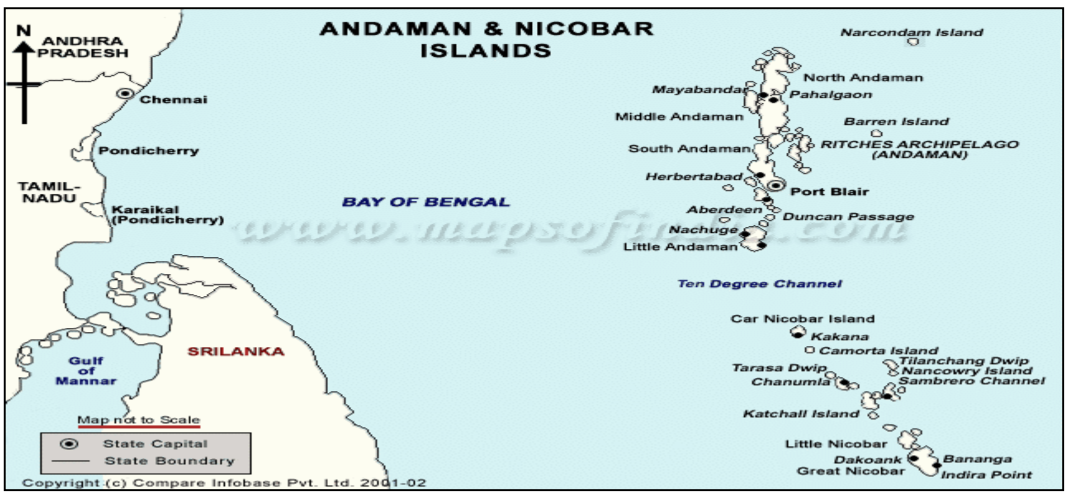
# MINISTRY OF TOURISM & CULTURE - DEPARTMENT OF TOURISM
# GOVT. OF INDIA

# PERSPECTIVE PLAN FOR TOURISM DEVELOPMENT IN ANDAMAN & NICOBAR ISLANDS




# FINAL REPORT

# FEBRUARY 2003

# A. F. FERGUSON & CO.

**Ministry of Tourism & Culture - Department of Tourism**

**Govt. of India**

**Perspective Plan for Tourism Development in Andaman & Nicobar Islands**

**Final Report**

**February 2003**

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# CHAPTER 1

# INTRODUCTION

1.1 A.F.Ferguson & Co. (AFF) were retained by the Department of Tourism, Government of India to prepare a 20 year perspective plan for tourism development in the Andaman & Nicobar (A&N) Islands. This forms the final report of the study.

***Background to the Study***

1.2 Tourism is acknowledged as a "high growth" industry globally. With over 700 million tourist arrivals internationally, the sector accounts for over US $ 500 billion by way of receipts. The sector holds immense potential in generating ***income, employment and foreign exchange*** and in creating a ***multiplier effect*** for the economy.

1.3 As a result of the growth potential and the multiple benefits the sector offers, tourism has emerged as the "core" focus area for many economies, both internationally and at the national level-Central as well as State.

1.4 In developing this sector, GoI's thrust is on planned development as part of which the development of 20 year perspective plans for States and Union Territories has been initiated. The perspective plans are strategic studies aimed at analysing the intrinsic potential, strengths, weaknesses, opportunities and threats for tourism in every state.

1.5 A.F.Ferguson & Co. (AFF) was awarded the study to prepare perspective plans for Rajasthan, Uttar Pradesh and Andaman & Nicobar Islands (this report).

***Terms of Reference (ToR)***

1.6 The terms of reference for the study are as per the guidelines proposed by the Department of Tourism, Government of India. The comprehensive coverage of ToR against the report is provided as Annexure I.

1.7 Based on the guidelines, the deliverables agreed upon for the report on 20 year perspective plan are as follows :

***Existing Status***

- To evaluate the status of the existing plans and schemes
- To list and evaluate existing potential tourist destinations and their classification into standalone destinations / circuits
- To assess the status of existing infrastructure broken up according to various departments

- To analyse current traffic flows to the major destinations and assess the ability of the destinations to manage the traffic

- To assess the institutional mechanisms for tourism development in the State.

***New Projects***

- To identify existing and new tourism projects in the major destinations, investment needs for new project development and its phasing

- To prepare an action plan for implementation of these projects

***Benefits***

- To broadly estimate potential for employment generation from these projects over the plan period including women and local artists

- To project tourist arrivals and visitors to the major tourist destinations

***Framework***

- To suggest various options for funding and for private sector investment in tourism projects

- To broadly assess the environmental issues associated with tourism projects

- To provide broad recommendations for privatisation of tourism properties owned by State Government / Government owned companies.

## APPROACH TO THE STUDY

1.8 Our approach to the study had three distinct phases :

- Understanding the current tourism scenario

- Identifying potential for tourism development

- Guidelines for developing tourism.

1.9 The study was carried out based on a combination of primary survey and secondary research.

# SECONDARY RESEARCH

1.10 AFF carried out a detailed secondary research as part of the study including :

- Tourism literature / brochures relating to A&N
- Past Tourism Statistics
- Economic Statistics of A&N
- Tourism Policy of A&N
- Tourism Statistics of other states in India as well as other countries
- Case studies of island economies
- Environmental issues pertaining to tourism development etc.

# PRIMARY SURVEY

1.11 AFF's primary survey involved a combination of field visits to the existing / potential tourist destinations as well as meetings with various stakeholders of tourism.

1.12 The locations covered as part of the study included :

- Port Blair
- Havelock
- Baratang
- Rangat
- Mayabunder
- Diglipur
- Little Andaman
- Nicobar District

and islands off these locations. It should be noted that AFF covered hitherto uncovered destinations like Little Andaman, Car Nicobar, Katchal & Great Nicobar as part of the study.

1.13 Extensive discussions were held with a variety of people including :

- Chief Secretary, A&N
- Secretary, Tourism
- Director, IP&T
- Planning Dept., IP&T
- PRO, IP&T
- Director, Shipping Services
- Harbour Master
- Secretary, Urban Development
- GM, ANIIDCO
- Secretary, Municipal Council
- Chief Engineer, PWD
- Principal Chief Conservator of Forest
- Chief Conservator of Forest
- Chief Wildlife Warden

- Conservator of Forest, CRZ
- Forest Conservation Officer
- GM, ANIFPDCL
- AN Chamber of Commerce & Industry
- GM, Fortune Resort – Bay Island
- GM, Peerless Resort
- Tour Operators
- Tribal Welfare Board

1.14 Primary and secondary research was used to identify potential tourist destinations, need for various developments in the region and tourism potential in the future. Tourism projects were identified based on the potential of the site and need for infrastructure development (while at the same time factoring the various constraints / limitations in developing tourism).

1.15 The development measures have been projected over three time periods :

- Short term (upto 2007)
- Medium term (2008 – 2012)
- Long term (upto 2022).

## STUDY LIMITATIONS

1.16 Tourism is not a well documented sector in A&N

- Limited statistics are available
- Tourist arrivals are tracked only at Port Blair
- Very little information was available on the tourism trends, economic benefits and employment patterns in the sector.

1.17 The study has extensively used information supplied by the departments listed earlier and validated through meetings with various stakeholders.

## FACTORS CRITICAL TO THE PERSPECTIVE PLAN

1.18 Andaman & Nicobar, by virtue of their location hold ***security considerations*** for the country. Naval security already imposes restrictions on entry and movement of foreigners. The proposal to set up the Strategic Nuclear Command (SNC) and base all air and sea submarines at A&N islands would take A&N into the ‘critical security zone” and impact the entry of both domestic and foreign tourists.

1.19 This factor would definitely shape the way tourism develops in the islands, but is not being reflected in this report bar the inclusion of Nicobar at a later stage and that too in a limited manner.

1.20 The ***Supreme Court Ruling*** banning tree felling and touching on a variety of related aspects will similarly limit avenues of tourism development and / or usage of the basic infrastructure which underpins tourism. The key points of the ruling include :

| SC Ruling | Impact on Tourism Development |
|---|---|
| Banning of felling of trees in A&N except in designated and used forest areas and that too for local consumption | • Development work (roads, resorts etc.)<br>• Availability of raw material for tourism infrastructure |
| • No encroachment in forest land<br>• No commercial plantations in forest land<br>• Eviction of encroachers & their resettlement | • Availability of land for tourism development (as such only 8% is revenue land) |
| Regulate entry of people into islands by imposing relevant restrictions under Sec.(3) and other provisions of Environment Protection Act | • Entry / movement of tourist |
| Ban on extraction of sand (on further extension after 30th September) | • Availability of material for construction / development activities |
| No concrete / permanent infrastructure for tourism in the islands * | • Development of basic and other tourism infrastructure |
| Allotment of revenue land for post 1978 encroachers into forest | • Land availability for tourism development |
| Issue of identity cards to residents and subsidies only to residents | • Increased cost of transport, power, water, telecommunication etc for tourist visitors |
| Closure of vehicular taffic in Andaman Trunk Road (in the Jarawa Reserve Area) within three months | • Connectivity problems to Rangat, Mayabunder & Diglipur<br>• Reliance only on ferry services (lack of frequency, regularity etc.)<br>• Problem in access during monsoon months (when ferry services are disrupted) |
| • Enhancement of ‘protected area network’ in main island<br>• Unworked ‘forest areas’ in Diglipur, Mayabunder<br>• Rangat and Banatang made into Natural Park | • Tourism activity in the areas in permitted manner only |

** Forest Land*

The Supreme Court ruling / highlights of the Shekhar Singh Committee report is attached as Annexure II.

1.21 However, the tourism development strategy has taken cognizance of the key aspects of the ruling. Recent news articles reveal that the SC ruling is yet to be implemented. The administration, however, has quoted the following reasons for not being able to comply with the SC Ruling

- Closing the road would affect three lakh people. The road being a strategic link, would affect a lot of business even of a portion of the road is closed

- Six months was felt to be too short a time, to implement the court order as alternate arrangements had to be made.

However, the report has pictured in the various aspects of the ruling.

1.22 A&N have a coastal line of 1600 kms and are covered under ***CRZ I, CRZ II and CRZ IV regulations.*** Most islands are small in diameter and hence blanket application of CRZ (restricting development of 200m from HTL in CRZ II & IV & 500m from HTL in CRZ I) is a major constraint for tourism development. The perspective plan has however worked at development options compliant with CRZ. Only tenting / camping has been suggested.

**Conclusion**

1.23 The report is organised in the following manner:

| | | |
|---|---|---|
| Chapter 1 | - | Introduction (this chapter) |
| Chapter 2 | - | Executive Summary |
| Chapter 3 | - | A&N : An Overview |
| Chapter 4 | - | Tourism Trends in A&N |
| Chapter 5 | - | Current Tourism Scenario in A&N |
| Chapter 6 | - | Infrastructure Assessment |
| Chapter 7 | - | Environmental Assessment |
| Chapter 8 | - | Tourism Development Strategy |
| Chapter 9 | - | Potential for Tourism Development in A&N |
| Chapter 10 | - | Privatisation and Public – Private Partnerships |
| Chapter 11 | - | Institutional Framework |
| Chapter 12 | - | Action Plan |

# CHAPTER 2

# EXECUTIVE SUMMARY

2.1 This chapter summarises the status of development of tourism in the A&N, limitations and deficiencies, developments possible and desirable and investments required by the year 2022.

***Importance of Tourism to A&N***

2.2 A&N is largely dependent on the primary sector (contributing >55% to the SDP) which has been slowing down. Direct and derived activities in forestry, logging, quarrying and downstream manufacturing have been affected rendering it necessary for A&N, which has a growing population to seek other economic drivers.

2.3 Tourism with its low capital high output ratio, high economic output and employment potential is an attractive option and one adopted by many small island economies as their mainstay.

## TOURIST TRAFFIC TRENDS

2.4 Despite the importance of tourism and an abundance of offerings, the number of tourists visiting A&N have been small, touching only 86,116 in 2000. Decadal and annual growth figures that matched or bettered the national average (albeit on a small base) over a 20 year period have actually dropped over the last 5 year period.

2.5 95% of the visiting tourists are Indians, and very largely from the "LTC" segment. Foreign visitors, largely comprise the "back packer" category. Both segments are not large contributors to revenues.

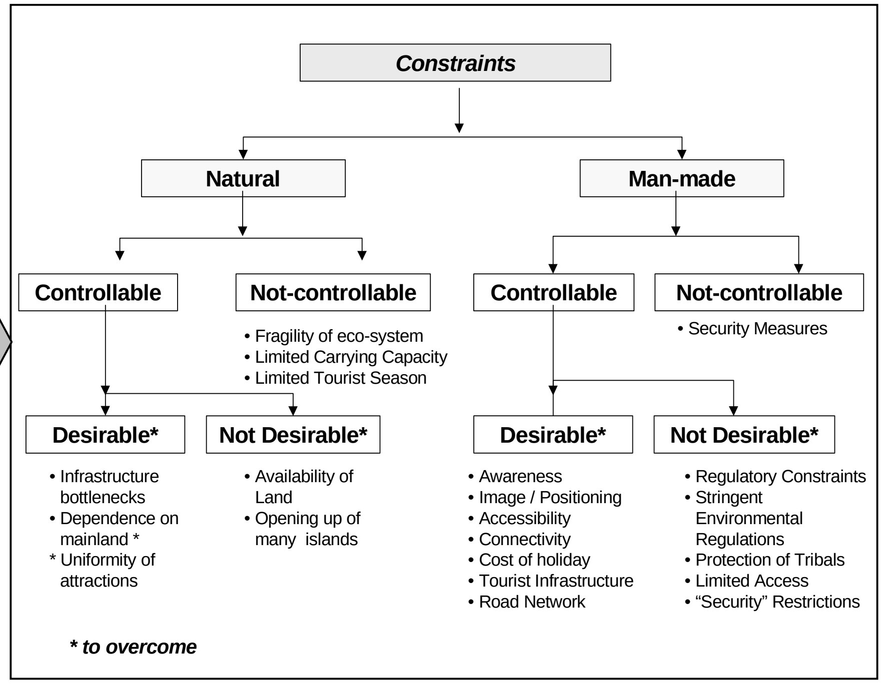
2.6 Traffic to existing destinations is uneven with a few locations experiencing concentrated tourist activity while others are poorly visited / unexplored.

## PERSPECTIVE PLAN FOR TOURISM DEVELOPMENT

2.7 The perspective plan has sought to balance the substantial strengths of A&N for tourism with limitations and constraints.

***Strengths***

- Strong "core" product
- Diversity of offerings
- World class attractions
- Pristine state of attractions
- Evenly distributed tourist attractions (equally attractive)
- Proximity to SE Asian Countries – current tourism "boom" areas
- Security, Law & Order situation
- Literate and tourist friendly population
- Clean environment




2.8 Factors that will continue to constrain growth are :

- The topography of A&N : 92% of land area is under forest, most of it being under reserve / protected forests. The remaining land is subject to multiple pressures for cultivation, settlement, basic and social infrastructure and resettlement of encroachers leaving little available for tourism development.

- The recent Supreme Court Ruling which allows very limited forest based activities, reduces availability of local natural material for construction, prohibits constructions within forest areas and has declared tribal areas out of bounds-effectively closing down two stretches of the Andaman Trunk Road. Though the ruling has not been complied with as yet, it has multiple implications for the development of tourism.

- A variety of regulations, the most critical being CRZ which prohibits development within 200m of HTL (500 m in the case of CRZ I). This restricts the development of tourism infrastructure to a very few islands and does not allow for the adoption of " the resort based development model", followed by other island economies.
  *Internationally CRZ norms of 50m and 70m are commonly used and combined with stringent limits on land area covered, number of buildings etc. This has enabled tourism to co-exist with environment protection. The Government needs to look at CRZ regulations on a case to case basis rather than a blanket application*

- Fragile eco-systems which limit the carrying capacity

- Security considerations which already restrict the stay of foreigners and the movement of visitors (both foreign and Indian) to parts of the island and Nicobar district, especially if A&N islands becomes the base for the Strategic Nuclear Command.

2.9 The strategy for tourism development has taken cognisance of the above, bar the security considerations.

2.10 The principles around which the perspective plan have been developed therefore, are

- Zero-impact / Eco-tourism through the adoption of zoning systems
- Natural rather than man-made attractions
- Growth as per carrying capacity to allow for re-generation
- High value tourism (to balance returns with lower volumes)
- Spatial distribution through a "Hub and Spoke" concept
- ***Sustainable tourism***

2.11 The hubs identified and mapped to products are presented below :

| **Area** | **The Spokes*** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Hub** | **Beaches** | **Island Resorts** | **Adventure** | **Mobile** | **Cruise** | **Heritage Culture** | **Nature** | **Forest** |
| North Andaman | Diligpur | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| North – Middle Andaman | Mayabunder | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Middle Andaman | Rangat | ✓ | ✓ | ✓ | ✓ | | | | ✓ |
| South Andaman | Port Blair, Havelock, Neil | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Little Andaman | Little Andaman | ✓ | | ✓ | ✓ | | | ✓ | ✓ |
| Nicobar | Car Nicobar Katchal Gr. Nicobar | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ |

** These are excursion points from a hub, each aligned with a particular product. As more than one spoke is aligned with the hub, individual locations have not been mentioned.*

2.12 Phased development is recommended for the hubs in respect of products as follows :

| | | **Existing** | **New** |
|---|---|---|---|
| **Locations** | **Existing** | Short Term<br>0 – 5 years | Short Term<br>Medium Term<br>2 – 10 years |
| | **New** | Medium Term<br>5 – 10 years | Long Term<br>> 10 years |

2.13 Areawise / itemwise development suggested are :

| Period | Nature of Development |
|---|---|
| 0 – 2 years | • Concentrate on existing tourist destinations and products<br>• Port Blair will continue to be the only entry point |
| 3-5 years | • Develop Diglipur as the second entry point<br>• Circuits for development<br>- Diglipur and Mayabunder<br>- Port Blair, Baratang, Rangat<br>- Port Blair, Little Andaman |
| 6-10 years | • Cruise Tourism in Nicobar Islands |
| >10 years | • Develop Great Nicobar as the third entry point<br>• Great Nicobar, Katchal and Car Nicobar will be the fourth circuit |

# TOURIST ARRIVAL FORECAST

2.14 Deriving from the above and factoring for constraints, the forecast for tourist arrivals in the perspective plan period is as follows :

**Projections for Tourist Arrivals in A&N Islands**

| Year | Short Term 2007 | Medium Term 2012 | Long Term 2022 |
|---|---|---|---|
| Port Blair | 1,14,114 | 1,28,419 | 1,62,631 |
| Rangat | 5,307 | 11,945 | 22,692 |
| Mayabunder | 3,269 | 7,357 | 13,975 |
| Diglipur | 11,726 | 18,475 | 26,739 |
| Little Andaman | 111 | 2,197 | 5,566 |
| Car Nicobar | Existing Inflow* | Cruise Tourists* | 7,901 |
| Katchal | | | 585 |
| Great Nicobar | | | 3,253 |
| **Total** | **1,34,527** | **1,68,393** | **2,43,342** |

** Nicobar is not open for tourists currently hence these numbers are not factored in.*

### *Investments*

2.15 A variety of tourism products have been proposed requiring a total investment of Rs.391.6 crs (at current prices).

(Rs. in lakhs)

| Particulars | Short Term (0-5 years) | Medium Term (5-10 years) | Long Term (10-20 years) |
|---|---|---|---|
| Transport Infrastructure | 100 | 540 | 120 |
| Accommodation Infrastructure | 5550 | 5870 | 11770 |
| Tourism Products | 3911 | 9193 | 1852 |
| Others | 170 | 84 | - |
| Total | 9731 | 15687 | 13742 |
| ***Grand Total*** | | ***39160*** | |

2.16 This has to be supported by investments in

- basic infrastructure (power, water, sewerage, roads)
- shipping (mainland and inter-island)
- communication and
- air connectivity and related infrastructure

which are to be estimated.

### *Other Requirements*

2.17 The perspective plan also envisages

- focused marketing and positioning accompanied by market research efforts
- cohesive functioning of the entities currently involved in tourism
- functional gearing of DIP&T in specific areas
- an enhanced role of the private sector
  - the roadblocks to PPP especially investor service and facilitation require urgent addressal.
- the setting up of the Andaman and Nicobar Islands Tourism Development Board which is intended to bring together the various stakeholders for the achievement of a common tourism vision
- upgradation of local skill-sets to meet service standards required
- community participation in tourism development.

### *Action Plan*

2.18 The detailed action plan for implementing the tourism perspective plan is provided below :

**Policy Issues (Regulation)**

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Entry and Access for tourists | DIP&T*<br>Central Govt.<br>A&N admin. | • Issues relating to naval security<br>• Visa Period Extension<br>• Access within A&N | ✓ | | |
| CRZ Regulations | A&N Admn.<br>DIP&T*<br>Dept. of Forest<br>MoEF | • CRZ relaxations on a case-to-case basis | ✓ | | |
| Impact of various regulations (for instance, Supreme Court ruling) | A&N admin.<br>DIP&T* | • Implications of ruling<br>• Alternate Strategies | ✓ | | |
| Service Standards | DIP&T* | • Establish Benchmarks<br>• Lay down norms for absolute & relative levels, minimum requirements & adherence to norms<br>• Update service standards | ✓ | ✓ | ✓ |
| Financing Tourism Development | A&N admin.<br>DIP&T<br>Central Govt. | • Investment Requirement<br>• Central allocation of funds<br>• Funds for basic infrastructure development | ✓ | ✓ | |

* ANTDB, after setting up

***Strategy Issues (Strategy)***

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Sustainable Tourism Development | DIP&T*<br>Min. of Env & Forest<br>Forest Dept. | • Socio-environmental impact for all projects<br>• Set norms for carrying capacity<br>• Introduce & Implement development controls<br>• Local community involvement in policy<br>• Opportunities for local community for earning | ✓ | ✓ | ✓ |
| Spatial distribution of tourism | DIP&T<br>Dept of Forest | • Identify concentration points<br>• Identify distribution points<br>• Establish linkages | ✓ | | |
| Hub and Spoke Concept | DIP&T | • Identify hubs<br>• Development requirements in hubs<br>• Regulatory compliances<br>• Identify and develop spokes | ✓ | | |
| Zoning of Hubs & Spokes | DIP&T<br>Dept of Forest | • Identify core, buffer and peripheral zones for various hubs & spokes | ✓ | | |
| Opening Nicobar as a tourist destination | A&N admn.<br>Central Govt.<br>Indian Navy<br>DIP&T* | • Discuss possibility of opening up in > 10 years<br>• Possibility of day-trips in Nicobar (cruises) | | ✓ | ✓ |
| Definition of Eco-Tourism | A&N admin.<br>DIP&T<br>Dept of Forest | • Nature of development<br>• Nature of projects<br>• Nature of material | ✓ | | |
| Integrated Area Development Plans | DIP&T | • ADPs for every tourist region<br>• Detailing on various aspects including Basic infrastructure, zoning maps etc. | ✓ | ✓ | ✓ |

* ANTDB, after setting up

***Tourism Development (Development)***

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Connectivity Infrastructure | DIP&T*<br>Min. of Civil Aviation<br>Dir. Of Shipping Services<br>Inland Waterways Authority<br>Private Sector | • Expansion of runway<br>• International Air Connectivity<br>• Increasing domestic flights<br>• Air connectivity to Diglipur & Great Nicobar<br>• Increased shipping services - frequency, regularity, quality<br>• Improve airstrips<br>• Improve Jetties<br>• Faster acquisition of ships | ✓ | ✓ | ✓ |
| Accommodation | DIP&T<br>Private Sector | • Norms for development<br>• Regulatory Compliances / clearances<br>• Land Availability<br>• Role of Govt. | ✓ | ✓ | ✓ |
| Tourist Information Services | DIP&T | • Set up information centres<br>• Deployment of trained staff<br>• Collate / disseminate information<br>• Networked reservations | ✓ | ✓ | |
| Wayside / Mid way amenities | DIP&T | • Provide for tourist comfort | ✓ | ✓ | |
| Basic and Support Infrastructure | DIP&T*<br>PWD<br>Municipal Council<br>Pvt. Funding Agencies | • Assess infrastructure availability against projected demand<br>• Regionwise Assessment of needs<br>• Infrastructure Master Plan<br>• Funds for expansion | ✓ | ✓ | |

* ANTDB, after setting up

***Marketing & Promotion ( Marketing)***

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Marketing Strategy | DIP&T | • Positioning<br>• Target Customers<br>• Target Markets | ✓ | | |
| Tie-up with other Indian states / neighbouring countries | A&N admin.<br>DIP&T*<br>State Govts.<br>State Tourism Depts. | • Marketing Tie-up<br>• Developing Circuits<br>• Tourist Information Services<br>• Connectivity. | ✓ | ✓ | |
| Tie-up with airlines | DIP&T*<br>Indian Airlines<br>Jet Airways | • Air Fares<br>• Promotions<br>• Developing Packages<br>• Frequency | ✓ | | |
| Tie-up with tour operators / travel agencies | DIP&T<br>Tour Operators / Associations<br>Travel Agencies | • Develop and Promote A&N<br>• Image Building | ✓ | ✓ | |
| Advertising &Promotion campaigns | DIP&T | • Appointing professional advertising agency<br>• Providing ad brief | ✓ | | |
| Attract Special Interest Tourists | DIP&T<br>Tour Operators | • Evolve special packages<br>• Tie-up with National Geographic / Good Earth and other nature groups<br>• Tie-up with international scuba-diving centres<br>• Target and focus on corporates for Conferences / Seminars | ✓ | ✓ | |
| Increasing tourist season | DIP&T | • Develop seasonal themes<br>• Focus on "self-sufficient " resorts to develop resort based tourism | ✓ | | |
| Increasing Avg Length of Stay | DIP&T<br>Tour Operators<br>Hotels | • Create long packages<br>• Increase the spokes<br>• Creating new products | ✓ | ✓ | |

| | | | | | |
|---|---|---|---|---|---|
| Increase tourist spending | DIP&T | • Increase avenues<br>• Improve quality of accommodation<br>• Providing entertainment avenues<br>• Providing shopping options - handicrafts, souvenir shops etc. | ✓ | ✓ | ✓ |

* ANTDB, after setting up

***Information ( Knowledge Bank )***

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Tourist Statistics | DIP&T | • Constitute a MR function within IP&T<br>• Review and evolve system for collection and analysis of tourist arrivals at various destinations<br>• Co-ordinating with the Centre / various states for MR initiatives in foreign countries<br>• Defining periodicity of research<br>• Tie-up with professional MR agencies | ✓ | ✓ | |
| Tracking tourist perceptions and level of satisfaction | DIP&T | • Tracking tourist movement, holidaying and spending pattern<br>• Obtain feedback on tourist perceptions w.r.t. A&N<br>• Measure tourist satisfaction on a regular basis | ✓ | | |

***Enabling private investment (Facilitation)***

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Investment Policies | DIP&T<br>ANIIDCO<br>Central Govt. | • Guidelines for private investment<br>• Investment/ Incentive Policies<br>• Establishing "single-window" for investor | ✓ | ✓ | |

| | | | | | |
|---|---|---|---|---|---|
| | | clearance<br>• Target Funding Agencies<br>• Setting up legal cell in IP&T | | | |
| Facilitating investors | DIP&T | • Establish a "escorting" cell within IP&T<br>• Understand investor requirements<br>• Educate investors on various compliances | ✓ | ✓ | |

**Organisational Initiatives**

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Establishing A&N Islands Tourism Development Board | DoT, Govt. of India<br>DIP&T<br>Other Stakeholders | • Establishing the TDB<br>• Setting out agenda for the Board | ✓ | | |
| Capacity Building | DIP&T | • Establishing various functions (MR, Legal, Escorting, Training etc)<br>• Training / Retraining employees to sensitise them to tourist needs.<br>• Establish service standards within the dept and various services offered by the department.<br>• Establish networking requirements | ✓ | ✓ | |
| Community Gearing | DIP&T | • Orient local community to tourist needs<br>• Sensitise them to customer needs and requirements<br>• Identify local people who can be re-deployed in the tourism sector (local guides, trekking etc.)<br>• Provide training opportunities | | ✓ | |

| | | | | | |
|---|---|---|---|---|---|
| Setting up Institute of Tourism Management | DIP&T<br>A&N admin<br>Central Govt.<br>AICTE | • Concept Planning for the institute<br>• Formalise location, course, content, intake<br>• Feasibility study for the institute<br>• Accreditation for the institute<br>• Tie-up with foreign universities<br>• Private Investors | | ✓ | ✓ |

# CHAPTER 3

# A & N ISLANDS : AN OVERVIEW

3.1 This Chapter presents an overview of A&N islands and the economic and social status in the context of tourism development. Factors aiding or impeding tourism or critical to enhancement of tourism are mentioned alongside each aspect of review and summarised at the end of this chapter.

### *GENERAL BACKGROUND*

#### LOCATION

3.2 The Union Territory of A&N islands are an archipelago of 572 islands (of which 38 are inhabited) in the Bay of Bengal stretching over 700 Kms from North to South. The islands lie

- Between 92$^{o}$ to 94$^{o}$E longitude and 6$^{o}$ to 11$^{o}$N latitude.
- 1200 kms. east of Chennai and 250 kms south of Kolkata, and
- In close proximity to Burma and other South East Asian countries (especially Thailand, Malaysia and Indonesia).

MAINLAND CONNECTIVITY IS VITAL FOR A VARIETY OF GOODS AND SERVICES.

#### NATURAL LANDSCAPE

3.3 The A&N islands have an unique combination of rich beaches, rising hinterland and dense equatorial forests . The heavy rainfall and location account for forest cover over 92% of the land ( with nearly 86% being reserved and protected forests). More than 50% of the forest area are Tribal Reserves, National Parks and Wild life sanctuaries .

Nearly, 11% of the territory is occupied by mangroves (amongst the richest in the world).

**Flora & Fauna**

3.4 The dense forest and vast seas house a variety of flora and fauna, with more than 150 species endemic to the islands. There are over 1200 species of fishes, 246 varieties of birds (39 endemic) including the Megapod, Hornbill, Surfet and Nicobari Pigeon and 10% of the known varieties of Indian orchids present. Nesting of certain rare species of turtle is common to the islands. Coral life is found in abundance with 179 species belonging to 61 genera being reported.

3.5 The eco-diversity and richness of A&N are its core strength. **Any development activity in the islands including tourism has to be sensitive to their fragility**.

**Climate**

3.6 The tropical location of A&N provide uniform temperatures throughout the year with marginal monthly / seasonal variations. This suits the need of the European / US tourists seeking warmth and sunshine.

3.7 The islands are however subject to both south-west and north-east monsoons (May – October, spill-over in November / December). With an average annual rainfall of over 3000 mm, the islands experience heavy rainfall especially between May – October (90% of annual rainfall).

3.8 Heavy rainfall (average two rain days for every 3), strong winds and high humidity levels, contribute to the 'not so ideal' conditions during the period and render tourism seasonal.

***Geographical & Demographic Profile***

**Area and Division**

3.9 A&N islands are spread over a total area of 8249 sq. Kms (Andaman - 6408 sq. kms & Nicobar -1841 sq. kms). Only 16.64 sq. kms fall under urban area. The administrative units are provided below :

| ***Administrative Unit*** | ***Particulars*** |
|---|---|
| Districts | 2 |
| Sub divisions | 4 |
| Tahsil | 7 |
| Town | 1 |
| Lok Sabha seat | 1 |
| Inhabited Islands | 38 |
| Panchayats | 67 |

*Source : A&N at a glance*

**Population & Spatial Distribution**

3.10 The key demographic statistics relating to A&N islands are provided below :

| **Particulars** | ***A&N*** | ***India*** |
|---|---|---|
| Total Population | 3,56,265 | 1,02,70,15,247 |
| Urban Population | 32.7% | 27.8% |
| Decennial growth rate of population | 25.94% | 21% |
| Decennial Urban growth rate of population (at Port Blair) | 55.3% | |
| Exponential Annual Growth Rate | 2.39 % | 1.93 % |

*Source : Census of India, 2001*

3.11 Population is distributed across administrative units as follows :

| Administrative Unit | *Population* | *% of population in A&N* |
|---|---|---|
| Diglipur | 42880 | 12% |
| Mayabunder | 23904 | 7% |
| Rangat | 38815 | 11% |
| Ferragunj | 48618 | 14% |
| **Port Blair** | **160022** | **45%** |
| Car Nicobar | 20273 | 5% |
| Nancowry | 21753 | 6% |

*Source : Census of India, 2001*

3.12 While the population of A&N has been growing, the decadal growth rate has shown a decline. However, the population growth rates are higher than the Indian average. The spatial distribution indicates population concentration in and around Port Blair (the only town in A&N), which also has a high level of population growth.

3.13 The density of population at 43 person per sq.km. is far less than the Indian average of 324 persons per sq.km. However, there is high concentration in urban pockets like Port Blair, leading to pressure on the resources and infrastructure; the urban population to urban area ratio is highly skewed. Developments have to ensure an even spread across the Union Territory.

### *Economic Overview*

3.14 The economic overview and its relevance to the tourism sector is presented below.

#### Trends in SDP

3.15 The trend in SDP and per capita SDP in A&N islands over the last few years indicate

- A growth in SDP accompanied by a decline in growth rate
- An SDP growth rate higher than the population growth rate
- Therefore, increasing per capita SDP and
- SDP levels higher than national levels of per capita income.

| Year | SDP (000's Rs) | Population (nos) | Per capita SDP (Rs) |
|---|---|---|---|
| 1980-81 | 532912 | 188741 | 2824 |
| 1990-91 | 1601633 | 286500 | 5590 |
| 1993-94 | 2792990 | 319100 | 8753 |
| 1994-95 | 3588141 | 330700 | 10850 |
| 1995-96 | 4395057 | 341250 | 12879 |
| 1996-97 | 5152334 | 347000 | 14848 |

***Source: Statistics Dept., A&N***

3.16 The higher per capita SDP has however to be measured against the higher cost of consumables which are transported from the mainland as well as the cost of subsidies provided by the government on public transport, power and communication.

**Sectoral Contribution**

3.17 As against the national scenario of pre-dominance of and a boom in the tertiary sector A&N is still dependent on the primary sector.

| Sector (All in %) | 1990-91 | | 1996-97 | |
|---|---|---|---|---|
| | A&N | India | A&N | India |
| Primary | 54.62 | 31.00 | 55.52 | 31.00 |
| Secondary | 9.64 | 29.00 | 15.40 | 25.00 |
| Tertiary (including services) | 35.74 | 40.00 | 29.08 | 44.00 |

*Source : A&N Plan Document*

**Primary Sector**

3.18 A break up of the ***primary sector*** in A&N is given below.

| Particulars | 1996-97 (Rs '000s) | Primary Sector |
|---|---|---|
| **Primary Total** | **2860770** | **100%** |
| Agriculture | 1681713 | 59% |
| Forestry & Logging | 362136 | 13% |
| Fishing | 761652 | 27% |
| Mining & Quarrying | 55269 | 1% |

*Source : A&N Plan Document*

3.19 While agriculture is a major activity, output is mainly for self-consumption. With the need for resettling encroachers from forest land (as a result of the SC order), further pressure on land for cultivation is expected. The SC ruling also adversely affects forestry, logging as well as quarrying sector. Fishing is the only primary activity with 'economic potential'.

**Secondary Sector**

3.20 The analysis of the ***secondary sector*** is presented below.

| Particulars | 1996-97 (Rs '000s) | Primary Sector |
|---|---|---|
| Manufacturing | 92900 | 60% |
| Construction | 136700 | 89% |
| Electricity, Gas & Water Supply | -75200 | -(49%) |
| **Secondary Total** | **154400** | **100%** |

*Source : A&N Plan Document*

3.21 Basic utilities are subsidised in A&N accounting for the negative contribution. With construction being oriented towards development work, manufacturing is the only sub-sector holding scope for 'economic contribution'. The statistics relating to the industrial sector are provided below :

| Category of Industry | Nos. |
|---|---|
| Large / Medium Scale | 5 |
| Small Scale | 1175 |
| Industrial Training Centre | 11 |
| Industrial Estates | 1 |

*Source : A&N at a Glance*

3.22 Nearly 60% of the large scale and 40% of the small scale industries are wood based / dependant on forest produce; with the ban on 'forest based' industrial activities, this sector is definitely adversely affected.

## Tertiary Sector

3.23 The analysis of the ***tertiary sector*** is presented below.

| Particulars | Value in Rs. (1996-97) | % Contribution |
|---|---|---|
| Banking & Insurance | 110600 | 7% |
| Real Estate & Dwelling | 173040 | 12% |
| **Public Administration** | **702700** | **47%** |
| **Other Services (Finance)** | **529405** | **35%** |
| **Transport** | **274491** | **(18%)** |
| Trade, Hotels, Restaurants | 256892 | 17% |
| Tertiary Sector (Total) | **1498146** | **100%** |

*Source : A&N Plan Document*

3.24 Public administration and finance are the major components of the tertiary sector. Transport sector, after setting off the subsides, yield a negative contribution. Currently, tourism related services (trade, hotels and restaurants) contribute 17% of the tertiary sector and 6% of SDP. This is far lower than the 18 - 36% of GDP contributed by tourism in small island economies (see table below)

***3.25 With the foreseeable drop in other forms of economic activity due to the ban on forest based activities, tourism and fishing will have to play key roles in supporting the economy.***

***Economic Contribution from Tourism***

Globally, tourism is acknowledged as a high economic contributor with many small island economies internationally having adopted tourism as their mainstay.

**A Case Study of Small Island Economies**

| ***Country*** | **Tourism Earnings as % of GDP** |
|---|---|
| Anguilla | 35.7 |
| British Virgin Islands | 30.8 |
| Maldives | 26.4 |
| Antigua / Barbuda | 24.2 |
| Saint Lucia | 23.8 |
| Virgin Islands | 21.9 |
| Bahamas | 20.0 |
| Cayman Islands | 17.8 |
| Macau | 18.0 |

*Source : World Tourism Organisation*

The above table re-affirms the possible benefits from tourism, especially in the current economic scenario of A&N islands. Tourism has a ***low capital- high output ratio.*** It is estimated that over the next 5-6 years the industry output is expected to touch $ 7.1 million. In the Indian context, ***every 1 million additional visitors could translate into Rs.4300 crores of revenue for the industry***.

**Employment Pattern**

3.26 There has been an declining trend in working population

| Particulars | 1971 | 1981 | 1991 |
|---|---|---|---|
| Population | 115133 | 188741 | 280661 |
| Working Population | 45331 | 69612 | 98901 |
| % of Working Population | 39.55 | 36.88 | 35.24 |

*Source : A&N at a Glance*

3.27 The forestry sector accounts for 9.55% of the workforce directly; it also has a cascading impact on industrial employment and construction activity (based on forestry). The Supreme Court ruling, which affects a major employment segment, also leads to the need for alternate employment options.

| **Employment Profile** | **A&N** | **All India** |
|---|---|---|
| **Category** | **% of Total** | **% of Total** |
| Household Industries | 4.3 | 2.4 |
| Other Industries | 4.66 | 6.10 |
| Construction | 10.77 | 1.90 |
| Trade & Commerce | 7.23 | 7.50 |
| Transportation & Communication | 4.34 | 2.80 |
| Other Services | 20.09 | 10.20 |
| Seasonal Workers | 6.99 | 1.80 |
| Cultivators | 12.55 | 38.40 |
| Agricultural labour | 4.32 | 26.40 |
| Forestry , hunting & Livestock | 9.85 | 1.90 |
| Mining & Quarrying | 14.90 | 0.60 |

*Source : A&N at a Glance*

Tourism is employment intensive and also an employment multiplier.

