

24	Development of Brahmaputra riverways/tourism/cruise from Manas to Kaziranga/Sadia	Mahindra Acres Consulting Engineers Ltd., Chennai	2001
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Executive Summary

The rich natural beauty, the serenity and exotic flora and fauna of the seven sisters of North East – Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura –are invaluable resources for the development of tourism more specifically eco-tourism. The region is endowed with diverse tourist attractions and each State has its own distinct features. The location of North Eastern region is strategically important as it has international borders with Bangladesh, Bhutan, China and Myanmar. The Union and the State Governments have attached great importance for the tourism development of the region in view of immense tourism potential of the region.

The Northeastern region is a place of magical beauty, bewildering bio-diversity and heavy precipitation. It is endowed with forest wealth and is ideally suited to produce a whole range of plantation crops, spices, fruits, vegetables, flowers and herbs. It is nestled in myths and mysteries, lore and legends. It is a land wherein the mighty river like the Brahmaputra flows. All these natural wealth and opportunities is an open invitation for establishing virtual paradise for travelers searching for continuous joy in pilgrimage, adventure, culture, nature, heritage, wildlife, golf & polo, river tourism and more.

Despite abundance of natural beauty, snow peaked mountains and White Water Rivers, the flow of incoming tourists has been marginal for the reasons of lack of infrastructure and other related facilities in the various tourist spots. Accordingly the Ministry of Tourism, Government of India and respective State Governments have embarked on a variety of ambitious plans for sustained tourism development. Tourism has been identified as one of the growth engines for the socio-economic development of the region as the region does not have any major industrial activity and accordingly a host of developmental schemes have been taken on priority basis.

As a part of developing river tourism in Northeastern region, North Eastern Development Finance Corporation Ltd. (NEDFi), a public financial institution set up for the development of industry and infrastructure in NE India, have issued a call for reputed consultants from India to conceptualize the river tourism opportunities in the

Brahmaputra river and formulate river tourism based projects which would enhance the tourism opportunities for the region.

After the rigorous selection process, NEDFi had commissioned M/s. MAHINDRA ACRES CONSULTING ENGINEERS LTD. (MACE) to prepare a pre investment feasibility report on Development of Brahmaputra River ways / Tourism / Cruise from Dhubri-Manas-Kaziranga-Sadia.

MACE carried out the Pre Investment Feasibility Study as per the terms of reference agreed upon and submitted the draft report. NEDFi vide their letter dated October 10, 2002 accepted the draft report submitted by MACE and have enclosed the minor comments of their expert consultants to be incorporated in the final report. The comments have been duly incorporated in this final report.

1.2 PRELUDE

- 1.2.1 The ancient instinct of man, namely, wandering, lust and urge to explore has blossomed into gigantic concept of tourism in modern society. Man, continually being subject to stresses and strains as the man-resource balance was becoming skewed, tended to become a 'machine', all only to sustain his mere survival in a competitive society.
- 1.2.2 Even to manage and maintain this bare minimum living environment, he has to work hard almost round the day. In his machine-life, he needs rest for a while to recoup and recover from his pain and fatigue. The rest time has become part of his work schedule and the 'rest/leisure' has, over time, manifested itself into different forms and the time varying from minutes to months, depending upon the 'rest place' – local, national and international.
- 1.2.3 The intended effect of 'leisure' can be enhanced greatly through a planned and structured agenda of relaxation of 'pleasures' and 'enjoyment'. In the long and unending corridors of time, this 'leisure' mostly has grown in shapes and forms to be called 'Tourism' which, over a period of time, assumed a proportion of a full-fledged 'industry'
- 1.2.4 Tourism is a major phenomenon of the modern society, which has emerged as an economic activity of immense global importance. Perhaps there is hardly any other field of activity where so many people are involved directly or indirectly.

Tourism has found a niche for itself as an effective instrument for generating employment, earning revenue and foreign exchange, enhancing environment and preserving culture & tradition thereby facilitating overall development.

- 1.2.5 Unlike other industries, “Tourism” is a unique industry, rather a “Societal Industry” where the end product is not measurable in its outputs – the outputs being replenishment of lost energy, restoration of mental peace, rejuvenation of fatigued mind, release and ventilation of tension, and above all, an ecstatic realization of the purpose of the very abounding beauty and grandeur of nature in its pristine and incomprehensible glory.
- 1.2.6 In as much as it is an important social need and industry, ‘tourism’ also assumes preeminence as it helps directly in
- ✳ Conservation, preservation and restoration of historic and heritage sites
 - ✳ Better utilization of spots of scenic beauty
 - ✳ Unfolding the mysteries of nature’s bounty.

