

## **Tourism industry of North Bengal - from Geographical point of view**

**Dr. Renu Jamwal**

Assistant Professor  
Department Geography  
University of Jammu

### **Abstract**

The term Tourism has been emerged as a major industry since World War II. This tourism industry is developed around a region of unique characteristics of natural, social, cultural, ethnic resource diversity and so on. North Bengal comprises of six districts namely Darjeeling, Jalpaiguri, Coochbehar, Uttar Dinajpur, Dakshin Dinajpur, and Malda. Each of the above districts has unique characteristics in respect of natural, social, cultural, ethnic resources. The natural beauty of Darjeeling mountain, reserve forest of Terai and Dooars, heritage site of Malda and the folk culture of forest surrounded rural area in North Bengal are attracting tourists (both domestic and international) from all over the world. The Darjeeling hills are well known as Queen of Hills. The Darjeeling Tea and Darjeeling Himalayan Railway (DHR) are regarded as the heritage of Darjeeling Hills. The unique ethnic community of Totopara of Jalpaiguri district, Coochbehar Rajbari and Heritage site of Malda (Goura) district has a major interest of tourist worldwide. This industry emerged as an important segment of daily life of the people, strengthening their economy and also generates supplementary income for local in rural as well as urban areas. But today lack of proper management the tourism industry of North Bengal has been suffered a lot. This paper is an attempt to focus the present problem and planning to rejuvenate development of Tourism industry of the study area.

**Key words:** 1.Adventure Tourism, 2.Dooars, 3.Eco- Tourism, 4.Ethnic tourism, 5.Sustainable Tourism, 6.Terai,7. Tourism, 8.Tourismagnetic factors.

### **Introduction:**

The definition of tourism includes three common important factors/elements-

- Movement of people between two or more places (origin and destination).
- Length of time of movement (always temporary, not more than one consecutive year).
- Purpose of movement of tourist.

Man is a born-traveller. From the beginning of the civilization man travel from place to place in search of meeting their basic needs. Thomas Cook (1860), the pioneer of organized mass tourism in England once commented, "God's earth in all its fullness and beauty is for the people".

North Bengal comprises of six districts namely Darjeeling, Jalpaiguri, Coochbehar, Uttar Dinajpur, Dakshin Dinajpur, and Malda. Each of the above districts has unique characteristics in respect of natural, social, cultural, ethnic tourism diversity. The natural beauty of Darjeeling

mountain, reserve forest of Terai and Dooars, heritage site of Malda and the folk culture of forest surrounded rural area in North Bengal are attracting tourists (both domestic and international) from all over the world. The latitudinal extension of study area is  $24^{\circ} 40' 20''$  N to  $27^{\circ} 13' 15''$  N and longitudinal extension is  $87^{\circ} 45' 50''$  E to  $89^{\circ} 54' 35''$  E. The study area has total area of 21855 sq km. The total population as in 2011 is 17,204,239 and density is 790/sq km. The study area shares its boundary with Bihar, Nepal in the west, Sikkim and Bhutan in the north, Assam and Bangladesh in the east and it is divided with the rest of West Bengal by the river Ganga in the south.