**A Case Study of Small Island Economies**

| **Country** | **Employment in tourism as % of GDP** |
|---|---|
| Anguilla | 28.0 |
| British Virgin Islands | 23.9 |
| Maldives | 21.2 |
| Antigua / Barbuda | 21.4 |
| Saint Lucia | 17.7 |
| Virgin Islands | 16.7 |
| Bahamas | 19.2 |
| Cayman Islands | 15.3 |
| Macau | 15.7 |

*Source : World Tourism Organisation*

***In India, tourism results in the highest employment output per rupee of investment.***

| ***Sector*** | ***Job per million Rs. Of Investment*** |
|---|---|
| Manufacturing | 12.06 |
| Agriculture | 44.70 |
| **Tourism** | **47.50** |

*Source : Ministry of Tourism*

Every direct job created further leads to creation of 11 indirect jobs.

3.28 With lack of attractive employment opportunities and with need for providing employment to unskilled and semi-skilled personnel, tourism holds much promise for A&N islands.

**Plan Outlay**

3.29 The details of the proposed outlay for various sectors in the Tenth Plan is provided below :

(in Rs. lacs)

| Sector | X Plan Outlay | % to Total | IX Plan Outlay |
|---|---|---|---|
| Agriculture & Allied | 216.29 | 6% | 137.89 |
| Rural Development | 148.73 | 4% | 57.50 |
| Irrigation & Flood Control | 142.25 | 4% | 10.00 |
| Energy | 265.00 | 7% | 151.50 |
| Industry & Minerals | 53.56 | 1% | 38.00 |
| Transport | 1722.60 | 47% | 550.36 |
| Island Communication | 10.00 | 0.6% | 5.00 |
| Science & Technology | 5.00 | 0.4% | 5.00 |
| General Economic services | 71.38 | 2% | 40.00 |
| Social Services | 922.54 | 25% | 481.27 |
| General Services | 96.32 | 3% | 58.48 |
| Total | 3653.67 | | 1535.00 |

*Source : Xth Plan Document, A&N*

3.30 The outlay in the Xth plan for the 'core' economic drivers

Tourism - < 3% (out of 3% of General Services)
Fisheries - < 6% (out of 6% for agriculture)

is very less relative to the economic potential held out by these sectors and requires revisiting. Spend in other areas, especially basic infrastructure and services is also needed to support an integrated island development plan driven by these.

***Capital Investment in Tourism***

**A Case Study of Small Island Economies**

| *Country* | Capital inv. in tourism as % of total |
|---|---|
| Anguilla | 55.3 |
| British Virgin Islands | 50.4 |
| Maldives | ~60.2 |
| Antigua / Barbuda | 76.8 |
| Saint Lucia | 60.7 |
| Virgin Islands | 57.9 |
| Bahamas | 52.1 |
| Cayman Islands | 54.4 |
| Macau | 50.4 |

*Source : World Tourism Organisation*

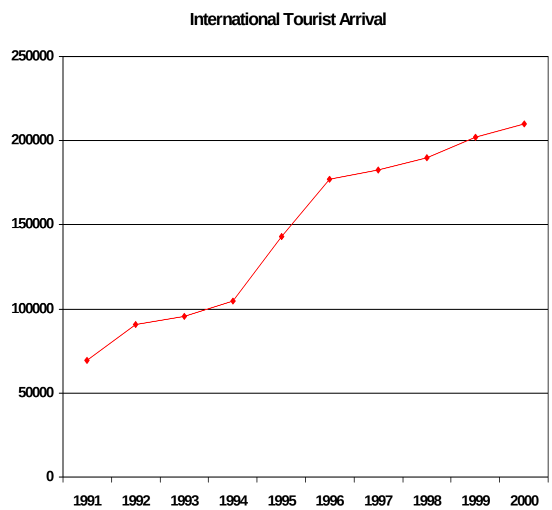
## ***An Indian Success Story***

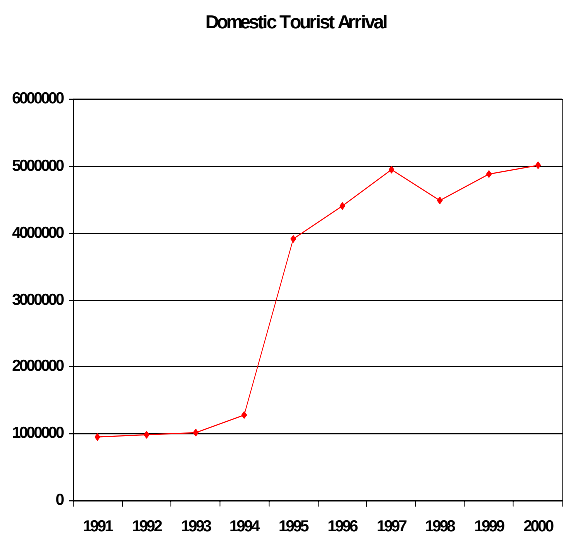
3.31 Kerala has become synonymous with a world class tourist centre in India.

3.32 In Kerala, tourism has emerged as one of the few economic alternatives to sustain the state economy. It was recognised to have the potential to give the economy the much needed thrust.

3.33 Kerala, went about developing tourism in a systematic and planned manner. As a first step a very strong positioning was evolved – As Kerala being 'God's own country'. Investment in tourism is the last 5 years is estimated at Rs.1000 crores.

3.34 Tourism in Kerala has seen remarkable growth in the last few years. The growth in domestic and international tourist arrivals is shown below :

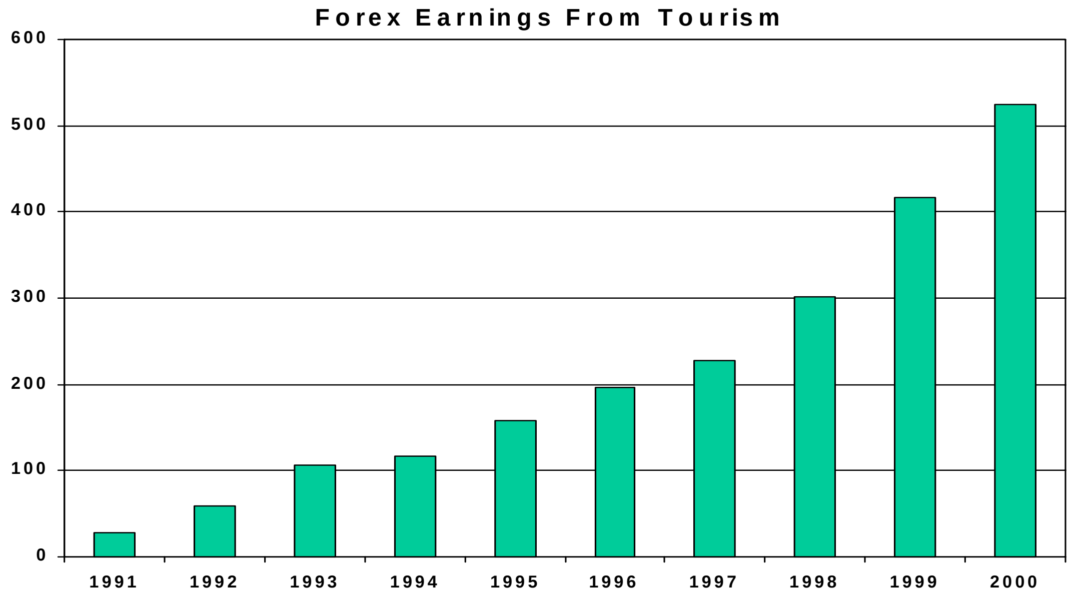



***Source : KTDC***

3.35 The direct revenue generated from tourism is estimated at Rs.2000 crs. (2000-01). The direct and indirect revenue generated are 6.29% of GDP.

3.36 The growth in forex earning from tourism is shown below.




*Source : KTDC*

3.37 The direct employment in tourism is estimated at 1.5 lakhs with total employment in the sector being 7.0 lakhs.

3.38 Kerala is a success of planned tourism development.

**Conclusion**

3.39 There is a strong economic case for the development of tourism in A&N, which has a growing population and limited avenues for economic activities and generation of surpluses. Further,

- Agricultural land is limited
- Forest and plantations are proposed to be banned
- Manufacturing is severely constrained

3.40 Tourism with its low capital high output ratio, high economic output and employment potential is an attractive option.

# CHAPTER 4

# CURRENT TOURISM TRENDS IN A&N ISLANDS

4.1 This chapter details current tourism trends, internationally and in India, their relevance to A&N, and the tourism scenario in A&N as it exists today.

## ***Tourism Trends - International***

Arrivals

4.2 The growth potential in the tourism sector is evident from the fact that tourist arrivals have grown internationally from a mere 25 million in 1950 to 664 million in 1999, reflecting an average growth rate of 7% p.a. Global tourism is expected to grow more slowly at around 4% p.a. till 2010 . While growth rates have slowed down mainly on account of the large base, India, with a relatively smaller base has potential for a much higher growth rate.

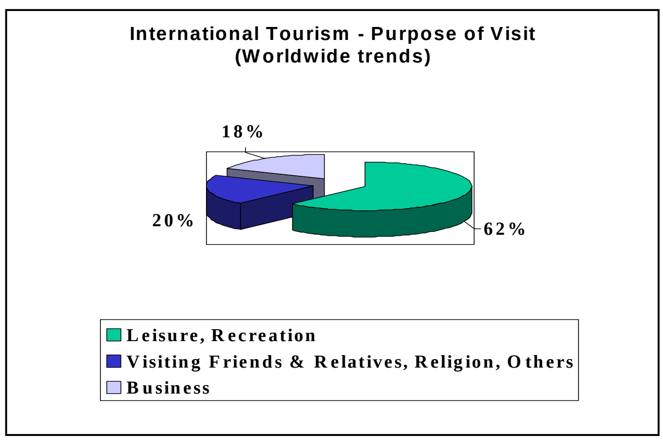
4.3 The analysis of the growth trends in international tourist arrivals, further reveal higher activity and growth rates in the Middle East, South Asia and African region in recent times making them "the new focus areas". The WTO's Tourism Vision 2020 also envisages

- A significant growth in regional tourism (expected to be around 10 times that of global tourism)
- Increasing growth in intra-regional traffic. By 2010, 80% of tourist arrivals are expected to be intra regional.

Both these present opportunities for India in terms of gain from the intra-regional movement and attracting tourists from nearby "tourist boom" regions – Middle East and South Asia .

4.4 Based on worldwide research conducted on the purpose of travel, leisure and recreation is quoted as the prime purpose of travel by international tourists.

4.5 As per the recent tourism statistics published by the Department of Tourism, India 92% of the international visitors travelled for the purpose of holiday and sight seeing. The growth in this segment augurs well for leisure destinations like A&N.




*Source : Secondary Publications*

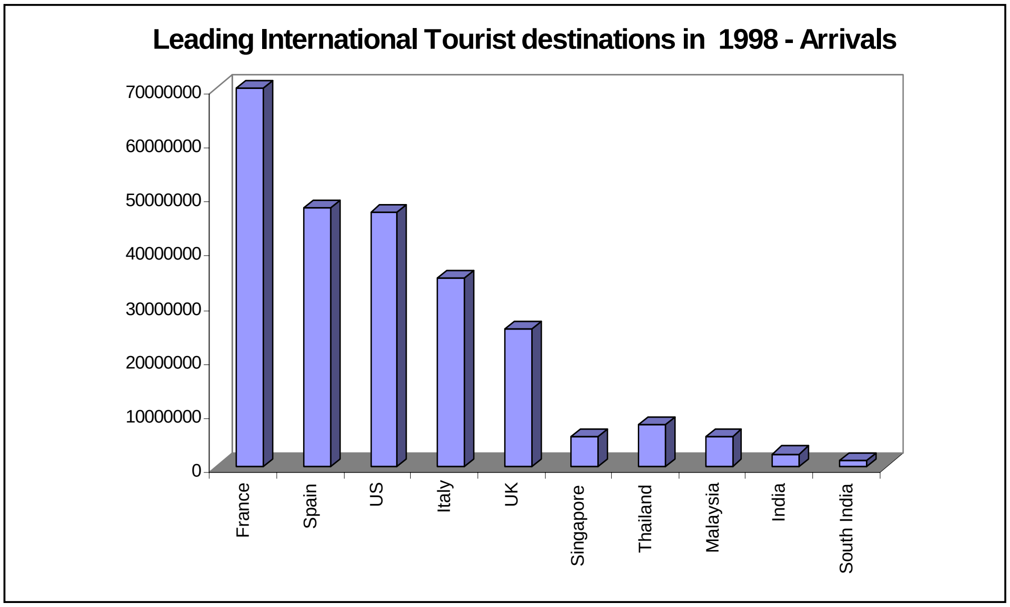
4.6 The key trends in global tourism industry and their implications for A&N islands are captured in the exhibit below :

| Changing Global Tourism Trends… | … Implications for A&N Islands |
|---|---|
| **Spatial Distribution**<br>• Shift away from Europe & America as prime tourism destinations<br>• Africa and Asia Pacific expected to clock the highest tourism growth rates<br>• Increasing growth in intra-regional traffic.<br>(By 2010, 80% of tourist arrivals expected to be intra regional) | **Can**<br>• Capitalise on the vast untapped potential to gain from the shifting spatial distribution<br>• Target & attract tourist traffic from "boom" regions<br>• Take advantage of geographical proximity to South - East Asian countries |
| **Tourist Preferences**<br>• Need for an "experience"<br>• Personalised / customised itineraries<br>• Increased environmental consciousness - "Eco-Tourism"<br>• "Relaxation" Tourism - Need for a complete getaway<br>• Growing importance of "heritage" / "ethnic" tourism<br>• Shift from long break-low frequency tours to short break-high frequency tours<br>• Visiting "unexplored" areas / "not visited " by friends & relatives<br>• Knowledge / intellectual tourism | • A&N are high on ability to cater to multiple tourist interests, but must<br>• Retain the "core" while leveraging on the variety<br>• Develop and propagate an image |
| **Tourist Movement**<br>• Shorter flight paths, increased networking, improved connectivity<br>• "Planned itinerary", with flexibility and multiple options<br>• Increased airline capacity<br>• Expectation of uniform service standards and delivery - across the globe | • Need to create world class infrastructure - basic as well as tourism related<br>• Connectivity, Convenience, Comfort - a pre-requisite |

***Source : WTO / WTTC Publications***

## ***Tourism Trends - India***

4.7 The comparative tourist arrival trend internationally is shown in the exhibit below:




4.8 India ranks 44th among international destinations with a meagre market share of 0.4%. While India receives 2.5 million tourists, China receives 50 million and Singapore 15 million tourists a year. *Tourist arrivals in Singapore are more than twice its population*. Tourist arrivals in India have been growing at a CAGR of 4.5% which is lower than the growth rates witnessed by other South Asian countries. Many smaller countries have a much larger market share and higher growth rates achieved by focusing on the critical aspects of the tourism sector – distinct offering, creating an "image", developing a niche, marketing and promotion, developing infrastructure, conducive atmosphere and competitive pricing.

4.9 Domestic tourists account for a major component of the Indian tourism sector, with international tourists forming a relatively small proportion. "Business" and "heritage" travellers dominate the latter. In the case of domestic tourists, however, religion and visiting friends and relatives constitute the prime purpose of travel. Thus the "core" "tourist segment" of leisure and holiday travellers, is relatively small*. In 1997, of the 162 million domestic tourists in India, 150 mn travelled for the reason of religion / pilgrimage*. This also indicates the large untapped potential for developing leisure, recreation and holiday segments.

4.10 Another segment gaining ground is ***outbound tourists***. As per Research conducted by the Pacific Asia Tourism Association, outbound tourism from India is growing at a rate of ***15% p.a***. A major proportion of this segment also travels for purposes of leisure . For 2000-01, it is estimated that outbound tourists will grow at 18% as against the 6% growth expected in inbound tourism. ***This is a focus segment for A&N.***

## ***Tourism Trends - A&N Islands***

4.11 Tourist arrivals in A&N islands is presented in the exhibit below :

### ***Tourist Arrivals - A&N Islands***

| Year | Domestic Tourists | International Tourists | Total |
|---|---|---|---|
| 1980 | 7500 | 2096 | 9596 |
| 1981 | 8835 | 1170 | 10005 |
| 1982 | 13444 | 1102 | 14546 |
| 1983 | 14020 | 1817 | 15837 |
| 1984 | 16000 | 3152 | 19152 |
| 1985 | 20291 | 1264 | 21555 |
| 1986 | 20942 | 1791 | 22733 |
| 1987 | 31591 | 2085 | 33636 |
| 1988 | 34589 | 3663 | 38252 |
| 1989 | 39967 | 2392 | 42359 |
| 1990 | 27019 | 6697 | 33716 |
| 1991 | 32242 | 2248 | 34490 |
| 1992 | 35817 | 2435 | 38252 |
| 1993 | 35000 | 1771 | 36771 |
| 1994 | 50737 | 3798 | 54535 |
| 1995 | 64490 | 3849 | 68339 |
| 1996 | 67958 | 5796 | 73754 |
| 1997 | 73558 | 4724 | 78082 |
| 1998 | 74732 | 4915 | 79647 |
| 1999 | 77448 | 6035 | 83483 |
| 2000 | 81432 | 4684 | 86116 |

*Source : Dept. of Information, Publicity & Tourism, A&N*

4.12 The above table highlights the following facts :

- A&N islands have a negligible proportion of international tourists (a mere 5.7% of total tourist traffic in 2000)
- The domestic tourist arrivals have grown at a compounded annual growth rate of 12.66% p.a. over the last 20 years which has dropped to 3.68% over the last 5 years. This is against the 9% p.a. growth rate of Indian domestic tourist market (over the last 5 years)
- The international tourist arrivals have grown at a compounded annual growth rate of 4.1% p.a. over the last 20 years with the growth rate dropping to -4% p.a. over the last 5 years. The international arrivals have grown at a rate of 5% p.a. over the last 5 years in India

4.13 The slower growth rate of domestic tourists over the last 5 years and negative growth rate of foreign tourists is a definite area of concern. Various reasons including global economic slowdown, unstable political conditions, natural calamities (Gujarat earthquake), the WTC attack etc. are quoted by A&N Tourism .

4.14 The comparative position of A&N islands vis-à-vis other states in India is shown below :

**Comparative Position of Andaman & Nicobar Islands (1997 Data)**

| State | Intl. Tourist Arrivals (in '000) | State | Domestic Tourist Arrivals (in '000) |
|---|---|---|---|
| Delhi | 1158.3 | Uttar Pradesh | 37780 |
| Maharashtra | 977.6 | Andhra Pradesh | 36790 |
| Uttar Pradesh | 712 | Tamilnadu | 18970 |
| Tamilnadu | 636.3 | Karnataka | 11760 |
| Rajasthan | 605 | Bihar | 8360 |
| Goa | 261.6 | Madhya Pradesh | 7450 |
| Karnataka | 246.8 | Maharashtra | 6970 |
| West Bengal | 193.6 | Rajasthan | 6290 |
| Kerala | 182.4 | Kerala | 4953 |
| Bihar | 130.3 | West Bengal | 4570 |
| **A&N Islands** | **4.72** | **A&N Islands** | **73.56** |
| **% share of A&N islands** | **0.086%** | **% share of A&N islands** | **0.046%** |

*Source : Government of India Statistics*

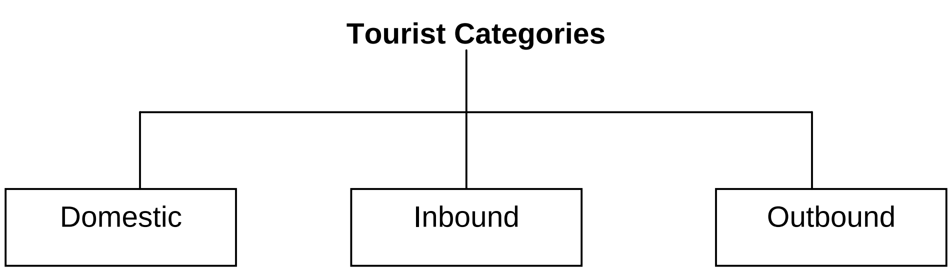
A&N islands are therefore is currently not a significant tourist destination in India.

***Definition of Tourists***

4.15 This section captures the various categories of tourists who currently visit A&N . Various kinds of categorisation – geographic movement, purpose of visit or end use / end product base have been used.

***Based on Geographical Movement***

4.16 The main tourist categories based on geographic movement include :



4.17 The typical profile and the itineraries of both domestic and foreign tourists are provided below.

**Domestic**

- Currently A & N is dominated by domestic tourists (nearly 95% of the tourists flown into A & N)
- (Based on the information compiled by the DIP&T) majority of the domestic tourists originated from East and South (Chennai and Kolkata being the two main connectivity points)
- Majority of the tourists come under the LTA category and hence travel with families
- Pre-dominantly middle aged, the tourists fall under the 'budget conscious', 'value for money' segment
- Around 65 % of the tourists travel by air, with the remaining 35 % by ship
- Domestic tourists seem to focus on a 'general holiday' with the need for variety
- Average length of stay is around 4 to 5 days
- Average expenditure of Rs.500 per day per person

**Inbound Tourists**

- Currently A & N attracts a low proportion of foreign tourists (5 % of the total tourists in 2000- 2001)
- The foreign tourists originate from a variety of countries including Europe and Australia
- Large proportion of low spending "back packers"
- Beaches and scuba diving seem to be the main attractions
- Average length of stay is around 15 to 20 days (while some stay on to the full permissible 30 days)
- This category is focused on a specific end use- beach / scuba diving

**Outbound Tourists** (from A&N) : Is not taken into consideration here.

4.18 Based on ***Purpose of visit***, categories and applicability to A & N are presented below:

| Purpose | Definition | Applicability to A&N |
|---|---|---|
| Leisure , Recreation & Holidays | Sightseeing, shopping, Sporting & Cultural events, non professional active sports, tracking, cruises, rest & recreation, honeymoon etc. | ✓ Is not specifically positioned for this purpose, but tourists visiting fit in any one or more of the definition |
| Visiting friends and Relatives | Visit to relatives or friends, home leave, attending functions, marriages, funerals etc | ✓ A&N has a large settler population/migrants from mainland, who draw a lot of visitors. In addition, the large govt. sector draw VFR tourists |

| Purpose | Definition | Applicability to A&N |
|---|---|---|
| Business & Professional | Government mission, professional sports, attending meetings, conferences, lectures / concerts, study / educational tourists, Sabbatical visits | ✓ Partly applicable. A&N has a large govt set-up & being a U.T. invites government missions. Is starting to host conferences |
| Health Treatment | Spas, Fitness, Health resorts, medical consultation, treatment etc. | ✓ Does not have any unique offering |
| Religion / Pilgrimage | Pilgrimages, religious events etc | ✓ Though religion/pilgrimage is the predominant tourism segment, is not applicable to A&N |
| Special Interests / Knowledge / Research | Scuba Diving, Bird watching, Flora / Fauna Research Anthropology/Culture Research | ✓ Though not uniquely positioned, has potential to cater to various special interest categories |

4.19 Therefore, the prime focus segments for A&N should be:

- Leisure, Recreation and Holidays
- Business and Profession
- Special Interest Tourists

4.20 The potential end use based categorisation of tourism as applicable to A& N islands is provided below :

## Tourism – Product Component in A&N

| End Product / End use | Adventure | Religion / Spiritual | Entertain-ment / amusement | Relax-ation | Cultural / Heritage | Nature | Health | Special Interests / Education | Leisure / variety |
|---|---|---|---|---|---|---|---|---|---|
| Beach (N) | ✓ | | | ✓ | | ✓ | | | |
| Historical Monument (N) | | | | | ✓ | | | ✓ | ✓ |
| Forests | ✓ | | | | | ✓ | | ✓ | |
| Bird Sanctuaries / National Parks | ✓ | | | | | ✓ | | ✓ | ✓ |
| Resorts | | | | ✓ | | | ✓ | | ✓ |
| Mountaineering Trekking | ✓ | | | | | ✓ | | | |
| Bird Watching/ Turtle Nesting/ Study Tours | | | | | | ✓ | | ✓ | |
| Scuba Diving / Snorkelling | ✓ | | | | | ✓ | | ✓ | |
| Water Sports Historical Events / Activities | | | ✓ | | ✓ | | | | |
| Summary | ✓ | | | ✓ | ✓ | ✓ | | ✓ | ✓ |

4.21 Analysis of the end use based matrix reveals that A&N could mainly cater to nature/ adventure / leisure categories. 'Special Interest Groups' are a very important category as they could potentially be converted into 'high value' tourists.

***Tourists Season***

4.22 One of the critical aspects of tourism in A&N is the "seasonality" of the industry. A&N witness both south-west and north-east monsoon. Heavy annual rainfall over 3000 mm limits the tourism season to mainly for 5 to 6 months a year - November - April. Off-season options are required to iron out the peaks and troughs.

4.23 The domestic tourists have 2 peak periods - December and April (combining with the annual school vacations).The international tourists however, tend to spread over through the year.

***Spatial Distribution***

4.24 In line with the population distribution, tourists also seem to concentrate in and around Port Blair. Domestic tourists (the majority) rarely move out to the North / Middle Andaman. Foreigners do move out, but their numbers are very low. Factors leading to concentration are discussed subsequently. A spreading out of tourists, therefore, is required to avoid/reduce pressure on infrastructure and the environment.

***Tourist Itinerary***

4.25 The typical travel itinerary of a domestic tourist to A & N is provided below:

| **Domestic Tourists** | | **Remarks** |
|---|---|---|
| ***Trip - 5 days*** | | |
| Day 1 | Arrive at Port Blair<br>Local sight seeing –<br>Cellular Jail, Sound & Light show, Water Sports complex<br>Ross/Viper island etc. | Mostly by conducted tour |
| Day 2 | Day trip to MG Marine National Park - Jolly Buoy / Red Skin Island | Excursion trip by conducted tour |
| Day 3 | Day Trip<br>Mount Harriet / Chidya Tapur or Anque Island | Conducted tour / charter boat |
| Day 4 | Havelock or Neil Island | Ferry service |
| Day 5 | Return from Havelock; Shopping | Ferry Service |
| Day 6 | Depart from Port Blair | |

*Source : Discussion with Tourists*

4.26 Tourists on a 4 days visit, tend to skip Mount Harriet.Tourists coming on package tours also tend to have a similar schedule in and around Port Blair.

4.27 The concentration of domestic tourists in and around Port Blair is due to :

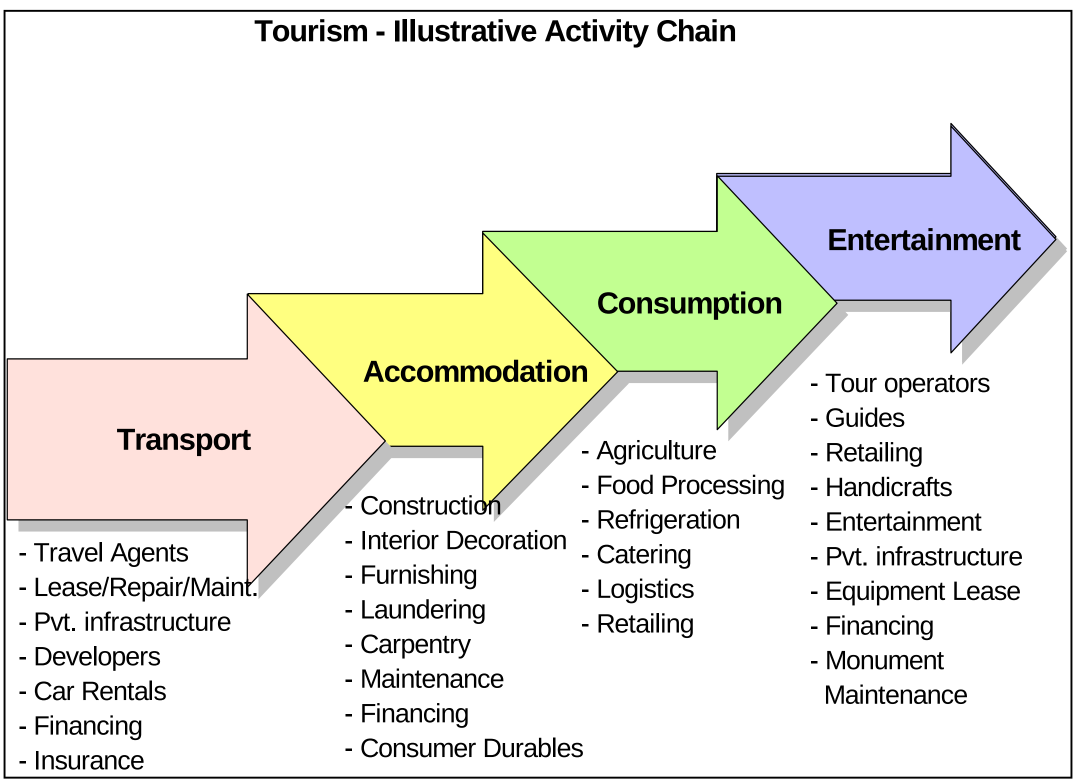
- Short vacations
- Poor connectivity and uncertain shipping schedules to most places and hence the inability to plan inter-island trips
- A preference for more "developed" areas
- Port Blair being for all practical purposes, the only point for entry and exit.

4.28 Foreign tourists who are on long duration holidays tend to stay lesser at Port Blair and longer near the beaches. Havelock (Radha Nagar) beach is the most popular destination for foreign tourists. North and Middle Andaman including Ross & Smith island , Diglipur and Mayabundar used to be popular spots (despite the difficulty in access) until the ban on foreign tourists on some of these islands. The spreading out of foreign tourists are on account of two factors .

- Preference for isolation/ exploring the un-known
- Longer duration stay which facilitates planning inter-island trips especially given the irregular shipping schedules

**Tourists Spend**

4.29 Tourist spend takes place along the tourism value chain, which is presented below :



4.30 While tourism has a very long value chain providing ample scope for economic returns there is substantial scope for " economic leakages", especially in the case of small island economies. In the case of A&N, for instance economic leakages can take place under various heads including domestic travel (booking from main land, fuelling from source Airport), Consumption (most of the supplies being imported from main land etc. ).

4.31 The contribution of tourism to SDP is provided in the table below :

| Head | 1997-98 | % of GDP |
|---|---|---|
| Trade , Hotel & Restaurant | 256892 | 4.9% |
| Transport | -274991 | 5.3% |

*Source : A&N at a Glance*

4.32 Currently, tourism accounts for 5% of GDP (tourist spend on Trade , Hotels & restaurants) . The subsidy provided on transportation is also available for tourists.

**Impact on Tourism Strategy**

4.33 Key points having a bearing on the tourism development strategy for A&N are

| Tourist Trends | Impact on Strategy |
|---|---|
| Tourism Preferences | • Capitalise on growth in knowledge / intellectual tourism<br>• Environmental 'conscious' tourism<br>• Positioning as a compete getaway and an unexplored destination |
| ***Tourist Categorisation*** | |
| By Origin | • Domestic, still the key. But need to bring in upper end domestic tourists and middle to high-end foreign tourists |
| By Purpose | • Leisure, Recreation, Holiday, Business / Profession<br>• Intellectual / Knowledge Tourists |
| By End Use | • Nature, Adventure, Special Interest, Relaxation / Leisure |
| ***Spatial Distribution*** | • **Distributed development** |

## ***Tourism Policy in A&N***

4.34 Tourism development in a planned manner was started in 1970s. Tourism was identified as a thrust area and key to sustainable development in the eighties. In line with this, there was a spurt in tourist arrivals in the same period (9596 nos in 1980 to 83483 in 1999). Keeping in mind, the constraints in the islands, the tourism policy focuses on 'high value – low volume' tourists.

4.35 The Tenth Five Year Plan has been proposed taking into account all aspects of tourism growth in the islands. The details of the outlay for various schemes is shown below.

| Sl. No. | Name of Scheme | Proposed Outlay ( Rs Lakhs) |
|---|---|---|
| 1. | Construction of Tourist Accommodation | 850 |
| 2. | Publicity & Propagation on Tourism | 1200 |
| 3. | Development of Recreational Tourism & Water Sports | 250 |
| 4. | Development of Tourist Spots | 1800 |
| 5. | Strengthening of Directorate of Tourism | 300 |
| 6. | Incentives to Tourism Industry | 350 |
| 7. | Faster Inter-Island Transport Services for Tourists | 350 |
| | **Total** | **5100** |

*Source: DIP&T, A&N*

However, of the 850 lakhs proposed for constructing tourist accommodation only 275 lakhs is towards capital expenses.

4.36 The following tourism infrastructure have been proposed for tourist accommodation.

- Eco friendly tourist resort at Goodwill Estate, Netaji Nagar, North Passage Island, Smith Island and Long Island
- Camping facility at Barriers island
- Management of existing guest houses and providing additional amenities
- Privatisation of guest houses in phased manner.

4.37 Incentives for tourism development have also been proposed to encourage private sector investments in terms of soft loans and capital investment subsidies. The loan scheme is proposed to be implemented through the state Financial Corporation (ANIIDCO). The proposed plan funds will be provided to ANIIDCO for implementing the scheme at a fixed rate of interest. ANIIDCO will extend the loan at a nominal rate of interest and take a margin for implementing the scheme.

4.38 Tourism policy in A&N takes cognisance of the need for sustainable tourism development and public private partnerships. However, there is need for much more focus on a 'unified' objective of tourism development, role clarity between institutions, investors and tourist services and the facilitation of hard and soft infrastructure.

# CHAPTER 5

## CURRENT TOURISM POTENTIAL IN A&N ISLANDS

5.1 This chapter provides a detailed evaluation of the various tourist attractions in terms of their offerings, attractiveness, connectivity, basic and tourism related infrastructure as well as other qualitative factors. The potential attractions in each of the areas are also listed.

5.2 For the purpose of long listing and evaluation, the A&N have been grouped into the following clusters :

- Port Blair (South Andaman including Neil, Havelock and Boratang)
- Diglipur (North Andaman)
- Mayabunder (North – Middle Andaman)
- Rangat (Middle Andaman)
- Little Andaman
- Nicobar (covering Car Nicobar, Katchal, Nancowry, Great Nicobar)

5.3 The critical aspect to be noted is that only Port Blair qualifies as a developed tourist destination. Most of the other locations qualify as existing tourist destinations only by virtue of the fact that they have connectivity (of some sort). Therefore, in a sense ***most of these locations are also potential tourist destinations***.

5.4 The summary of the overall destination-attractions mapping of tourist interest is provided in the table below :

| Destination / End-use | Beaches | Nature | Heritage / Culture | Forest / Hills | Adventure | Others |
|---|---|---|---|---|---|---|
| Port Blair | ✓ | | ✓ | | ✓ | |
| Diglipur | ✓ | ✓ | - | ✓ | ✓ | |
| Mayabunder | ✓ | ✓ | ✓ | | | |
| Rangat | ✓ | | | | | |
| Little Andaman | ✓ | ✓ | | ✓ | ✓ | |
| Nicobar | | ✓ | | ✓ | | |

5.5 While there are unique attractions in the various locations, most of them offer the same package of attractions of equal standard. This is an advantage for A&N and augurs well for spatial distribution of tourism.

5.6 This chapter has been arranged in six sections :

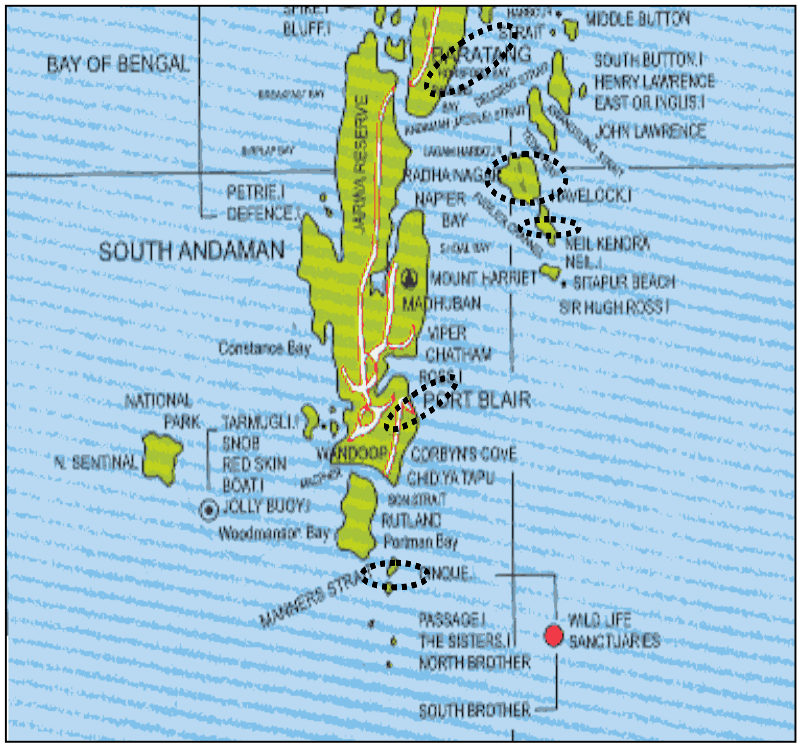
| | | |
|---|---|---|
| Section I | - | Port Blair |
| Section II | - | Diglipur |
| Section III | - | Mayabunder |
| Section IV | - | Rangat |
| Section V | - | Little Andaman |
| Section VI | - | Nicobar |

# SECTION I - PORT BLAIR

***Port Blair - A Fact File***

5.1.1 Port Blair region (including Ferragunj) spreads over an area of 3106 sq kms. Port Blair, besides being the only town in A&N, is also the only entry point. Being the capital city, Port Blair houses all the government and administrative offices of the Union Territory.

5.1.2 Port Blair region has nearly 45% of A&N's population. While agriculture and forestry are the main occupation in Havelock, Port Blair has a large proportion of the population engaged in services including Public Administration.




***Present Tourism Scenario***

5.1.3 The main tourist season in the region is between the months of November and April. Being the entry point though Port Blair has a constant stream of visitors (almost all the current tourists arrivals happen through Port Blair). Hence, the annual tourist arrival is 86,116 (with 4500 foreign tourists). This translates to an average of ~250 visitors a day. Havelock, one of the popular tourist destinations is estimated to receive nearly 50-60% of the tourist inflow into Port Blair. The average stay period of a foreign tourist in Port Blair is around 15 - 20 days. The same drops to 4-5 days in case of a domestic tourist.