1.3 CONTEXT

- 1.3.1 The changing socio-economic profile and the characteristics of the people drive them towards availing leisure-time based activities to relax as well as gain pleasures. About two decades ago, the importance given to the leisure time activities was not overwhelming and the number of tourist places, which attracted people, was also less. Now the tourism sector is an important and major industry and people plan and set aside specific time to tourism based activities. The industry has grown to an extent that a number of picnic spots and places to attract tourists have come up in private sector on a competitive and commercial proposition. The number of tourists has increased manifold in the recent years to such an extent, the existing infrastructure and facilities at the tourist places are not in a position to adequately cope with the tourist volume catering to all their genuine needs.
- 1.3.2 In most of the tourist places, the tourism elements that attract tourists are historic monuments, heritage structures, scenic spots and the like. With rare exception, all these places are environmentally sensitive and fragile. Any change by addition or deletion in them will deprive the places of the values they are adored for. Moreover, the atmosphere the tourists create in terms of noise, pollution, wear

and tear, generation of wastes, unintended and sometimes even unmindful damages of various kinds do threaten the very “tourism elements” in the tourist places. This is greatly due to tourist’s varied cultural backgrounds, habits, regions and tastes. Nonetheless, these damages have to be prevented as required facilities are to be provided without marring the “tourism values” of the place in a sustainable mode coping with the growing tourist volumes year after year. Incidentally, it also warrants opening up more potential tourist places, which are not yet fully explored and utilized taking care that the ecosystem is not driven to a state of imbalance. Therefore, in order to promote sustained tourism, it is necessary to prepare a perspective plan, which should also take care of convergence of funds to the tourist places through other development schemes. This warrants drawing up of specific plan to promote tourism on a sustainable basis that would incidentally provide employment to many, both formally and informally.

1.4 AN OVERVIEW ON INDIAN TOURISM

- 1.4.1 Tourism is a major phenomenon of the modern society, which has emerged as an economic activity of immense global importance. Perhaps there is hardly any other field of activity where so many people are involved directly or indirectly. Tourism has found a niche for itself as an effective instrument for generating employment, earning revenue and foreign exchange, enhancing environment and preserving culture & tradition thereby facilitating overall development.
- 1.4.2 Tourism is one of the world’s largest and fastest growing industries. In 2000 there were 699 million international tourists arrivals throughout the world, an increase of 7.4% over the preceding year and international tourists receipts reached US \$ 476 billion, a 4.5% increase from 1999. There has been strong growth in foreign travel to developing countries during recent years and this trend is expected to continue.
- 1.4.3 From time immemorial, India has been looked upon as a place full of mystique. Now, as the world with supersonic jets has been shrunk into a small place – a “global village”, the tourists from all parts of the world are pouring into India that renders Tourism in India as one of the fast developing Industries. There are still more potentials yet to be utilized for tourism in the country.

- 1.4.4 Recent International economic developments have broken the travel barriers between countries and there is a flow of free trade. The present day tourism encompasses a wide spectrum of multiple activities focused with the integration of shopping and recreation, entertainment and education, culture and meetings / business development.
- 1.4.5 In India, the tourism industry comprises Government of India, respective State Governments, Tourism operators, tour agents, hotels, Tourism Development Corporations, etc
- 1.4.6 As a consequence of economic restructuring and liberalization of policies, the tourism industry was declared as a priority sector for foreign investment.
- 1.4.7 Realizing the vast potential for tourism development and the need for that in the present context, Government has planned to develop select tourism places and areas to diversify culture oriented tourism into holiday and leisure tourism. This industry is increasingly recognized as an important economic, environmental and social force. Quite likely, there may be some shifts in tourism in this current century due to wide-ranging change in consumer values, aggressive political forces and explosive growth of information technology.
- 1.4.8 Globally, tourism is one of the fast growing industries registering about 7% in total capital Investment in the world. According to World Tourism Organization (WTO), around 660 million people crossed international borders for holidays by 2000 A.D. India's share in World Tourism is meager being 0.2% which is expected to touch 1-2% by 2005. The Hospitality and Tourism industry projected a rise in foreign tourists, and to touch a figure of 5 million, and domestic tourists to touch 90 million this year. In fact, tourism is India's third largest foreign exchange earner after readymade garments and Jewellery, with earnings of \$ 2928 million in 1995-96 itself. In terms of employment, according to Pacific Asia Travel (PATA) agency, Tourism industry employs as much as 10% of the world's employment today.
- 1.4.9 In, India tourism alone generates maximum job opportunities as it provides direct employment to 9.5 million people and indirect employment to another 12.5

million people. India's tourism industry services about 3 million visitors including non-residents Indians visiting relatives.