**Objectives:**

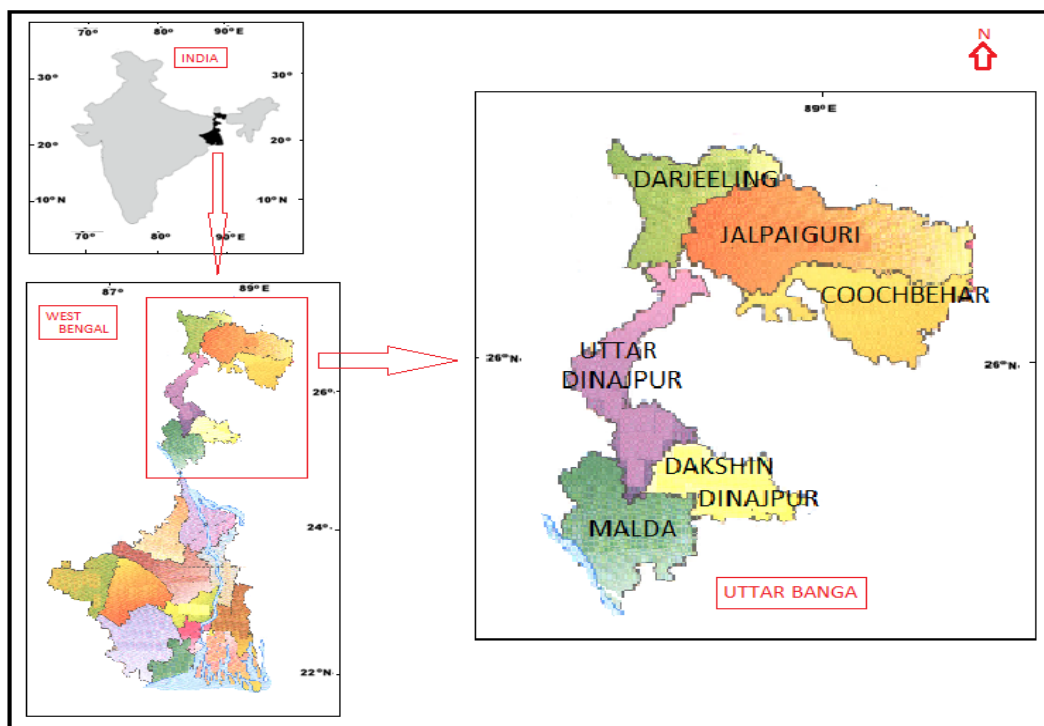
The **main objectives** of the study are-

1. To highlight the major problems of tourist and tourism industry of the study area.
2. To highlight the tourism agnetic model for better management of tourism industry.
3. To prepare an action plan for further development.

**Methodology:**

The methodology consists of two parallel processes. The first process carried out for primary data and second process carried out for secondary data collection. In the first process several method such as Observation method, Interview method (both personal interview and telephone interview), Collection of data through questionnaires etc. has been taken for collecting primary data. The next step is carried out through observation of the study area. The observation of study area includes infrastructure, safety, political affairs, climate change and their consequence effect upon tourism etc. Interview of 700 people was taken during the survey. Out of them 147 are International Tourists, 455 are Domestic Tourists and 98 are involved in Tour and Travel Agency in the study area. The second process is carried out through the collection of primary and secondary data from different sources. Several maps such as location map, land use map are also added to clarify the problem. Various publications of the central, state and local governments, books, magazines, news paper, publication prepared by research scholar, university etc. in different field, statistics and historical document are also carefully studied for collecting secondary data. Limited review regarding the study also are helpful for understand the problem of tourism industry of the study area. Finally all the data is compiled to overcome the project.

**Location map:**



**Fig: 1- Location map of north bengal.**

**Present problem of tourism industry in north bengal:**

The major problems of Tourism Industry in North Bengal are following-

**1. Infrastructure:**

Infrastructure of the study area plays a vital role. Infrastructure means Hotels, Lodges, Restaurants facilities, Transport and communication facilities, Recreation facilities, Pollution free environment etc.

**a. Hotels, Lodges, Restaurants:**

In some area of natural, cultural tourism landscape and wildlife, rural tourism site of the study area the hotel service is limited. For this reason the tourist have to pay very high price in comparison to the facility available. On the other hand in some popular and urban tourist spots the rapid growth and here and there construction of new resorts, hotels, lodges and restaurants can often be seen natural beauty, wildlife removed from the study area in order to satisfy the demand of tourist. From the following data it is clearly depicted that the number of registered hotels in the popular tourist spot increased very highly. But problem is more arises when the unregistered hotels developed here and there in the study area. This Unregistered hotels may avoid the governmental tax and also generated environmental problem such as land slide viability, pollution etc. in the study area.