***Present Economic Contribution of Tourism***

5.1.4 The following is the present typical spending range for a visiting tourist into this region.

| | |
|---|---|
| Round trip from Port Blair to Havelock and back | INR 80 |
| Stay expenses / day | INR 50 to INR 4000 |
| Food expenses / day | INR 150 to INR 1000 |
| Sight seeing expenses | INR 900 to INR 1500 |

*Source: Discussions with tourists*

5.1.5 The following points can be inferred from the tourist spending

- Concentration in Port Blair; need to spread tourism out to other locations
- Tourists (especially domestic) use Port Blair as the base and cover other destinations around Port Blair as excursion trips
- Potential for further earnings on variable components (food and stay)
- The availability of inexpensive accommodation like "eco-huts" in Havelock and unauthorised camping / hammocks in Havelock / Neil Islands

***Inventory of present tourist attractions***

5.1.6 The inventory of present attractions are grouped into Port Blair and in and around Port Blair.

**In Port Blair**

5.1.7 *Cellular Jail*, a National Memorial, is a place of historic significance. The Jail, originally a seven pronged building with a central tower, is a massive structure comprising honeycomb like corridors. Presently, three of the seven wings remain. The Jail also houses a museum, an art gallery and a photo gallery. Memories of the freedom struggle and the experience of being imprisoned in the Cellular Jail are recreated in the Sound and Light Show in the evenings.

5.1.8 *Ross Island* was the erstwhile capital of A&N Islands. The island houses the ruins of old buildings like the Ballroom, Chief Commissioner's House, Govt. House, Church, Cemetery, Hospital, Bakery, Press, Swimming Pool and Troop Barracks, all memoirs of the British Regime. The island is a 10 minute boat journey from Phoenix Bay Jetty.

5.1.9 *Viper Island* is another place of historic significance as dangerous convicts from the penal settlements were put in fetters and were forced to work with their fetters here. The ruins of the jails and gallows are seen in the island. The is situated within a 20 minute boat journey from Port Blair.

5.1.10 *Corbyn's Cove*, is located 7 kms away from Port Blair town. With hotels, restaurants, changing rooms facilities, it makes an ideal spot for sun-bathing. Snake Island located nearby is famous for scuba diving.

5.1.11 *Chatham* houses one of the oldest and largest saw mills in Asia. The island is connected to Port Blair by a bridge and has the second largest wharf of the islands. The mill is the storehouse of a variety of wood species.

5.1.12 *Marina Park and Gandhi Park* are entertainment areas in Port Blair. Both parks have amusement rides, safe water sports and nature trails.

5.1.13 *Museums* - Port Blair has a variety of museums including the Anthropological Museum, Samudrika (Naval Marine Museum), Zoological Survey of India Museum, Forestry and Aquarium. They serve the interest of tourists who are keen to educate themselves on the natural wealth of the regions. The mini zoo houses endemic species of birds and animals found in the island.

5.1.14 Andaman Water Sports Complex, has provisions for safe water sports and adventure sports such as water skiing, water scooters, para sailing, sail boats, wind surfers, glass bottom boats etc. But the facilities are found wanting.

***Excursion Trips from Port Blair***

**Wandoor**

5.1.15 The Mahatma Gandhi Marine National Park, spread over 280 sq.kms is a natural 'haven of open sea' creeks and islands. The area is rich in coral and marine life. Red Skin and Jolly Buoy Islands are popular for scuba diving and snorkelling. Glass bottom boats are available.

**Mount Harriet**

5.1.16 Mount Harriet is the highest peak in South Andaman offering a magnificent view. It is situated 55 km by road / 15 km by ferry.

Trekking is available from Bamboo flat to Mount Harriet. From Mount Harriet, a trail can be taken to reach Madhuban. Mount Harriet houses a variety of rare endemic birds, animals and butterflies.

**Chidiya Tapu**

5.1.17 Chidiya Tapu (25 kms from Port Blair) is the southern most tip of South Andaman. The lush green forest cover with birds, pristine beaches and mangroves make it an ideal picnic spot. It offers a wonderful sun set view

**Sippighat Farm**

5.1.18 Sippighat Farm is a research centre for cultivation of spices (cloves, nutmeg, cinnamon, coconut and pepper).

**Cinque Island**

5.1.19 Cinque Island, has a beautiful sand bar separating its North and South islands. The island is rich in coral and marine life. Located 39 kms by sea from Port Blair, it is an excellent excursion point. The islands are only serviced by private boat (which were also not available during our field visits).

**Havelock**

5.1.20 Havelock island is situated 21 nautical miles from Port Blair. Regular ferry services, makes Havelock a very popular destination among tourist. Radha Nagar beach, is rated as a world class beach. Vijay Nagar beach also offers calm seas and white sand. Havelock has rich coral life and is a very popular destination for snorkelling and scuba diving.

5.1.21 Neil Island is situated 20 nautical miles from Port Blair. Sitapur beach is a very popular tourist destination.

5.1.22 Baratang is situated 35 nautical miles from Port Blair. Baratang offers some unique attractions in the form of Mud Volcanoes and Limestone caves. The limestone caves remain largely unexplored as a tourist destination. The trek to reach the caves is adventurous.

***Present status of Infrastructure***

5.1.23 The present status of infrastructure has been looked at under two heads viz.

- Basic Infrastructure (like power, water, roads etc.)
- Tourism Infrastructure (like boarding, lodging, transport etc.)

***Basic Infrastructure Development***

5.1.24 *Power* supply to the region is from a variety of DG plants located in and around Port Blair. Neil and Havelock Islands have their own DG plants. The present power supply situation is satisfactory. With increasing concentration of tourists in the region, there could be a strain on existing resources.

5.1.25 *Water* supply is from rainwater storage and hence is dependant on monsoons. Supply is through the Dhanikhari Dam and other small nullahs. With increased concentration of population and tourists in Port Blair there is high pressure on water supply. The area faces water shortage especially during March – April when there is rationing of water.

5.1.26 *Roads* within Port Blair are well laid out and maintained. All arterial roads have streetlights and hence are safe for night travel. But the quality of roads in Havelock needs improvement.

5.1.27 *Telecommunication* facility is well developed in Port Blair with number of pay phones offering STD / ISD facility. However, in Havelock and Neil the same is available only in the market place; one STD call could require a 5 km journey.

5.1.28 *Internet* facility is presently available in Port Blair only.

5.1.29 *Banking* facility is available through State Bank of India, Andaman Co-Op Bank and variety of other banks with money changing facility. ATMs of select banks are also present in Port Blair.

5.1.30 *Postal and Courier* facilities are available.

5.1.31 *Police Station as well as Tourist Police are* available and the general civil conditions are rated peaceful and tourist friendly. The region is considered 'safe' for tourists.

5.1.32 For *Medical* attention, the government hospital as well as private clinics are available at Port Blair. The other islands depend on the Primary Health Centre.

5.1.33 Other *Recreational* facilities such as parks, cinema are available at Port Blair.

5.1.34 *Revenue Land* is available to the tune of 32 sq. km. for fresh developments. This becomes a limiting factor on the extent of development and hence the improvement in carrying capacity.

***Tourism Infrastructure Development***

5.1.35 Stay facilities are adequately developed in Port Blair (~ 2000 beds). But with increased focus on high value tourists there could be a gap in the higher end resorts. Havelock has a IP&T guest house and two premium resorts. In addition, Havelock has plenty of "eco-huts" priced between Rs.50 – 100 a day. These are patronised by the back-packing foreign tourists. Neil has an IP&T Guest house, PWD Guesthouse and a few private sector accommodation. Baratang has a PWD Guest house (which is not open for private tourists).

5.1.36 For local travel, State Transport Service buses are available. Autos and taxis are available in Port Blair (difficult to get during peak season).

5.1.37 All fore-shore services and inter-island services start from Port Blair. Regular ferry services (2-3 times a week) are available to Neil and Havelock. Baratang, however is not connected by ferry services, private fisherman Doongies are available for the same. Cinque island is also accessible only by private boats, which are currently not available.

5.1.38 Tourist Information Services are available in Port Blair. But there is need for the same in other location. In addition, there is also need for trained guides.

***Potential for Tourism Development***

5.1.39 Currently, Port Blair is the only entry point. Hence there is concentration of tourists in Port Blair. While Port Blair, may still remain as the primary entry point, tourists need to be spread out to other tourist destination. Neil and Havelock need to be promoted for the same.

5.1.40 The following table summarises the broad options available for tourism development in Port Blair region.

| ***Tourist Attraction*** | ***Present Positioning*** | ***Proposed Positioning*** |
|---|---|---|
| ***Present Attractions*** | | |
| Potential Baratang | - | Nature and Adventure |
| Havelock | Beach | Resort / Conference destination<br>Scuba Division |
| Neil | Beach | Resort / Conference destination |
| Rutland | - | Eco Resorts |
| Cinque | - | Leisure<br>Island Camping |

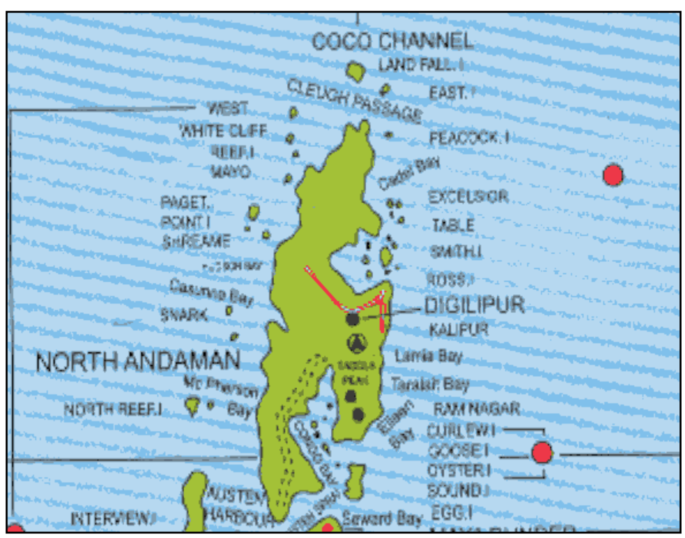
5.1.41 The attractiveness matrix of Port Blair region as a tourist destination is given below.

**Attractiveness Matrix**

| Parameter | Low | Medium | High |
|---|---|---|---|
| Current Tourist Attractions | | | |
| Diversity of Attraction | | | |
| Unique / Core Attraction | | | |
| Current Popularity | | | |
| Potential / Tourism Opportunities | | | |
| Present Connectivity | | | |
| Tourism Infrastructure | | | |
| Basic Infrastructure | | | |
| Carrying Capacity | | | |
| Overall Potential | | | |

***SECTION II – DIGLIPUR***

# DIGLIPUR – A FACT FILE




5.2.1 Diglipur is an 884 sq. km. large island in the North Andaman housing lush green tropical forests, world class beaches and rare attractions like the Mud Valcanoes. The island has a population of 42,880 people spread across 42 villages and 13 gram panchayats. The population is primarily made up of people from Bengal, Tamil Nadu and Kerala and hence this island offers a unique cultural experience. Cultivation and Fisheries are the two primary occupations of people in this island.

**Present Tourism Scenario**

5.2.2 The tourists' season in Diglipur is between the months of November and April in a year. The present tourist inflow in a season is guess estimated at 1000 nos., of which 95% (i.e. 950) are domestic tourists and the rest foreign. This translates to a low average of 6 tourists per day in season. The average stay period of a foreign tourist is put at 10 days to a fortnight and the same drops to 1-3 days in case of a domestic tourist.

**Present Economic Contribution of Tourism**

5.2.3 The following is the present typical spending range for a visiting tourist into this region.

| | |
|---|---|
| Round trip from Port Blair to Diglipur and back | INR 250 |
| Stay expenses / day | INR 120 to INR 800 |
| Food expenses / day | INR 150 to INR 300 |
| Sight seeing expenses | INR 1200 to INR 1800 |

5.2.4 This spending range applied over average stay period translates into an average spending of INR 5500 to INR 18550 for a foreign tourist. The same drops to INR 2260 to INR 5350 for a domestic tourist. However, computation of average per day spending (in USD terms) reveals that foreign tourists spend only USD 7 to USD 25 per day while domestic tourists spend USD 15 to USD 36. This is indicative of the fixed component of the trip being more (like expenses towards travel from Port Blair and back, sight seeing expenses etc.) than variable component (like stay, food etc.)

5.2.5 Applying the above spending pattern over the tourists inflow, the present economic contribution of tourism is guess estimated in the range of INR 2.4 mn. to INR 6 mn.

5.2.6 The above are indicative of the following:

- Latent potential of tourism in the island; need to offer more tourism products, better entry options and other facilities

- Potential for increased economic realisation even from the present visiting tourists
- Low economic contribution from foreign tourists.

### *Inventory of present tourist attractions*

5.2.7 *Ross Island* offers a virgin beach bordered by a tropical forest. This island, at a distance of 20 minutes boat ride from Arial Bay jetty is an ideal spot for

- Beach tourism
- Adventure (trekking through tropical forest)
- Research / Education (like scuba diving, snorkeling, turtle nesting)

5.2.8 Wild elephants can occasionally be spotted. The sand bar joining this island with the adjoining Smith island is an added attraction.

5.2.9 *Smith* Island offers a similar experience like Ross island. This island also houses a small village of about 60 families. Eco rest houses are available for overnight stay. Turtle nesting during season is an added attraction

5.2.10 *Kalipur Beach*, at a distance of 18 km from Diglipur, offers a combination of sand and rock shores with fishing village nearby.

5.2.11 *Lamba Bay Beach* borders the Diglipur National Park, leading to Saddle Peak. This beautiful beach has a stretch of shore covered with shells. At the end of this walk is a refreshing fresh water stream 'Thambu Nali' in the foothills of National Park.

5.2.12 *Diglipur National Park* is a dense tropical forest housing a rich bank of exquisite trees, (including sandal), rare flora and wild fruits and offering trekking opportunities including climbing up natural steps formed by the roofs of old trees. Tourists need to take permission from Forest Department to trek through this Park.

5.2.13 A 740 feet climb leads to *Saddle Peak*, the highest point in A&N islands which offers an aerial view of A&N, the second peak 'ice degree peak' is the coldest point while the third peak provides a fantastic view spanning Diglipur to Mayabunder.

5.2.14 *Kalipur Adventure Sports Complex*, near Kalipur Beach, has been started about two years back. This complex offers water based adventure sports such as speed boats, water scooters etc. However, the complex is presently not stocked and maintained well as the traffic is very low.

5.2.15 *A Mud Volcano* has been identified at the northern tip of Diglipur island. Little is known about the place; even locals lack knowledge. Visits by tourists is therefore difficult. Efforts need to be made in locating the volcano and providing facilities to access the same.

5.2.16 *Radha Nagar Beach*, on the way to Kalighat, is another popular beach destination. But this beach needs a facelift.

5.2.17 Kalighat Creek, on the way from Diglipur to Mayabunder offers a breathtaking view of the mangroves / equatorial forests.

***Present status of Infrastructure***

5.2.18 The present status of infrastructure has been examined under two heads viz.

- Basic Infrastructure (like power, water, roads etc.)
- Tourism Infrastructure (like boarding, lodging, transport etc.)

***Basic Infrastructure Development***

5.2.19 *Power* supply to this island is from the recently commissioned 5.5 MW hydro electric project of NHPC. The present power supply situation is satisfactory with occasional power cuts due to stabilisation problems in the new plant. The present capacity is said to be sufficient to meet the power requirements of Diglipur, Mayabunder and Rangat islands. However, augmentation needs have to be studied in the context of proposed tourism projects / initiatives

5.2.20 *Water* supply is from the perennial Kalpong river, the only river in the whole of A&N islands. The water supply situation is satisfactory till date. However, construction of dam for hydro electric project has raised concerns on sustainability of maintaining the present water supply levels.

5.2.21 *Roads* for commuting within the island are well laid out and maintained. All arterial roads have streetlights and hence are safe for night travel.

5.2.22 *Telecommunication* facility is available in villages located on the Andaman Grand Trunk route passing through this island. Other villages have one phone each, given under the rural telephony scheme. Only phone lines on the Grand Trunk route offer STD, ISD facilities and other rural telephones do not have these facilities. At present, a distance of 16 kms is needed to be traversed for accessing a STD booth.

5.2.23 *Internet* facility is presently available in Diglipur. However, public internet access systems (like net cafes) are yet to come up.

5.2.24 *Banking* facility is available through State Bank of India and Andaman Co-Op Bank. However, money-changing facility is not available in this island.

5.2.25 *Postal and Courier* facilities are available. However, couriers take a minimum of four days to reach Chennai or Calcutta, the only two main land locations presently connected by flight.

5.2.26 One *Police Station* is available and the general civil conditions are rated peaceful and tourist friendly.

5.2.27 For *Medical* attention, Primary Health Centres in Diglipur, Kalighat, Community Health Centre in Diglipur and Health Sub Centres in every village are available. One more Primary Health Centre is proposed in Kalipur.

5.2.28 Other Recreational facilities such as parks and cinema halls are absent in Diglipur

5.2.29 *Revenue Land* is available to the tune of 47 sq. km. for fresh developments. This becomes a limiting factor on the extent of development and hence the carrying capacity.

### *Tourism Infrastructure Development*

5.2.30 *Entry* into Diglipur is only from Port Blair. Therefore, tourists have to enter Andaman through Port Blair and travel to Diglipur by road or sea. By sea, tourists can directly sail to Diglipur. There are direct ship services to Diglipur. Alternatively, tourists can travel upto Diglipur by road, crossing three creeks on the way including Kalighat Creek. By road, tourists need to travel upto Mayabunder, then sail cross Kalighat Creek by ferry boats, and again travel by road from Kalighat Creek to Diglipur.

5.2.31 This island is 330 km. by road and morning bus services are available between Port Blair and Diglipur. The travel time is about 15-16 hours. However, there are three breaks in journey. At these locations, creeks need to be crossed using vehicle ferries, adding around 45 mts of waiting time for the availability of vehicle ferries. If this delay can be overcome, the travel time can be reduced to 8.5 –9.5 hours. The break in journey between Mayabunder and Diglipur (which needs to be crossed by a ferryboat) adds to the tourists' experience as the ferry journey is through the Kalighat Creek. A 0.5 km long bridge connecting Mayabunder and Diglipur is nearing completion and is expected to be opened for traffic flow by September 2001.

5.2.32 The island is 185 km. by sea from Port Blair and shipping services are available for 4-5 days in a week. The travel time is about 12-16 hours. Quality of ships, availability of cabin accommodation and quality of journey are issues in ship travel.

5.2.33 *Stay* facilities are limited in Diglipur. There is an IP&T guesthouse located in Kalipur, with a capacity to accommodate 24 guests. Apart from this, there are three private lodges in Diglipur having a total bed capacity of 30. Other than the IP&T guesthouse, lodging standards are below par.

5.2.34 *Boarding* facilities are also limited to Diglipur Bazaar area. Presently, there are only small hotels available in Diglipur offering limited choice in food.

5.2.35 For *local travel*, tourists can use bus services run by State Transport Services and private operators. The public transport services are available between 04:30 hrs. and 19:30 hours. There are also about 35 autos and 5 jeeps available in Diglipur, which are the only alternate means of public transport on the island. However, auto / jeep charges are nearly 35 times costlier than bus charges.

Travel from Diglipur to IP&T guest house in Kalipur costs Rs. 6/- by bus and almost Rs. 200/- by auto.

5.2.36 Fishermen doongis are available for *Inter Island travel.* Charges for these doongis have to be negotiated. Doongis are uncomfortable as they are open and also unsafe for sea travel as they do not stock any stipulated life saving devices, including life jackets.

5.2.37 There is also a need for *Tourist Information Services*, the absence of which presently puts a visiting tourist in a lot of difficulty in getting guidance on places of interest, facilities available, entry formalities (if any) etc.

5.2.38 There is also a need for *trained guides*, the absence of which is leading to visiting tourists not being able to appreciate the true magnitude of significance of various attractions. For example, there are only three locals in Kalipur village knowing the way to reach Saddle Peak through the National Park. Their primary occupation being fishing, availability of them is also an issue.

### *Potential for Tourism Development*

5.2.39 Tourism Development plan for this island needs to address the following :

- Improving tourist inflow – entry point, connectivity issues
- Extending average stay period – offering more tourism products
- Increasing average spending by a tourist – offering high value services
- Increasing realisation from foreign tourists – offering custom made services.

5.2.40 The following table summarises the broad options available with respect to the above. The options include using the present inventory of tourist attractions and developing of newer tourist attractions.

| ***Tourist Attraction*** | ***Present Positioning*** | ***Proposed Positioning*** |
|---|---|---|
| ***Present Attractions*** | | |
| Ross Island | Beach | Camping / Tents |

| *Tourist Attraction* | *Present Positioning* | *Proposed Positioning* |
|---|---|---|
| Smith Island | Beach | Island Resorts |
| Kalipur Beach | Beach | Eco Resorts |
| Lamba Bay Beach | Beach | Relaxation |
| Diglipur National Park | Adventure | Trekking<br>Bio-sphere reserve |
| Saddle Peak | Nature | Nature / Activities |
| Kalipur Water Sports Complex | Adventure | Adventure |
| Radha Nagar Beach | General Interest | General Interest |
| ***New Attractions*** | | |
| Mud Valcano | | Education / Nature |
| NHPC Dam | | General Interest |
| NHPC Power Plant | | Education |
| Keralapuram | | History / Culture |
| Kalighat | Creek | Nature |
| Ramnagar | Beach | Special Interest |

5.2.41 Detailed descriptions of projects have been presented in Chapter 9.

5.2.42 The overall summary of Diglipur as a tourist destination is provided below.

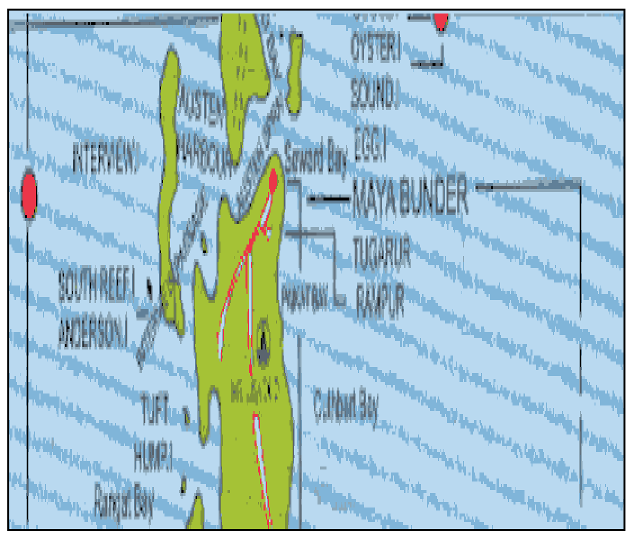
**Attractiveness Matrix**

| Parameter | Low | Medium | High |
|---|---|---|---|
| Current Tourist Attractions | | | |
| Diversity of Attraction | | | |
| Unique / Core Attraction | | | |
| Current Popularity | | | |
| Potential / Tourism | | | |

| | | | |
|---|---|---|---|
| Opportunities | | | |
| Present Connectivity | | | |
| Tourism Infrastructure | | | |
| Basic Infrastructure | | | |
| Carrying Capacity | | | |
| Overall Potential | | | |

***SECTION III – MAYABUNDER***

# MAYABUNDER – A FACT FILE




5.3.1 Mayabunder is a 1348 sq. km. large island in the Middle Andamans housing exquisite small beaches / islands. The island houses a population of 23904 people spread across 71 villages and 8 gram panchayats. The population is primarily made up of settlers from Pakistan and Bangladesh. Fisheries and cultivation are the two primary occupation of people in this island.

**Present Tourism Scenario**

5.3.2 The tourist season in Mayabunder is between the months of November and April. The present tourist inflow in a season is guess estimated at 2000 nos., of which 70% (i.e. 1400) are foreign tourists and the rest domestic. This translates to a low average of 11 tourists per day in season. The average stay period of a foreign tourist is put at 5 days to a week and the same drops to 1-2 days in case of a domestic tourist.

**Present Economic Contribution of Tourism**

5.3.3 The following is the present typical spending range for a visiting tourist into this region.

| | |
|---|---|
| Round trip from Port Blair to Mayabunder and back | INR 400 |
| Stay expenses / day | INR 120 to INR 800 |
| Food expenses / day | INR 150 to INR 300 |
| Sight seeing expenses | INR 900 to INR 1500 |

5.3.4 This spending range applied over average stay period translates into an average spending of INR 2490 to INR 9600 for a foreign tourist. The same drops to INR 1640 to INR 4100 for a domestic tourist. However, computation of average per day spending (in USD terms) reveals that foreign tourists spend only USD 7 to USD 27 per day while domestic tourists spend USD 16 to USD 41. This is indicative of the fixed component of the trip being more (like expenses towards travel from Port Blair and back, sight seeing expenses etc.) than variable component (like stay, food etc.)

5.3.5 Applying the above spending pattern over the tourists inflow, the present economic contribution of tourism is guess estimated in the range of INR 4.5 mn. to INR 16 mn.

5.3.6 The above are indicative of the following:

- Low awareness as a tourist destination
- Issues in connectivity, knowledge of accessibility to tourist attractions etc.
- Potential for increased economic realisation even from the present visiting tourists
- Low average spending by foreign tourists presently.

### *Inventory of present tourist attractions*

5.3.7 *Karmatang Beach* is a wonderful beach located at a distance of 12 km. from Mayabunder. This beach, with crystal clear water and rich coral reserve is a turtle nesting ground and also has mangrove line creeks - a nature lovers delight.

5.3.8 *Pokhadara Beach* is another small beach close to Mayabunder jetty. There is a village close to the beach, which restricts the extent of privacy for tourists.

5.3.9 *Various Creeks including Austin Creek* offer a lifetime experience of cruising through the evergreen mangrove fringed creek, with exotic flora and fauna all around. These are ideal for nature lovers, bird watchers, research / education oriented tourists, who are also sensitive to ecology.

5.3.10 *Avis Island* is a small beautiful island also known as Coconut Island. This island 15 minutes by boat ride, has a mini beach with crystal clear water and is an ideal picnic spot.

5.3.11 *Ray Hill*, at a distance of 20 minutes boat ride from Mayabunder jetty, houses an Eco Village developed and maintained by ANIFPDCL. The facilities available include eco guesthouses, wilderness trail, elephant safari, rock climbing for children, angling, and small library. Ideal for family tourists.

5.3.12 *Austin X island*, at a distance of 25 minutes boat ride from Mayabunder jetty, has a palm fringed little beach and a shallow sea with mangrove belt. This is an ideal spot for picnic and trekking. Spotted deer coming to water holes is also a common sight.

5.3.13 *Forest Museum*, located in DFO office (close to Mayabunder jetty), houses a rare collection of coral life and fauna. It also has an Information Center to inform visitors of the collections in the museum. Ideal for research / education oriented tourists

5.3.14 *Anmol Driftwood Museum*, run by a private entrepreneur, is made up of an interesting collection of woodworks. An ideal place for general interest tourists.

## ***Present status of Infrastructure***

5.3.15 The present status of infrastructure has been examined under two heads viz.

- Basic Infrastructure (like power, water, roads etc.)
- Tourism Infrastructure (like boarding, lodging, transport etc.)

### *Basic Infrastructure Development*

5.3.16 *Power* supply to this island is from the DG power plant located in Rangat. The present power supply situation is satisfactory with occasional power cuts due to DG maintenance. There is also a proposal to supply power to Mayabunder from the recently commissioned hydroelectric power plant in Diglipur. An 8 km. transmission line is pending installation, after which this proposal will become feasible. This will be critical, if the area picks up as a tourist zone.

5.3.17 *Water* supply is from rainwater storage and hence is dependent on monsoons. Though there are hardly any monsoon failures in this island, there is water scarcity in summer months. The problem has been highlighted as one of storage rather than monsoons themselves.

5.3.18 *Roads* for commuting within the island are well laid out and maintained. All arterial roads have streetlights and hence are safe for night travel.

5.3.19 *Telecommunication* facility is available in villages located on the Andaman Grand Trunk route passing through this island. Other villages have one phone each, given under the rural telephony scheme. Only phone lines on the Grand Trunk route offer STD, ISD facilities and other rural telephones do not have these facilities.

5.3.20 *Internet* facility is presently not available in Mayabunder

5.3.21 *Banking* facility is available through State Bank of India and Andaman Co-Op Bank. However, money-changing facility is not available in this island

5.3.22 *Postal and Courier* facilities are available. However, couriers take a minimum of three days to reach Chennai or Calcutta, the only two main land locations presently connected by flight.

5.3.23 One *Police* Station is available and the general civil conditions are rated peaceful and tourists friendly.

5.3.24 For *Medical* attention, Primary Health Centre in Mayabunder and Health Sub Centres in every village are available.

5.3.25 Other *Recreational* facilities such as parks, cinema halls are absent in Mayabunder.

5.3.26 *Revenue Land* is available to the tune of 50 sq. km. for fresh developments. This becomes a limiting factor in development of structures. Hence there is a need for 'mobile' tourism – tents, camping etc.

***Tourism Infrastructure Development***

5.3.27 *Entry* into Mayabunder is chiefly from Port Blair though one ship from Calcutta stops at Mayabunder jetty once a month. Therefore, tourists by and large have to enter Andamans through Port Blair and travel to Mayabunder by road or sea.

5.3.28 This island is 157 km. distance by road with morning bus services being available between Port Blair and Mayabunder. The travel time is about 10-11 hours. However, there are two breaks in the road journey where creeks need to be travelled through vehicle ferries. Normally, about 45 minutes is wasted in each of these locations waiting for the ferries. If this delay can be overcome, the travel time can be reduced to 8.5 –9.5 hours.

5.3.29 The recent Supreme Court judgement bans vehicular traffic on two stretches of the Andaman Trunk Road. (ie. One between Port Blair and Rangat and other between Rangat and Mayabunder). This will make access to Mayabunder possible only through ferries.

5.3.30 The island is 85 nautical miles by sea with shipping services being available for 4-5 days in a week. The travel time is about 10-12 hours. Quality of ships, availability of cabin accommodation and quality of journey are issues in ship travel.

5.3.31 *Stay* facilities are limited in Mayabunder to 64 bed nights. There is an IP&T guesthouse located in Karmatang, with a capacity to accommodate 24 guests. Apart from this, there are five private lodges in Mayabunder having a total capacity of accommodating about 40 guests. However, quality of private lodges is sub standard.

5.3.32 *Boarding* facilities are also limited to Mayabunder Bazaar area. Presently, there are only small hotels available in Mayabunder offering limited choice in food.

5.3.33 For *local travel*, tourists can use bus services run by State Transport Services and private operators. The public transport services are available between 04:30 hrs. and 19:30 hours. There are also about 50 autos available in Mayabunder, which are the only alternate means of public transport in the island. However, auto charges are nearly 25 times costlier than bus charges.

| |
|---|
| Travel from Mayabunder Jetty to IP&T guest house in Karmatang costs Rs. 6/- by bus and Rs.150/- by auto. |

5.3.34 Fishermen doongis are available for *Inter Island travel*. Charges for these doongis are not fixed and must be negotiated. Doongis are uncomfortable and unsafe for sea travel as they do not stock any stipulated life saving devices, including life jackets.

5.3.35 The absence of information service puts tourists to difficulty in terms of places of interest, facilities available, entry formalities (if any) etc.

5.3.36 An absence of trained guide also limits awareness and dissemination of the historical relevance of areas within Mayabunder. For example, the interesting background / history on Sound Island, Murga Island may not be reaching every tourist.

Sound Island: Mayabunder Island under the control of Japanese during World War II, housed a small team of Japanese army personnel whose assignment was to sound and alert the army in Mayabunder of approaching enemy ships by sounding drums and bugles.

Murga Island: During British regime, a medical facility used to be run in this island for people suffering from chronic ailments. The dead would be buried on the island itself.

5.3.37 However, presently ANIFDCL is operating conducted tours in Mayabunder covering Karmatang Beach, Austin X island, Ray Hill, Avis Island and Creek Cruising. The Corporation maintains covered Doongis with life saving gadgets and offer trained guides who can give interesting narration about various places.

***Potential for Tourism Development***

5.3.38 Tourism Development plan for this island needs to address the following :

- Improving tourist inflow – entry point, connectivity issues
- Extending average stay period – offering more tourism products
- Increasing average spending by a tourist – offering higher value services
- Increasing realisation from foreign tourists – offering custom made services to attract high spending foreign tourists

5.3.39 The following table summarises the broad options available towards the above objectives. The options include using the present inventory of tourist attractions and developing of newer tourist attractions.

| ***Tourist Attraction*** | ***Present Positioning*** | ***Proposed Positioning*** |
|---|---|---|
| ***Present Attractions*** | | |
| Karmatang Beach | Beach | Beach<br>Relaxation |

| ***Tourist Attraction*** | ***Present Positioning*** | ***Proposed Positioning*** |
|---|---|---|
| Pokhadara Beach | Beach | Beach / Adventure |
| Austin Creek | Nature | Nature |
| Avis island | Picnic | Island Resort |
| Austin X island | Picnic | Island Resort |
| Ray Hill island | Family | Eco Village |
| Forest Museum | Education | Education |
| Anmol Driftwood Museum | General Interest | General Interest |
| ***New Attractions*** | | |
| Austin II island | | Island Resort |
| Austin IV island | | Island Resort |
| Austin IX island | | Island Resort |
| Sound island | | Heritage |
| Murga island | | Heritage |
| Interview island | | Adventure |
| Anderson island | | Solitude |
| North Reef island | | Education |

5.3.40 Detailed descriptions of projects have been presented in Chapter 9.

5.3.41 The overall assessment of Mayabunder as a tourist destination is given below.

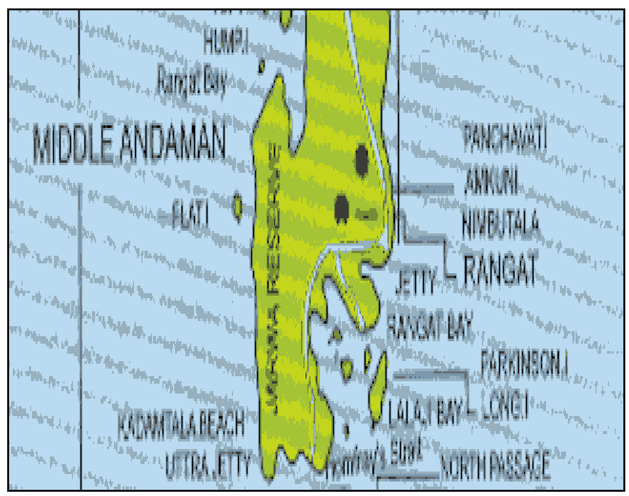
**Attractiveness Matrix**

| **Parameter** | **Low** | **Medium** | **High** |
|---|---|---|---|
| Current Tourist Attractions | | | |
| Diversity of Attraction | | | |
| Unique / Core Attraction | | | |
| Current Popularity | | | |

| | | | |
|---|---|---|---|
| Potential / Tourism Opportunities | | | |
| Present Connectivity | | | |
| Tourism Infrastructure | | | |
| Basic Infrastructure | | | |
| Carrying Capacity | | | |
| Potential | | | |

## *SECTION IV – RANGAT*

### *Rangat – A Fact File*




5.4.1 Rangat is a 1070 sq. km. large island in Middle Andaman with pristine beaches, waterfalls, and interesting islands. This island has a population of 38815 people spread across 75 census villages and 14 gram panchayats. The population is primarily made up of people from Tamil Nadu and Kerala. Fisheries and cultivation are the two primary occupations of people in this island.

### *Present Tourism Scenario*

5.4.2 The tourists' season in Rangat is between the months of November and April. The present tourist inflow in a season is estimated ~3000 nos. of which 70% (i.e. 2100) are foreign tourists and the rest domestic. This translates to a low average of 17 tourists per day in season. The average stay period of a foreign tourist is put at 5 days a week and the same drops to 1-2 days in case of a domestic tourist.

*(Source : Discussion with Local Officials)*

***Present economic contribution of Tourism***

5.4.3 The following is the present typical spending range for a visiting tourist into this region.

| | |
|---|---|
| Round trip from Port Blair to Rangat and back | INR 200 |
| Stay expenses per day | INR 120 to INR 800 |
| Food expenses per day | INR 150 to INR 300 |
| Sight seeing expenses | INR 300 to INR 900 |

5.4.4 This spending range applied over average stay period translates to an average spending of INR 1540 to INR 8800 for a foreign tourist. The same drops to INR 770 to INR 4400 for a domestic tourist.

5.4.5 Applying the above spending pattern over the tourist inflow, the present economic contribution of tourism is guess estimated in the range of INR 4.5 mn. to INR 21.5 mn.

5.4.6 The above are indicative of the following:

- The relative proximity of Port Blair being an advantage - the present average tourists inflow of 17 tourists / day in a season is higher than Diglipur / Mayabunder
- The need to offer a variety of tourism products, better connectivity and infrastructure to increase the low average stay period
- Upgradation in the standard / quality of accommodation / boarding facilities.

***Inventory of present tourist attractions***

5.4.7 *Cutbert Bay Beach* is located at a distance of 12 km. from Rangat. This is a lengthy beach with a tropical forest bordering the beach. Apart from the beach, which is famous for turtle nesting in season, the tropical forest offers elephant safaris. Tourist can also visit the elephant training camps.

5.4.8 *Amkunj Bay beach* is another sandy beach on the way to Cutbert Bay. This beach is ideal for swimming, sun bathing and relaxation.

5.4.9 *Moorys Dare* is a rocky mountainous terrain opposite Amkunj Bay, which will perfectly suit the requirements of adventure tourists interested in trekking

5.4.10 *Panchavati Hills have* a beautiful, gentle waterfall. The agricultural farm en-route housing a rich bank of vegetation, is of interest to botany enthusiasts.

5.4.11 *Long Island*, off the southeast coast of Middle Andaman has a small village and several sandy beaches perfect for camping. On Wednesday and Saturday, the ferry from Port Blair and Havelock call at Long Island before reaching Rangat. This island has the famous 'Lalaji Bay' beach, which is rated as truly world class. The only accommodation available on this island is the Forest Department Guest House, which is not open to tourists.

5.4.12 *North Passage island*, about 30 minutes boat ride from Long Island, is another interesting small island housing the other famous beach in this locality, 'Merc  Bay'. This island also has dense coconut groves, which add to the beauty.

5.4.13 *Yeretta Creek* is a lush green mangrove creek, which is on the way from Yeretta jetty to Long Island.

5.4.14 *Uttera Creek* is another lush green mangrove creek travelled through on the way to Kadamtala.

### *Present status of Infrastructure*

5.4.15 The present status of infrastructure has been examined under two heads viz.

- Basic Infrastructure (like power, water, roads etc.)
- Tourism Infrastructure (like boarding, lodging, transport etc.)

### *Basic Infrastructure Development*

5.4.16 *Power* supply to this island is from the DG power plant located in Rangat. The present power supply situation is satisfactory with occasional power cuts due to DG maintenance. There is also a proposal to supply power to Rangat from the recently commissioned hydroelectric power plant in Diglipur. But with increase in tourist traffic, there could be need for augmenting the power resources.