1.4.10 The projections of the trends of tourism in India by Cambridge International Forecast based on WTO and Industry estimates are as follows:

Key Trends	1990	1996	1997	1998	1999	2000	2005	2010
Total Foreign visits (000)	1721	2254	2391	2359	2384	2856	3570	4462
Total Tourism revenues (\$m)	1513	2980	3153	3152	3154	3510	5102	7105
Total tourism spending abroad (\$m)	45	432	457	483	511	540	702	912

Source: Cambridge International Forecasts, based on WTO and industry estimates

1.5 TOURISM IN NORTH EAST / ASSAM

1.5.1 The North Eastern Region of India, comprising of the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, presents a plethora of interesting ethno-geographic and bio-geographic diversities. It is characterized by heavy precipitation, extremely rich flora and fauna, fragile hills and a drainage pattern, marked by lateral valleys in the north traverse valleys in the south, dissected by huge rivers and raging torrents. North East has been the meeting place of many communities, faiths and cultures. It is a place of magical beauty and bewildering diversity.

1.5.2 The North East is different, in the lushness of its landscape, the range of communities and geographical and ecological diversity to most other parts of the subcontinent. In winters, mist carpets the valleys but swirls around the traveler in hills during the summer rains, creating an enchanting and romantic atmosphere. Its jungles are dense, its rivers powerful and rainstorms sweep across the hills and plains during the annual monsoons.

1.5.3 The North East is a haven for tourists, beckoning one who needs to relax and unwind. For those who yearn for adventure and excitement, there is mystique and romance in exploring wild life in its undisturbed form.

- 1.5.4 During 1999-2000, the Government of India prioritized 171 projects amounting to Rs. 4228.63 lakhs for Northeastern states including the state of Sikkim.
- 1.5.5 The Northeast region does not have any other major industry and it is tourism that envisages as the just fulcrum of the region's socio-economic structure. Most importantly, tourism is now recognized as a most vital economic activity that could immensely benefit the country at minimum cost in human, environmental and cultural terms. The region has excellent tourism potential, but poor infrastructure support. Tourism in Northeast is a classic case of non-utilization of unlimited opportunities.
- 1.5.6 Situated between 90-96°E.Longitude and 24-28°N.Latitude, Assam is bordered in the North and East by Bhutan and Arunachal Pradesh. Along the south lies Nagaland, Manipur, and to the extreme south lies Mizoram, Meghalaya lies to her Southwest, Bengal and Bangladesh to her West.
- 1.5.7 The sub-tropical climate of Assam is characterized by high rainfall and high humidity and is worked by three dominant seasons, viz., winter (November to February), summer (March to May) and monsoon (June to October). Most of the rainfall in the state is received under the influence of the southwest monsoon between June and October.
- 1.5.8 As a consequence of economic restructuring and liberalization of policies, the tourism industry was declared as a priority sector for foreign investment. The entire North Eastern region offers India's share in World tourist arrivals and receipts is dismally negligible. Amidst this dismal picture, however, there are certain positive factors. These include comparatively higher average duration of stay, repeat visitors, leisure tourist and higher percentage of visitors in the high spending category. Within the country the flow of tourist to the North Eastern region is still more dismal. Despite the substantial potentiality, the region possesses to develop tourism, due to multifarious reasons the potentialities have not been exploited thus far. Mighty River Brahmaputra is one of the best tourism opportunities of the region. World over, river tourism is very popular.
- 1.5.9 Assam, the heart of the eastern sun, is the gateway to the exotic North Eastern region of India. Assam in the local language means unparalleled. With her breathtaking scenic beauty lofty blue hills, the mighty Brahmaputra that is one of

the largest rivers of the world, emerald forests and exotic wildlife punctuated by rolling tea gardens and golf courses, Assam indeed unequivocally unparalleled. It also inspired the ethnic travelers from time immemorial with her unique confluence of Vaishnavism, Buddhism and Tantricism. One has to be there to experience it. Assam has always fascinated millions of travelers with her aura of mystic beauty, art, culture and folklore.