**Table no-1: Increasing number of registered hotels in some major tourist destinations.**

PLACE	2000	2003	2005
DARJEELING	247	267	280
KALIMPONG	40	45	48
KURSEONG	46	51	55
MIRIK	23	24	26

SOURCE: DARJEELING, KALIMPONG, KURSEONG, AND MIRIK MUNICIPALITY (2000, 2003, 2005).

**b. Transport and communication facilities:**

To access different parts of tourism region Transport and Communication play a crucial role in tourism industry. The maximum existing road conditions of the study area are bad, some of the rural tourism sites are not well connected by roadways, and a maximum river bridge is old in age and has a limited carrying capacity. The railway line is also single line in some place and strict rule regarding speed limit of train in forest area to save wild animals also consume unnecessary time. Only one International airport (Bagdogra air port) is situated in the study area which is well connected to Kolkata and Delhi but not well connected to the rest of the country. For this reason the maximum time and money of the tourist is consumed.

**2. Political unrest:**

The political movement of different local political parties (Gorkha Janamukti Morcha, Adibasi Bikash Parishod, Amra Bengali, Kamtapuri etc.) has directly influenced the tourism industry of North Bengal especially in hill areas, terai, and dooars. Political strike of these political parties in pick tourism season drown back the tourism industry in respect of economically and emotional attitude of tourist. The tourists are hackle to get food, motor vehicle in the time of strike. The local committees also play significant role. They collect donation, entry fees, car parking fees etc. unofficially from the tourist. If the tourist denies to giving such kind of fees to the local committees they create several problems physically and mentally to them.

**3. Safety:**

Safety of Domestic and International tourist has become a major problem for the growth of tourism industry in the study area. Political unrest, local community force, terrorist attack, improper law and order, accident, physically torture etc. adversely affects the sentiment of Domestic and Foreign tourists.

**4. Eviction of local people:**

Sometime the Government are forcefully evicted a number of local people who have inhabited in the study area from generation by generation for making land bank, common infrastructure of tourism region. This threatens the social harmony of the region.

**5. Lack of coherent policy and a master plan:**

One long term coherent policy and a master plan can change the problem. But problem become more arise due to lack of long term coherent policy and a master plan.

**6. Rapid deforestation:**

Forest based tourism are declining due to the rapid rate of deforestation in North Bengal.

**7. Climate change:**

Climate change is another significant factor which adversely affects the tourism industry in the study area. Scarcity of drinking water in northern hill region, dropping down of water level in major rivers, water bodies, wet lands, loosing of Glaciers from highest peak, maximum heat and cold during summer and winter due to high rate of deforestation, soil erosion, urbanisation, pollution undoubtedly drawn back the tourism industry in the study area.

**8. Lack of land diversity:**

Tourist motivation is always stands towards such place where different physiographic attributes are found at a time. Darjeeling and Jalpaiguri districts have their different physiographic attributes which attract the tourist from all over the World. But rest of above two districts other four district of North Bengal namely Coochbehar, Uttar Dinajpur, Dakshin Dinajpur and Malda district has

lack of such physiographic diversity. We hardly find any natural and cultural scenic beauty together within a tourism circuits at a time.

**9. Loss of biodiversity:**

Loss of Biodiversity of the study area is a major cause to drawn back the tourism industry for the wildlife lovers' tourist in order to satisfy their demand. The broad gage line is set up and being in operation since 2004. After broad gage line being in operation the loss of biodiversity mainly elephant are mostly reduced by train accident. Another reason of elephant death is military affairs in Nepal border. The North Bengal tiger and other animals are reduced due to high rate of deforestation in regard to the food availability in the forest and hunting by poachers in the study area. It is clearly seen from West Bengal Forest report 2011-12 the north Bengal tiger is totally finished from Gorumara reserve forest, Boikunthapur, Kalimpong, Kerseong and Darjeeling forest subdivision.