5.4.17 *Water* supply is from rainwater storage and hence is dependent on monsoons. There is pressure on water supply in the hot months.

5.4.18 *Roads* for commuting within the island are well laid out and maintained. All arterial roads have streetlights and hence are safe for night travel.

5.4.19 *Telecommunication* facility is available in villages located on the Andaman Grand Trunk route passing through this island. Other villages have one phone each. Availability of STD lines and telephone access is an issue.

5.4.20 *Internet* facility is presently not available in Rangat.

5.4.21 *Banking* facility is available but without money-changing facility.

5.4.22 *Postal and Courier* facilities are available. However, couriers take a minimum of three days to reach Chennai or Calcutta.

5.4.23 One *Police Station* is available and the general civil conditions are rated peaceful and tourists friendly.

For *Medical* attention, Primary Health Centre in Rangat and Health Sub Centres in every village are available.

5.4.24 Other *Recreational* facilities such as parks, cinema halls are absent in Rangat.

5.4.25 *Revenue Land* is available to the tune of 272 sq. km. for fresh developments. This is a larger land availability compared to Diglipur and Mayabunder.

### *Tourism Infrastructure Development*

5.4.26 *Entry* into Rangat is chiefly from Port Blair and by ferries from Havelock, Neil and Long Island. Therefore, tourists have to enter Andamans through Port Blair and travel to Rangat by road or sea.

5.4.27 This island is a distance of 93 km by road; morning bus services are available between Port Blair and Rangat. The travel time is about 6-7 hours. However, there are two breaks in journey between Port Blair and Rangat, one at Baratang and another at Uttera at which points the seas is crossed on by vehicle ferries. Normally, about 45 minutes is wasted in each of these locations waiting for the ferries. If this delay can be overcome, the travel time can be reduced to 4.5-5.5 hours. Road to Rangat from Port Blair passes through Jarawa reserves on the west coasts of South and Middle Andaman. Local interest groups are proposing to close down this road to protect the rare group of 50 Jarawas left.

5.4.28 For the same reasons, the Supreme Court has recently banned vehicular movement in ATR along the Jarawa Reserves. This makes access to Rangat possible only by ferry services.

5.4.29 The island is 50 nautical miles by sea and shipping services are available for 4-5 days in a week. The travel time is about 4-5 hours. Quality of ships, availability of cabin accommodation and quality of journey are issues in ship travel.

5.4.30 *Stay* facilities are limited in Rangat. There is an IP&T guesthouse located in Cutbert Bay, with a capacity to accommodate 24 guests. Apart from this, there are four private lodges in Rangat having a total capacity of accommodating about 40 guests. However, their quality leaves scope for improvement. The total bed capacity in Rangat is 64.

5.4.31 *Boarding* facilities are also limited to Rangat Bazaar area where small hotels offer limited choice in food.

5.4.32 For *local travel*, tourists can use bus services run by State Transport Services and private operators. The public transport services are available between 04:30 hrs. and 19:30 hours. Few autos and omni vans are available for public transport.

Travel from Rangat Jetty to IP&T guest house in Cutbert Bay will cost Rs. 6/- by bus and the same will cost Rs. 150/- by auto and Rs. 200/- by van.

5.4.33 There are fishermen doongis available for *Inter Island travel*. Charges for these doongis are not fixed; Doongis are uncomfortable, unsafe for sea travel as they do not stock any stipulated life saving devices, including life jackets.

5.4.34 There is also a need for *Tourist Information Services*, the absence of which presently puts a visiting tourist to difficulty in getting information on places of interest, facilities available, entry formalities (if any) etc.

5.4.35 There is also a need for *trained guides.*

***Potential for Tourism Development***

5.4.36 Tourism Development plan for this island needs to address the issues identified such as

- Improving tourist inflow – entry point, connectivity issues
- Extending average stay period – offering more tourism products
- Increasing average spending by a tourist – offering high value services
- Increasing realisation from foreign tourists – offering custom made services to attract elite foreign tourists

5.4.37 The following table summarises the broad options available towards the above objectives. The options include using the present inventory of tourist attractions and developing of newer tourist attractions.

| ***Tourist Attraction*** | ***Present Positioning*** | ***Proposed Positioning*** |
|---|---|---|
| ***Present Attractions*** | | |
| Cutbert Bay | Beach | Premium<br>Beach<br>Resorts |
| Amkunj Bay | Beach | Leisure |
| Panchavati Hills | Nature | Nature |
| Moorys Dare | Nature | Adventure / Nature |
| Long Island | Beach | Island Resort / Camping |

| Tourist Attraction | Present Positioning | Proposed Positioning |
|---|---|---|
| North Passage Island | Beach | Island Resort / Camping |
| Uttera Creek | | Cruises |
| Yeretta Creek | | Cruises |
| ***New Attractions*** | | |
| Guitar Island | | Island Resorts |
| Lal Degree Island | | Adventure |
| North Button Island | | Island Camping |
| South Button Island | | Island Camping |

5.4.38 Detailed descriptions of projects have been presented in Chapter 9.

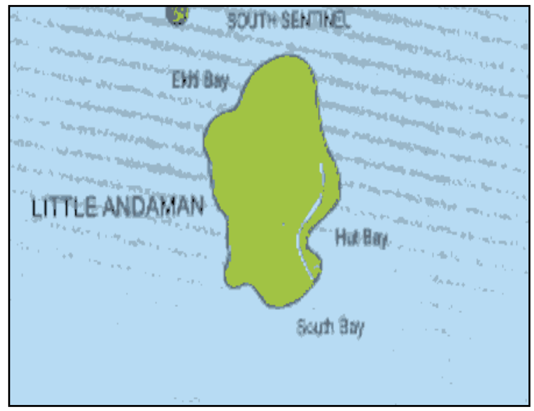
5.4.39 The attractiveness of Rangat as a tourist destination is summarised below :

**Attractiveness Matrix**

| Parameter | Low | Medium | High |
|---|---|---|---|
| Current Tourist Attractions | | | |
| Diversity of Attraction | | | |
| Unique / Core Attraction | | | |
| Current Popularity | | | |
| Potential / Tourism Opportunities | | | |
| Present Connectivity | | | |
| Tourism Infrastructure | | | |
| Basic Infrastructure | | | |
| Carrying Capacity | | | |
| Potential | | | |

## *SECTION V – LITTLE ANDAMAN*

# LITTLE ANDAMAN – A FACT FILE




5.5.1 Little Andaman is a 722 sq. km. large island in the Andaman district housing pristine beaches, sprawling palm oil plantations and water falls. The island has 4 gram panchayats. The population is primarily made up of people from Bengal and Tamil Nadu. There is also a Nicobaree village, 6 km from the jetty, housing 250 families. Cultivation and Fisheries are the two primary occupations of people on this island.

**Present Tourism Scenario**

5.5.2 The tourist season in Little Andaman is between the months of November and April. This island is still virgin with a very low tourist inflow guesstimated at 90 nos. in a season. Of this, nearly 95% (i.e. 80) are foreign tourists and the rest domestic. This translates to a low average of 0.5 tourists per day in season. The average stay period of a foreign tourist is put at a week to 10 days and the same drops to 1-2 days in case of a domestic tourist.

**Present Economic Contribution of Tourism**

5.5.3 The following is the present typical spending range for a visiting tourist into this region.

| | |
|---|---|
| Round trip from Port Blair to Little Andaman and back | INR 125 |
| Stay expenses / day | INR 300 |
| Food expenses / day | INR 150 |
| Sight seeing expenses | INR 500 |

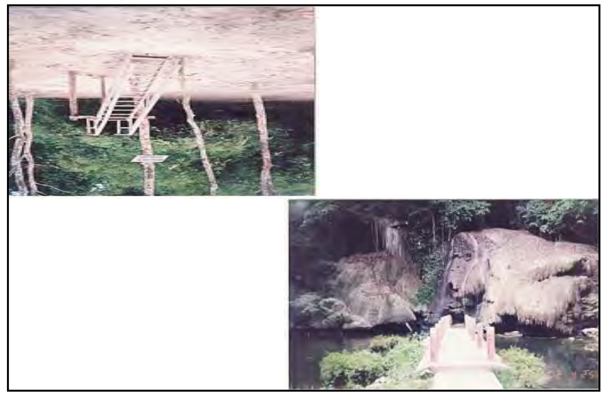
5.5.4 This spending range applied over average stay period translates into an average spending of INR 5125 for a foreign tourist and INR 1525 for a domestic tourist

5.5.5 Applying the above spending pattern over the tourists inflow, the present economic contribution of tourism is guess estimated in the range of INR 0.43 mn.

5.5.6 The above are indicative of the following:

- Unexplored status as a tourist destination
- Need for upgrading tourism related infrastructure
- Need to augment economic realisation

### *Inventory of present tourist attractions*



5.5.7 *White Surf Waterfalls* is located in the midst of a tropical forest. ANIFPDCL, maintaining the area, also offer elephant safari during season. *Whisper Wave Waterfall* is the other waterfall available in the island.

5.5.8 *Palm Oil Plantation* spread across a large part of the islands

5.5.9 *Bala Reef* is a site suited for water adventure including scuba diving

5.5.10 *Butler Bay Beach* is a virgin beach offering a long sandy shore. ANIFPDCL, maintaining this beach, offer Nicobaree style cottages for tourist stay at reasonable tariffs in the range of INR 50 to INR 200 per day. However, the sea is rough which makes access seasonal. It is also frequented by crocodiles. *Boating* from Buter Bay to Palm Oil Factory is an interesting journey.

5.5.11 *Netaji* Nagar beach is yet another interesting beach located along the roadside of village, whose name is shared with the beach.

### *Potential Tourist Destinations*

5.5.12 *Dams* in Ramakrishnapur and Vivekanandapuram, which are presently not much explored by tourists, are the potential attractions on this island

***Present status of Infrastructure***

5.5.13 The present status of infrastructure has been estimated under two heads viz.

a. Basic Infrastructure (like power, water, roads etc.)
b. Tourism Infrastructure (like boarding, lodging, transport etc.)

***Basic Infrastructure Development***

5.5.14 *Power* supply to this island is from the 1900 KVA DG power plant operated in this island. The present power supply situation is satisfactory, especially due to fall in demand following closure of saw mills. Another 1000 KVA DG is expected to be commissioned shortly, which will further augment the power supply capacity.

5.5.15 *Water* supply is chiefly from rain water storage. The water supply situation is satisfactory till date.

5.5.16 *Roads* for commuting within the island are well laid out and maintained. The 37 km. long arterial road has streetlights and hence is safe for night travel.

5.5.17 *Telecommunication* facility is available for 20 kms. of the 37 kms. arterial road. STD / ISD facilities are available too.

5.5.18 *Internet* facility is presently not available in Little Andaman.

5.5.19 *Banking* facility is available through State Bank of India and Andaman Co-Op Bank. However, money-changing facility is not available in this island

5.5.20 *Postal* facility is available. However, courier facility is absent presently.

5.5.21 One *Police* Station is available and the general civil conditions are rated peaceful and tourists friendly.

5.5.22 For *Medical* attention, one Primary Health Centre and Health Sub Centres in every village are available.

5.5.23 Other Recreational facilities such as parks, cinema halls are absent in Little Andaman

5.5.24 *Revenue Land* is available to the tune of 460 ha for fresh developments. This provides scope for development.

### *Tourism Infrastructure Development*

5.5.25 *Entry* into Little Andaman is only from Port Blair for which 7 – 9 hours voyage required. However, frequency of ships from Port Blair, tickets availability, sailing as per schedules are the main requirements to make this island a more attractive destination.

5.5.26 *Stay* facilities are limited in Little Andaman. There is an ANIFPDCL guesthouse with a capacity to accommodate 10 guests. There is also the eco resort of ANIFPDCL at Butler Bay beach with cottages to accommodate upto 20 guests.

5.5.27 *Boarding* facilities are also limited to Little Andaman Bazaar area. Presently, there are only small hotels available in Little Andaman offering limited choice in food. This may also act as a bottleneck in attracting high value tourists.

5.5.28 For *local travel*, tourists can use bus services run by State Transport Services and private operators. There are five public buses available. There are also about 60 autos and few vans available in Little Andaman, which are the only alternate means of public transport in the island. However, auto / van charges are much costlier than bus charges.

To travel the entire 37 km. road stretch, it costs Rs. 7/- by public transport while it costs Rs. 250/- by autos.

5.5.29 There is also a need for *Tourist Information Services in* the absence of which tourists are not able to get information on places of tourist interest, access, entry formalities etc. There is also a need for *trained guides.*

***Potential for Tourism Development***

5.5.30 By virtue of the unexplored / unexploited state, most of the tourist attraction qualify as potential tourist destination.

| ***Tourist Attraction*** | ***Present Positioning*** | ***Proposed Positioning*** |
|---|---|---|
| ***Potential Attractions*** | | |
| White Surf Waterfall | | Nature |
| Whisper Wave Waterfall | | Nature |
| Netaji Nagar Beach | | Beach |
| Butler Bay Beach | | Resort |
| Palm Oil Plantation | | Special Interest |
| Palm Oil Extraction Unit | | Special Interest |
| Bala Reef | | Adventure |
| Vivekanandapuram | | Nature |

| ***Tourist Attraction*** | ***Present Positioning*** | ***Proposed Positioning*** |
|---|---|---|
| Dam | | |
| Ramakrishnapur Dam | | General Interest |

5.5.31 Detailed descriptions on projects have been presented in Chapter 9.

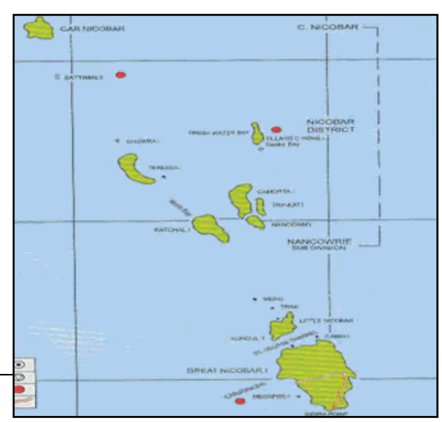
5.5.32 The assessment of Little Andaman as a tourist destination is provided below.

**Attractiveness Matrix**

| Parameter | Low | Medium | High |
|---|---|---|---|
| Current Tourist Attractions | | | |
| Diversity of Attraction | | | |
| Unique / Core Attraction | | | |
| Current Popularity | | | |
| Potential / Tourism Opportunities | | | |
| Present Connectivity | | | |
| Tourism Infrastructure | | | |
| Basic Infrastructure | | | |
| Carrying Capacity | | | |
| Potential<br>***Could be a 'Nature Paradise'*** | | | |

## *SECTION VI – NICOBAR*

## NICOBAR – A FACT FILE




5.6.1 Nicobar district of Andaman & Nicobar islands is made up of five main islands viz. Car Nicobar, Teressa, Katchal, Great Nicobar and Nancowry. Car Nicobar island is the district head quarters. These islands house an interesting mix of tribals including the forward looking Nicobareese the fragile

Shampens and hostile Sentinels. There are also settlers from Bengal and Tamil Nadu living in these islands.

**Present Tourism Scenario**

5.6.2 Nicobar islands are presently not open for foreign tourists and are selectively open for domestic tourists. Domestic tourists need to obtain a 'tribal permit' issued by the Deputy Commissioner, A&N Administration for visiting these islands. This is primarily for the purpose of safeguarding the local tribals in these islands against exploitation of any sort by tourists.

**Present Economic Contribution of Tourism**

5.6.3 Due to restrictions on entry, the present tourist traffic into this island is guess estimated at a low of 20 tourists in a year. This may continue to be so, as the tribal councils (panchayat equivalent of tribal village administration) are objecting to opening of these islands for tourists. However, due to planned interventions by the Government and the recent exposure to mass media (like satellite television) the tribals may slowly graduate to accepting them. However, higher officials at Tribal Welfare Department put the time period at about 10 years for the tribals to be fully ready to be receptive to normal society and also tourists.

5.6.4 Due to the above, these islands should be targeted for tourism development only in the long term, say beyond 10 years from now. This will also reserve fresh attractions for introduction during the time other destinations may be saturating. In effect, the tourism life cycle can be extended and tourism can be re-invented.

### *Inventory of Tourist Attractions*

5.6.5 Car Nicobar, the district head quarter, houses exquisite beaches bordered by coconut groves which offer a tranquile setting for tourists wanting to unwind from the packed main land life style.

5.6.6 Katchal, where the first sun rise of the millenium was seen in India, has interesting beaches along the 24 km arterial road stretch. East Bay, West Bay, Jhula and Jhansi are the beaches available. Kupinga, 3 km from Marine jetty houses interesting British time developments

5.6.7 Great Nicobar, also called as Campbell Bay, has the southern most tip of India, i.e. Indira Point. Apart from this, there are two bio-sphere reserves viz. Campbell Bay and Galathia, which are selectively open for tourists. This island has a rich bank of rare flora and fauna which are attracting researchers in this field from world over. This island, with one naval airstrip and two helipads, can well become another entry point for A&N over a period of time.

### *Present status of Infrastructure*

5.6.8 The present status of infrastructure has been looked at under two heads viz.

c. Basic Infrastructure (like power, water, roads etc.)
d. Tourism Infrastructure (like boarding, lodging, transport etc.)

### *Basic Infrastructure Development*

5.6.9 *Power Supply* in these islands are through DG stations in the respective islands. The present power supply situation is satisfactory with the connected load being very low. However, 'serviceability' in the scenario of increased demand due to tourism infrastructure development needs to be studied.

5.6.10 *Water* supply is chiefly from rain water storage. The water supply situation is satisfactory till date.

5.6.11 *Roads* for commuting within the island are well laid out and maintained. The arterial roads has streetlights and hence are safe for night travel.

5.6.12 *Telecommunication* facility in all the islands with STD / ISD facility. However, connectivity through satellite earth stations need improvement

5.6.13 *Internet* facility is presently not available in Car Nicobar and Campbell Bay. However, public internet access is yet to happen (like net cafes)

*Banking* facility is available through 1-2 nationalised banks and Andaman Co-Op Bank. However, money-changing facility is not available in these islands

5.6.14 *Postal* facility is available. However, courier facility is absent presently.

5.6.15 One *Police Station* is available in each island and the general civil conditions are rated peaceful and tourists friendly.

5.6.16 For *Medical* attention, 1-2 Primary Health Centre is available in each island. Health Sub Centres in every village are available.

5.6.17 Other Recreational facilities such as parks, cinema halls are absent in Little Andaman

5.6.18 *Revenue Land* availability is an area of concern in the present context. Car Nicobar and Katchal being tribal reserves, there is no revenue land availability in these islands for development of tourism infrastructure. In Campbell Bay too, the extent of revenue land available is limited to 64 sq. km. This becomes a limiting factor on the extent of development and hence the improvement in carrying capacity.

***Tourism Infrastructure Development***

5.6.19 *Entry* into Nicobar islands is only from Port Blair. Therefore, tourists have to enter Andamans through Port Blair and travel to these islands by sea. The frequency of ships, limited cabin accommodation, erratic shipping schedules are bottlenecks that need to be addressed while attempting tourism promotion in these islands.

5.6.20 *Stay* facilities are limited in these islands to the PWD Guest Houses and the Marine Guest Houses. There are no tourist resorts or such lodging facilities.

5.6.21 *Boarding* facilities are also limited to the Bazaar area in these islands. Presently, there are only small hotels offering limited choice in food.

5.6.22 For *local travel*, tourists can use bus services run by State Transport Services and private operators. There are 2-5 public buses available. The alternate means of transport available are autos (3-6 in no.) in Car Nicobar and Great Nicobar. Auto charges will average about Rs. 7.50 to Rs. 10 per km. In Katchal public transport is the only means of transport.

5.6.23 There is also a need for *Tourist Information Services and trained guides.*

# CHAPTER 6

# ASSESSMENT OF INFRASTRUCTURE

4.39 This chapter provides a broad overview of the infrastructure status in A&N. The assessment covers both basic as well as tourism related infrastructure (including transport, accommodation, tourist offices and information centres, support infrastructure etc.) and the future plans with regard to the same.

***<u>Basic Infrastructure</u>***

4.40 The basic infrastructure covers power, water and sewerage.

**Power**

4.41 A&N are almost entirely dependant on Diesel Generated Power. This is mainly on account of absence of natural sources of power (coal reserves, perennial rivers etc.) Investment during the VIth and VIIth Plan period, expanded power availability and distribution and led to an improvement from the previous 'power starved situation'.

4.42 The last decade has seen systematic increase in power generation. The electricity department runs around 35 power houses in different parts of A&N, with an aggregate installed capacity of ~ 39 MW (as of 2000). The installed capacity and power generation in key centres is shown below.

| Sl. No. | Power Station | Installed Capacity (kw) | Energy Generated (KWH) |
|---|---|---|---|
| 1 | Chatham | 12,750 | 57,97,36,000 |
| 2 | Havelock | 523 | 9,12,833 |
| 3 | Neil Island | 404 | 6,02,317 |
| 4 | Rangat | 4,136 | 96,58,475 |
| 5 | Long Island | 175 | 5,80,856 |
| 6 | Smith Island | 30 | 8,726 |
| 7 | Cinque Island | 80 | - |
| 8 | Strait Island | 18 | 13,586 |
| 9 | Phoenix Bay | 9,136 | 3,67,63,809 |

*Source : PWD, A&N*

4.43 At the end of Xth Plan period the total power generation capacity is estimated at 72.4 MW. A 20.3 MW expansion is proposed during the Xth Plan period at an estimated investment of Rs.230 crores. The Xth Plan also proposes augmenting capacity at various locations including Car Nicobar, Great Nicobar, Long Island, Neil and Havelock, North Andaman, Little Andaman, Rangat and Katchal. The 20 MW DG Power House at Bamboo Flat, South Andaman is also likely to be completed within the plan period.

4.44 The 5.25 MW hydro-electric project across Kalpong river in North Andaman caters to a substantial part of power requirement for the entire region. In addition, the administration is also looking at implementing the following schemes

- Harnessing Wind Energy
- Installing Solar photovoltaic power plants
- Mini / micro hydro electric system
- Biomass based energy

4.45 The cost of generating power remains high at an estimated Rs. 8 per unit, whereas it is distributed at a subsidised rate of Rs.2 per unit.

Though, power is an expensive resource, availability of power is not seen as a constraint for tourism development. With investment, the capacity can be augmented to suit the need.

**Water**

4.46 Water is a ‘precious’ resource in A&N, which is mainly dependent on rainfall. In spite of heavy rainfall (of around 3100 mm), water retention is an issue due to the nature of

- Terrain which allows rain water to drain into the sea
- Soil which again does not retain water.

4.47 In addition to rain water, there are natural spring / open wells available, but in inadequate quantities.

4.48 Due to this, there is ‘water rationing’ especially in Port Blair during the non-monsoon period (between November – April), with the worst period being April. Incidentally, this coincides with the tourist peak period in April, which further increases the pressure on the resources.

| ***Case Study : Port Blair*** | |
|---|---|
| Estimated Demand (1.3 lakh population) | 42 lakh gallons / day |
| Season Availability | 34 lakh gallons / day |
| Off-season Availability | 26 lakh gallons / day |

*Source : Municipal Council, Port Blair*

4.49 The current availability of water and treatment capacity is 150 lakh litres per day. By 2007, the projected demand is estimated at 342 lakh litres per day. Capacity augmenting is planned by increasing the height of the Dhanikhari dam which is proposed to add 170 lakh litres, in addition to various other schemes as shown below.

***Proposed Increase in Water Supply***

| Projects | Capacity (lakh litres per day) |
|---|---|
| Indira Nallah Project | 18.16 |
| Chouldhari Nallah Project | 6.25 |
| Revival of Nayagaon & Chakyagaon Diggies | 4.50 |
| **NEW PROJECT**<br>Lower Dhanikhari Scheme | 170.00 |
| Ground Water Recharge | 5.00 |

*Source : Municipal Council*

4.50 In addition, an extensive ground water survey was undertaken recently which shows potential in atleast 32 villages (of the 162 planned). A perennial water source has been identified close to Port Blair, which might ease the pressure.

4.51 A&N administration have not actively considered desalination of water as an option (due to cost and viability issues). While desalining water to potable levels is expensive, treating water for sundry usage, may prove viable. Along with rain water harvesting, this should be an attractive option.

The availability of water is a critical factor for tourism development. With the augmentation proposed, there might not be constraint in the immediate period (till 2007). But with increased tourist inflow coupled with population growth, water could become a constraining factor. This however, is actionable through alternate viable options.

**Sewage System**

4.52 Scientific sewage treatment is not practised anywhere in A&N including Port Blair as the sewage collected is allowed to drain into the sea. With increasing population and tourist arrivals, there is need for a sewage treatment system. Excess drainage of sewage into the sea, not only harms the water quality but also affects coral reefs to a great extent.

4.53 There is a proposal to install a scientific sewage collection, treatment and disposal system at Port Blair. Sewage treatment plants are proposed to be put up at Junglighat, Chatham and Corbyn with a capacity to treat 30 MLD of sewage by 2021.

4.54 Future tourism development should envisage captive sewage treatment facilities at individual resorts using small / package sewage treatment plants, which will minimise the impact of development.

4.55 In addition to sewage systems, solid waste management systems exist only in Port Blair where solid waste is collected and landfilled at Brooksabad. It is proposed that in future, solid waste management should be handled at the individual resorts; the Administration proposes to identify suitable degraded land in the islands for this purpose.

## ***Tourism Related Infrastructure***

4.56 This section deals with tourism related infrastructure including transport, accommodation, communication and other amenities.

### Transport

4.57 Transport is the "lifeline", both for connectivity to and connectivity within Andaman. In the context of A&N, the transport sector includes :

- Mainland - Island Connectivity
- Inter Island Connectivity
- Foreshore Sector
- Harbour Sector

Mainland - Island Connectivity

4.58 Mainland - Island connectivity is available through both air / sea.

*Air Connectivity*

4.59 Only domestic air connectivity is available to A&N islands and that too only from Chennai and Kolkata. The biggest restriction is the length of the runway, which can accommodate only Boing 737 flights. In addition, the uni-directional usage of the runway, puts a restriction on the load factor of aircrafts (reduced passenger load). At present there is no international air connectivity to A&N Islands. The only airport is at Port Blair though naval landing strips exist in Diglipur and Car Nicobar. This proves grossly inadequate during the peak season and during the vacation month of May when traffic off A&N is also large.

4.60 The domestic air schedule to A&N islands is provided below :

| Origin | Carrier | Capacity | Frequency |
|---|---|---|---|
| Chennai | Jet Airways | ~ 120 | Daily |
| | Indian Airlines | ~ 120 | 4 times a week |
| Kolkata | Indian Airlines | ~ 120 | 5 times a week |

*Sea Connectivity*

4.61 Shipping services to Andaman are available from Chennai, Kolkata and Visakhapatnam, details of which are provided below :

| Gateway Point | **Ships** | **Frequency** | **Operated By** |
|---|---|---|---|
| Chennai | MV Swarajdweep<br>MV Nancowry | 3 - 4 trips per month (through Car Nicobar once a month; through Campbell Bay once in 2 months) | Directorate of Shipping Services, A&N |
| Kolkata | MV Akbar<br>MV Harshavardhana<br>MV Nicobar | 4 - 5 trips per month (through Mayabunder once a month) | Shipping Corporation of India |
| Visakhapatnam | MV Akbar<br>MV Harshavardhana<br>MV Nicobar | 1 trip per month | Shipping Corporation of India |

*Source : Directorate of Shipping Services*

4.62 The total details of the passenger carrying capacity of these ships are provided below :

***Maximum Passenger Carrying Capacity***

| **S.No** | **Ship** | **Passenger Carrying Capacity** | **Trips per annum** | **Total Passenger Carrying Capacity** |
|---|---|---|---|---|
| 1 | MV Akbar | 1534 | 30 | 46020 |
| 2 | MV Nicobar | 1200 | 12 | 14400 |
| 3 | MV Harshavardana | 749 | 12 | 8900 |
| 4 | MV Nancowry | 1200 | 40 | 48000 |
| 5 | MV Swarajdweep | 1200 | 30 | 36000 |
| **Estimated Carrying Capacity** | | | | **1,50,000** |

*Estimation based on data provided by DSS*

4.63 This assumes a certain number of trips per year. However, the actual no. of trips is far lower (due to monsoon, maintenance, break-down), bringing down carrying capacity.

4.64 Apart from passenger traffic, cargo forms a very important constituent of Mainland – Island traffic. With A&N being dependent on the mainland for a large part of their supplies, there is an increasing demand for space.

4.65 The demand projection for the mainland – island sector during the Xth plan period is provided below.

***Demand for Main – Island Service***

| **Year** | **Passenger Nos.** | **Cargo (tonnes)** |
|---|---|---|
| 2001-02 | 1,49,300 | 1,97,000 |
| 2002-03 | 1,55,300 | 2,05,900 |
| 2003-04 | 1,62,000 | 2,14,900 |
| 2004-05 | 1,69,200 | 2,24,900 |
| 2005-06 | 1,77,300 | 2,29,500 |
| 2006-07 | 1,86,300 | 2,44,800 |

*Source : Directorate of Shipping Services, A&N*

*This is based on estimated tourist arrival of 120000 by 2005.*

4.66 Even assuming a very optimistic vessel deployment, there is a substantial demand – supply gap. With further initiatives in the tourism sector and proposed increase in tourist traffic, the demand could go up further.

4.67 The Xth plan proposes the introduction of a 1000 passenger vessel to ply between mainland and island at a speed of 20 knots. This might augment capacity in the immediate term but there is need for further augmentation of vessels.

## *INTER ISLAND*

4.68 The inter-island services connect Port Blair with Diglipur in the North and Campbell Bay in the South and deploys 4 vessels – MV Sentinel, MV Chowra, MV Derring and TSS Yerewa. These ships are run and maintained by SCI.

4.69 The demand projections for passenger traffic in the inter island sector and hence, demand for services is shown below.

***Demand-Supply Gap (Inter Island Sector)***

| | Description | Year | Capacity | Average trip/week | Year wise Demand Vs. Carrying Capacity | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | **2001-02** | **2002-03** | **2003-04** | **2004-05** | **2005-06** | **2006-07** |
| **Passenger Demand** | | | | | 190970 | 198225 | 205480 | 212736 | 219991 | 227266 |
| **Available Carrying Capacity** | Existing Vessels | | | | | | | | | |
| | M.V.Derring | 2012 | 300 | 2 | 49920 | 49920 | 49920 | 49920 | 49920 | 49920 |
| | M.V.Yerewa | 2001 | 200 | 4 | 66560 | - | - | - | - | 0 |
| | M.V.Sentinel | 2001 | 300 | 1 | 24,60 | - | - | - | - | 0 |
| | M.V.Chowra | 2004 | 300 | 1 | 24960 | 24960 | 24960 | - | - | 0 |
| | **Current Capacity** | | | | **166400** | **74880** | **74880** | **49920** | **49920** | **49920** |
| | **VIIth Plan Vessels** | | | | | | | | | |
| | 400 Pax .Vessel | | 400 | 1.5 | - | - | 49920 | 49,920 | 49920 | 49920 |
| | **VIIth Plan Vessels** | | | | | | | | | 0 |
| | 400 Pax .Vessel | | 400 | 1.5 | - | 49,920 | 49920 | 49,920 | 49,920 | 49920 |
| | IXth Plan Vessels | | | | | | | | | 0 |
| | 500 Pax. (50%) | | 500 | 1 | - | | | 20,800 | 41,600 | 41600 |
| | **Proposal Vessels** | | | | | | | | | 0 |
| | 500 Pax. (50%) | | 500 | 1.5 | - | | | | | 62400 |
| | **Total Carrying Capacity** | | | | **166400** | **124800** | **174720** | **170560** | **191360** | **253760** |

*Source : Directorate of Shipping Services*

4.70 The above analysis reveals that the current fleet is inadequate to meet the growing demand (especially with 3 of the vessels due for decommissioning in the 5 year period). In addition, with the Supreme Court ban on vehicular traffic on two stretches of the Andaman Trunk Road, connectivity to Middle & North Andaman becomes entirely dependent on inter-island services (not factored into the projections). This coupled with an increase in tourist growth, will further push up the demand.

4.71 Meeting the demand is largely dependent on the proposed fleet expansion. However, even the VIIth Plan vessels are yet to be acquired. There is a huge time lag in placing orders and obtaining delivery. Non-delivery of the vessel, especially in 2003-04 and 2004-05 will lead to serious problems as 3 of the existing vessels get decommissioned by then. Given past experience, early acquisition dates seem a low possibility.

4.72 Concrete steps need to be taken to ensure delivery of the vessels and thereby increasing the availability, frequency and regularity of these services.

*Foreshore - Island Sector*

4.73 The foreshore services are operated between Port Blair and nearby islands and are available on the following routes :

| Route | Sorting per week |
|---|---|
| Port Blair to Hut Bay | 2 trips |
| Port Blair to Diglipur | 2 trips |
| Port Blair to Rangat via Neil, Havelock, Straight and Long Island | 2 trips |
| Port Blair to Rangat via Havelock | 1 trip |
| Port Blair to Long Island vis Neil, Havelock, Kadamtala | 1 trip |
| Port Blair to Havelock | 1 trip |

*Source : Directorate of Shipping services, A&N*

4.74 The ships being operated in the foreshore sector are smaller, thereby making trips heavily dependent on weather. During monsoon period, the services are very irregular and unpredictable. The shipping schedule, therefore, is also not available in advance.

4.75 The estimated demand and gap vis-à-vis the carrying capacity is provided below :

### *Demand Supply Gap (Foreshore Services)*

| DESCRIPTION | | Year Built | Capacity | Average trip/week | Year wise Demand Vs. Carrying Capacity | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 |
| **Passenger Demand** | | | | | 1,96,472 | 2,03,935 | 2,11,368 | 2,18,861 | 2,26,316 | 2,33,787 |
| **Available Carrying Capacity** | **Existing Vessels** | | | | | | | | | |
| | M.V.Tapi | 1977 | 25,600 | 2 | 25,600 | 25,600 | 25,600 | - | - | - |
| | M.V.Triveni | 1978 | 150 | 2 | 19,200 | 19,200 | - | - | - | - |
| | M.V. Kalpong | 1991 | 250 | 2 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 |
| | M.V.Galathia | 1993 | 250 | 2 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 |
| | M.V.Ramanujam | 1992 | 600 | 2 | 96,000 | 96,000 | - | - | - | - |
| | **Current Capacity** | | | | **220,800** | **220,800** | **105,600** | **80,000** | **80,000** | **80,000** |
| | **Plan for Augmentation** | | | | | | | | | |
| | 100 Pax .Vessel x 8 | | 800 | 2 | 24,000 | 1,03,680 | 1,15,200 | 1,15,200 | 1,15,200 | 1,15,200 |
| | 75 Pax .Vessel x 3 | | 225 | 2 | 18,000 | 26,000 | 26,000 | 26,000 | 46,000 | 46,000 |
| | **Total Carrying Capacity** | | | | **2,62,800** | **3,50,480** | **2,46,800** | **2,46,800** | **2,41,200** | **2,41,200** |

*Source : Directorate of Shipping Services (A&N)*

4.76 The above table shows that the existing capacity is adequate for the immediate period. But with one of the ships due for decommissioning in 2003 (and that too M.V.Ramaujam – a ship travelling on the popular Havelock route with a carrying capacity of 96000) there is a huge demand – supply gap.

4.77 The lack of road service to Rangat (on account of the Supreme Court ban on vehicular movement along the Jarawa tribes) will further add to passenger demand.

4.78 Passenger capacity is expected to be augmented by commissioning new vessels that have been ordered during the IX Plan period. However, there are substantial delays in obtaining the ships and in some cases, there has even been a 10-15 years time lag. Therefore, availability of the vessels in time, which is critical to meet the passenger demand, is questionable.

*Expansion Plans*

4.79 The Xth plan proposes Rs.688 crores for the shipping services. The following vessels are proposed to be procured during the plan period.

| Vessels | Nos | Remarks |
|---|---|---|
| 1000 Pax. Vessel | 1 | Dedicated mainland service |
| 500 Pax. Vessel | 1 | Inter Island service centrally air-conditioned |
| 200 Pax. Vessel | 2 | Specially for tourists, with high quality accommodation and recreational facilities in the foreshore services |
| Harbour Cruise Vessels | 2 | Harbour Services, Fully air-conditioned under MV Act |
| Vehicle Services | 2 | For facilitating road - sea connectivity |
| Rescue Boats | 1 | With trial speed of 30 knots |
| Self Propelled Barges | 5 | For transferring passengers and cargo from anchorage to Jetty |
| Motor Launches | 5 | |
| Steel Pontoons | 6 | Transferring cargo to Jetty |

4.80 Shipping services are the lifeline of A&N for both the local population as well as tourists. So on-time delivery of vessels is extremely critical. The order for vessels are mostly placed with public sector shipping units, wherein there is a large delay in completing the order. This time lag also leads to an increase in the cost of the ships. There are instances where even orders placed in the VIIth plan period have not been delivered.

*Other Issues*

4.81 There are a variety of other issues related to the shipping services

- No 'tourist' boats are available
- Lack of prior intimation of shipping schedule. Usually sailing schedules are announced only 2-3 days in advance which undermines planning
- Irregular shipping schedule
- Return reservation are not provided as the ships also cater to the settled population on the island. Non availability of seats becomes an issue
- Owing to lack of fast vessels, duration of journey becomes very long and hence at times (bad weather, crowded vessel) quite an ordeal. For instance, Havelock, which is situated 30 kms from Port Blair is a 4½ hour journey. Even with the introduction of a new vessel, the journey still takes 2½ hours
- Limited cabin accommodation, reservations for which are difficult to obtain. Journey by bunk class or sitting, is far from comfortable
- Lack of quality amenities / recreational options to sustain tourist interest

that need to be addressed to improve the quality of ship travel for visitors and local population.

***Port Infrastructure***

4.82 With shipping services being key to connectivity in A&N, the state of the support infrastructure ie. Ports and jetties become important. The current categorisation of ports in A&N is provided below :

| Main Port | Inter-island Ports | Foreshore Ports | Undeveloped Ports |
|---|---|---|---|
| Port Blair | 1. Diglipur<br>2. Mayabunder<br>3. Hut Bay<br>4. Car Nicobar - MVS<br>5. Malacca<br>6. Noncowry<br>7. Kutchal<br>8. Campbell Bay | 1. Rangat<br>2. Neil<br>3. Havelock<br>4. Chowra<br>5. Terissa<br>6. Kondul<br>7. Pillow Milton | 1. East Island<br>2. Cinque Island<br>3. Jollybuoy<br>4. Tillangchory<br>5. Castle Bay<br>6. South Bay<br>7. Dugaong Beach (Hut Bay) |

*Source : DSS*

4.83 Alongside, improving shipping services and frequency, ports and jetties also need to be developed / improved in parallel for facilitating easy access to various islands having tourist potential.

