Manebhanjyang
Mr. Rinzing Sherpa Owner Sherpa Chalet (Hotel) Sandakphu	
Non Government Organisations	
Mr. Subarna Rai Member Real Rimbick United Club Rimbick	Mr. Asish Rai Coordinator DLR Prena Darjeeling
Mr. Shekhar Bhujel Research Scholar ATREE, Gangtok	Ms. Michelle Gurung Project Coordinator ATREE Darjeeling
Mr. Sonam Tashi Bhutia Coordinator Red Panda Network – Nepal Chapter Nepal	
Dr. Sarala Khaling Regional Director ATREE, Eastern Himalayas Gangtok	Dr. Sunita Pradhan Visiting Fellow ATREE, Eastern Himalayas Gangtok
Mr. Roshan Pradhan Research Associate ATREE, Eastern Himalayas Gangtok	