**10. Lack of publication:**

Lack of publication is another problem of tourism industry in North Bengal. Except Darjeeling city, Gorumara reserve forest etc. most of the natural and cultural beautiful tourist destination are still unknown to the tourist due to lack of publicity. North Bengal is much further from the state capital (Kolkata) though Government of West Bengal is trying to improve the tourism industry through tourism department but progress is not satisfactory.

**11. Wild animal in locality:**

Wild animals such as Leopard, Rhino, and Elephant etc. in locality are common phenomena in the study area. The Leopard preferred to live in deep scarab or deep grasses region of forest fringe. But lack of food, water in the forest fringe they enter to nearby locality or tea gardens. It is increased day by day due to lack of employers in forest department in the study area. Sometimes local people mix poison in dead got or dog body and throw it in forest surrounded area to kill leopard that entered their village. For safety the tourist avoids the forest surrounded rural area for tourism.

**12. Natural hazard:**

The study area mainly northern hill and terai and dooars are highly prone to Earthquake and Landslide. This phenomenon also plays a negative impact in tourist mind and due to landslide along roadways the tourist has to spend long time in roadway and suffer lot of pain.

**Other problems of tourism industry in north bengal:**

- Tourism industry has a worker shortage; lack of involvement of woman worker etc. particularly this problem is more common in the rural interior of the study area.
- Another common problem is land shortage, because these regions are highly agrarian. The local and state government are often unable to secure enough land for the development of tourism industry within the study area.
- Adventure tourism like Water Rafting, Trekking, and Biking etc. does not well develop.
- Tourists are often exploited economically and criminal elements in North Bengal.
- The major Historical Tourist places are losing their past glory due to the local government negligence about their proper conservation and maintenance.

- The natural Himalayan beauty, picnic spot, wildlife conservation area, Various Temple, Mosque, and Kings palace are being battered by soil or land, air and water pollution.
- Retirement and healthy tourism region are also avoided by the woman, child, and elderly tourist due to the pollution mainly Noise, Air and Sight pollution.
- Lack of tourist information centre.
- Regulatory issues like Visa procedures are seen as hindrance for foreign tourist (especially Tourist of Bangladesh) in puja vacation.

Table-2: Tourism circuits &amp; destinations in north bengal:

Type of Attraction	Major tourist destination
Eco/Natural tourism landscape	Darjeeling, Kurseong, Kalimpong, Mirik, Sinchula hill of Buxa dooars.
Adventure tourism	Water Rafting- Tista Bazaar Trekking- Around Sandakphu Biking- Darjeeling, Mirik, Mongpo etc.
Wildlife tourism region	Sandakphu Biosphere Reserve, Buxa Tiger Reserve Forest, Kulik Bird Sanctuary, NeoraValley, Jaldapara, Garumara, Chapramari, Nilpara Wildlife Sanctuaries.
Heritage tourism region	Toy Train
Cultural tourism region	Rabindranath Tagore house in Mongpo
Ethnic tourism region	Toto para of Jalpaiguri District, Matigara of Darjeeling district
Plantation tourism region	Darjeeling Hills, Terai and Dooars for Tea, entire malda district for Mango farming.
Rural tourism region	Totopara of Jalpaiguri District
Retirement & healthy tourism region	Darjeeling, Kurseong, Kalimpong, Mirik, Lava, Rishop etc.
Man made tourism wonders	Coronation Bridge of Sabok, Tenging Norgoy Mountaineering Institution, Coochbehar palace.
Festival tourism	Entire North Bengal in Durga Puja, Ras mala of Coochbehar, Huzu Sahab Mela of Haldibari, Jalpaiguri, Bollakali Mela of Balurghat, Dakshin Dinajpur etc.

### Planning: A step towards development

#### DEvelopment of sustainable tourism:

Development of sustainable tourism is necessary for improving the tourism industry of the study area.