### *Roads*

4.84 The topography of A&N islands does not allow for an extensive road network. The roads in A&N are categorised as :

- Major District Roads
- Urban Roads
- Rural Roads

4.85 The Andaman Trunk Road (ATR), Little Andaman Trunk Road (LATR) and Great Nicobar Trunk Road (GNTR) are the three important district roads.

4.86 The 333 kms long ATR connects South to North Andaman, with three creeks in between and largely supplements the ferry services. The recent SC ruling has however banned vehicular movement on two stretches (along the Jarawa Reserve of ATR). This also puts on hold the envisaged widening of the ATR.

4.87 The 24 km LATR running along the Eastern Coast connects Dugong Greek in North to Harminda Bay in South. The road needs widening and improvement.

4.88 The 94 km GNTR connects Kopen Heat to Campbell Bay (43 km) and Campbell Bay to Indira Port (51 km); widening and improvement of these roads is also proposed.

4.89 The state of many urban and rural roads calls for investments to maintain and improve their state. Considering the exposure of these roads to heavy monsoons, the funds available for their maintenance is inadequate. Expansion of roads is also pending on account of land acquisition, which in the current scenario is extremely difficult.

4.90 In addition to roads, bridges across the creeks are necessary for ensuring traffic flow without delays. The bridge across Kalighat creek is nearing completion. The bridges across the other two creeks are also proposed in the Xth plan period.

Transport Infrastructure mainly shipping services are found inadequate to meet the growing demand. The demand for these services, is further expected to go up with the ban on ATR. Developing transport infrastructure is essential for tourism development. But this could be the biggest constraint.

### *Accommodation*

4.91 Accommodation is inadequate in A&N. Almost all the accommodation is restricted to areas in and around Port Blair; very little private accommodation is available outside Port Blair.

4.92 The total accommodation capacity of A&N (including government and private hotels, PWD / Government Guest Houses etc.) is estimated at 2000 beds. Of this, 80-90% of the accommodation is in Port Blair. The categorisation of accommodation availability in Port Blair is shown below :

| Category of Accommodation | % of total |
|---|---|
| High | 18% |
| Moderate | 35% |
| Lower end | 47% |

6.56 With the focus of the tourism in A&N being 'high value' tourists there is a need for quality accommodation at the higher end.

4.93 Besides Port Blair, Havelock is the only island with reasonable private accommodation. DIPT's guest houses, fall under the moderate – high end category. However, Havelock has a huge number of "eco-huts" – unregistered tourist accommodation at prices of Rs.50 – 100 per day.

4.94 All other destinations together offer a bed capacity of 200 – 250 beds per day but mostly in the form of PWD / Government Guest Houses which are not open to 'general' tourists.

4.95 Inadequate tourist infrastructure (quality as well as quantity) will be an issue in tourism development. Owing to the various restriction on development a mix of eco-friendly / mobile / permanent tourism infrastructure needs to be evolved.

4.96 The detailed availability and need for additional beds has been discussed in Chapter 9.

***Telecommunication***

4.97 Port Blair has a developed telecom network with public STD / ISD facilities. Internet access is available through public kiosks. However, not many mid range hotels have STD / ISD connectivity.

4.98 The telecom network in other locations is inadequate. While there is one telephone per village, STD / ISD facilities are available only along the Trunk Road. In Diglipur, for instance a tourist has to travel 16 kms from the Guest House to access a STD booth. Tele-connectivity' is therefore an area for improvement.

4.99 A major improvement in telecommunication in the islands has been effected through the introduction of Wireless in Local Loop (WiLL) system by BSNL which can

- Open up 2000 lines
- Support mobile services

Alongwith internet telephony on the anvil, this will go some way in improving the current situation.

### *Other Tourist Amenities*

4.100 The DIP&T runs a tourist information centre at their office, which provides information to tourists on tourist attractions, access etc. However, this facility is not available outside Port Blair. Considering the fact that most of the other locations are relatively unexplored, the tourists are at a loss of information. There is a definite need for tourist information centres and tourist guides.

4.101 Wayside amenities are also found wanting in many of the tourist sites. There is also dearth in other recreational facilities available for tourists

- Cinema Halls are available only in Port Blair
- Facilities for shopping is also limited in the islands
- Wood and shell based handicrafts, that are unique to the islands are also available only in the market place at Port Blair.

### ***Conclusion***

4.102 Basic Infrastructure is sufficient to meet the needs of the local population but needs augmentation at every stage particularly for the higher levels of tourist traffic envisaged and will come at a cost.

4.103 Tourism infrastructure is grossly inadequate in terms of both quality and availability. Transport is the most critical link.

4.104 But for pockets of project related infrastructure, the onus of development will lie with the government which has to take a lead role.

# CHAPTER 7

# ENVIRONMENTAL ASSESSMENT

4.105 This chapter examines the possible impact of tourism development on natural assets and the requirements of strategies to mitigate the same.

### ***Definition of Environment***

4.106 For the purpose of the study, the following catgorisation of environment has been adopted.

A&N Environment

- Biological Environment
  - Fisheries
  - Coral
  - Mangroves
  - Forests
- Baseline Environment
  - Air
  - Water
  - Socio-cultural

***Biological Environment***

**Fisheries**

4.107 A&N have a coastline of approximately 1900 kms with a continental shelf of 34900 kms; with 57 landing centres, the resource potential is estimated at 1.61 lakh tonnes. A&N account for 30% of Indian "Exclusive Economic Zone".

4.108 The marine environment in A&N is rich and houses 1200 species of fish, 350 species of echinoderms, 1000 species of molluscs and many other lower forms of life. Dugong, Dolphins, Whales, Salt Water Crocodile, Sea turtles and sea snakes are commonly found vertebrates.

4.109 While Fisheries have been identified as a thrust area for economic development impediments exist in the form of limited cold storage facilities, modern amenities etc.

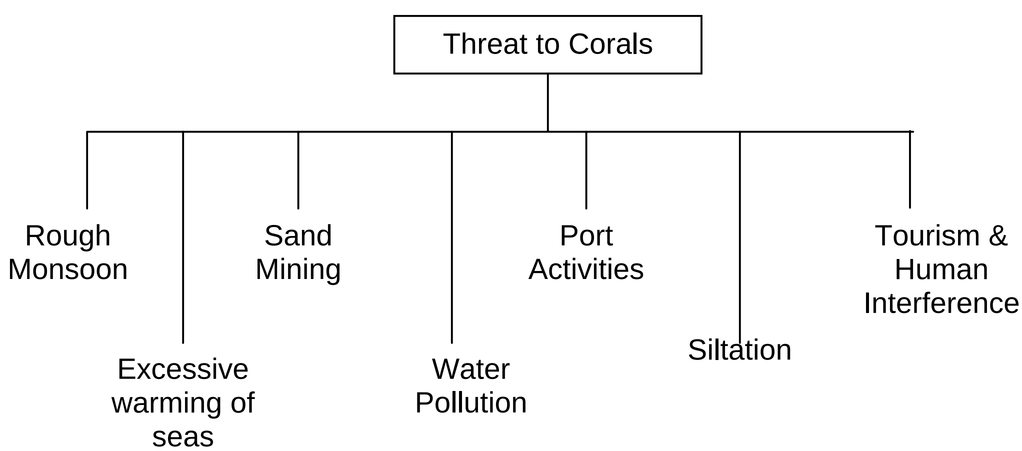
4.110 Game fishing / hunting would endanger the rare varieties of marine wealth such as the coconut cress, sea cucumber, dugong etc. Tourism, per se otherwise would not adversly impact fisheries provided developments take place at a distance from fishing villages and game fishing is controlled.

**Corals**

4.111 Corals and coral reefs are one of the unique and rich marine ecosystems of A&N islands and a major tourist attraction. Around 179 species of corals belonging to 61 genera have been reported in the islands. Both fringing as well as barrier type reefs are present.

4.112 Coral reefs are the breeding and nursing ground for a variety of fishes and marine organisms. Besides, they provide white sand to the beaches and act as a natural barrier for the shoreline. Hence, preserving coral reefs are vital to maintain the ecological balance of the marine eco-system.

4.113 Coral reefs world-wide are under threat on account of a variety of factors :




| Activities with Direct Impact | Actual / Potential Impact |
|---|---|

| | |
|---|---|
| Snorkelling | Physical damage (breakage, lesions)<br>Kicking up sediments |
| Scuba Diving | Physical damage (breakage, lesions) |
| Motor boating and yachting | Physical damage from anchoring<br>Physical damage from boat grounding |
| Fishing | Over exploitation of reef fish stocks |
| Collecting shells, lobsters, conch etc | Threatening local survival of rare species<br>Contributing to over exploitation |
| **Activities with Indirect Impact** | **Actual / Potential Impact** |
| Resort development & constructions | Increased sedimentation |
| Resort operations – Sewage disposal and solid waste disposal | Nutrient enrichment<br>Litter<br>Leaching of toxic substances from inappropriate waste disposal |
| Seafood consumption | Over exploitation of high priced resource species |
| Demand for marine curiosities | Exploitation of rare and endangered species such as shells, black corals and turtles |
| Construction of artificial beaches | Increased sedimentation |
| Cruise Ships | Litter from illegal or accidental solid waste disposal |

4.114 Options to limit exposure and therefore damage are :

- Limiting tourist numbers through price or permissions
- Spreading tourists across coral reefs to prevent concentration at a single point
- Allowing scuba diving / snorkelling under close monitoring
- Targeting the special interest groups who are environment conscious

***Mangroves***

4.115 Mangrove forests are found on shores, mouths of creeks and inland channels of these islands and occupy 966 sq.km area. Mangroves add to lush natural landscape of the islands, making creek cruises a creek a popular tourist attraction.

4.116 The unique and rich mangrove environment present in A&N has been the focus of substantial research. Concerns were raised about the decreasing quantum of mangrove forests (mangrove forests were destroyed to make land available to settlers, the wood also finds use as fuel wood, construction material and charcoal).

4.117 The A&N administration has imposed a total ban on extraction of mangroves with a penalty for non-compliance.

4.118 Tourism development along the creeks poses a threat in the form of clearance of forests for developing resorts, jetties etc. However, with the strict monitoring by the administration, existence of CRZ and the recent Supreme Court ban on felling trees, this can be controlled.

### *Forests*

4.119 A&N have 92% of the area under forest cover, with most of them being reserved/ protected forest. The forests of Andaman have broadly been categorised into 12 forest types including tropical evergreen, moist deciduous, littoral and mangrove forests. In most cases, the forest types are not distinctly demarcated and merge into one another.

4.120 The large forest cover houses a variety of flora and fauna some of which are endemic to the islands. The flora consists of more than 1400 vascular plants from 137 families, with 20% reputed endemic varieties. The forests are characterised by absence of wild animal / large mammals. The living resources comprise of 3500 species of plant, 58 mammals, 270 birds, 183 reptiles, 18 amphibians, 1184 fishes, 1825 insects, 950 molluscs, 600 crustaceans and 1000 others invertebrates.

4.121 The biggest threat to forests is in terms of their clearance for settlement of population and encroachments within forest land. Research studies have indicated that forest land has been cleared (especially in North and South Andaman) for encroachment and tourism development. This not only reduces the forest cover, but also causes harm to the natural life present in these forests.

4.122 A variety of regulations have however come into force which prohibit development on forest land. In addition, the recent Supreme Court Order, bans felling of naturally grown trees in A&N. This would also check the adverse impact of tourism on environment, if strictly enforced.

4.123 A&N's tourism strategy can be "Forest" focussed without harmful impact if forests are used for 'activity based tourism' – natural trails, bird watching and other research work. The sensitive areas of the forests can be earmarked as "core zone" - open only for serious research. The buffer zone can allow activities with only mobile infrastructure – eco-restlets, tents, tree top 'machan' etc. All tourism infrastructure can be developed in the peripheral area outside the forest cover.

4.124 Careful planning and monitoring of tourism will allow it to co-exist with the forest environment.

## ***Baseline Environment***

### *Air Environment*

4.125 There are a variety of sources of air pollution including industrial activity, vehicular emissions, increased air traffic etc.

4.126 The level of industrial activity in A&N islands is very low. Potential air pollution from the proposed power plant at Bambooflat is being handled through the use of alternate fuels.

4.127 Vehicular traffic in A&N is also not very high. As of 2000, only 419 three wheelers (a major pollutant) were registered in A&N, with only 18760 two wheelers and 2274 cars. This is spread across both the districts.

4.128 While, the level of air pollution is estimated well within permissible levels, development of tourism will have an impact in terms of increase in public transport vehicles and three wheelers. However, A&N administration can take pro-active steps through the mandating of clean fuels, use of non-mechanised transport, (where possible-the terrain being uneven) etc. to limit effect of air pollution.

### Water Environment

4.129 Water is a scarce commodity in A&N, with water rationing being a common practice; currently water scarcity is bigger problem than pollution.

4.130 Augmentation of water reserves is a pre-requisite for tourism. A&N administration has drawn up plan for augmenting water supply (storage areas). Rain Water Harvesting Schemes etc. need to be explored.

4.131 The major sources of water pollution in A&N are the disposal of sewerage into the sea and the spillage from ships especially near the ports. The former, with growth in population and tourism would become a potential source of pollution.

4.132 New tourism projects should be mandated to have their own Sewerage Treatment Plants. This is especially needed in Port Blair region where the concentration of population is high.

## SOCIO-CULTURAL ENVIRONMENT

4.133 The socio-cultural environment of A&N become critical on account of the presence of tribal population in the island.

4.134 A&N house six aboriginal tribal groups :

| Tribes | Location |
|---|---|
| • Jarawas | • South & Middle Andaman |
| • Sentinelese | • Sentinel |
| • Onges | • Little Andaman |
| • Great Andamanese | • Strait Islands |
| • Shompens | • Great Nicobar |
| • Nicobarese | • Car Nicobar & Katchal |

4.135 Two tribal groups – Jarawas and especially Sentinelese are still very hostile to outside population. But for the Nicobarese, all other tribes are primitive groups with hunting and gathering being the means of sustenance. Nicobarese practice not only cultivation and plantations, but also participate in commercial activities.

4.136 The dwindling population of the tribals is a source of concern. For instance only 25 Great Andamanese are surving at present. Shompens have reduced to a population of merely 135.

4.137 Because of their uniqueness, the tribal population in A&N is a subject of curiosity and kindles tourist interest. However, there are strict regulations under the Andaman & Nicobar Islands (Protection of Abongrial Tribals) Regulations with entry into tribal reserves strictly prohibited. Vehicular movement on the Andaman Trunk Road along the Jarawa Reserves have also been banned.

4.138 Tourism could negatively impact tribal lifestyle if tribal areas are freely opened and tribal practices put on display. However, as mentioned above, this is not permitted. Simulated settings can add to tourist interest and can be undertaken.

### *Regulatory Controls*

4.139 Article 48-A of Indian Constitution provides guidelines for environment protection in India.

*"The state shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country"*.

4.140 The main environmental regulations that are application to A&N is shown below :

- Forest (Conservation) Act 1972
- Wildlife (Protection) Act 1972
- Indian Forests Act 1927
- Environmental Protection Act 1986
- (Prevention and Control of Pollution) Act 1974, 1981
- CRZ, 1991
- Andaman & Nicobar (Protection of Aboriginal Tribals) Act, 1956

4.141 Other than these acts there have been international conventions and United Nations sponsored conferences on environment protection and management. In India, the responsibility for environmental protection is with the Ministry of Environment and Forests (MOEF).

*Environmental Protection Act, 1986*

4.142 This act gives the Central Government powers to make rules and provide strictures to protect and improve environment quality. The powers stipulated under this act allow the Government to lay down standards for emissions and discharge of pollution, inspection into environmental pollution, handling of dangerous goods and spatial control over industrial activities. The Government has over the past few years specified a number of measures and regulations under this act. One such declaration affecting Andamans is the Coastal Regulation Zones (CRZ).

4.143 Through the CRZ, the government seeks to prohibit certain activities in various types of zones in coastal area. For this purpose there has been categorisation of the coastal zones into 4 areas from category I (CRZ 1) to category IV (CRZ 4). For each of these areas separate prohibitions have been mentioned.

4.144 CRZ I – Ecologically sensitive and important areas where no new constructions is permitted within 500 metres of High Tide Line (HTL)

4.145 CRZ II– Already developed areas such as towns and settlements where no new buildings are allowed on the seaward side of the road and new buildings on the landward side are subject to the regulations of the Town Planning Committee.

4.146 CRZ III – Areas that are relatively undisturbed and not covered in first two categories where no new buildings is allowed within 200 metres from the HTL and approval of MOEF is necessary for hotels/resorts beyond this area.

4.147 CRZ IV – This category is specifically for islands and hence assumes importance to Andamans. Guidelines regarding new construction, number of floors, design of construction, materials used etc have been provided under this category.

4.148 CRZ regulations restrict what is considered acceptable tourism development internationally. Internationally CRZ norms of 50m and 70m are commonly used and combined with stringent limits on land area covered, number of buildings etc. This has enabled tourism to co-exist with environment protection. The Government needs to look at CRZ regulations on a case to case basis rather than a blanket application.

**The Indian Forest Act, 1927**

4.149 This act gives the State government / Union Territory powers to declare any forest land or waste land as a reserved or a protected forest. The act also provides framework for designating certain forest as a reserve or protected forest.

**The Forest (Conservation) Act, 1980**

4.150 This act stipulates that all proposals in forest area for a change of use to 'non-forest purpose' or de-reservation requires approval of Central Government. Approval of the government is required in the following specific areas: -

- Cease designation of a reserve forest
- Clearance of trees for reforestation
- Lease or assign forest area to a private individuals
- Use of forest land for non-forest purposes

***Wildlife (Protection) Act, 1972***

4.151 The act deals with two main aspects – the loss of natural habitats for wildlife and the resulting threat to wildlife. It also provides for mechanism for banning trade in endangered species and monitoring trade in other animals. Wildlife Sanctuaries, Closed Areas and National Parks are designated under this Act. The purpose of wildlife sanctuaries has been stated for protecting various peculiar species of flora and fauna and to prohibit killing or exploitation of any wildlife within the limits of the sanctuary. Various measures introduced in the 1991 amendment include: -

- Ban on export of birds and extending the list of protected plant species
- Seizure of vehicles and equipment used by poachers
- Commercial felling of trees and exploitation of wildlife banned in sanctuaries
- Controls for hunting increased

4.152 A Tourism Development Strategy compliant with these acts is envisaged not to pose any detrimental environment impact.

***Conclusion***

4.153 While the impact of tourism development on the islands can be controlled, future tourism development options need to be evaluated on a case to case base with detailed studies covering various aspects including :

| | Parameter | Assimilation Capacity | Resource Base | Impact Development |
|---|---|---|---|---|
| Biological Environment | Forest | | | |
| | Shrubland | | | |
| | Grassland | | | |
| | Herbfield (alpine) | | | |
| | Sand / Shingle / Rock | | | |
| | Cropland | | | |
| | Urbanland | | | |
| | Lakes | | | |
| | Rivers | | | |
| | Estuaries | | | |
| | Inter-tidal | | | |
| | Marine | | | |
| | Wetlands | | | |
| Physical Environment | River regime | | | |
| | Erosion / land stability | | | |
| | Sedimentation | | | |
| | Surface water | | | |
| | Ground water | | | |
| | Agricultural soil | | | |
| | Foundation materials | | | |
| | Climate / atmosphere | | | |
| | Nuisance (noise, dust, smell) | | | |
| | Landform | | | |
| Social Environment | Public participation | | | |
| | Employment | | | |
| | Settlement | | | |
| | Land value | | | |
| | Existing land uses | | | |
| | Risks and anxieties | | | |
| | Personal and social values | | | |
| | Historical / cultural | | | |
| | Landscape / visual | | | |
| | Recreation | | | |

# CHAPTER 8

## Tourism Development Strategy for A&N Islands

1.24 This chapter presents a SWOT analysis for A&N and key issues arising out of these, for tourism development in A&N Islands. A suitable tourism development strategy has been articulated based on these and the principles for tourism development outlined earlier.

***SWOT Analysis***

1.25 The SWOT analysis for A&N is based on the detailed field visits by AFF to various locations and interactions with various stakeholders of tourism (including tourists themselves). This is presented in the exhibit below.

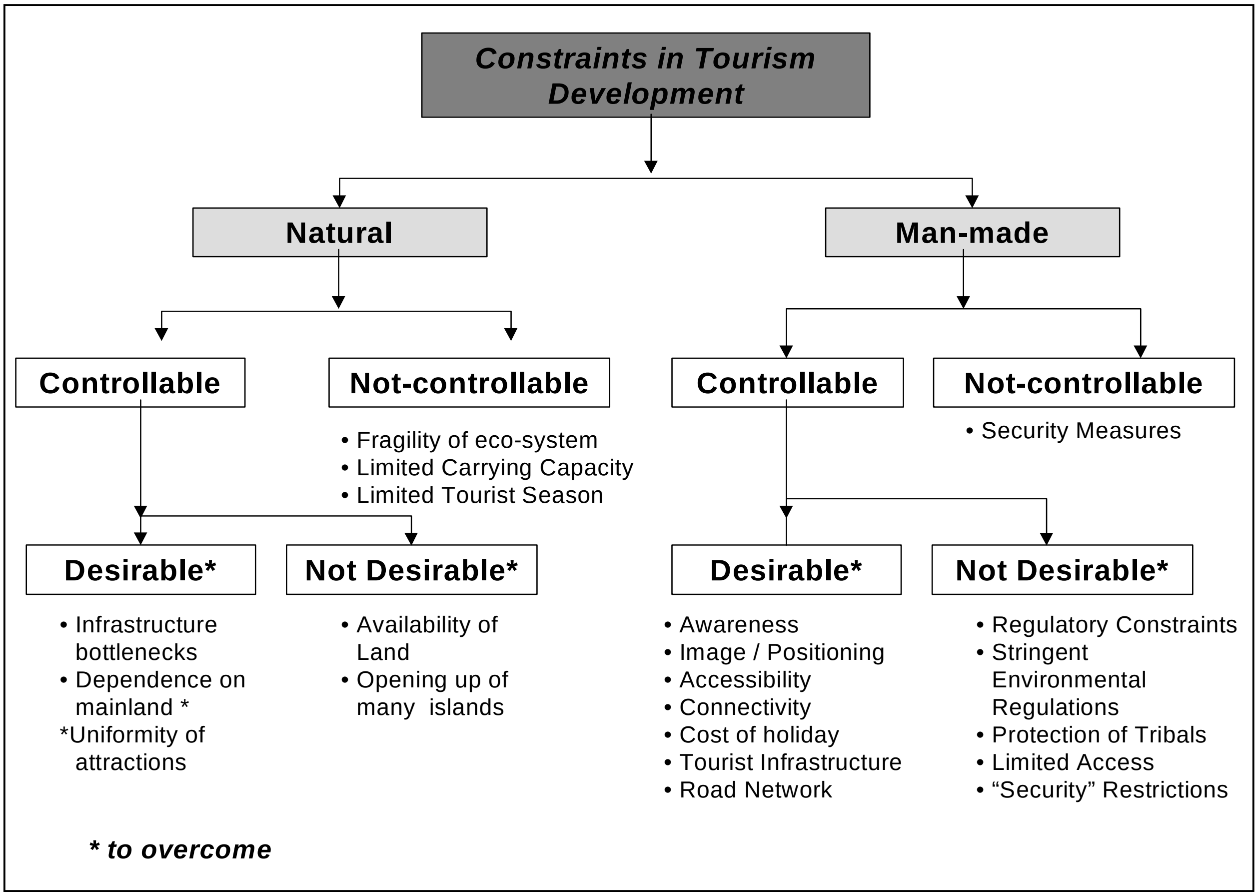
***Exhibit 8.1***
***SWOT Analysis for Tourism Development in A&N***

| Strengths | Weaknesses |
|---|---|
| • Strong "core" product<br>• Diversity of offerings<br>• World class tourist attractions / products<br>• Pristine state of attractions<br>• Proximity to SE Asian Countries - current tourism "boom" areas<br>• Security, Law & Order situation<br>• Literate and tourist friendly population<br>• Clean environment<br>• Evenly distributed tourist attractions (equally attractive) | • Lack of awareness as a tourist destination<br>• Lack of defined image / positioning<br>• Limited accessibility to A&N<br>• "Costly" to reach destination<br>• Limited / irregular connectivity within A&N<br>• Limited availability of land for tourism / infrastructure development<br>• Fragile Eco-systems<br>• Limited Carrying Capacity<br>• Limited tourist season (climatic)<br>• Inadequate Tourism Infrastructure<br>• Basic Infrastructure bottlenecks<br>• Dependence on main land for supplies<br>• Uniform attractions across A&N – sustenance of interest ?<br>• Environmental / Regulatory Limitations<br>• "Security" concerns and restrictions |
| **Opportunities** | **Threats** |
| • Boom in tourism sector<br>• Potential for Indian to develop as a major tourism hub<br>• Attraction of tourists away from neighbouring "tourism boom" areas<br>• Growth in leisure travellers<br>• Eco Tourism – a boom segment<br>• Growth in "knowledge / intellectual tourism"<br>• Tourism in nascent stage (possibility to guide development) | • Competition from other states / UTs in India<br>• Competition from locations with similar offerings (Maldives, Mauritius, Lakshadweep)<br>• Growth in outbound tourism - need for an international holiday<br>• Competition from other forms of tourism<br>• Competition from SE Asian countries<br>• Impact of tourism on environment / ecology |

1.26 Weaknesses and constraints were further analysed to assess whether they needed to be overcome / ignored or serve as boundaries to tourism development.

***Exhibit 8.2***

***Constraints in Tourism Development***




1.27 Aspects closely inter-linked with tourism , some of which are unique to A&N are discussed below, by category of constraint.

***<u>Natural Limitations - Not-Controllable Factors / Controllable (but not desirable to control)</u>***

**Fragility of Eco-System**

1.28 A&N houses a wealth of natural attractions - endemic flora and fauna, wide variety of marine life, rich coral life and vast forest cover. Faunal ecologies including turtle nesting and coral reefs are prone to high risk of damage from development and /or human presence. In addition, quality of environment (ie. without the effect of pollution) is critical for the survival of various eco-systems.

**Limited Carrying Capacity**

1.29 In addition to fragile eco-systems that need protection from over-exposure, there are limitations in the availabilty of basic infrastructure (water, sewerage system etc.). Therefore, in the perspective plan, the carrying capacity of the islands is pegged at a level that allows for sustenance and re-generation of natural wealth and avoids over straining of resources.

**Limited Tourist Season**

1.30 Climatic condition limits tourism as A&N experiences both south-west and north-east monsoon. The monsoon lasts from April to December with the period from May to November witnessing very heavy rainfall (~2500 mm rainfall). The heavy monsoon accompanied by strong winds and high level of humidity do not provide "ideal" tourist conditions for almost 7-8 months in a year. Accessibility to Port Blair by ships and connectivity within A&N (weather conditions restrict travel by ship) are impaired during the monsoon period.

**Availability of Land**

1.31 Availability of land is limited as more than 92% of the land is under forest cover (most of which are protected / reserve). The division wise availability of revenue land for allocation (net after past allotments of revenue land) is provided below.

**Land Availability**

(Area in Sq.Km)

| Sl. No. | Name of the Island | Geogra-phical Area | Forest Area | | Area other than Forest |
|---|---|---|---|---|---|
| | | | Reserved | Protected | |
| | ***Andaman Group of Islands*** | | | | |
| 1 | Aves Island | 0.16 | - | - | 0.16 |
| 2 | Baratang Island | 297.60 | 283.20 | - | 14.40 |
| 3 | Curlew Island | 0.03 | 0.03 | - | - |
| 4 | East Island | 6.11 | 6.11 | - | - |
| 5 | Flat Bay Island | 9.36 | 9.36 | - | - |
| 6 | Havelock Island | 113.87 | 95.60 | - | 18.33 |
| 7 | Interview Island | 133.87 | 133.87 | - | - |
| 8 | John Lawrence Island | 41.98 | 41.98 | - | - |
| 9 | Little Andaman Island | 731.57 | 699.29 | - | 32.28 |
| 10 | Long Island | 17.90 | - | 13.58 | 4.02 |
| 11 | Middle Andaman Island | 1535.50 | - | 1344.58 | 190.92 |
| 12 | Neil Island | 18.90 | 2.20 | - | 12.16 |
| 13 | North Sentinal Island | 59.67 | 59.67 | - | - |
| 14 | North Passage Island | 21.96 | 21.98 | - | - |
| 15 | North Andaman (Main Island) | 1375.99 | - | 1180.21 | 195.78 |
| 16 | Narcondam Island | 7.38 | 7.38 | - | - |

| Sl. No. | Name of the Island | Geogra-phical Area | Forest Area | | Area other than Forest |
|---|---|---|---|---|---|
| | | | Reserved | Protected | |
| 17 | Peel Island | 27.84 | 27.84 | - | - |
| 18 | Prolob Island | 13.05 | 13.05 | - | - |
| 19 | Rutland Island | 137.17 | 136.17 | - | - |
| 20 | Strait Island | 6.01 | 6.01 | - | - |
| 21 | Smith Island | 24.70 | - | 15.79 | 8.91 |
| 22 | Stewart Island | 7.30 | 7.23 | - | - |
| 23 | South Andaman Island (including Chatham) | 1347.97 | 936.36 | 111.66 | 299.95 |
| 24 | Viper Island | 0.50 | - | - | - |
| | ***Nicobar Group of Islands*** | | | | |
| 1 | Car Nicobar | 126.91 | - | - | 126.91 |
| 2 | Chowra | 8.28 | - | - | 8.28 |
| 3 | Teressa | 101.26 | - | 60.00 | 41.26 |
| 4 | Bompoka | 13.46 | - | 10.00 | 3.48 |
| 5 | Katchal | 174.30 | - | 120.00 | 54.30 |
| 6 | Kamorta | 188.03 | - | 140.00 | 48.83 |
| 7 | Nancowry | 66.82 | - | 40.00 | 26.82 |
| 8 | Trinket | 38.26 | - | 20.00 | 16.26 |
| 9 | Little Nicobar | 159.02 | - | 155.00 | 4.02 |
| 10 | Kondul | 4.86 | - | - | 4.66 |
| 11 | Pilo Milo | 1.29 | - | - | 1.29 |
| 12 | Great Nicobar | 1044.54 | - | 960.40 | 84.14 |

*Source : Forest Statistics, 1997-98*

1.32 A large part of the revenue land has already been alloted for a variety of purposes. Compounding this is the recent Supreme Court Order which has

- Banned encroachments in forest area
- Recommended resettlement of the pre 1978 encroachers in their alloted revenue land
- Mandated resettlement of post 1978 encroaches in revenue land (that needs to be allotted afresh) on a priority basis

These would further reduce the net revenue land availability for other developments.

**Opening of islands for tourism**

1.33 Only 13 islands are readily available for tourism development (perhaps for resorts where revenue land is available).

| | |
|---|---|
| Total number of islands in A&N | 572 |
| After reduction of small islands, isles and rocks | 160 |
| Islands with non-forest lands | 24 |
| LESS : Exclusive tribal reserves | 11 |
| **Area available for development** | **13** |

***Natural Limitations - Controllable Factors***

**Infrastructural Bottlenecks**

*1.34* There are “Basic Infrastructure” bottlenecks in terms of availability of water, power, sewerage system etc. With emergence of options like solar power, hydel power, rain water harvesting, desalination etc. these bottlenecks can be addressed (probably at a cost, which has to be related to viability).

**Dependence on Mainland**

1.35 A&N is currently dependant on the mainland for most of the resources required for sustenance (but for some food articles that are cultivated locally). In areas outside Port Blair, supplies are refreshed once a week or less frequently and in most cases are rationed. Therefore, to a large extent tourists compete with the local population for these resources. The demand for these products invariably pushes up the prices,leading to increased cost of living for locals.

**Uniformity of Destinatons**

1.36 A&N have evenly spread out tourist products that are equally attractive and provide the possibility of spatial distribution of tourism development; the contrary issue here is to sustain the interests of tourists. Further, the environmental / regulatory constraints do not really allow for augmenting the natural attractions with man-made attractions.

***Manmade Limitations - Not-Controllable Factors / Controllable (but not desirable to control)***

**Security Concerns**

1.37 A&N, by virtue of their strategic location are a sensitive zone; restrictions on entry and free movement of foreigners (30 day permit, entry / stay only at select destinations) already exist.

1.38 There is a recent proposal to make A&N islands the base for housing the Air and Sea assets of the Strategic Nuclear Command (SNC). This would have a much larger impact on tourism and the movement of both domestic and foreign visitors.

# REGULATORY CONSTRAINTS

1.39 There are number of regulations applicable to A&N islands including :

- Forest Conservation Act
- Environment Protection Act
- Coastal Regulation Zone
- Protection of Tribals etc.

to name a few.

1.40 The tenets of these regulations affect tourism development. For instance

- Forest Conservation Act and the recent SC judgement disallow any sort of development in reserved / protected forests, sanctuaries, natural parks / reserves
- A&N falls under 3 CRZ zones – CRZ I, CRZ II and CRZ IV. CRZ I (applicable to protected / reserve forests / other sensitive areas) prohibits any development within 500 mts of High Tide Line. CRZ II and IV prohibit development within 200 mts of High Tide Line. Considering the topography, vast shoreline and small breadth of the island, most of the areas fall under CRZ, thereby constraining physical development.

# ACCESS TO NATIONAL PARKS / SANCTUARIES

1.41 A&N houses numerous bio-spheres, national parks, sanctuaries, wildlife reserves and marine parks which could be definite tourist attractions, but entry to which is restricted / limited.

***Manmade Limitations - Controllable Factors***

# LACK OF AWARENESS

1.42 A&N is not a well-known tourist destination nationally and inter-nationally - a fact reflected by the low tourist inflow into A&N, especially foreign visitors.

# LACK OF IMAGE / POSITIONING

1.43 While A&N has a strong ‘core’ product, it still lacks a distinct image and positioning like other established tourist economies. For instance, Kerala – “God’s own country”, Malaysia – “Truly Asia” have become synonymous on account of distinct positioning and branding.

***Accessibility and Cost***

1.44 Accessibility to A&N islands is a bottleneck :

- Port Blair is the only entry point
- Only domestic connectivity at present - no international connectivity
- Domestic Connectivity only with Chennai and Kolkata by air and Chennai, Kolkata and Visakhapatnam (infrequent) by ship
- Limitations on nature of air carrier - only 737
- Length of air strip - limitation on load factor and hence carrying capacity
- Only morning flights are permitted
- Irregular shipping schedule
- Long journey time (by sea)
- Inadequate cabin accomodation in ships; also difficulty in securing cabin accomodation
- Carrying capacity - a limiting factor during peak season.

1.45 The cost of travel to A&N by air (the preferred option) is prohibitive even from the closest points on the mainland. Other regional destinations which also qualify as "foregin" holidays are therefore preferred.

***Comparative Air Fares***

in Rs.

| Destination / Origin | Chennai | Mumbai | Delhi |
|---|---|---|---|
| Singapore | 17000 | 26795 | **26795** |
| Malaysia | 15000 | 26795 | **26795** |
| Maldives | **14410** | **1885** | **30430** |
| Sri Lanka | **8285** | **19405** | **31160** |
| Port Blair | 14300 | 23700 | 32200 |

*Source : Sita Travel & Tours (Per person in May 2002)*
*Rates valid for 3 months; Rates are for a round trip*

***Connectivity (within A&N)***

1.46 The issues in inter island conectivity include :

- Very limited road networks necessitating movement by ferry to Middle and North Andaman
  - *The recent SC ruling has put a banned vehicular movement on two large stretches of the Andaman Trunk Road. This further affects connectivity and increases presure on the shipping services*
- Breaks in road networks for sea crossing leading to longer journey time
- Only day journey possible by road
- Lack of frequent and regular shipping servies
- No prior information about shipping schedules which discourages prior planning
- Lack of fast ships
- Limited cabin accomodation
- Lack of berthing facilities e.g. Car Nicobar, which is a district headquarter cannot berth ships with passenger capacities greater than 150
- Advance reservation for return journey not possible

- Poor quality of facilities in ships
- Not all tourist attractions have ship / ferry connectivity. Travellers have to depend on private dunghies which are not safe options

***Lack of Basic Tourism Infrastructure***

1.47 A&N is relatively undeveloped in terms of quality tourism infrastructure. With the exception of Port Blair, private accommodation is very limited and found wanting in other locations. Currently, many tourist locations have only Government Guest Houses that are not open to public. Standard of existing facilities are generally below par.

1.48 Telecommunication is also developed only in Port Blair, leaving a gap in other locations. Wayside amenities / tourist information centres etc. are also inadequate.