- 1.5.10 Assam is a land of fairs and festivals. Most of the festivals celebrated in Assam have their roots in the diverse faith and belief of her inhabitants. They reflect the true spirit, tradition and life style of the people of Assam. The culture of Assam is a rich tapestry woven with multicolor yarns of distinct heritage of all the races that inhabit there. The perfect fusions of heritage of her tribes and sub-tribes have made Assam the home of the most colourful festival - passionate, compelling and mesmerizing. The major festivals celebrated in Assam are Bihu, Baishagu, Ali-Ai-Ligang, Baikho, Rongker, Rajini Gabra & Harni Gabra, Bohaggiyo Bishu, Ambubashi Mela and Jon bill Mela and so on.
- 1.5.11 The people of Assam have been traditionally craftsmen from time immemorial. Though Assam is mostly known for the exclusive silks and the bamboo and cane furniture's, there is in actuality a lot to see in the state where several ethnic groups live in complete harmony.
- 1.5.12 Nature has ungrudgingly blessed Assam with an abundance of scenic grandeur, a wealth of rarest and near-extinct Wildlife. It forms part of a global bio-diversity; 'hotspot'. Twenty out of forty one listed endangered species of Wildlife are found in Assam. Kaziranga, the world famous National Park for one horned Rhino lies in Golaghat and Nagaon District. The only Tiger reserve of Assam, Manas is one of the most magnificent National Parks and a world Heritage site.
- 1.5.13 Assam finds a place in the adventure sports map due to the turbulent rivers, the mystic blue hills, the savage terrains and serene countryside.
- 1.5.14 Convergence of people of different religions have resulted in numerous places pilgrimage for Hindus, Muslims, Sikhs, Buddhists and Christians strewn all over the length and breadth of the state a spirit of accommodation and togetherness, tolerance and harmony prevails amongst the believer of different faiths.

1.5.15 Most of the ancient temples and monuments were destroyed in natural calamities but the remains of which lie scattered over an extensive area. Almost all the standing architectural monuments of Assam belong to the medieval period and represent the building styles of the Koch, Kachari, and Ahom royal courts

1.5.16 The recent lifting of the “Restricted Area Permit”, by the Government of India for the foreign tourists visiting the northeastern region would accelerate the growth of tourism in the region.

1.5.17 The Prime Tourist attractions broadly include:

- ★ Pilgrim Centers
- ★ Wildlife Sanctuaries
- ★ Bird Sanctuaries
- ★ Picnic Spots
- ★ Archaeological and Historical places
- ★ Adventure Sports
- ★ Local Festivals
- ★ Arts & Crafts

1.6 THE RIVER TOURISM PROJECT

1.6.1 In line with the decision of Government of India to lay more emphasis on the development of Northeastern states, tourism has been identified as one of the important segment, which could accelerate the developments in the region. Several schemes were announced and Ministry of tourism took several steps for the boosting the tourism in the region.

1.6.2 The project envisages an integrated development of river tourism in Brahmaputra River. The project aims at a comprehensive development of tourism by identifying and integrating the hot spots along the banks of the mighty river Brahmaputra. The project shall also address the needs of creating high quality state of the art infrastructure facilities for river tourism based projects. The project is developed on the premise of conserving and preserving the culture, tradition, heritage and environment. Tourism projects like river cruising, Water Adventure sports and other projects shall be meticulously selected keeping in view of various factors like

- ➔ NEED FOR THE PROJECT
- ➔ INTEGRATION OF HOT SPOTS
- ➔ MAINTAINING / ENHANCING CULTURAL & HERITAGE VALUES
- ➔ EMPLOYMENT GENERATION
- ➔ SKILL SETS
- ➔ ROLE OF THE PROJECT IN OVERALL DEVELOPMENT PLAN
- ➔ PHYSICAL INFRASTRUCTURE
- ➔ TECHNICAL FEASIBILITY
- ➔ STATUTORY AND REGULATORY ISSUES
- ➔ INVESTMENT LEVEL
- ➔ PROJECT VIABILITY
- ➔ GESTATION PERIOD
- ➔ SOCIO-ECONOMIC DEVELOPMENT
- ➔ ENVIRONMENTAL ISSUES
- ➔ OPPORTUNITIES FOR PRIVATE SECTOR PARTICIPATION

1.6.3 The selected river tourism projects are expected not only to enhance the tourism potential of the Northeastern region but also to act as a catalyst for the growth and socio-economic development of the Northeastern region.