The United Nations Environment Programme (UNEP) and UNWTO brought out a publication entitled "Making Tourism More Sustainable – A Guide for Policy Makers. They list the following aims of an agenda for sustainable tourism:

1. Employment Quality
2. Visitor Fulfilment
3. Community Wellbeing
4. Physical Integrity
5. Resource Efficiency

6. Local Prosperity
7. Social Equity
8. Local Control
9. Cultural Richness
10. Biological Diversity
11. Environmental Purity
12. Economic Viability

**Development of rural tourism:**

In the study area implementation of rural tourism helps in employment generation, enhancing earning capacity, check migration and better livelihood for the rural population. As per Tourism department of India, 12<sup>th</sup> five year plan (with modification) the brief details of the proposed strategy are given below.

1. Identification of clusters of 2 to 4 villages having unique craft, ethnic art form, for development as a Tourism Product.
  2. Creation of tourism awareness in host community.
  3. Facilitating marketing of local products through creation of Craft Bazaars/ Haats.
  4. Developing basic local infrastructure and sanitation through the local Government.
  5. Physical infrastructure components include tube well, sewerage, roads and drainage, solid waste management, solar/street lights, etc.
  6. Components for cluster as a whole would include haat/ bazaar, amphi-theatre with green rooms, toilet blocks, tube wells, etc.
  7. Development of Accommodation/ Home-Stay facilities for tourists within the cluster.
- Those are essential for developing rural tourism in the study area.

**Development of eco-tourism:**

Development of Ecosystem friendly tourism is necessary for sustainable tourism in the study area.

The following planning is necessary for development of Ecotourism site-

1. Use biodegradable materials for making hotels, lodges etc.
2. Use solar light in the eco village.
3. Use cart for transportation.
4. Horseback riding.
5. Making environment friendly market with local vegetation and fruits.
6. Involvement of local community as a tourist guide.
7. Eco-school to reach a particular skill.
8. Eco-festivals with wide publicity and sponsorship.
9. Moonlight activity in and around Eco-village.
10. Eco-educational tour and Nature-oriented Camp for student and tourist.
11. Development of Adventure tourism near Eco-village.
12. Watching tower to fell the total scenic beauty around an Eco-village for tourist.
13. Introduction of tribal song, dance, and Art form etc. of local nearby community for tourist interest and also generates supplementary income to the local community.

**Developing Agri tourism and plantation tourism:**

Agriculture is the backbone of Indian economy. Eighty percent of the total population is directly or indirectly dependent on agriculture. There are an increasing number of tourists preferring non-urban tourist spot. There is a large scope for promotion of non-urban tourist spots in interior village by establishing agri-tourism and plantation-tourism centres

The basic principle of Agri-tourism and plantation- tourism are-

- Have something for visitor/tourist to see.
- Have something for visitor/tourist to do.
- Have something for visitor/tourist to buy.

Some Successful Entertainment Farming Enterprises And Techniques In agri- tourism and plantation- tourism are-

Entertainment agri-tourism means agri- tourism involvement in agricultural operation creates joyful experience to the tourist. From the basic principle the following steps are essential (According to Pandurang Taware with some modification) for developing agri-tourism and plantation -tourism.

- Arts and crafts demonstrations.
- Farm store: Exhibition of farm equipments (old and new).
- Roadside Stand, selling fresh farm products and craft items.
- Processing of farm product and sale.
- Demonstration of Agri-activities.
- Wool processing.
- Free fishing/ hunting.
- Farm vacations.
- Farm tours.
- Horseback Riding.
- Cross-country Skinning.
- Cycling in and around agri and plantation tourism site.
- Camping.
- Picnic grounds.
- A shady spot for tourist to rest-like big mango tree.
- Educational tour for school children, officers and progressive farmer.
- Farm schools to reach a particular skill.
- Outdoor schools which are mobile in nature, teaching agriculture.
- Herb walks.
- Workshops on interesting, emerging agriculture topics.
- Festivals with wide publicity and sponsorship.
- Cooking Demos to satisfy housewives.
- Rent-an-Orange tree.
- Moonlight activities.
- Speakers who can attract Argo-tourist narrating Agricultural experience.
- Regional theme like Darjeeling Tea.
- Crop art.
- Log Building.
- Antique Villages.
- Miniature Village.
- Farm theme play ground for Children.
- Fantasyland.
- Hotel and restaurant.
- Theme (orange town) etc.