***Tourism Development Strategy for Andaman & Nicobar***

***Boundaries for the Strategy***

1.49 The boundaries for the Tourism Development strategy of A&N are defined by

- The objective of promoting tourism ie. Socio-economic benefit
- Core offering i.e. Nature
- Need for sustainability and compliance with WTO's Bali Declaration
  - Economic Sustainability : Provide economic returns/ earning potential to local community/intermediaries
  - Social Sustainability : Tourism at a level where society can absorb it without disharmony
  - Ecological Sustainability : Tourism within natural capacities and providing for re-generation
  - Cultural Sustainability : Ensure that tribals/ locals maintain distinct cultural traits
- Environmental, natural and regulatory factors
- Tourist preferences and expectations
- Balancing stakeholder interest

Sustainable tourism development envisages

- Operating within natural capacities for regeneration and future productivity of natural resources

- Recognising contribution that people, communities, customs and lifestyle make to tourism experience

- Providing these resources with equitable share in the economic benefits of tourism and

- Guidance by the wishes of local people and communities

***Source** : Tourism Concern & WWT, 1992*

1.50 Some of these factors, acting as boundaries have been discussed in earlier chapters. They are nevertheless presented below for a holistic understanding of the critical factors driving tourism strategy.

| ***Supreme Court Ruling*** | | |
|---|---|---|
| **Key Recommendations** | **Implication** | **Impact on Tourism Development Strategy** |
| Banning of felling of trees in A&N except in designated and used forest areas and that too for local consumption | • Development work (roads, resorts etc.) cannot be undertaken<br>• Limited availability of raw material for tourism infrastructure | Mobile Tourism ie. Camping, cruises etc. |
| • No encroachment of forest land<br>• No commercial plantations on forest land<br>• Eviction of encroachers & their resettlement | Further restriction on land availability for tourism development | • "Hub and spoke" concept with development only in select location.<br>• Focus on camping / tents / tree houses etc. cruises etc. |
| Regulate entry of people into islands by imposing relevant restructions under Sec.(3) and other provision of Environment Protection Act | • Restricted entry / movement of tourists<br>• Difficulty in opening up new areas | Focus on islands that are possible to access |
| Ban on extraction of sand (on further extension after 30th September) | Availability of material for construction / development activities | Emphasis on tents, tree houses, cruises & pre-fabricated structures |
| No concrete / permanent infrastructure for tourism in the islands | Restrictions on development of basic and tourist infrastructure | • Excursion trips into forest areas<br>• Tented accommodation<br>• Pre-fabricated structures that can be dismantled |
| Allotment of revenue land for post 1978 encrochers into forest | Restricted land availability for tourism development | Development in select locations |
| Issue of identity cards to residents and subsidies only to resident | Increased cost of transport, power, water, telecommunication etc. | Focus on high vaue tourists |
| Closure of vehicular taffic in Andaman Trunk Road (in the Jarawa Reserve Area) within three months | • Connectivity problems to Rangat, Mayabunder & Dighpur<br>• Reliance only on ferry services (lack of frequency, regularity etc.) | • Improve connectivity<br>  • More ferry services<br>  • Regular service<br>  • Entry point at Diglipur and at a later stage Car Nicobar |
| • Enhancement of 'protected area network' in main island<br>• Unworked 'forest areas' in Diglipur, Mayabunder<br>• Rangat and Baratang made into Natural Park | Restriction on Tourism activity in the areas | • Creation of core, buffer and peripheral zones<br>• 'Hubs' to be developed in perhipheral zone<br>• Protected area for excursion activities |

| ***Environmental / Regulatory Constraints*** | |
|---|---|
| **Issue** | **Direction of Strategy** |
| Ecological Fragility of A&N | • Tourism with limited carrying capacity<br>• Evenly distributed development |
| Forest Conservation Act, CRZ and other regulation<br>• Land availability<br>• Nature of development | • "Hub and Spoke" concept tourism development at 'hubs' and 'spokes' as excursion points<br>• Activity based tourism in forest<br>• Nature trails, trekking, bird watching<br>• Mobile tourism – camping, cruises etc. |
| Protection of sanctuaries, reseres, biospheres | • Categorise as core, buffer and peripheral areas<br>• Activity / excursion in buffer zones / periphery zones<br>• No entry in sensitive zones<br>• No development encouraged; only camping / tree top machans |
| Tribal Welfare Act. | • No entry / development in tribal areas<br>• Simulation of tribal village proposed |
| Seasonality | • Off season permit for resort based activities in select location<br>• Natural re-generation in other areas |
| Opening up of Nicobar Islands | • Not envisaged in the next 5-10 years<br>• 'Cruise Tourism' in Nicobar (Provision for stop area at Nicobar) |
| Restrictions in opening up islands | • Opening / leasing islands having revenue land, compliant with CRZ proposed<br>• 'Island Resort' concept to promote exclusivity<br>•one resort per island<br>•eco-friendly<br>•regulations on nature of construction |
| ***Tourist Preferences / Categorisation*** | |
| **Tourist Preferences** | **Direction of Strategy** |
| Domestic / Foreign | • Target high value tourists<br>• Clear product offering and positioning |
| Leisure, Recreation & Holiday Tourists | • Focus on variety<br>•Resorts for facility based tourists<br>•Eco resorts for nature tourists<br>•Tenting / camping for adventure tourist<br>•Multiple excursion points |
| Business & Professional Tourists | • Develop resort islands specifically for the segment |
| Adventure tourists | • Water activities<br>• Nature trails<br>• Trekking<br>• Scuba diving / snorketing |
| Relaxation | • Resort / Island Resort cruises |
| Cultural & Heritage | • Visit to monuments / historical sites, sound & light shows |

| Tourist Preferences / Categorisation | |
|---|---|
| **Tourist Preferences** | **Direction of Strategy** |
| Nature | • Beaches<br>• Forest trails<br>• Sanctuaries / natural parks<br>• Mangrove cruise<br>• Limestone caves<br>• Mud volcanoes<br>• Bird watching<br>• Flora / Fauna study<br>• Turtle Nesting |
| Intellectual / Knowledge Tourists | • Marine Tourism<br>• Forest Tourism<br>• Bird watching<br>• Coral studies<br>• Turtle Nesting<br>• Flora / Fauna research |

***Directions for Tourism Development***

1.51 The common principles and concepts that emerge from the multiple factors discussed above for development of tourism in A&N are :

- Zero-impact / Eco-tourism through the adoption of zoning systems
- Natural rather than man-made attractions
- Growth as per carrying capacity to allow for re-generation
- High value tourism (to balance returns with lower volumes)
- Spatial distribution through a “Hub and Spoke” concept
- ***Sustainable tourism***

***Eco Tourism***

1.52 Eco tourism can be introduced in critical habitats of A&N including biospheres, wildlife sanctuaries, mangroves, flora and fauna, coral reefs, marine life through activity tourism. Activity tourism facilitates excursion / day trips into forests doing away with the need for permanent development.

- Camping
- Jungle Trails
- Trekking / rock climbing
- Snorkeling / Scuba diving
- Kayaking / canoeing

1.53 Eco-sensitive tourist destinations should be categorised into zones with different carrying capacities and pricing levels and catering to different tourist interests.

*Eco Tourism Initiatives*

**Thenmala Eco-tourism Project**

Thenmala Eco-tourism project has been conceived to promote eco-tourism in the high ranges of Kollam and Pathanamthitra districts of Kerala with Thenmala as the focal point. The major components of this project are Eco-friendly general tourism, Eco-tourism and Pilgrimage tourism. The project is designed to provide nature education, employment to local communities without upsetting the fragile ecological balance of environment There has been divided into 4 zones. The Culture Zone, The Adventure Zone, The Leisure Zone and The Deep Woods, each catering to a different segment of tourists based on their extent of interest in eco-tourism.

**Wyanad Forests - Kerala**

The latest breakaway for eco-tourists is being created in a forest resort in Wyanad district of north Kerala where houses atop the 90 feet towering Fycus trees offer both adventure and tranquility to eco-tourists. The houses modeled on the Erumadams, the native habitats of the local Paniya tribe have been consciously made as a blend of modern amenities and ecological sensibilities. All the requirements of food, power, lamps etc. are met in a self-sufficient eco-friendly manner. The concept is quite popular with the foreign tourists.

**Jungle Resorts - Karnataka**

Jungle Lodges and Resorts Limited (JLR) was started in 1980 with a resort in Kabini. Completely owned by the Govt. of Karnataka, it operates six resorts and has identified four projects for development in the near future including Bannerghatta, Hampi, Gokarna and Kemmangundi. Besides the thrill of staying in eco-resorts built in the midst of forests it also provides other facilities such as scuba diving in Devbagh, river rafting in Dandeli, Ayurveda facilities in Kabini and Bheemeshwari. All locations have naturalists, who guide the visitors for trekking, jungle safaris, fishing etc.

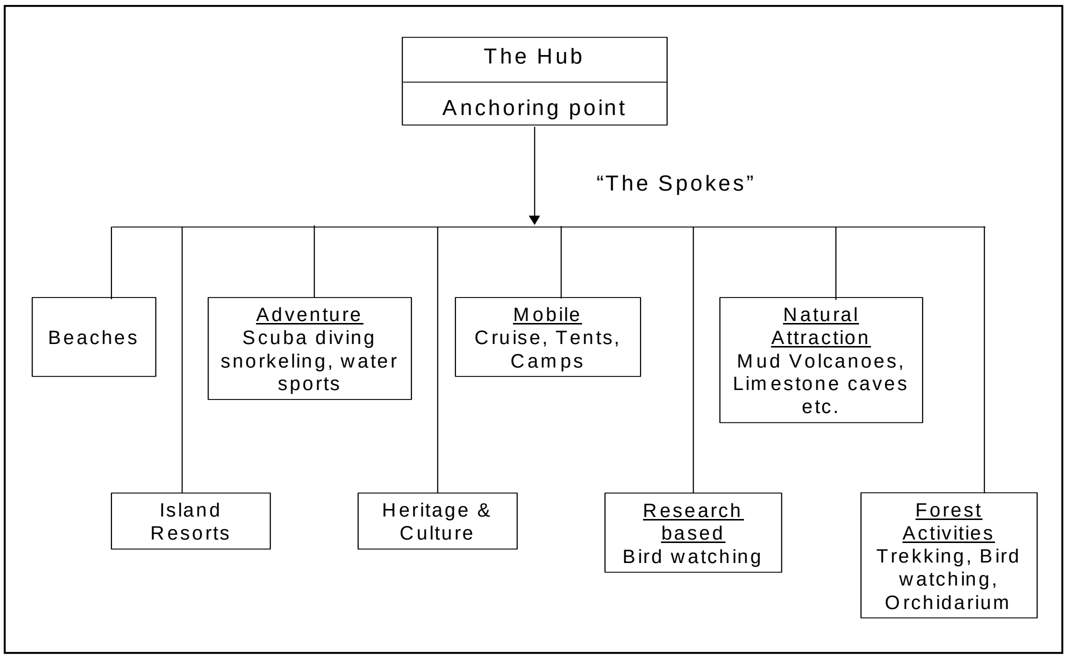
JLR also ensures conservation of environment at each of their locations. The JLR resorts management comprises of people with experience in areas such as forestry, nature conservation etc. Eco friendly material is used for construction. The number of tourists at any point of time is limited to 30 – 50 in each of the resorts. Locals are employed for all the maintenance work at the site. Tourists are advised to follow nature friendly practices. Each of the JLR spots has a team of naturalists, who guide the visitors for trekking, jungle safaris, fishing etc. The safaris etc. are limited to the tourist zone of the forests and entry into the reserve forests is prohibited.

## Areawise Development Concept

1.54 For the purpose of the perspective plan, tourism development is described along the following tourist areas :

- Diglipur (covering North Andaman)
- Mayabunder (Middle-North Andaman)
- Rangat (Middle Andaman)
- Port Blair (incl. Baratang and South Andaman)
- Little Andaman
- Nicobar (including Car Nicobar, Katchal, Great Nicobar)

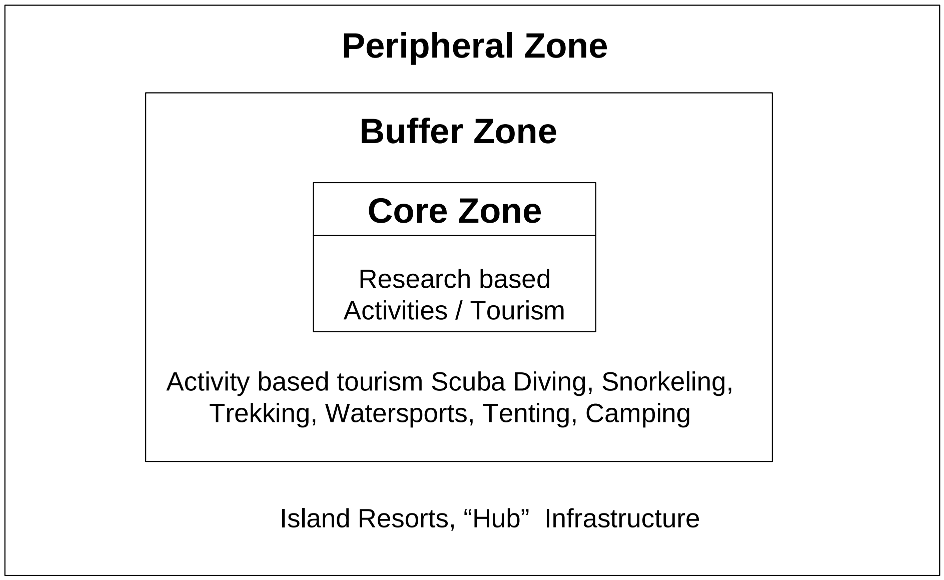
1.55 The generic tourism development concept (hub and spoke) is presented below :



| Area | The Spokes* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Hub** | **Beaches** | **Island Resorts** | **Adventure** | **Mobile** | **Cruise** | **Heritage Culture** | **Nature** | **Forest** |
| North Andaman | Diligpur | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| North – Middle Andaman | Mayabunder | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Middle Andaman | Rangat | ✓ | ✓ | ✓ | ✓ | | | | ✓ |
| South Andaman | Port Blair, Havelock, Neil | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Little Andaman | Little Andaman | ✓ | | ✓ | ✓ | | | ✓ | ✓ |
| Nicobar | Car Nicobar Katchal Gr. Nicobar | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ |

* These are excursion points from a hub, each aligned with a particular product. As more than one spoke is aligned with the hub, individual locations have not been mentioned.

1.56 Each set of “hubs” and “spokes” will need to be zoned in the following manner :




**Phasing**

1.57 A&N are in an early stage of tourism development. On account of the relatively less developed state of the tourism sector and the locational / natural constraints, tourism development has to be undertaken in a phased manner. The following phasing strategy is proposed for A&N island.

| Locations | | **Existing** | **New** |
|---|---|---|---|
| | **Existing** | Short Term<br>0 – 5 years | Short Term<br>Medium Term<br>2 – 10 years |
| | **New** | Medium Term<br>5 – 10 years | Long Term<br>> 10 years |

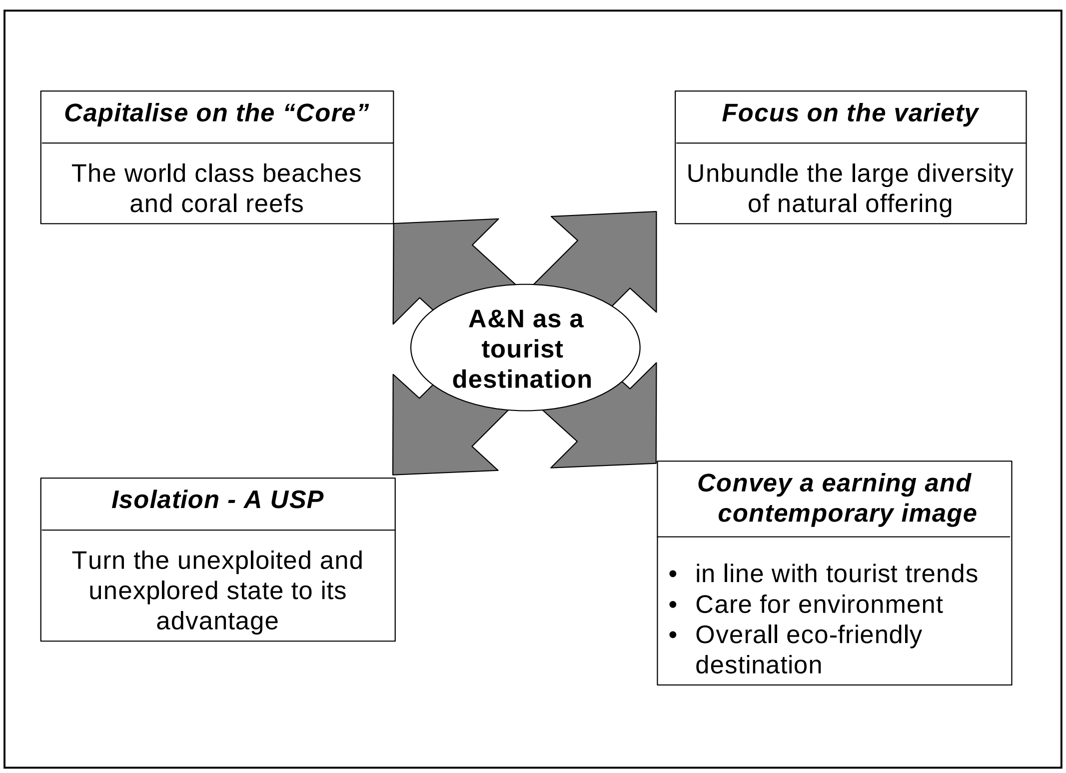
1.58 The phasing strategy proposed for the tourism development in A&N include :

| Period | Nature of Development |
|---|---|
| 0 – 2 years | • Concentrate on existing tourist destinations and products<br>• Port Blair will continue to be the only entry point |
| 3-5 years | • Develop Diglipur as the second entry point<br>• Circuits for development<br>  • Diglipur and Mayabunder<br>  • Port Blair, Baratang and Rangat<br>  • Port Blair and Little Andaman |
| 6-10 years | • Cruise Tourism in Nicobar Islands |
| >10 years | • Develop Great Nicobar as the third entry point<br>• Great Nicobar, Katchal and Car Nicobar will be the fourth circuit |

1.59 Details of the potential products based on the above concepts are presented in the next chapter.

**Positioning**

1.60 For the tourism development strategy and phasing to materialise, a well-defined positioning as well as focused marketing and promotion efforts become critical. The broad platform for positioning tourism in A&N islands is shown below :



1.61 The core attraction of A&N is undoubtedly nature. The advantage which A&N has is the wide variety that it has to offer in nature – beaches, forests, moutains, animal life, marine life, corals, flora and fauna, mangrores, mud volcanoes, limestone caves, waterfall, rivers etc.

1.62 Instead of merely positioning itself as a beach destination, A&N should therefore position itself as a 'Nature' Destination and convey the 'live with nature' message.

***Marketing and Promoting***

1.63 The critical aspects in marketing are to define :

- Customer segment
- Marketing methodologies

**Customer Segment**

1.64 The target segments for A&N fall under the following categories

*By Income / Socio Economic Level*

1.65 A&N is proposed to be a 'high' value destination to offset the limited carrying capacity.

1.66 Currently, there is a dominance of domestic tourists, bulk of whom fall under the 'budget category'. While the 'budget' tourists must remain to provide "bulk" especially during the leaner months, A&N has to target on potential 'affordable' segments.

- High income households (with high discretionary spend) estimated at roughly 125000 – 150000 households in India. This is the premium high spend segment with deep pockets
- Outbound Tourists – where affordability and high spend are not constraints. This is a high growth segment (growing at 14% compared to the Indian average of 6%)
- NRIs – significant number of NRIs abroad, who besides being high end tourists can also act as ambassadors for A&N
- International Expatriates : owing to liberalisation, a large number of expatriate population are in India, especially in the south. Marketing to expatriates, besides direct inflow also offers potential for dissemination of information / opportunities to the overseas population
- International Tourists, falling under the high end category and special interest groups instead of the current 'back packing' category.

## BY REGION

1.67 Focus regions for A&N could be regions with

- High tourism growth
- High outbound tourists
- Geographical proximity

- Synergy in offering

1.68 The analysis of tourism growth in various countries reveal the following :

- South Asia Pacific and Africa as regions with highest growth rates
- An increasing trend towards intra-regional traffic (anticipated to be 80% of total traffic by 2011)

A&N is located in close proximity to Thailand, Bangkok, Phuket, Malaysia and other SE Asian countries – popular beach destinations.

1.69 The immediate focus for A&N should be the South East Asian countries. Marketing in these countries will also provide indirect marketing to the large number of international tourists visiting the country.

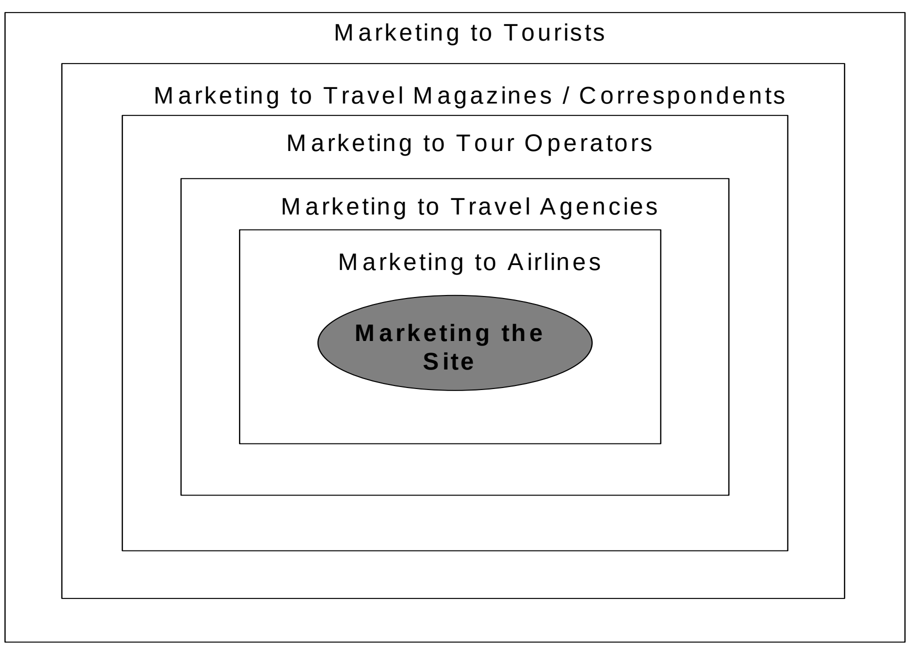
1.70 The main domestic source markets for A&N currently are Chennai and Kolkata. However, the main gateway for international tourists in India are Delhi and Mumbai. Therefore focus should be on marketing and establishing direct connectivity with these two cities.

1.71 In addition, focus should be on creating an extended India Circuit on areas of common tourist interest.

- Beach Circuit – Combining with Goa / Kovalam
- Nature Circuit – Combining with Kerala

*Stakeholders*

1.72 There are a number of stakeholder levels to be marketed to :



1.73 Important to the marketing effort is the involvement of stakeholders at successive levels and the evolving of innovative marketing strategies. For eg.

- Tie-up with Jet / Indian Airline to
  - Offer holiday packages
  - Holiday destinations for their promotion packages – Desh-Videsh scheme, Frequent Flier scheme etc

- Tie-up with travel agencies to market A&N on a sustained basis; use their influencing capacity to educate tourists about A&N

- Tie-up with tour operations to offer innovative / interesting tour options catering to various tourist needs

- Tie-up with travel magazines to regularly feature A&N and its offerings

*Special Categories*

1.74 In addition to multi-level marketing, the effort should also focus on special categories

- Corporates – to position A&N as a 'conference gateway'. Target high end, service sector / FMCG companies who hold such programmes regularly

- Corporates, to promote A&N as a holiday destination / provide reward holiday in A&N

- Tie-up with international luxury cruise operators

- Special Interest Groups like National Geographic, Good Earth etc. who regularly organise such tours for their subscribers. These are premium, focused tourists who are also environment conscious.

Selected Travel Packages offered by the National Geographic

(All costs from the US)

| Destination | No. Days | Tour Cost | Tour Details |
|---|---|---|---|
| Caribbean | 7 | $ 549 without Airfare Include all meals and entertainment | • Eastern route include San Juan, St. Maarten and St. Thomas<br>• Western route highlights include Cozumel, Grand Cayman and Ocho Rios |
| Sri Lanka | 15 | $ 1590 | • Visit to the Muthurajawela Nature Reserve and Uda Walawe National Park<br>• Performance by cultural Kandyan dancers and drummers performance<br>• Trek into the forests of the southern highlands and the rainforests |
| Singapore, Bangkok and Hong Kong | 12 | $ 1698 including airfare | • Roundtrip flight to Asia Flights Singapore – Bangkok and Bangkok – Hong Kong (on Singapore Airlines, Cathay, Thair or United)<br>• Accommodation for 10 nights at (your choice) Superior Deluxe, Deluxe or Superior First Class hotels<br>• Singapore sightseeing tour Bangkok city tour with Grand Palace<br>• Bangkok boat ride tour through the klongs (canals) to the Temple of Dawn and Ryoal Barge Museum<br>• Thai dinner and dance show (Bankgok)<br>• Hong Kong Island tour |
| Malaysia | 13 | $ 1875 | • Visit to the trading port of Malacca<br>• Drive to Taman Negara National Park to explore one of the wold's most ancient tracts of rainforest<br>• Trip to Cameron Highlands<br>• Visit to Penang Island |

**Promotion**

1.75 Communication and promotion should be targeted at

- The tourists directly
- The travel industry
- Stakeholders groups including hotels

1.76 Promotion activities to be taken up include :

- Advertising – Tourism department has to tie-up with a professional advertising agency to create a marketing campaign that captures the positioning and offerings of A&N
- A push strategy : The initial period requires a 'push strategy' with a thrust on advertising. The initial burst advertising should target prime TV channels that are travel based eg. National Geographic, Discovery
- Tie-up with travel related programmes
- Promotional Literatures such as CDs, Information Brochures etc.
- Creation and maintenance of a web site exclusively for tourism having linkages with other tourism / travel related sites
- Promotional events such as travel marts / meeting of hotel association / tour operation / travel agencies etc.
- Collaborative marketing efforts with facilitating agencies
- Setting up a call centre – a cost effective means that can be accessed from all tourist destinations and the entry points
- Setting up Tourist Information Centres / Information kiosks at important tourist destinations in India.

# CHAPTER 9

## POTENTIAL FOR TOURISM DEVELOPMENT IN ANDAMAN & NICOBAR ISLANDS

9.1 This chapter presents the potential for tourism development in A&N Islands, the projected tourist arrivals, potential projects for development, likely investments towards the same and phasing of projects.

# PROJECTING TOURIST ARRIVALS

9.2 The projection of tourist arrivals for the 20 year period was done based on a detailed model, which factored in various aspects including historic and current tourist arrivals, carrying capacity and international experience. The model has been detailed below in Exhibit 9.1.

## *Exhibit 9.1*

**Potential for Tourist Arrivals**

- Carrying capacity estimated by NEERI
- International benchmarks for tourist arrivals vis-a-vis population for similar "small island economies"

Potential estimated independently for various tourist regions

**Realistic Growth Targets**

- Current Tourist Traffic
- Historic Growth Trends
- Scenario Building
  - Short Term : Growth rate in the recent 5 years
  - Medium Term : Best 5 year growth rate in the last 20 years
  - Long Term : Average 5 years CAGR over last 20 years

**Entry Point & Movement Analysis**

- Port Blair will continue to be the only entry point for next 2 years. Rangat, Baratang and Little Andaman will be drifting points from Port Blair
- Tourist inflow into Port Blair to be restricted to the potential demand it can take in. The excess tourists coming into Port Blair (i.e. the difference between possible and potential demand) are assumed to be channelised to other entry points (such as Diglipur) and other hub points around Port Blair (like Niel island, Havelock island). This is through anchoring the ship from Calcutta at a distance from Arial Bay Jetty in Diglipur and taking passengers from the ship using ferry boats
- Diglipur will be developed as the second entry point by 2005. Mayabunder will be a drifting point from Diglipur
- Great Nicobar will be developed as the third entry point by 2012. Katchal, Car Nicobar will be drifting points from Great Nicobar
- Diglipur, the second entry point, expected to achieve 50%, 70% and 80% of the potential in 2007, 2012 and 2022 respectively
- Mayabunder, drifting point from Diglipur, to achieve 25%, 50% and 75% of potential in 2007, 2012 and 2022 respectively. For this purpose, movement out from Diglipur will have to be the extent of 28%, 40% and 52% in the respective time periods
- Rangat, drifting point from Port Blair, to achieve 25%, 50% and 75% of potential in 2007, 2012 and 2022 respectively. For this purpose, movement out from Port Blair will have to be the extent of 5%, 9% and 14% in the respective time periods

**Traffic Projections**

- Traffic Forecast
- Foreign and Domestic Tourist Break-up
- National Trends

9.3 Based on the methodology, the tourist projection for A&N islands over the next 20 years is provided in the table below :

***Table 9.1***

**Projections for Tourist Arrivals in A&N Islands**

| Year | Short Term 2007 | Medium Term 2012 | Long Term 2022 |
|---|---|---|---|
| Port Blair | 1,14,114 | 1,28,419 | 1,62,631 |
| Rangat | 5,307 | 11,945 | 22,692 |
| Mayabunder | 3,269 | 7,357 | 13,975 |
| Diglipur | 11,726 | 18,475 | 26,739 |
| Little Andaman | 111 | 2,197 | 5,566 |
| Car Nicobar | Existing Inflow* | Cruise Tourists* | 7,901 |
| Katchal | | | 585 |
| Great Nicobar | | | 3,253 |
| **Total** | **1,34,527** | **1,68,393** | **2,43,342** |

* Nicobar is not open for tourists currently hence these numbers are not factored in.

*Tourist Potential for A&N*
If A&N were to follow
- The Singapore model, the tourist arrivals, should touch 12,00,000 by 2022
- The Maldives model, tourist arrivals should touch 6,00,000 by 2022.

However, tourist arrivals in A&N are restricted by
- Limited land availability and hence density of population
- Limited carrying capacity
- Restrictions on development as discussed earlier.

9.4 The overall tourist arrivals have been categorised into domestic and foreign tourists, for factoring in the differences in the stay period and spending pattern. The tourism development strategy focuses on high value tourists-Indian and foreign. Hence, a significant growth in the proportion of foreign tourists has been assumed.

**Table9.2**
**Proportion of Foreign and Domestic Tourists**

| Year | 2002 | 2007 | 2012 | 2022 |
|---|---|---|---|---|
| Foreign Tourists | 8% | 25% | 40% | 50% |
| Domestic Tourists | 92% | 75% | 60% | 50% |

9.5 Based on the above assumption, the categorisation of the tourism potential for A&N is given below :

**Table 9.3**
***Projected Foreign and Domestic Tourists***

| Categorisation of Tourists (Nos.) | | | | | | |
|---|---|---|---|---|---|---|
| **Year** | **2007** | | **2012** | | **2022** | |
| | **F** | **D** | **F** | **D** | **F** | **D** |
| Port Blair | 28529 | 85585 | 51368 | 77051 | 81315 | 81316 |
| Rangat | 1327 | 3980 | 4778 | 7167 | 11346 | 11346 |
| Mayabunder | 818 | 2451 | 2943 | 4414 | 6987 | 6988 |
| Diglipur | 2932 | 8794 | 7390 | 11085 | 13369 | 13370 |
| Little Andaman | 28 | 83 | 879 | 1318 | 2783 | 2783 |
| Car Nicobar | Existing Inflow* | | Cruise Tourists* | | 3950 | 3951 |
| Katchal | | | | | 293 | 292 |
| Great Nicobar | | | | | 1627 | 1626 |
| **Total** | **33634** | **100893** | **67358** | **101035** | **121670** | **121672** |

* Nicobar is not open for tourists currently hence these numbers are not factored in.

### *Infrastructure Requirement*

9.6 Locationwise, periodwise infrastructure requirements have been estimated based on the projections. The infrastructure elements have been grouped under the following heads viz.

- Transport – including ships, luxury cruises, covered doongis, deluxe buses, upgradation of jetties, upgradation of airstrips, upgradation of roads etc

- Stay – including premium resorts, semi-premium resorts and economy resorts. In addition the 'Bed & Breakfast' concept catching up in many other Indian States has been suggested in those islands where there is scarcity of revenue land for development of stay facilities (like Car Nicobar, Katchal). In this concept, few families identified in these islands will host the tourists in their home at pre-determined rates and for pre-agreed facilities

- Tourism Products – including glass bottom boats, glass submarines, camping facilities, tree top houses, earth villages, eco villages, adventure sports centres, interpretation centres, orchidarium, museums, sound & light show and simulation show

- Others – including wayside amenities, signage, tourist information centres and training centres in hospitality management.

9.7 Please note that infrastructure estimation is limited to tourism related infrastructure only and does not extend into basic infrastructure like power, water, telecommunication etc. Qualitative comments on these infrastructure elements are available in chapter 6, which contains descriptions of various locations. Detailed calculations are presented as Annexure III to the report.

***Assumptions and norms in infrastructure estimation***

9.8 The following paragraphs detail the assumptions and norms that have been used in estimating the requirements in various infrastructure elements.

***Transport***

9.9 Transport has been approached under two categories viz. Long distance (connectivity to entry points from mainland) and Short distance (inter-island connectivity)

9.10 Inter-island connectivity through buses has been assumed only for Diglipur – Mayabunder circuit. The same has not been considered for the Port Blair- Rangat circuit owing to the recent Supreme Court ban on vehicular movement in Andaman Trunk Road along the Jarawa Reserves.

***Stay***

9.11 The average stay period of a foreign tourist at a hub is assumed to be 2 days and 8 days at spoke points. The average stay period of a domestic tourist at a hub is assumed to be 2 days and the 3 days in spoke points. The above demand has been further split into premium, semi-premium and economy, for all the locations. Details have been shown in subsequent sections.

9.12 Locations for resorts have been identified based on land availability, and the need for spreading out. Locationwise, periodwise projects are presented in the following sections.

| | | |
|---|---|---|
| *Section I* | *:* | *Diglipur* |
| Section II | : | Mayabunder |
| Section III | : | Rangat |
| Section IV | : | Port Blair |
| Section V | : | Little Andaman |
| Section VI | : | Car Nicobar |
| Section VII | : | Katchal |
| Section VIII | : | Great Nicobar |

## *SECTION I : DIGLIPUR*

9.13 Based on the evaluation of the current tourist attractions and the potential tourists destinations (discussed in Chapter 5), Diglipur has high potential for tourism development.

9.14 The projected tourist numbers based on AFF's Methodology is presented below:

| | **2002** | **2007** | **2012** | **2022** |
|---|---|---|---|---|
| Domestic | 10005 | 8794 | 11085 | 13370 |
| Foreign | 870 | 2932 | 7390 | 13369 |
| **Total** | **10875** | **11726** | **18475** | **26739** |

9.15 Based on the hub and spoke concept, the tourism development strategy for Diglipur is shown below :

| | |
|---|---|
| *Region* | Diglipur |
| Coverage | North Andaman |
| Hub | Diglipur |
| Spokes | |
| Beaches | Kalipur, Lamba Bay |
| Island Resorts | Smith Island |
| Nature | Kalighat Creek, Mud Volcano, Ramnagar Beach (Turtle Nesting), Kalipur |
| Adventure | Saddle Peak (Trekking), North Reef Island (Scuba diving), Adventure Sports Complex |
| Mobile Tourism | Ross Island |
| Cruises | Kalighat Creek |
| Heritage / Culture | British Settlement Simulation |
| Forest based | Saddle Peak, National Park |
| Island Renting / Leasing | Table Island, Excelsior, Peacock Island |

9.16 Based on the extensive field survey at Diglipur and assessment of existing infrastructure, the following have been identified as the key development requirements

| **Category** | **Current Status** | **Potential for Development** | | |
|---|---|---|---|---|
| | | **Short Term** | **Medium Term** | **Long Term** |

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Connectivity Infrastructure | Not developed | ✓ | ✓ | ✓ |
| | | In line with growing demand | | |
| Accommodation | Not developed | ✓ | ✓ | ✓ |
| | | In line with growing demand | | |
| Midway/ Wayside Facilities | Not available | ✓ | | |
| Tourist Offices | Not available | ✓ | | |
| Others (Recreational Facilities, Shopping Facilities, etc) | Minimal | ✓ | ✓ | |
| Existing Sites | Need for upgradation | ✓ | | |
| Sanctuaries/ Eco-Tourism | Exists but not developed | ✓ | ✓ | |
| Tourism Products | Exists but not developed | ✓ | ✓ | ✓ |

9.17 Based on this analysis, the various tourism projects that have been proposed for Diglipur is shown below :

***Tourism Products for Diglipur***

| **Period** | ***Short Term*** | | **Medium Term** | **Long Term** |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| ***Hub*** | **Diglipur** | | | |
| ***Key Milestones*** | Entry from Port Blair | Entry point . Jetty to accommodate 1000 seater passenger ships | | |
| ***Tourism Products*** | | | | |

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport projects | • Direct sea connectivity with Kolkatta<br>• Jetty to accommodate 1000 pax ships | | • Direct sea connectivity with Kolkatta | • Enhancement of naval airstrip at Diglipur for landing of 120 seater flights<br>• Air connectivity in addition to sea connectivity |
| Accommodation projects | • 10 room premium resort in Smith Island<br>• 15 room semi-premium resort in Keralpuram<br>• 25 room economy resorts in Diglipur and Arial Bay | | • 40 rooms premium resorts in Kalighat and Kalipur<br>• 50 rooms semi premium escort in Ramnagar<br>• 25 rooms economy resort in Kishori Nagar | • 25 rooms economy resort in Durgapur |
| **Tourism Products** | • Upgradation of watersports centre, scuba diving, snorkelling<br>• Picnic spots at Kalpong dam and NHPC power plant<br>• Trekking at Saddle Peak<br>• Sound and light show at Keralapuram<br>• Island camping in Ross Island<br>• Turtle nesting at Ramnagar beach - interpretation centre, watch stations<br>• Orchidarium at Kalipur<br>• Mud Volcano as an excursion point | | • Floatel at Kalighat<br>• Earth villages at Madhupur and Shibpur<br>• Scuba diving centre at North Reef Island<br>• Butterfly Park at Saddle Peak National Park | • Island renting at Table Excelsior and Peacock Islands |
| Tourists Information Centres | At Arial Bay and Diglipur | | | At Kalipur |

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
| **Common projects** | Midside / Wayside Amenities<br>Handicraft / Souvenir Shops<br>Covered doongis / boats for short sailing meeting all safety norms and regulations | | | |

## BRIEF DESCRIPTION OF PROJECTS

9.18 Transport Infrastructure needs have been estimated but investments in related infrastructure has not been taken into account.

9.19 Accommodation is based on the existing beds available, the demand for beds based on increase in tourists traffic. Categorisation of room requirement into premium, semi premium and economy classes have been considered as shown below.

***Projections for Accommodation Infrastructure***

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
| *Present tourist inflow* | 1000 | | | |
| *Projected tourist inflow* | 10875 | 11726 | 18475 | 26739 |
| *Room nights available* | 54 | | | |
| *Demand for room nights* | 186 | 212 | 349 | 520 |
| *Incremental Demand* | 132 | 26 | 137 | 171 |
| *Premium category* | 13 | 5 | 34 | 51 |
| *Semi Premium category* | 26 | 8 | 48 | 68 |
| *Economy category* | 93 | 13 | 55 | 52 |

9.20 Smith Island is proposed to be developed as a premium (island Resorts) with Ross Island as an excursion point having camping facilities. A premium resort is also proposed at Kalighat and Kalipur Creek.

## INVESTMENT REQUIREMENT

9.21 The investment requirement towards development of the presented infrastructure elements has been computed based on established norms, secondary research and discussions with the industry. The cost norms are provided as an appendix to the report. The broad cost estimates for tourism development in Diglipur is shown below:

***Projected Investment***

*(Rs. in lakhs)*

| **Period** | ***Short Term*** | **Medium Term** | **Long Term** |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport Infrastructure | - | - | - |
| Accommodation projects | 1100 | 3650 | 250 |
| Tourism Products | 1226 | 650 | 450 |
| Others (Tourists Information Centres, Wayside Amenities etc.) | 33 | 5 | - |
| **Total** | 2359 | 4305 | 700 |
| **TOTAL INVESTMENTS** | 7364 | | |

## SECTION II : MAYABUNDER

9.22 The evaluation of current and potential tourist attractions revealed Mayabunder as a high potential tourists destination.