1.7 HOT SPOTS ON THE BANKS OF BRAHMAPUTRA - ASSAM

- ➔ **GUWAHATI** - “GATEWAY TO THE NORTH EAST”
FAMOUS FOR TEMPLES PRIME
BEING KAMAKHYA TEMPLE
- ➔ **HAJO** - FAMOUS FOR RELIGIOUS PLACES
PRIME BEING HAYAGRIB MADHAB
TEMPLE & PAO MECCA
- ➔ **CHANDUBI** - NATURAL LAGOON
& FINE PICNIC SPOT
- ➔ **SUALKUCHI** - FAMOUS FOR ASSAM
SILK INDUSTRIES
(MUGA & PAT)
- ➔ **MADAN KAMDEV** - MAGNIFICENT ARCHAEOLOGICAL
RUINS



- **POBITORA** - A SMALL WILDLIFE SANCTUARY
- **BATADRAWA** - BIRTH PLACE OF SHRI SANKARDEVA
- **LAOKHOWA** - WILDLIFE SANCTUARY
- **POBHA** - WILDLIFE SANCTUARY
- **DIBRU SAIKHOWA-** BIRD SANCTUARY
- **GARAMPANI** - HOT WATER SPRING
- **BARPETA SATRA & KIRTAN GHAR** - RELIGIOUS PLACE FOR VAISHNAVAS
- **MANAS** - THE ONLY TIGER PROJECT IN ASSAM
- **ORANG** - WILDLIFE SANCTUARY
- **NAMERI** - NATIONAL PARK
- **BHALUKPUNG** - ECO CAMP AT JAI BHOROLI
- **TEZPUR** - FAMOUS FOR DA - PARBATIYA BAMUNI HILLS AGNIGARH
- **MAJULI** - LARGEST RIVER ISLAND IN THE WORLD VAISHNAVA SATRAS
- **KAZIRANGA** - OLDEST NATIONAL PARK IN THE STATE, HOME OF ONE HORNED RHINO



1.8 OBJECTIVES OF THE STUDY

- ☞ To identify and examine the Techno-economic viability of Tourism Projects based on the river Brahmaputra.
- ☞ To provide basic information to prospective entrepreneurs, investors, financial institutions, Government agencies etc, regarding business opportunities on tourism based projects on the river Brahmaputra.

1.9 TERMS OF REFERENCE

★ Identification of the places of interest within the river and along its banks. The analysis to cover the following:

- ☞ Identification of the stretch of the river Brahmaputra and its principal tributaries suitable for development of tourism. In identifying the stretch, considerations will be given to navigability period, availability of channel marking, nighttime navigability and other related factors.
- ☞ Identification of the river ports which are significant from the point of view of tourism.
- ☞ Identification of the major tourist attractions that may be approached from the port on call. The attractions shall be classified as heritage sites, pilgrimage sites, wild life sites, adventure sports sites etc.
- ☞ Presentation of profile of the tourist attractions covering the significance of the place, estimated annual tourist inflow (domestic and foreign), status of infrastructure such as road communication from the port of call, telecommunication, medical facilities, restaurant, wash-room & toilets and any other important facilities.

★ Identification of tourism projects. The analysis shall include:

- ☞ **River cruise projects:** Profile of projects such as Heritage cruise, Pilgrimage cruise, Wild-life cruise etc. Considerations may be given to cruise trips covering wild life sanctuaries, heritage sites with breaks at a intermediate places of tourists' interest.
- ☞ **Rafting or any other water adventure sports:** Profile of water adventure sports possible in the river Brahmaputra or any of its tributaries.

- ☞ **Other entertainments:** Profile of projects such as evening cruise, floating restaurant, floating conference hall, floating marriage hall, floating theatre etc.

★ **Preparation of project profiles**

- ☞ Estimation of market size of different category stating clearly the assumptions based on which the market size has been determined.
- ☞ Detailed identification and estimation of vessels and equipment such as camping gear, sports gear, service infrastructure etc. for different categories along with specifications.
- ☞ Total investment requirement, i.e. the project cost.
- ☞ A list of reputed suppliers for vessels, equipment etc.
- ☞ Income and expenditure statement, cash flow chart, analysis of important financial parameters such as debt equity ratio, return on investment, internal rate of return, break even point etc.
- ☞ Estimated investment requirement for development of infrastructure such as jetty. State of existing infrastructure, the desired state and the requirements to close the gap between the two states must be clearly identified in quantifiable terms.

★ **Statutory and regulatory requirements**

- ☞ Information on cultural/conservation/religious issues need to be taken care of while developing the river tourism business
- ☞ Suggestion on requirement of adherence to national/international service quality standards
- ☞ Identification of requirement of clearances from state government(s), central government and other agencies.
- ☞ Any other requirements.
- ☞ The desired policy decisions of the state and central government, tourism promotion agencies to ensure success of the projects.

★ **Human resources requirements**

- ☞ Assessment of technical and non-technical manpower requirement in terms of knowledge and skill to man the services. Also, the need to strengthening of human resources available locally shall be assessed.