**Developing Tourism Park:**

Near an existing tourist destination in the study area the Tourism Park is helpful in several ways-

1. It generates employment and supplementary income for the local community.
2. It holds back the tourist for an extended period.



**Intregrated tourism planning:**

Integrated tourism planning or a master plan is necessary for all round development of entire study area through Government and private organisation. This tourism planning may implemented in study area in 3 different levels such as-

1. Regional level Planning.
2. Local or Community level Planning.
3. Site level Planning.

The main elements of level wise tourism destination planning are-

- a. Formation of Tourism complex.
- b. Tourism Demand Analysis.
- c. Tourism Facility Supply Analysis.
- d. Tourism Impact Analysis.
- e. Economic and Financial Analysis.
- f. Action Plan and Recommendation.

**Improveing basic infrastructure:**

To overcome the Infrastructural problem involves the improvement of Government tourist lodge and other lodges, hotels, restaurants facilities and also maintain the ratio about the number of hotels and lodges in rural and urban tourist spots to satisfy the demand of tourists.

There was strong objection of foreign tourist about the quality of food supplied from the hotel, lodges in the study area. They suggest this problem may be overcome with the help of modern cooking tools and involvement of skilled service provider.

The condition of National and state highways are bad in northern hill and entire North Bengal. Due to not enough land bank in the possession of the state government, for lack of land bank policy of state Government the roadway authority could not extend roadways in the study area. The ongoing and proposed river bridges, Domestic airport of Cooch behar is being in operation, and in future the structure of transport may developed in north Bengal for the development of tourism industry.

**Human resource development and capacity building:**

The people involved in Tourism sector in the study area should develop their human resource and capacity through-

- i. Earn while you learn programme.
- ii. Introduced training for regional level guides, Taxi, Auto-Rickshaw, Rickshaw drivers.
- iii. Skill certification of the existing service providers and new comers in the study area.

**Employment generation and community based tourism:**

Community based tourism (CBT) is a community development tool that strengthens the ability of rural communities to manage tourism resources while ensuring full villager participation. When applied properly it can help villagers control the impacts of tourism while also generating income, diversifying the local economy, preserving culture, conserving the environment, providing educational opportunities and so on.

- CBT has the following management procedures:
  1. The community has the ability to make and reinforce rules and regulations for environmental, cultural, and tourism management.
  2. A local organisation or mechanism exists to manage tourism, with the ability to link it to community development.

3. Benefits would be fairly distributed to all. A percentage of profits from tourism would be contributed to a community fund for the economic and social development of the community of the study area.
4. There are no situations in the village that would pose serious problems to community based tourism, such as natural disaster or political instability.

**Safe and honourable tourism:**

“ATHITHI DEVO BHAVA”- this is the slogan of Indian tourism industry. So, the local people, people related with tourism industry should understand they have to well behave with Domestic and International tourist for the sake of tourism industry in the study area.

**Create land bank and rehabilitation of settlement:**

Sometime the Government forcefully evict the local people from the study area this is also causes social harmony. But the Government should have always enough land bank near the major tourist destination for construction Tourism Park. For this reason the Government should have to implement proper land bank policy. Rehabilitation of settlement and guaranty of job opportunity of local community for their survival is necessary for restrict social harmony.