9.23 The projected tourist numbers based on AFF's methodology is presented below:

| | 2002 | 2007 | 2012 | 2022 |
|---|---|---|---|---|
| Domestic | 1840 | 2451 | 4414 | 6988 |
| Foreign | 160 | 818 | 2943 | 6987 |
| **Total** | **2000** | **3269** | **7357** | **13975** |

9.24 Based on the hub and spoke concept, the tourism development strategyproposed for Mayabunder is shown below :

| | |
|---|---|
| *Region* | Mayabunder |
| Coverage | Middle to North Andaman |
| Hub | Mayabunder |
| Spokes | |
| Beaches | Karmatang |
| Island Resorts | Interview Island |
| Nature | Austin Creek, South Reef Island, Anderson Island |
| Adventure | Interview Island (Scuba diving), Pokha Dara Beach (Adventure Sports Complex) |
| Mobile Tourism | Austin X Island, Avis Island |
| Cruises | Austin Creek |
| Heritage / Culture | Murga Island, Sound Island |
| Forest based | Forest Museum |
| Island Renting / Leasing | Austin II, IV, IX, X Islands |

9.25 Based on the extensive field survey at Mayabunder and assessment of existing infrastructure, the following have been identified as the key development requirements

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Connectivity | Not developed | ✓ | ✓ | ✓ |

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Infrastructure | | In line with growing demand | | |
| Accommodation | Not developed | ✓ | ✓ | |
| | | In line with growing demand | | |
| Midway/ Wayside Facilities | Not available | ✓ | | |
| Tourist Offices | Not available | ✓ | | |
| Others (Recreational Facilities, Shopping Facilities, etc) | Minimal | ✓ | ✓ | |
| Existing sites | Need for upgradation | ✓ | | |
| Sanctuaries/ Eco-Tourism | Exists but not developed | ✓ | | |
| Tourism Products | Exists but not developed | ✓ | ✓ | ✓ |

9.26 Based on this analysis, the various tourism projects that have been proposed for Mayabunder is shown below :

***Tourism Products for Mayabunder***

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
| ***Hub*** | **Mayabunder** | | | |
| ***Key Milestones*** | Mayabunder – Diglipur to be a circuit<br>Drifting point from Diglipur | | | |
| ***Tourism Products*** | | | | |
| Transport projects | Deluxe buses / coaches between Diglipur and Mayabunder | | | |
| Accommodation projects | • 10 room premium resort at Karmatang<br>• 15 room semi-premium resort in Lucknow<br>• 20 room economy resort in Rampur | | | • 20 rooms premium eco resorts in Harinagar<br>• 25 rooms semi premium resort in Chainpur<br>• 20 rooms economy resort in |

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
| | | | | Deopur |
| **Tourism Products** | • Upgradation of eco village at Ray hill<br>• Adventure sports complex at Pokhadara Beach<br>• Upgradation of forest museum<br>• Floatels at Austin Creek<br>• Island renting at Avis, Austin Islands<br>• Scuba diving centre at Interview Island | | • Eco village at Anderson Island<br>• Simulation show at Murga Island<br>• Sound and light show at Sound Island<br>• | • Scuba diving at South Reef Island<br>• Island renting at Austin II, IV, IX island |
| Tourists Information Centres | At Mayabunder | | | |
| **Common projects** | Midside / Wayside Amenities<br>Handicraft / Souvenir Shops<br>Covered doongis / boats for short sailing meeting all safety norms and regulations | | | |

## BRIEF DESCRIPTION OF PROJECTS

9.27 Transport Infrastructure has been estimated based on tourists inflow into Mayabunder. Exclusive deluxe tourist buses / coaches have been proposed between Diglipur and Mayabunder (Diglipur assumed to the main entry point for Mayabunder).

9.28 Accommodation is based on the existing beds available, the demand for beds based on increase in tourists traffic. Categorisation of room requirement into premium, semi premium and economy classes have been considered as shown below.

### *Projections for Accommodation Infrastructure*

| Period | *Short Term* | Medium Term | Long Term |
|---|---|---|---|

| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
|---|---|---|---|---|
| *Present tourist inflow* | 2000 | | | |
| *Projected tourist inflow* | 2000 | 3269 | 7357 | 13975 |
| *Room nights available* | 64 | | | |
| *Demand for room nights* | 34 | 59 | 139 | 272 |
| *Incremental Demand* | -30 | 25 | 80 | 133 |
| *Premium category* | | 5 | 20 | 40 |
| *Semi Premium category* | | 7 | 28 | 53 |
| *Economy category* | | 12 | 32 | 40 |

*Inspite of excess capacity, resorts are proposed in the short term owing to the need for quality accommodation*

9.29 Karmatang is proposed to be developed as a premium destination with Interview Island as an excursion point having camping facilities. A premium resort is also planned at Harinagar.

## INVESTMENT REQUIREMENT

9.30 The investment requirement towards development of the presented infrastructure elements has been computed based on established norms, secondary research and discussions with the industry. The cost norms are provided as an appendix to the report. The broad cost estimates for tourism development in Mayabunder is shown below:

## ***Projected Investment***

*(Rs. in lakhs)*

| Period | *Short Term* | Medium Term | Long Term |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport Infrastructure | 100 | 40 | 120 |
| Accommodation projects | 800 | 0 | 1300 |
| Tourism Products | 1800 | 300 | 150 |
| Others (Tourists Information Centres, Wayside Amenities etc.) | 40 | 0 | 0 |
| **Total** | **2740** | **340** | **1570** |
| **TOTAL INVESTMENTS** | 4650 | | |

## *SECTION III : RANGAT*

9.31 Based on the evaluation of the current tourist attractions and the potential tourists destinations (discussed in Chapter 5), Rangat has moderate - high potential for tourism development.

9.32 The projected tourist numbers based on AFF's methodology is presented below:

| | 2002 | 2007 | 2012 | 2022 |
|---|---|---|---|---|
| Domestic | 2760 | 3980 | 7167 | 11346 |
| Foreign | 240 | 1327 | 4778 | 11346 |
| **Total** | **3000** | **5307** | **11945** | **22692** |

9.33 Based on the hub and spoke concept, the tourism development strategy for Rangat is shown below :

| *Region* | Rangat |
|---|---|
| Coverage | Middle Andaman |
| Hub | Rangat |
| Spokes | |
| Beaches | Cuthbert Bay, Merc Bay, Lalaji Bay |
| Island Resorts | North Passage Island, Long Island |
| Nature | Panchavati Waterfalls, Yeretta Creek |
| Adventure | Moorys Dare, Lal Degree Island |
| Mobile Tourism | Long Island |
| Cruises | Yeretta Creek |
| Island Renting / Leasing | Guitar Island |

9.34 Based on the extensive field survey at Rangat and assessment of existing infrastructure, the following have been identified as the key development requirements

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Connectivity Infrastructure | Not developed | ✓ | | ✓ |
| | | In line with growing demand | | |
| Accommodation | Not developed | ✓ | ✓ | |
| | | In line with growing demand | | |
| Midway/ | Not available | ✓ | | |

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Wayside Facilities | | | | |
| Tourist Offices | Not available | ✓ | | |
| Others (Recreational Facilities, Shopping Facilities, etc) | Minimal | ✓ | ✓ | |
| Sanctuaries/ Eco-Tourism | Exists but not developed | | ✓ | |
| Tourism Products | Exists but not developed | ✓ | ✓ | ✓ |

9.35 Based on this analysis, the various tourism projects that have been proposed for Rangat is shown below :

***Tourism Products for Rangat***

| **Period** | ***Short Term*** | | **Medium Term** | **Long Term** |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| ***Hub*** | **Rangat** | | | |
| ***Key Milestones*** | Part of Port Blair Circuit<br>Principal entry point to be Port Blair<br>Rangat to be drifting point from Port Blair | | | |
| ***Tourism Products*** | | | | |
| Transport projects | Larger ships from Port Blair to Rangat | | | Exclusive ships for tourists |
| Accommodation projects | • 20 room premium resort in Cuthbert Bay<br>• 30 room semi-premium resort in Amkunj Bay<br>• 35 room economy resorts in Nimbutala | | | • 30 rooms premium eco resorts in North Passage Island<br>• 40 rooms semi premium resort in Long Island<br>• 30 rooms economy resort in Rampur |

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
| **Tourism Products** | • Orchidarium at Panchvati<br>• Natural trail and trekking at Moorys Dare<br>• Panchvati Waterfalls – Approach and way side amenities<br>• Floatels at Yeretta Creek<br>• Island camping in Long Island, Lalaji Bay | | • Simulated Jharawa village in Rampur<br>• Island renting in Guitar Island | • Adventure tourism in Lal Degree Island |
| Tourists Information Centres | At Rangat, Long Island, Lalaji Bay | | | |
| **Common projects** | Midside / Wayside Amenities<br>Handicraft / Souvenir Shops<br>Covered doongis / boats for short sailing | | | |

# BRIEF DESCRIPTION OF PROJECTS

9.36 Accommodation is based on the existing beds available, the demand for beds based on increase in tourists traffic. Categorisation of room requirement into premium, semi premium and economy classes have been considered as shown below.

### *Projections for Accommodation Infrastructure*

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
| *Present tourist inflow* | 3000 | | | |
| *Projected tourist inflow* | 3000 | 5307 | 11945 | 22692 |
| *Room nights available* | 64 | | | |
| *Demand for room nights* | 51 | 96 | 226 | 441 |
| *Incremental Demand* | -13 | 44 | 130 | 216 |
| *Premium category* | | 9 | 32 | 65 |
| *Semi Premium category* | | 13 | 45 | 86 |
| *Economy category* | | 22 | 53 | 65 |

9.37 Cuthbert Bay and North Passage Island to be premium destinations.

# INVESTMENT REQUIREMENT

9.38 The investment requirement towards development of the presented infrastructure elements has been computed based on established norms, secondary research and discussions with the industry. The cost norms are provided as an appendix to the report. The broad cost estimates for tourism development in Rangat is shown below:

***Projected Investment***

*(Rs. in lakhs)*

| Period | *Short Term* | Medium Term | Long Term |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport Infrastructure | 0 | 0 | 0 |
| Accommodation projects | 1550 | 0 | 2000 |
| Tourism Products | 425 | 250 | 50 |
| Others (Tourists Information Centres, Wayside Amenities etc.) | 23 | 0 | |
| **Total** | **1998** | **250** | **2050** |
| **TOTAL INVESTMENTS** | **4298** | | |

## *SECTION IV : PORT BLAIR*

9.39 Based on the evaluation of the current tourist attractions and the potential tourists destinations (discussed in Chapter 5), Port Blair has high potential for tourism development. But the city of Port Blair itself is crowded and therefore tourists need to be distributed across the region.

9.40 The projected tourist numbers based on AFF's Demand Estimation Methodology is presented below:

| | 2002 | 2007 | 2012 | 2022 |
|---|---|---|---|---|
| Domestic | 92546 | 85585 | 77051 | 81316 |
| Foreign | 8047 | 28529 | 51368 | 81315 |
| **Total** | **100593** | **114114** | **128419** | **162631** |

9.41 Based on the hub and spoke concept, the tourism development strategy for Port Blair is shown below :

| *Region* | Port Blair |
|---|---|
| Coverage | South Andaman |
| Hub | Port Blair, Havelock, Neil |
| Spokes | |
| Beaches | Havelock, Neil |
| Island Resorts | Rutland, Havelock |
| Nature | Baratang (Limestone Caves, Mud Volcano), Mount Harriet |
| Adventure | Mount Harriet, Havelock, Water Sports Complex |
| Mobile Tourism | Cinque Island |
| Cruises | Kadamtala Creek<br>Luxury Cruises to Nicobar and Diglipur |
| Heritage / Culture | Sound and light show at Humpryganj |
| Forest based | Cinque Island Sanctuary |
| Island Renting / Leasing | Passage and Sister Island |
| Others | Heritage Circuit |

9.42 Based on the extensive field survey at Port Blair and assessment of existing infrastructure, the following have been identified as the key development requirements

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Connectivity Infrastructure | Moderate | ✓ | ✓ | ✓ |
| | | Local, luxury coaches | | |
| Accommodation | Moderate | ✓ | | ✓ |
| | | In line with growing demand | | |
| Midway/ Wayside Facilities | Not available | ✓ | | |
| Tourist Offices | Moderate | ✓ | | ✓ |
| Others (Recreational Facilities, Shopping Facilities, etc) | Moderate | ✓ | ✓ | |
| Existing sites | Need for improvement | ✓ | | |
| Tourism Products | Moderate | ✓ | ✓ | ✓ |

9.43 Based on this analysis, the various tourism projects that have been proposed for Port Blair is shown below :

***Tourism Products for Port Blair***

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
| ***Hub*** | **Port Blair** | | | |
| ***Key Milestones*** | Primary entry point | | | |
| ***Tourism Products*** | | | | |
| Transport projects | | | | |
| Accommodation projects | • 30 room premium resort in Goodwill Estate<br>• 45 room semi-premium resort in Neil Island<br>• 30 room premium resort in Havelock for conferences | | | • 120 room premium resort in Baratang<br>• 200 rooms semi-premium resort in Collinpur<br>• 100 families in Port Blair for Bed and Breakfast |

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
| | | | | scheme |
| **Tourism Products** | • Upgradation of watersports centre<br>• Scuba diving institute at Havelock<br>• Sound and light show at Humphry Ganj<br>• Island camping at Rutland, Cinque Island<br>• Nature cum adventure trip to Baratang<br>• Heritage circuit covering cellular jail, Ross Island, Viper Island and Humphry Ganj<br>• | | • Tourism Management Institute<br>• Flotatels at Kadamtala Creek<br>• Luxury cruise to Nicobar<br>• Butterfly park at Mount Harriet<br>• | • Island renting at Passage & Sister Island<br>• |
| Tourists Information Centres | At Port Blair, Havelock and Neil | | At Baratang | |
| **Common projects** | Midside / Wayside Amenities<br>Handicraft / Souvenir Shops<br>Covered doongis / boats for short sailing compliant with safety requirements, signages | | | |

## BRIEF DESCRIPTION OF PROJECTS

9.44 Transport Infrastructure has been estimated for local sight seeing and excursion trips.

9.45 Accommodation is based on demand as well as the need for spreading out tourism development. Havelock and Neil are also proposed to be developed as conference destinations. Hence, the room requirements for Port Blair are more proactive and nature than being demand based.

***Projections for Accommodation Infrastructure***

| **Period** | ***Short Term*** | | **Medium Term** | **Long Term** |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| *Present tourist inflow* | 100593 | | | |
| *Projected tourist inflow* | 100593 | 114114 | 128419 | 162631 |
| *Room nights available* | 2000 | | | |
| *Demand for room nights* | 1721 | 2060 | 2426 | 3162 |
| *Incremental Demand* | -279 | 60 | 426 | 737 |
| *Premium category* | | 12 | 106 | 221 |
| *Semi Premium category* | | 18 | 149 | 295 |
| *Economy category* | | 30 | 171 | 221 |

9.46 Havelock, Neil and Cinque Islands are proposed to be developed as premium destinations.

# INVESTMENT REQUIREMENT

9.47 The investment requirement towards development of the presented infrastructure elements has been computed based on established norms, secondary research and discussions with the industry. The cost norms are provided as an appendix to the report. The broad cost estimates for tourism development in Port Blair is shown below:

***Projected Investment***

*(Rs. in lakhs)*

| **Period** | ***Short Term*** | **Medium Term** | **Long Term** |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport Infrastructure | 0 | 0 | 0 |
| Accommodation projects | 2100 | 0 | 7600 |
| Tourism Products | 460 | 7620 | 750 |
| Others (Tourists Information Centres, Wayside Amenities etc.) | 75 | 0 | 0 |
| **Total** | **2635** | **7620** | **8350** |

| Period | *Short Term* | Medium Term | Long Term |
|---|---|---|---|
| Year | 2007<br>(0-5 years) | 2012<br>(6-10 years) | 2022<br>(>10 years) |
| TOTAL INVESTMENTS | 18605 | | |

# SECTION V : LITTLE ANDAMAN

9.48 Based on the evaluation of the current tourist attractions and the potential tourists destinations (discussed in Chapter 5), Little Andaman has moderate to high potential for tourism development. Little Andaman has a lot of unique natural attractions.

9.49 The projected tourist numbers based on AFF's Demand Estimation Methodology is presented below:

| | **2002** | **2007** | **2012** | **2022** |
|---|---|---|---|---|
| Domestic | 83 | 83 | 1318 | 2783 |
| Foreign | 7 | 28 | 879 | 2783 |
| **Total** | **90** | **111** | **2197** | **5566** |

9.50 Based on the hub and spoke concept, the tourism development strategy for Little Andaman is shown below :

| *Region* | Little Andaman |
|---|---|
| Coverage | Little Andaman |
| Hub | Little Andaman |
| Spokes | |
| Beaches | Butler Bay Beach |
| Nature | White surf waterfalls, Whisper Wave Water fall |
| Adventure | Trekking, Boating |
| Mobile Tourism | Hut Bay Beach |
| Forest based | Elephant Safari |

9.51 Based on the extensive field survey at Little Andaman and assessment of existing infrastructure, the following have been identified as the key development requirements

<table>
<tr><th rowspan="2">Category</th><th rowspan="2">Current Status</th><th colspan="3">Potential for Development</th></tr>
<tr><th>Short Term</th><th>Medium Term</th><th>Long Term</th></tr>
<tr><td rowspan="2">Connectivity Infrastructure</td><td rowspan="2">Not developed</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td colspan="3">In line with growing demand</td></tr>
<tr><td rowspan="2">Accommodation</td><td rowspan="2">Not developed</td><td></td><td>✓</td><td>✓</td></tr>
<tr><td colspan="3">In line with growing demand</td></tr>
<tr><td>Midway/ Wayside Facilities</td><td>Not available</td><td>✓</td><td></td><td></td></tr>
</table>

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Tourist Offices | Not available | ✓ | | |
| Others (Recreational Facilities, Shopping Facilities, etc) | Minimal | | ✓ | |
| Tourism Products | Exists but not developed | | ✓ | ✓ |

9.52 In the short term, the focus is on the northern circuit. Hence, no new development is envisaged in Little Andaman. Tourism development is focussed in the medium term. This also serves to augment the tourist attractions periodically.

9.53 Based on this analysis, the various tourism projects that have been proposed for Little Andaman is shown below :

***Tourism Products for Little Andaman***

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
| ***Hub*** | **Little Andaman** | | | |
| ***Key Milestones*** | Port Blair to be the entry point<br>Little Andaman to be part of Nicobar Luxury Cruise circuit<br>Drifting point from Port Blair | | | |
| ***Tourism Products*** | | | | |
| Transport projects | | | | Exclusive tourist ships from Port Blair |
| Accommodation projects | • Upgrading existing tourism resorts at Little Andaman | | • 15 rooms premium resorts in Hut Bay<br>• 20 rooms semi premium eco-resort in Nethaji Nagar<br>• 15 rooms economy resort in R.K. Puram | |

| **Period** | ***Short Term*** | | **Medium Term** | **Long Term** |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| **Tourism Products** | • Upgrading existing tourism attractions | | • R.K. Puram and V.K. Puram Dams<br>• Adventure sports at White surf water falls<br>• Elephant safari at White surf water falls<br>• Boating from Butler Bay to Palm Oil Factory<br>• Earth village at Little Andaman | • Tree top "machans" at hutbay<br>• Nicobari village in V.K. Puram<br>• Scuba diving at Bala Reef<br>• Trekking at Whitesurf Waterfalls |
| Tourists Information Centres | At Little Andaman | | | |
| **Common projects** | Midside / Wayside Amenities<br>Handicraft / Souvenir Shops<br>Covered doongis / boats for short sailing | | | |

## BRIEF DESCRIPTION OF PROJECTS

9.54 Transport Infrastructure has been estimated based on the average tourist inflow per day exclusive vessels for tourists have been considered as an option.

9.55 Accommodation is based on the existing beds available, the demand for beds based on increase in tourists traffic. Categorisation of room requirement into premium, semi premium and economy classes have been considered as shown below.

### *Projections for Accommodation Infrastructure*

| **Period** | ***Short Term*** | | **Medium Term** | **Long Term** |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| *Present tourist inflow* | 90 | | | |
| *Projected tourist inflow* | 90 | 111 | 2197 | 5566 |
| *Room nights available* | 20 | | | |
| *Demand for room nights* | 2 | 2 | 42 | 108 |

| | | | | |
|---|---|---|---|---|
| *Incremental Demand* | -18 | 0 | 40 | 67 |
| *Premium category* | | | 10 | 20 |
| *Semi Premium category* | | | 14 | 27 |
| *Economy category* | | | 16 | 20 |

# INVESTMENT REQUIREMENT

9.56 The investment requirement towards development of the presented infrastructure elements has been computed based on established norms, secondary research and discussions with the industry. The cost norms are provided as an appendix to the report. The broad cost estimates for tourism development in Little Andaman is shown below:

***Projected Investment***

*(Rs. in lakhs)*

| **Period** | ***Short Term*** | **Medium Term** | **Long Term** |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport Infrastructure | **0** | **0** | **0** |
| Accommodation projects | 0 | 1000 | 0 |
| Tourism Products | 0 | 180 | 175 |
| Others (Tourists Information Centres, Wayside Amenities etc.) | 0 | 23 | |
| **Total** | **0** | **1203** | **175** |
| **TOTAL INVESTMENTS** | **1378** | | |

# *SECTION VI : CAR NICOBAR*

9.57 Based on the tourism development strategy proposed for A&N, Nicobar will be opened for tourism development only after 10 years. In the medium term, cruise tourism will be introduced in Nicobar which will basically take day trips into areas of tourist interest.

9.58 The projected tourist numbers based on AFF's Demand Estimation Methodology is presented below:

| | 2002 | 2007 | 2012 | 2022 |
|---|---|---|---|---|
| Domestic | Current Arrivals | | Cruise Tourism | 3951 |
| Foreign | | | | 3950 |
| **Total** | | | | **7901** |

9.59 An assessment of existing infrastructure, the following have been identified as the key development requirements

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Connectivity Infrastructure | Not developed | | | ✓ |
| | | In the medium term through Cruise Tourism | | |
| Accommodation | Not developed | | | ✓ |
| | | | | |
| Midway/ Wayside Facilities | Not available | | | ✓ |
| Tourist Offices | Not available | | | ✓ |
| Others (Recreational Facilities, Shopping Facilities, etc) | Minimal | | | ✓ |
| Tourism Products | Exists but not developed | | | ✓ |

9.60 Based on this analysis, the various tourism projects that have been proposed for Car Nicobar is shown below :

***Tourism Products for Car Nicobar***

| **Period** | ***Short Term*** | | **Medium Term** | **Long Term** |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| ***Hub*** | **Car Nicobar** | | | |
| ***Key Milestones*** | Drifting point from Port Blair and Great Nicobar | | | |
| ***Tourism Products*** | | | | |
| Transport projects | | | Luxury cruise from Port Blair | • Passenger Ships from Port Blair |
| Accommodation projects * | | | • 10 tree top machans on Nicobar Beach<br>• 15 room eco-resort on Nicobar Beach<br>• 20 families for bed and breakfast | • 10 tree top premium resort in Nicobar Beach<br>• 15 room semi-premium eco-resort<br>• 20 families for bed and breakfast concept |
| **Tourism Products *** | | | • Eco-restlets at Nicobar Beach | • Eco-restlets at Nicobar Beach |
| Tourists Information Centres | | | At Car Nicobar | |
| **Common projects** | Midside / Wayside Amenities<br>Handicraft / Souvenir Shops<br>Covered doongis / boats for short sailing | | | |

* Accommodation and Tourism products developed to cater to cruise tourists and for

tourist arrivals projected in the >10 years period.

## BRIEF DESCRIPTION OF PROJECTS

9.61 Transport Infrastructure has been estimated based on the average tourist inflow per day exclusive vessels for tourists have been considered as an option.

9.62 Car Nicobar is a tribal reserve and hence there is no revenue land availability. Therefore, tourist accommodation have been suggested accordingly.

### *Projections for Accommodation Infrastructure*

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| *Present tourist inflow* | | | | |
| *Projected tourist inflow* | | | | 7901 |
| *Room nights available* | | | | |
| *Demand for room nights* | | | | 154 |
| *Incremental Demand* | | | | 95 |
| *Premium category* | | | | 29 |
| *Semi Premium category* | | | | 37 |
| *Economy category* | | | | 29 |

***Other Tourism Products***

9.63 Due to the non-availability of revenue land for tourism development, live with nature in natural surroundings to be the theme

## INVESTMENT REQUIREMENT

9.64 The investment requirement towards development of the presented infrastructure elements has been computed based on established norms, secondary research and discussions with the industry. The cost norms are provided as an appendix to the report. The broad cost estimates for tourism development in Car Nicobar is shown below:

***<u>Projected Investment</u>***

*(Rs. in lakhs)*

| Period | *Short Term* | Medium Term | Long Term |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport Infrastructure | | 0 | 0 |
| Accommodation projects | | 620 | 620 |

| **Period** | ***Short Term*** | **Medium Term** | **Long Term** |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Tourism Products | | 2 | 2 |
| Others (Tourists Information Centres, Wayside Amenities etc.) | | 20 | 0 |
| **Total** | | **642** | **622** |
| **TOTAL INVESTMENTS** | | **1264** | |

## *SECTION VII : KATCHAL*

9.65 The projected tourist numbers for Katchal based on AFF's Demand Estimation Methodology is presented below:

| | 2002 | 2007 | 2012 | 2022 |
|---|---|---|---|---|
| Domestic | Current Arrivals | | Cruise Tourism | 293 |
| Foreign | | | | 292 |
| **Total** | | | | **585** |

9.66 Based on the extensive field survey at Katchal and assessment of existing infrastructure, the following have been identified as the key development requirements

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Connectivity Infrastructure | Not developed | | | ✓ |
| | | Cruise tourism from Port Blair in the Medium term | | |
| Accommodation | Not developed | | ✓ | |
| | | | | |
| Midway/ Wayside Facilities | Not available | | ✓ | |
| Tourist Offices | Not available | | ✓ | |
| Others (Recreational Facilities, Shopping Facilities, etc) | Minimal | | ✓ | |
| Tourism Products | Exists but not developed | | ✓ | ✓ |

9.67 Based on this analysis, the various tourism projects that have been proposed for Katchal is shown below :

***Tourism Products for Katchal***

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |

| **Period** | ***Short Term*** | | **Medium Term** | **Long Term** |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| ***Hub*** | **Katchal** | | | |
| ***Key Milestones*** | Difting point from Port Blair and Great Nicobar | | | |
| ***Tourism Products*** | | | | |
| Transport projects | | | Luxury cruise from Port Blair | |
| Accommodation projects * | | | • 2 premium and semi premium eco houses in West Bay Beach<br>• 10 families for bed and breakfast concept | |
| **Tourism Products *** | | | • Restlets in Jhansi Beach<br>• Sound and Light show at Kupinga British Buildings<br>• Walkway to Millenium Sunrise Point | • Scuba diving centre at Jhula Beach<br>• Nicobarese village at Bechadara |
| Tourists Information Centres | | | At Katchal | |
| **Common projects** | Midside / Wayside Amenities<br>Handicraft / Souvenir Shops<br>Covered doongis / boats for short sailing | | | |

* Accommodation and Tourism products developed to cater to cruise tourists and for
tourist arrivals projected in the > 10 years period.

## BRIEF DESCRIPTION OF PROJECTS

9.68 Katchal is a tribal reserve and hence there is no revenue land availability. Therefore, tourists accommodation have been suggested accordingly.

### *Projections for Accommodation Infrastructure*

| **Period** | ***Short Term*** | **Medium Term** | **Long Term** |
|---|---|---|---|

| Year | 2002 (0-2 years) | 2007 (3-5 years) | 2012 (6-10 years) | 2022 (>10 years) |
|---|---|---|---|---|
| *Present tourist inflow* | | | | |
| *Projected tourist inflow* | | | | 585 |
| *Room nights available* | | | | |
| *Demand for room nights* | | | | 11 |
| *Incremental Demand* | | | | 7 |
| *Premium category* | | | | 2 |
| *Semi Premium category* | | | | 3 |
| *Economy category* | | | | 2 |

# INVESTMENT REQUIREMENT

9.69 The investment requirement towards development of the presented infrastructure elements has been computed based on established norms, secondary research and discussions with the industry. The cost norms are provided as an appendix to the report. The broad cost estimates for tourism development in Katchal is shown below:

***Projected Investment***

*(Rs. in lakhs)*

| Period | *Short Term* | Medium Term | Long Term |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport Infrastructure | | 0 | 0 |
| Accommodation projects | | 110 | 0 |
| Tourism Products | | 106 | 150 |
| Others (Tourists Information Centres, Wayside Amenities etc.) | | 21 | 0 |
| **Total** | | **237** | **150** |
| **TOTAL INVESTMENTS** | **387** | | |

## SECTION VIII : GREAT NICOBAR

9.70 Proximity to South East Asian Countries offers Great Nicobar, high potential for tourism development.

9.71 The projected tourist numbers based on AFF's Demand Estimation Methodology is presented below:

| | 2002 | 2007 | 2012 | 2022 |
|---|---|---|---|---|
| Domestic | Current Arrivals | | Cruise Tourism | 1627 |
| Foreign | | | | 1626 |
| **Total** | | | | **3253** |

9.72 Based on the extensive field survey at Great Nicobar and assessment of existing infrastructure, the following have been identified as the key development requirements

| Category | Current Status | Potential for Development | | |
|---|---|---|---|---|
| | | Short Term | Medium Term | Long Term |
| Connectivity Infrastructure | Not developed | | | ✓ |
| | | Cruise tourist in the medium term | | |
| Accommodation | Not developed | | ✓ | |
| | | | | |
| Midway/ Wayside Facilities | Not available | | ✓ | |
| Tourist Offices | Not available | | ✓ | |
| Others (Recreational Facilities, Shopping Facilities, etc) | Minimal | | ✓ | |
| Tourism Products | Exists but not developed | | ✓ | ✓ |

9.73 Based on this analysis, the various tourism projects that have been proposed for Great Nicobar is shown below :

***Tourism Products for Great Nicobar***

| **Period** | ***Short Term*** | | **Medium Term** | **Long Term** |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| ***Hub*** | **Campbell Bay** | | | |
| ***Key Milestones*** | | | | Entry point through air and sea |
| ***Tourism Products*** | | | | |
| Transport projects | | | Cruise tourism from Port Blair<br>Upgrading existing airstrip | • Small flight having direct entry into Great Nicobar |
| Accommodation projects * | | | • 8 room premium tree top resort in Gandhi Nagar<br>• 12 rooms semi premium resort in Vijay Nagar<br>• 10 families for bed and breakfast | |
| **Tourism Products *** | | | • Orchadarism<br>• Butterfly Park<br>• Research Centre and Interpretation Centre at CB and Galathia National Park<br>• Developing approach to Indira Point | • Birds Museum<br>• Nicobaree style village |
| Tourists Information Centres | | | At Campbell Bay | |
| **Common projects** | Midside / Wayside Amenities<br>Handicraft / Souvenir Shops<br>Covered doongis / boats for short sailing | | | |

* Accommodation and Tourism products developed to cater to the cruise tourists and for tourist arrivals projected in the > 10 years period.

# BRIEF DESCRIPTION OF PROJECTS

9.74 Accommodation is based on the existing beds available, the demand for beds based on increase in tourists traffic. Categorisation of room requirement into premium, semi premium and economy classes have been considered as shown below.

***Projections for Accommodation Infrastructure***

| Period | *Short Term* | | Medium Term | Long Term |
|---|---|---|---|---|
| **Year** | **2002 (0-2 years)** | **2007 (3-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| *Present tourist inflow* | | | | |
| *Projected tourist inflow* | | | | 3253 |
| *Room nights available* | | | | |
| *Demand for room nights* | | | | 63 |
| *Incremental Demand* | | | | 39 |
| *Premium category* | | | | 12 |
| *Semi Premium category* | | | | 15 |
| *Economy category* | | | | 12 |

## INVESTMENT REQUIREMENT

9.75 The investment requirement towards development of the presented infrastructure elements has been computed based on established norms, secondary research and discussions with the industry. The cost norms are provided as an appendix to the report. The broad cost estimates for tourism development in Great Nicobar is shown below:

***Projected Investment***

*(Rs. in lakhs)*

| Period | *Short Term* | Medium Term | Long Term |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport Infrastructure | | 500 | 0 |
| Accommodation projects | | 490 | 0 |
| Tourism Products | | 85 | 125 |
| Others (Tourists Information Centres, Wayside Amenities etc.) | | 15 | 0 |
| **Total** | | **1090** | **125** |

| Period | *Short Term* | Medium Term | Long Term |
|---|---|---|---|
| Year | 2007<br>(0-5 years) | 2012<br>(6-10 years) | 2022<br>(>10 years) |
| TOTAL INVESTMENTS | | 1215 | |

### *Total Investment Requirements*

9.76 Based on the various projects proposed and the phasing of the projects, the overall investment requirement is shown below.

**Proposed Investments for Tourism Development**

*Rs. in Lakhs*

| Period | Short Term | Medium Term | Long Term |
|---|---|---|---|
| **Year** | **2007 (0-5 years)** | **2012 (6-10 years)** | **2022 (>10 years)** |
| Transport projects | 100 | 540 | 120 |
| Accommodation projects | 5550 | 5870 | 11770 |
| Tourism Products | 3911 | 9193 | 1852 |
| Other Projects | 170 | 84 | 0 |
| **Total** | **9731** | **15687** | **13742** |
| **Grand Total** | **39160** | | |

9.77 Please note that, projections for 20 years have been made at current prices and no adjustments for inflation / time value of money has been provided for.

### ***Socio-Economic Benefits***

9.78 As discussed in Chapter III, investments in tourism have the potential to bring in a variety of economic benefits including :

- Increased contribution to SDP
- Resources for protection and conservation of natural resources
- New employment opportunities
- Scope for redeploying local community

There are potential costs too including:
- Pressure on limited resources
- Increased rate of inflation
- Adverse impact on culture and tradition
- Increased economic leakages

- Improvement in the sate of infrastructure
- Improvement in the quality of life

9.79 At current prices, direct revenue from tourism by 2022 could be Rs 300 crs per annum based on the following:

- 243342 tourist arrivals (equal domestic and foreign)
- Average length of stay (domestic – 5 days, foreigners – 10 days)
- Average spending per day

9.80 The development options suggested have a number of employment opportunities.

9.81 The perspective plan for tourism development has suggested a variety of development options for A&N. The potential employment opportunities in these areas is shown below :

**Investment of every additional 1 mn rupees in the tourism sector is likely to result in 47.5 direct and 17 indirect jobs.**
**Source : WTO**
***By 2022 the application of this norm would result in 1,85,725 direct jobs and 66,470 indirect jobs in A&N islands***

**<u>Employment Potential of Various Tourist Expenditure Areas</u>**

| Category | Overall Employment Potential | | Potential for Women Employment | | Remarks |
|---|---|---|---|---|---|
| Accommodation Infrastructure | | | | | |
| Premium / Semi-premium Resorts | **High** 50 - 100 per unit/ (0.7-0.92 per bed) | • Front Desk<br>• Housekeeping<br>• Food Service<br>• Maintenance<br>• Others (administration, travel desk, entertainment, health and beauty, etc.) | **High** 5-25/ unit | Front Desk<br>Housekeeping<br>Administration<br>Food Service<br>Parlors and Salons<br>Play Pens<br>Child Care | **High possibility for local community / artisans**<br>Live performances<br>Souvenirs and Handicraft stores<br>Convenience stores |

| Category | Overall Employment Potential | | Potential for Women Employment | | Remarks |
|---|---|---|---|---|---|
| Other Resorts | **High** 15-50/ unit | • Front Desk<br>• Housekeeping<br>• Food Service<br>• Maintenance | **Med.** 5-20/ unit | • Front Desk<br>• Housekeeping | **Medium possibility for local community / artisans**<br>• Convenience stores |
| Bed & Breakfast | **A Family** 4-5/ unit | Basic services on offer | **High** 1-3 unit | Can be managed by housewives | **It is entirely based on local community involvement** |
| **Tour and Travel Services** | | | | | |
| Tour Operators | **High** 10-50/ unit | • Reception<br>• Administration<br>• Drivers<br>• Guides | **Moderate** 5-10/ unit | • Reception<br>• Administration | **Local community can play an important role as guides / drivers. Forest Dept. employees can also be redeployed as guides** |
| Transport | **High 15- 30 per ship** | • Drivers<br>• Shipping Services<br>• Cabin Crew | **Low** | | **Local Community can be involved in shipping services Artisans can provide live performances on ships** |
| **Food Service** | | | | | |
| Restaurants | **High** 20-40/ unit | • Service<br>• Kitchen<br>• Helpers | **Low** 2-5/ unit | • Kitchen | Live cultural shows in restaurants |
| Wayside facilities | **High** 10-20/ unit | • Service<br>• Kitchen<br>• Helpers | **Med** | • Kitchen | **Regional distribution of employment** |
| Tourism Products (Scuba Diving, Nature Trails, Amusement Parks, Orchidarium, Eco-villages, Sound &Light shows, Cruise Ships etc.) | **High** | • Administration<br>• Guides<br>• Trainers<br>• Resource Personnel<br>• Service Cultural Performances | **High** | • Live Performances<br>• Instructors<br>• Administration | **High**<br>• Live performances<br>• Showcasing artefacts<br>• Providing local cuisine in eco-villages etc. |
| **Souvenir Shopping** | | | | | |
| Direct / Retail / Manufacturing | **Medium** | • Sales<br>• Administration<br>• Manufacturing | **Med** | • Sales<br>• Administration<br>• Manufacturing | |

| Category | Overall Employment Potential | | Potential for Women Employment | | Remarks | |
|---|---|---|---|---|---|---|
| Guide Services | **Medium** | | **Low** | | **Low** | |

9.82 There is a definite scope for employment opportunities for the local community and also specifically for women and artisans. However, for maximising opportunities for local participation, training programmes have to be provided to the residents of A&N and specially the younger generation. With the need for ensuring service standards in the industry, there is need for upgrading the local community with the appropriate skill-sets. Redeploying the existing employees of saw-mills / plantations / logging (who are likely to be displaced) need to be taken up on a priority basis.

# CHAPTER 10

# PRIVATISATION & PUBLIC-PRIVATE PARTNERSHIPS FOR TOURISM DEVELOPMENT

10.1 This chapter deals with the background and trends in privatisation and public-private partnerships in the tourism sector, the options available for the same in A&N and the key issues that needs to be addressed.

***Background***

10.2 Tourism industry in India and especially in A&N is still in its infancy. For tourism to be successful, besides attractiveness of the site, other hygiene factors such as the social, political and cultural environment also become significant. This all round development not only calls for direct investment, but also substantial investments in the social and urban infrastructure.

10.3 The tourism industry has a long value chain with multiple activities and stakeholders. Though the actual quantum of private sector investments in tourism has not been estimated, tourism is increasingly seen as a private sector activity, with the government being the facilitator.