**Save the biodiversity:**

Loss of Biodiversity of the study area is a major problem for the wildlife lovers' tourist in order to satisfy their demand. So, local, state government and forest department should take some strict rules for the poachers. Asian Rhino, Elephant are the main target for poachers. A number of Elephant are also reduced due to the train accident. So following steps may be taken to save the wildlife biodiversity in the study area-

1. Strict rules and their implementation for poaching.
2. Involve the forest surrounded local people to save biodiversity.
3. Use automatic thermal sensor in train and forest corridors to save the Elephant from train accident.
4. Use radio collar to save Elephant.
5. Making forest over bridge railway line or tunnel railway line at forest corridors.
6. Creates fire lines in the Forest.
7. Increased number of worker in forest department.
8. Increased awareness of local people about the importance of biodiversity.
9. Co-operation between Forest-Tourism-Railway departments.
10. Reforestation in the forest fringe.
11. Making pond and canals for water storage mainly in dry season etc.

**Reforestation:**

To develop forest base tourism as early as possible reforestation is necessary in North Bengal.

**Check pollution level and minimise negative impact on environment:**

The major tourist destinations of the study area are severally affected by soil, air, water, noise pollution. The following steps may be helpful to check the pollution level-

1. Develop conciseness of local people and among the tourist.
2. Strict rule and observation about hooding here and there in major tourist spot.
3. Conciseness of Drugs and high penalty during smoking, Alcohol drinking, and other drugs in major tourist destinations.
4. Declared drug prohibited zone of the entire tourist destination like neighbourhood state Sikkim.

5. Increase awareness about the misuse of non-degradable materials such as plastic.

#### **Mitigation method of landslide and landslide prone area:**

Landslide occurrences cannot be restricted with human effort but with some scientific measure we must minimize its negative impact. Some of the mitigation methods of landslide prone northern hill area are following below-

1. Treatment of slope conformation
2. Treatment of the drainage
3. Structural measures
4. Afforestation programmed.
5. Ban on non-biodegradable materials
6. Proper land use measures etc.

#### **Awareness:**

- The State and local Government should take some positive measure to develop awareness among the local people about the importance and benefit of tourism industry through manpower resource development and media publication at grass root level.
- The Environmental awareness programme is also necessary among the tourist and host community for the preservation and conservation of natural and socio-cultural tourism destination.
- Awareness of different political leader and Government officers is also necessary instead of their narrow political popularity and self interest

#### **Development of information technology:**

In the modern globalization era the world come closer with the help of Information technology. The West Bengal tourism department have their own site in internet but according to some tourist it has lack of information and maintain no up to date regularly. The WBTDC could develop and regularly maintain a computer network system to establish instant on line information and reservation facility about the tourist destinations, tour operators, tourist guide, hotel information, and transport facility information etc. for the tourist in the internet.

#### **Marketing:**

Marketing is another important factor for the rejuvenation and growth of tourism industry. Government and private sector co-operatively should launch tourism package scheme, combined tourism package scheme, honeymoon tourism package scheme, youth student adventure and educational tourism package scheme, religious and medical tourism package scheme for senior citizen tourist etc. to develop the tourism industry in North Bengal. Through the marketing of new tourist destination can be made popular and attractive among the tourist.

#### **Involvement of private sector and local community:**

Involvement of private sector should be encourage and welcome for the better development of tourism industry in North Bengal. Involvement of local community is also necessary for enhancing the socio-economic status of tourism based study area.

#### **Conclusion:**

As tourism industry of the study area is a leading industry and the benefits of this industry is shared by Nation, State and Local community, it's all responsibility to maintain its standard and also satisfy the tourist demand. Beside the above points for development, the Government should take some positive step for the development of tourism industry in North Bengal. The recommendation of positive step for the Government are-

- Formulate a long term coherent policy and a muster plan will solve the present problem.
- Create maximum land bank in the procession of Government and also guaranty of resettlement and job opportunity of the local community.
- Government-private sector cooperation.
- Simple VISA procedure for the international tourist. For safety Govt. Should provide electronic gadget to foreigner to trace their movement and activity.
- Increase publicity about the new tourist destination.
- Established tourism school with hostel and scholarship facility.
- Involvement of woman in tourism sector for increasing woman and child tourist in North Bengal.
- Development of infrastructure, safety, community based tourism etc.

Apart from this the Government has also responsibility to develop awareness at grass root level. If awareness and responsibility of all the community is enhanced the further development of tourism industry cannot be stopped in North Bengal.

**Reference:**

1. Chakravarti, Pranab Kumar (2006): Society Development and Environment, Tourism in West Bengal: Potentials and Strategies for Development, Progressive Publishers, Kolkata, pp. 305-316
2. Colin, Michael Hall and Stephan, Page. (2006), "The Geography of Tourism and Recreation: Environment, Place and Space." Routledge.
3. Bhattacharya, Arundhati (Dec, 2011): Bhugolika, Eco-Tourism in Sundarban, Bangiyo Bhugol Mancha, Kolkata, pp. 21-24
4. Sarkar, Bipul Chandra (July, 2012): Bhugolika, Heritage Based Tourism in Koch Bihar District, Bangiyo Bhugol Mancha, Kolkata, pp. 7-14
5. Identification of Tourism Circuits across India- Interim Report, West Bengal, April 2012, Submitted by IL&FS Infrastructure, Submitted to Ministry of Tourism, Government of India.
6. Taware Pandurang (2008): "Indian Rural Economy", Agritourism in India, The Icfai University Press, Hyderabad, pp. 148-159
7. Gangapadhya, Basudeb. (2000): "Paschimbanga Parichya", Sisu Sahitya Samsad, Kolkata, pp. 38-43, 52-68, 101-107
8. Chakraborty, S. C. (2007): "Natural Hazards and Disaster Management", Pragatishil Prokashak, Kolkata, pp. 136-141
9. Lahiri, Dipankar. (2009): "Environment- The First Child of Nature", Sahitya Samsad, Kolkata, pp. 108-126, 162-179
10. World Resource Institute (1998-1999): World resource: a guide to the global environment, Oxford University Press.
11. Richard, N., Onwonga, Joyce, J. Lele and Joseph, K (2013). Comparative Effects of soil amendments on phosphorus use and agronomic efficiencies of two Maize hybrids in acidic soils of Molo county, Kenya. American Journal of Experimental Agriculture, 3(4): 939-958.
12. Saha, R., Mishra, V., Majumdar, B., Laxminarayana, K. and Ghosh, P (2012). Effect of integrated nutrient management on soil physical properties and crop productivity under a maize (*Zea mays* L) – mustard (*Brassica campestris*) cropping sequence in acidic soils of northeast India. Communications in Soil Science and Plant Analysis 41: 2187–2200.
13. Shanwad, .U K., Aravindkumar, B. N., Hulihalli, U. K., Surwenshi, A., Reddy, M and Jalageri, B.R (2010). Integrated nutrient management (INM) in maize-bengal

- gram cropping system in Northern Karnataka. *Research Journal of Agricultural Sciences*, 1(3):252-254.
14. Singh, Ummed. S. R., Singh, A., Saad. A and Mir, S.A (2009). Phosphorus management in green gram-brown sarson cropping system under rainfed conditions of kashmir valley. *Annals of Arid Zone*, 48 (2); 147-151.
  15. Tetarwal, J.P., Ram, B and Meena, D.S (2011). Effect of integrated nutrient management on productivity, profitability, nutrient uptake and soil fertility in rainfed maize (*Zea mays.L* ). *Indian Journal of Agronomy*, 56 (4):373-376.
  16. Tiwari, R.K (2005) Long-term use of inorganic fertilizers and response of soybean to basal application of phosphorus. *Journal of the Indian Society of Soil Science*, 65:83-97.
  17. Cacha FB (1976). Figural Creativity, Personality, IQ and Peer Denominations of pre-adolescent, the gifted child quarterly: 20
  18. Goldberg L (1974). Personality Integration as determinant in the relationship intelligence. *Dissertation Abs. Int.* 35, 1494-A.
  19. Nwazuoike IA (1989). Correlates of Creativity in High Achieving Nigeria Children. Unpublished Ph.D. thesis, Department of Guidance and Counseling, University of Ilorin, Nigeria.