**Need for Public-Private Partnerships**

10.4 The key drivers of PPPs in A&N islands are :

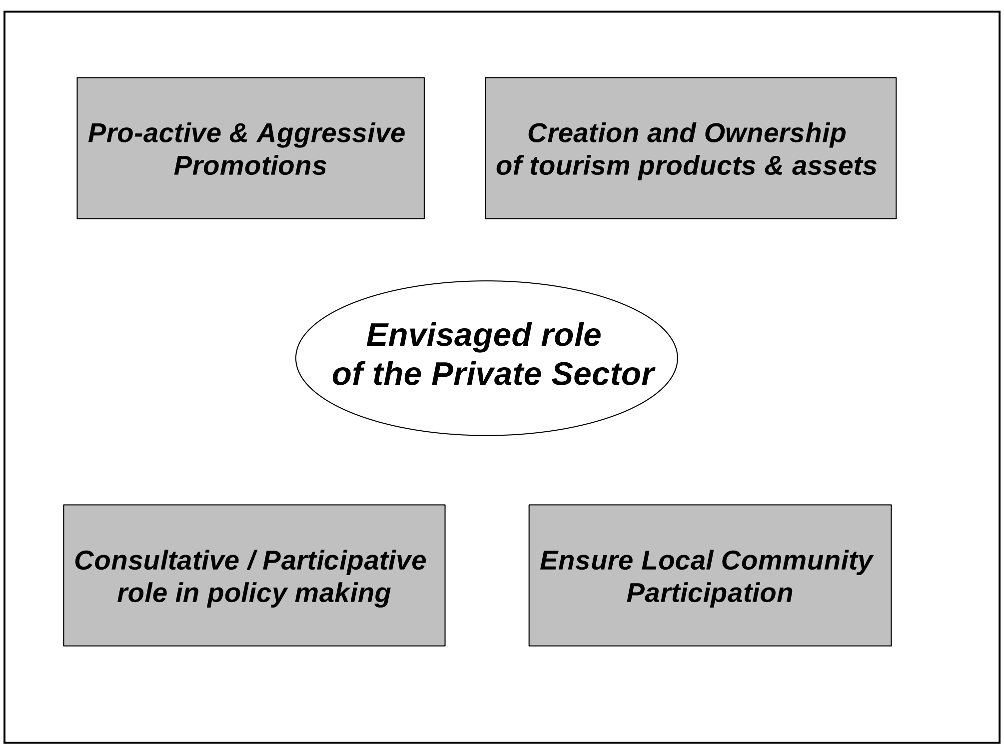
- The tourism development strategy calls for developing tourism industry to international standards. Further, the focus is also on high-value tourists. This implies a quantum leap in quality of tourism products, infrastructure and service standards. A minimum investment of Rs 391crs is envisaged in the next 20 years, most of it in the immediate - short term. This calls for a substantial ***burst of capital inflow***
- Existing dependence of A&N islands on Central Government funding which also has other claimants
- Efficiency of fund utilisation would come in with private sector investment leading to short break-evens and improved cash flows
- Meeting the need for specialised expertise in diverse areas.

***Role of Private Sector***

10.5 Private sector's role has traditionally been in the form of investments in

- Manmade tourism attractions like entertainment venues, amusement parks, heritage villages etc.
- Tourism service delivery products like luxury cruises, coaches, hotels etc.

10.6 There is however, a larger role that private sector can play :



**Forms of PPP**

10.7 Private investment in tourism comes in several forms :

- 100% private investment in various projects
- Joint Venture with State initiatives
- Consortium investments
- Technical Tie-ups for specialised activities
- Outsourcing of certain modules (Event Management promotions / presentations etc.)

10.8 However only Joint Venture with government to run state owned assets and Outsourcing event management / promotional campaigns have become popular. 100% private investments are largely restricted to hotels/ resorts / pure entertainment projects. Other forms of investments are yet to catch up in a big way.

***Road Blocks in PPP***

10.9 Unlike other states, A&N islands are subject to a mix of natural, environmental and regulatory factors that - present, all at the same time militate against project viability. Projects need to be right-sized, conceptualised and located well. These may not interest traditional "travel and hotel" investor.

10.10 Other road blocks to PPPs are :

- Lack of a clear road map to promote project development, incentives and the role of government in facilitating
- Lack of equity funding. Financiers prefer debt capital and that too for the short term. There is need for venture capital.
- Clear definition of revenue and risk sharing arrangements.

***Policy Initiatives of A&N***

***Investment opportunities for Tourism in A&N***

Policy

- Considering the limited carrying capacity of the islands, the policy of the Administration is to promote high value low volume eco-friendly tourism
- Developmental activities, which are not harmful to the natural beauty and the eco-system, will be allowed
- The Administration will play the role of a facilitator
- Private investment will be encouraged in various sectors like developing high quality resorts, introducing high speed boats, development of golf course, adventure water sports, glass bottom submarines for coral viewing etc.

Potential Areas : Goodwill Estate, North Passage Island, Long Island, Little Andaman Island, Smith Island, Neil Island, etc.

*Source : Investment Opportunities in Tourism Sector*

10.11 In addition, the administration is also offering fiscal incentives to private investment in tourism. Incentives for investment in tourism sector are routed through ANIIDCO. The proposed funds for providing subsidies are allocated to ANIIDCO, in turn extend loans at nominal rate of interest.

10.12 The Department of Tourism runs resorts / guest houses at various cities including :

| | |
|---|---|
| Directorate of Tourism | ➢ Andaman Teal House, Port Blair<br>➢ Dolphin Resort, Havelock<br>➢ Hawkbill Nest – Neil Island<br>➢ Hawkbill Nest – Rangat<br>➢ Turtle Resort – Diglipur |
| ANIIDCO | ➢ Megapode Nest, Post Blair |
| ANIFPDCL | ➢ Green Grace and Cozycove<br>➢ Nicobar Huts |

These are potential options for privatisation. This is also being actively considered by the Directorate of Tourism. .

***Public Private Partnership – Case Studies***

10.13 A few successful initiatives in PPPs are shown as case studies in the following section

**International Case Studies**

***China***

In September 2000 the Chinese Tourist Delegation, composed of representatives of CNTA and the State Development Planning Commission, participated in the Fourth China International Fair for Investment and Trade (CIFIT). A total of 211 tourist projects, of which, there were 97 projects for scenic areas, 13 for accommodation facilities, 82 for modern entertainment, involving a total investment of US$ 4.28 billion were cleared. The agreements of investment, involving 110 tourist projects, were concluded with domestic and foreign business people, with negotiated funds reaching US$ 1.3 billion, In 2000, 77 priority investment projects were introduced by CNTA, of which, there were 53 projects in middle and western regions, with construction funds of 861 million yuan allocated by the State financial plan.

***Thailand***

In Thailand, travel and tourism is already the country's largest foreign exchange earning service industry. It is identified by Govt. (Thai Deputy PM in UN Seminar on PPP in tourism) that tourism has grown largely because the private sector has played a major role in ensuring that the country offers good products and services that are recognised world-wide for their quality and value money. These products are then marketed by the Tourism Authority of Thailand, THAI Airways International and others involved in the industry, working in partnership. It is appreciated widely that careful thought and action are required in order to define the nature and balance in the public-private partnership for tourism development. This includes thinking about the comparative advantage of the private sector in responding to the market forces and the social responsibility of the public sector for establishing the policy framework and business environment that would

## Indian Initiatives

***Tamil Nadu***

Since pilgrim and heritage centres are important tourist attractions in the state, the government is encouraging private partnerships for setting up five-star hotels is these areas. The government on its part is extending support in the form of necessary speedy approvals, land clearances, capital subsidies and setting up a guidance and investment

***Kerala***

Tourism Investment Guidance Cell has been formed at the Directorate of Tourism to guide potential investors in this sector. It consists of representatives from each of the following organisations - Kerala State Industrial Development Corporation (KSIDC), Kerala Financial Corporation (KFC) and Department of Tourism. The government has extended several incentives to tourism in the form of subsidies, technical guidance, marketing assistance, publicity and help in availing loans. KSIDC provides services like preparation of feasibility reports, technology and manpower sourcing and most importantly, funding. KFC also provides financial support in the form of short-term loans. The immediate focus of the government is to introduce a single window for

***Karnataka***

With the objective of transforming the state into a leading tourist destination and encourage private participation in tourism sector, leading travel agents, tour operators and hoteliers have come together and formed the Karnataka Tourism Forum (KTF). The government has also decided to privatise 7 properties belonging to the Karnataka State Tourism Development Corporation (KSTDC). These would be run on a sort of private-

***<u>Non Government Funding Options</u>***

10.14 Private sector investment ably supported by Government investment in core infrastructure would be the two key sources for funding of tourism projects in the state. Apart from these, following sources for funding can also be looked at for tourism projects:

- Foreign Direct Investment
- Foreign funding from bilateral and multilateral agencies
- Others (NGOs, trusts, community participation, etc.)

***Foreign Investment***

10.15 Foreign private investment for tourism projects is a relatively unexplored option in Indian context and has been so far limited to setting up of hotels by international hotel and fast-food restaurant chains through their Indian franchisers. Other areas attracting foreign private investment have been support infrastructure like Airport projects, Power generation, etc..

10.16 The main reason behind unavailability of foreign investment in other tourism infrastructure has been the relative small size of tourism market in India and lack of adequate financial incentives for the foreign investor to invest in tourism projects.

10.17 An important recent development in this regard has been the raising of Foreign Direct Investment (FDI) limit to 100% for the Hotel and Tourism industry through the automatic route from the existing 51%. This would make investment in the hotel sector (especially the luxury and mid-priced range) more attractive for foreign players

10.18 Focus areas where foreign investment should be sought in A&N include premium resorts, amusement and theme parks, cruise ships, scuba diving centres etc.

***Foreign Multilateral/ Bilateral Funding***

10.19 This includes funding of tourism projects from bilateral (specific aid from the donor/ funding nation to the recipient agency) or multilateral (funding to recipient agency from international or multilateral agencies in the World Bank, OECF, ADB, WWF etc).

10.20 Tourism does not usually get a high priority in the total funding package by multilateral agencies, since the focus is on core infrastructure and urban development projects. However, projects like Integrated Area Development Plans / Carrying Capacity Analysis, sanctuaries / national parks / restoring monuments etc. have benefited in the past.

10.21 Other international sources of funding for tourism related investments that need to be explored are donor agencies like World Tourism Organisation (WTO) or the United Nations Development Programme (UNDP). UNDP have in the past funded specific tourism-related studies.

**Special Groups**

10.22 Since A&N is in the high eco-sensitive zone, fundings from agencies that work closely with nature - WWF, Coral Reef Research Foundations need to be targeted.

***Conclusion***

10.23 The various opportunities for public -private partnerships in the islands are shown in the table below :

| Illustrative Projects Proposed | Government | Private Sector | International Aid | International Funding |
|---|---|---|---|---|
| Basic Infrastructure | ✓ | Selective | ✓ | |
| Transport Infrastructure | ✓ | Cruises Luxury Coaches | | |
| Resorts | | ✓ | | ✓ |
| Tourist Information Centres | ✓ | | | |
| Mid way / Wayside Amenities | ✓ | Sponsor-ships | | |
| Amusement Parks | | ✓ | | ✓ |
| Simulation Shows | | ✓ | | |
| Sound & Light Shows | | ✓ | | |
| Cruise Ships | | ✓ | | ✓ |
| Restlets | ✓ | | | |
| Eco-Villages | | v | | |
| Watch Towers | ✓ | | | |
| Nature Trails | ✓ | ✓ | | |
| Public Amenities | ✓ | | | |
| Tourism Management Institute | | ✓ | ✓ | ✓ |
| Orchidarium | | ✓ | ✓ | ✓ |
| Butterfly Park | | ✓ | ✓ | ✓ |
| Scuba Diving | | ✓ | | ✓ |
| National Parks | | ✓ | ✓ | |
| Heritage Sights | | ✓ | ✓ | |

10.24 But government would have to play a lead role in enabling and facilitating PPPs. The setting up of the A&N islands Tourism Development Board is meant to facilitate PPPs (detailed in Chapter 11).

*CHAPTER 11*

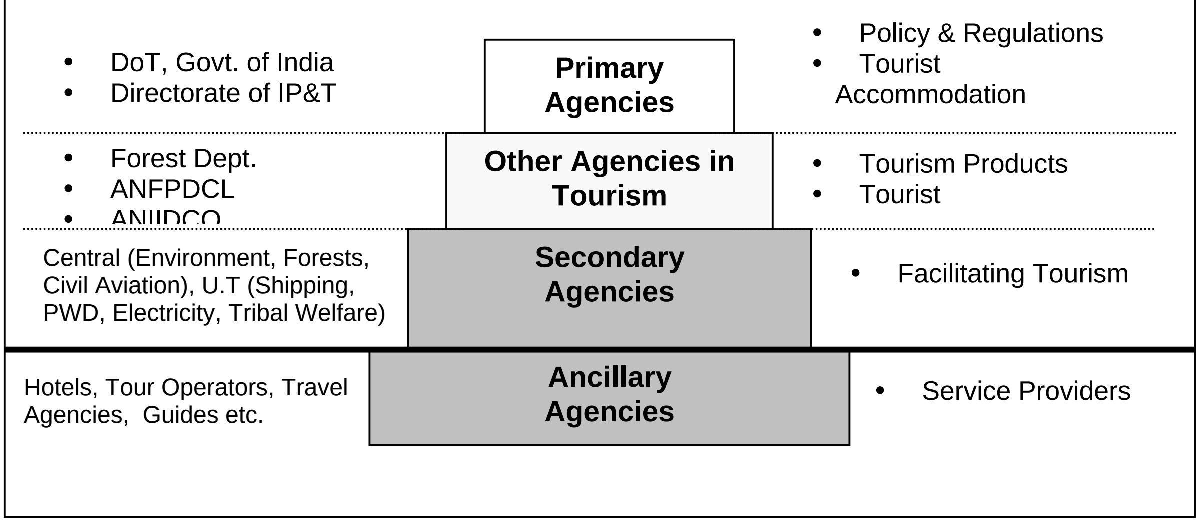
# INSTITUTIONAL FRAMEWORK FOR TOURISM DEVELOPMENT

1.77 This chapter deals with the existing institutional framework, role of various agencies in tourism development, issues / deficiencies in the current set-up and options / recommendations for the same.

## ***Existing Framework***

1.78 The current institutional framework for tourism development and promotion in A&N is provided in the exhibit below.

***Current Institutional Framework***




## ***Agencies involved in Tourism Development***

1.79 Currently, there are four agencies involved in tourism development in A&N. A brief description of their role is presented below :

### *Directorate of Information, Publicity & Tourism (DIP&T)*

1.80 The DIP&T is the nodal agency for tourism promotion and development in A&N. The main activities performed by the Department include :

- ➢ Policy / strategy for tourism development
- ➢ Budgets for tourism development
- ➢ Publicity including preparation of brochures and other information literatures

- Development and maintenance of tourism accommodation (IP&T guesthouses in Port Blair, Neil, Havelock, Rangat, Mayabunder and Diglipur)
- Tourist Information Services / kiosk in Port Blair
- Tourism promotion including attending travel / trade shows
- Public relations including co-ordinating trips for guests
- Co-ordinating the Island Festival
- Developing and running tourism products (Water Sports Complex, Waves Restaurant, Sound & Light Show at Cellular Jail etc.)
- Tourism Promotion on the Mainland through the office of the Dy. Resident Commissioners.

1.81 The DIP&T is headed by Secretary (Tourism) who also has the additional portfolio of Finance. The Director (Tourism) is its operational head.

***Department of Forest***

1.82 The Forest Department –effectively the custodian of A&N's vast natural resources - is a recent entrant in tourism development. With its traditional activities in question, the department is seeking alternate means of sustenance through the promotion of eco-tourism. The department is best placed to "direct" the nature and level of tourism that can be permissible / possible in these areas. A Draft Eco-Tourism Plan is under preparation. The Department is considering areas / islands that it can open for tourism development, sanctuaries / reserves and activities that can be permitted etc.

***Andaman & Nicobar Islands Forest Plantation Development Corporation Ltd. (ANIFPDCL)***

1.83 ANIFPDCL is a PSU within the Forest Department, established for the main purpose of managing the plantation sector. With a slow down in the sector (the recent Supreme Court Ruling also bans plantation activity), ANIFPDCL is also looking for other survival options.

1.84 Currently, ANIFPDCL is involved in providing tourism related services. ie. conducted tours to Mayabunder and Little Andaman besides running an eco-village at (Ray Hill) at Mayabunder. An expansion in services is planned.

***Andaman & Nicobar Islands Integrated Development Corporation Ltd. (ANIIDCO)***

1.85 ANIIDCO was established in 1988 for initiating and promoting an integrated development approach to various sectors including fisheries, distribution, industrial finance and tourism.

1.86 The organisation started participating in a minor way in tourism with the setting up and management of Megapode Nest, a high-end resort in Port Blair and a specialty sea-food restaurant in its office complex.

1.87 ANIIDCO's role has recently expanded to enabling public-private partnerships in A&N. Incentives for investment in the tourism sector are routed through ANIIDCO which in turn extends loans at a nominal rate of interest to potential investors. ANIIDCO is also keenly looking at developing tourism infrastructure.

***<u>Issues in the Existing Framework</u>***

1.88 Limitations in the existing institutional framework for tourism development are :

- ***Multiple tourism agencies with overlapping functions***

Overlap between the agencies in terms of activities and functions, leading to a dilution and duplication of effort and lack of accountability for specific achievements.

| Functions | DIP&T | Dept. of Forests | ANIFPDCL | ANNIDCO |
|---|---|---|---|---|
| Tourism Development | | | | |
| Tourist Accommodation | | | | |
| Tourism Products | | In progress | | |
| Publicity & Promotion | | | | |
| Focus Areas | Beach | Forests | Forests | - |
| Tourist Finance | | | | |

- ***Lack of a well defined Vision***

Though master plans have been prepared earlier, development efforts are still geared towards limited operationalisation and private investor attraction rather than comprehensive tourism development. This is compounded by the piece meal approach of each agency and the lack of concerted effort to address factors that are critical for success.

- ***Multiple Regulatory Agencies***

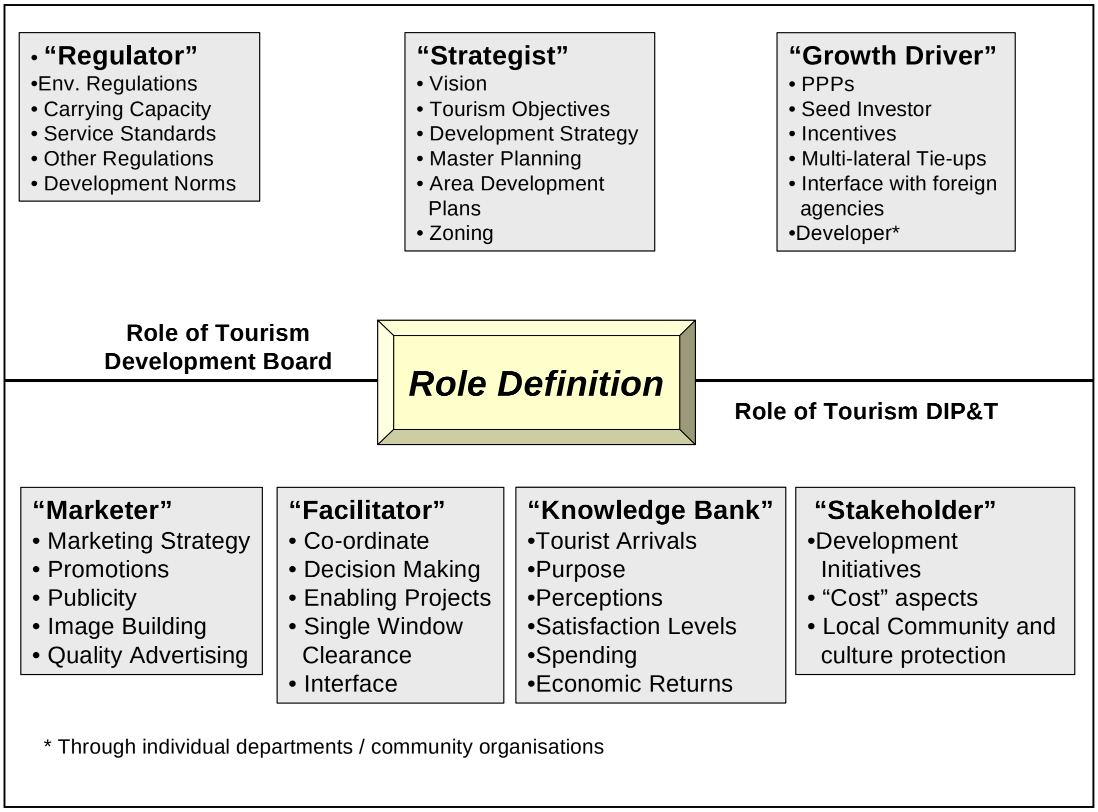
Geography, ecological sensitivity and security all lead to a far greater role played by a plethora of government departments and regulatory bodies, in the development of tourism than from the agencies directly involved in tourism.

Integration of action is however lacking; this is compounded by the need to refer issues to the centre.

1.89 All of these adversely impact levels of tourist and tourism investor service. A&N today needs substantial institutional gearing before it can service higher levels of tourist activity.

## ***Role of Govt. in Tourism Development Administration***

1.90 A pro-active role of the government is essential in expediting the tourism development process in A&N islands.




1.91 Fulfilling the above, needs initiatives both within and outside of DIP&T best achieved through the creation of an Apex Tourism Board that brings together all stakeholders and provide a common platform for discussions and forum for decision making.

## ***Andaman & Nicobar Islands Tourism Development Board***

1.92 The ANITDB will have representations from :

- Directorate of IP&T
- Director,Shipping Services
- Principal Chief Conservator of Forests
- Conservator of Forests - CRZ
- Chief Engineer - PWD
- Secretary, Municipal Council
- Environmentalists
- Industry

1.93 The Board can be headed by a senior person appointed jointly by the DIP&T and Ministry of Tourism and have representation from the MoEF, Delhi on a periodic basis. The main focus of the apex body will be :

- Provide a strategic direction to tourism development in A&N including capacity building
- Decision making on projects taking cognisance of the various regulations / issues
- Single point interface to get project clearances from the Central Government
- Discuss issues / constraints of critical nature with the Central Govt. to seek appropriate relaxations
- Harmonising stakeholders efforts.

1.94 One of the primary focus areas of the Tourism Development Board (TDB) will be ensure service standards. The tourism industry is highly competitive. This necessitates ensuring tourist satisfaction by maintaining high levels of service which deals with

- Absolute levels of service provided
- Level of service in relation to cost of service
- Minimum basic requirements
- Adherence to stated norms of service (especially setting norms / level for service

***Areas for Internal Gearing***

1.95 Besides, setting up of an apex body, the following areas also need to be strengthened within the DIP&T :

- More focus on strategies and policy than routine operational issues
- Dedicated Market Research function to keep abreast of industry trends and experiences, track customer satisfaction etc.
- Co-ordination with a professional advertising agency for creating the marketing / promotion campaign and promotional literatures
- "Escorting " service that help private investors with project details and clearance
- Training the staff and sensitise them to tourist needs.
- Improve information services and network
- Legal division to handle the modalities of PPP
- Networked reservation system with the mainland
- Sensitising local community

# CHAPTER 12

# ACTION PLAN FOR TOURISM DEVELOPMENT

12.1 This chapter provides an action plan for tourism development in A&N islands. The action plan has been grouped under various functional categories and across various time periods. The action plan also identifies the agencies responsible for implementing the action agenda.

**Policy Issues (Regulation)**

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Entry and Access for tourists | DIP&T*<br>Central Govt.<br>A&N admin. | • Issues relating to naval security<br>• Visa Period Extension<br>• Access within A&N | ✓ | | |
| CRZ Regulations | A&N Admn.<br>DIP&T*<br>Dept. of Forest<br>MoEF | • CRZ relaxations on a case-to-case basis | ✓ | | |
| Impact of various regulations (for instance, Supreme Court ruling) | A&N admin.<br>DIP&T* | • Implications of ruling<br>• Alternate Strategies | ✓ | | |
| Service Standards | DIP&T* | • Establish Benchmarks<br>• Lay down norms for absolute &relative levels, minimum requirements & adherence to norms<br>• Update service standards | ✓ | ✓ | ✓ |
| Financing Tourism Development | A&N admin.<br>DIP&T<br>Central Govt. | • Investment Requirement<br>• Central allocation of funds<br>• Funds for basic infrastructure development | ✓ | ✓ | |

* ANTDB, after setting up

***Strategy Issues (Strategy)***

| Issues | Primary Responsibility | *Action Agenda* | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Sustainable Tourism Development | DIP&T*<br>Min. of Env & Forest<br>Forest Dept. | • Socio-environmental impact for all projects<br>• Set norms for carrying capacity<br>• Introduce & Implement development controls<br>• Local community involvement in policy<br>• Opportunities for local community for earning | ✓ | ✓ | ✓ |
| Spatial distribution of tourism | DIP&T<br>Dept of Forest | • Identify concentration points<br>• Identify distribution points<br>• Establish linkages | ✓ | | |
| Hub and Spoke Concept | DIP&T | • Identify hubs<br>• Development requirements in hubs<br>• Regulatory compliances<br>• Identify and develop spokes | ✓ | | |
| Zoning of Hubs & Spokes | DIP&T<br>Dept of Forest | • Identify core, buffer and peripheral zones for various hubs & spokes | ✓ | | |
| Opening Nicobar as a tourist destination | A&N admn.<br>Central Govt.<br>Indian Navy<br>DIP&T* | • Discuss possibility of opening up in > 10 years<br>• Possibility of day-trips in Nicobar (cruises) | | ✓ | ✓ |
| Definition of Eco-Tourism | A&N admin.<br>DIP&T<br>Dept of Forest | • Nature of development<br>• Nature of projects<br>• Nature of material | ✓ | | |
| Integrated Area Development Plans | DIP&T | • ADPs for every tourist region<br>• Detailing on various aspects including Basic infrastructure, zoning maps etc. | ✓ | ✓ | ✓ |

* ANTDB, after setting up

## *Tourism Development (Development)*

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Connectivity Infrastructure | DIP&T*<br>Min. of Civil Aviation<br>Dir. Of Shipping Services<br>Inland Waterways Authority<br>Private Sector | • Expansion of runway<br>• International Air Connectivity<br>• Increasing domestic flights<br>• Air connectivity to Diglipur & Great Nicobar<br>• Increased shipping services - frequency, regularity, quality<br>• Improve airstrips<br>• Improve Jetties<br>• Faster acquisition of ships | ✓ | ✓ | ✓ |
| Accommodation | DIP&T<br>Private Sector | • Norms for development<br>• Regulatory Compliances / clearances<br>• Land Availability<br>• Role of Govt. | ✓ | ✓ | ✓ |
| Tourist Information Services | DIP&T | • Set up information centres<br>• Deployment of trained staff<br>• Collate / disseminate information<br>• Networked reservations | ✓ | ✓ | |
| Wayside / Mid way amenities | DIP&T | • Provide for tourist comfort | ✓ | ✓ | |
| Basic and Support Infrastructure | DIP&T*<br>PWD<br>Municipal Council<br>Pvt. Funding Agencies | • Assess infrastructure availability against projected demand<br>• Regionwise Assessment of needs<br>• Infrastructure Master Plan<br>• Funds for expansion | ✓ | ✓ | |

* ANTDB, after setting up

***Marketing & Promotion ( Marketing)***

| Issues | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Marketing Strategy | DIP&T | • Positioning<br>• Target Customers<br>• Target Markets | ✓ | | |
| Tie-up with other Indian states / neighbouring countries | A&N admin.<br>DIP&T*<br>State Govts.<br>State Tourism Depts. | • Marketing Tie-up<br>• Developing Circuits<br>• Tourist Information Services<br>• Connectivity. | ✓ | ✓ | |
| Tie-up with airlines | DIP&T*<br>Indian Airlines<br>Jet Airways | • Air Fares<br>• Promotions<br>• Developing Packages<br>• Frequency | ✓ | | |
| Tie-up with tour operators / travel agencies | DIP&T<br>Tour Operators / Associations<br>Travel Agencies | • Develop and Promote A&N<br>• Image Building | ✓ | ✓ | |
| Advertising &Promotion campaigns | DIP&T | • Appointing professional advertising agency<br>• Providing ad brief | ✓ | | |
| Attract Special Interest Tourists | DIP&T<br>Tour Operators | • Evolve special packages<br>• Tie-up with National Geographic / Good Earth and other nature groups<br>• Tie-up with international scuba-diving centres<br>• Target and focus on corporates for Conferences / Seminars | ✓ | ✓ | |
| Increasing tourist season | DIP&T | • Develop seasonal themes<br>• Focus on "self-sufficient " resorts to develop resort based tourism | ✓ | | |
| Increasing Avg Length of Stay | DIP&T<br>Tour Operators<br>Hotels | • Create long packages<br>• Increase the spokes<br>• Creating new products | ✓ | ✓ | |
| Increase tourist spending | DIP&T | • Increase avenues<br>• Improve quality of accommodation<br>• Providing entertainment avenues<br>• Providing shopping options - handicrafts, souvenir shops etc. | ✓ | ✓ | ✓ |

* ANTDB, after setting up

***Information ( Knowledge Bank )***

| Issues | Primary Responsibility | *Action Agenda* | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Tourist Statistics | DIP&T | • Constitute a MR function within IP&T<br>• Review and evolve system for collection and analysis of tourist arrivals at various destinations<br>• Co-ordinating with the Centre / various states for MR initiatives in foreign countries<br>• Defining periodicity of research<br>• Tie-up with professional MR agencies | ✓ | ✓ | |
| Tracking tourist perceptions and level of satisfaction | DIP&T | • Tracking tourist movement, holidaying and spending pattern<br>• Obtain feedback on tourist perceptions w.r.t. A&N<br>• Measure tourist satisfaction on a regular basis | ✓ | | |

***Enabling private investment (Facilitation)***

| *Iss ues* | Primary Responsibility | Action Agenda | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Investment Policies | DIP&T<br>ANIIDCO<br>Central Govt. | • Guidelines for private investment<br>• Investment/ Incentive Policies<br>• Establishing "single-window" for investor clearance<br>• Target Funding Agencies<br>• Setting up legal cell in IP&T | ✓ | ✓ | |
| Facilitating investors | DIP&T | • Establish a "escorting" cell within IP&T<br>• Understand investor requirements<br>• Educate investors on various compliances | ✓ | ✓ | |

**Organisational Initiatives**

| *Issues* | Primary Responsibility | *Action Agenda* | Time Frame | | |
|---|---|---|---|---|---|
| | | | Short | Medium | Long |
| Establishing A&N Islands Tourism Development Board | DoT, Govt. of India<br>DIP&T<br>Other Stakeholders | • Establishing the TDB<br>• Setting out agenda for the Board | ✓ | | |
| Capacity Building | DIP&T | • Establishing various functions (MR, Legal, Escorting, Training etc)<br>• Training / Retraining employees to sensitise them to tourist needs.<br>• Establish service standards within the dept and various services offered by the department.<br>• Establish networking requirements | ✓ | ✓ | |
| Community Gearing | DIP&T | • Orient local community to tourist needs<br>• Sensitise them to customer needs and requirements<br>• Identify local people who can be re-deployed in the tourism sector (local guides, trekking etc.)<br>• Provide training opportunities | | ✓ | |
| Setting up Institute of Tourism Management | DIP&T<br>A&N admin<br>Central Govt.<br>AICTE | • Concept Planning for the institute<br>• Formalise location, course, content, intake<br>• Feasibility study for the institute<br>• Accreditation for the institute<br>• Tie-up with foreign universities<br>• Private Investors | | ✓ | ✓ |

***ANNEXURE I***

# MATCHING ToR TO THE DRAFT REPORT

| Sl. No. | ToR | Coverage in Report |
|---|---|---|
| (i) | Perspective Plan | Chapter 8, 9 |
| (ii) | Short Term / Long Term Plans | Chapter 9 |
| (iii) | Action Plan | Chapter 12 |
| (iv) | Existing Tourism Scenario | Chapter 5 |
| (v) | Existing Development / Investment Plans | Chapter 5 |
| (vi) | Existing Potential | Chapter 5 |
| (vii) | Analyse / Categorise existing destination | Chapter 5 |
| (viii) | Existing Infrastructure Levels | Chapter 6 |
| (ix) | Traffic Flow | Chapter 9 |
| (x) | Cost of Likely Investment | Chapter 9 |
| (xi) | New Tourism Projects | Chapter 5 |
| (xii) | Overall Investment Levels | Chapter 9 |
| (xiii) | Action Plan for Implementation | Chapter 12 |
| (xiv) | Employment Potential | Chapter 9 |
| (xv) | Domestic and Foreign Tourist | Chapter 9 |
| (xvi) | Employment Potential | Chapter 9 |
| (xvii) | Existing Infrastructure | Chapter 6 |
| (xviii) | Funding Options | Chapter 10 |
| (xix) | Funding Options | Chapter 10 |
| (xx) | Institutional Machinery | Chapter 11 |
| (xxi) | Performance for Local Artists | Chapter 9 |
| (xxii) | Cultural Complex | Chapter 9 |
| (xxiii) | Handicraft Shops | Chapter 9 |
| (xxiv) | Eco Resorts | Chapter 9 |
| (xxv) | Executive Summary | Chapter 2 |
| (xxvi) | Private Public Partnership | Chapter 10 |
| (xxvii) | Environment Impact | Chapter 7 |
| (xxviii) | Carrying Capacity; Spatial Planning | Chapter 9 |
| (xxix) | Eco Impact | Chapter 7 |
| (xxx) | Privatization | Chapter 10 |

***ANNEXURE II***

Recommendations on the prof. shekhar singh commission & Supreme Court ruling

The Supreme Court had appointed Prof. Shekhar Singh of Indian Institute of Public Administration as Commissioner to study and submit the report on the Forestry related matters in the Andaman & Nicobar Islands. Given below are the Recommendations of the Shekhar Singh Commission.

# FOREST HARVESTING

1. Felling of trees and collection of non-timber forest produce (NTFP) should be banned from the forests of Little Andaman Island and all tribal reserves except for i) collection of NTFP from already worked forests of Little Andaman and from forest areas designated for the purpose in the Nicobar group of Islands, for meeting the legitimate consumption of local inhabitants; and ii) collection of timber and other forest produce by tribals living within tribal reserves for meeting their bonafide needs.

2. Harvesting of all forest produce including timber and NTFP should be completely prohibited from National Parks and Sanctuaries.

3. In addition to areas covered under 1 & 2 above, no felling of trees should be allowed in any unworked forest area, i.e., area where felling of trees as per working plans, working schemes, felling schemes or approved working plans, has not taken place earlier. There should also be no diversion of forestland from any such unworked area or from areas covered under 1 and 2 above, without the specific orders of the Supreme Court.

4. No felling of trees for whatsoever reasons or justification should be carried out to supply to, or to meet the raw material requirement of, plywood, veneer, blockboard, match stick or any other such wood based units except to local small-scale units (including saw mills) solely for meeting the local requirement for sawn timber and other wood based products.

5. For meeting the timber and other forest produce requirements of inhabitants of the ANI, felling of trees from forest areas not covered under 1, 2 & 3 above, i.e., forest area worked earlier in accordance with working plans, working schemes, felling schemes or approved working plan and excluding areas falling within national parks, sanctuaries, tribal reserves, or Little Andaman, may be allowed. Such felling may be undertaken as per prescriptions of the working plans approved by the MoEF. These plans should also contain action plans for removing, in a phased manner, trees of commercial species that are in number or concentration in excess of

what is found in a natural forest of the same type and similar location. Concurrently, efforts should be made to bring back the forest to its natural profile by encouraging /reintroducing those species of fauna and flora that naturally occurred in these forests prior to their being “converted”. The working plan should also contain sufficient provisions for regeneration of felled areas. In accordance with an earlier Supreme Court order of 22nd September, 2000, felling of trees should be allowed only it sufficient financial provisions for implementing the working plan prescriptions have been made.

6. In the meanwhile, the present ban on felling of trees may be continued and the local requirement of timber and other forest produce may be met by utilising the already felled trees and sawn timber lying with the forest department and the ANIFPDC.

7. Once the stock of already felled trees and sawn timber is depleted, the local requirement of timber should be met, as far as possible, by harvesting the mono culture and mixed plantations of padauk, gurjan, teak and other species. The felling of trees from already worked natural forest, as specified in 5 above, should be undertaken only to meet the balance requirement. However, if the local requirement of timber and other forest produce is more than what could be obtained by felling of plantations and sustainably extracting trees from worked areas, as specified in 5 above, the same may be met by bringing timber in from other parts of the country. Under no circumstances should the over harvesting of the forest available for felling under para 5 above be permitted or undertaken.

8. There should be no expansion of monoculture or commercial plantations on forestland. The existing plantations of oil palm, rubber and teak are reportedly no longer viable and should be phased out. The land so released should, in so far as it is forestland, be regenerated as specified earlier. Consequently, the Andaman and Nicobar Islands Forest Plantation and Development Corporation Ltd. (ANIFPDC) should be wound up as it was primarily set up to promote commercial forestry and plantations, especially in Little Andaman.

9. At the same time, efforts should be made to reduce the level of demand for timber and for firewood. For the purpose, the A&N Administration should investigate and implement methods of achieving this, including the conversion to the wood and bamboo based “Assam type” construction, which is both less timber intensive, and safer in earthquakes, than the present all-timber or RCC buildings.

## WOOD BASED INDUSTRY

10. There should be a complete ban on the establishment of any new wood based unit for the next 10 years.

11. All existing small-scale wood based units (saw mills) should be relocated within industrial estates or, where industrial estates are not feasible, in locations contiguous to forest offices or otherwise convenient for the forest department to monitor. This relocation should be completed within one year, after which the non-complying saw mills should be closed down. These saw mills should also be required to obtain a licence from the ANI Forest Department within three months and to maintain such records as may be prescribed by the forest department. Their licence may be renewed every year at the discretion of the ANI Forest Department, after the department has satisfied itself that a) the unit was not involved in the use of any illegal timber; b) the prescribed records were properly maintained; c) all provision of the act, rules and the terms and conditions stipulated by the forest department from time to time have been complied with. Necessary rules, guidelines etc., for the purpose, should be prescribed by the forest department within three months.

12. No subsidy of any type, including transport subsidy, should be given to any wood based unit.

13. Existing medium and large scale wood based industries (including plywood, veneer, and match industries) can be allowed to function provided they import their entire requirement of wood and other forest based raw materials from the mainland or from abroad. No subsidies should be allowed to them.

14. No timber, either as logs or as sawn timber or plywood/veneer, or in any other form, should be transported out of the Islands through any means whatsoever. This should not, however, inhibit the transportation, as personal baggage, of a reasonable quantity of wooden handicrafts by tourists or of personal articles by those permanently leaving the islands. Also, where a wood based industry, as specified in 13 above, imports its entire wood and forest based raw material requirement, then it should be permitted to export its finished product.

15. All timber, bamboo and cane used for construction and requiring treatment in order to extend its durability and life, should be so treated and the administration should ensure that requisite capacity to treat all such timber is in position within a period of six months. After the expiry of this period, no timber, bamboo or cane of the type requiring treatment should be sold for use in building and construction activities, or used for such purpose, unless it has been appropriately treated.

16. Any further regularisation of encroachments on forestland in any from, including allotment/use of forestland for agricultural or horticultural purposes, should be strictly prohibited.

17. All those families who have been identified as having encroached on forest land prior to 1978 and have not yet shifted to their allotted rehabilitation sites, should be given three months notice to vacate their encroachments and shift to the allotted land. Failing this, their allotment should be cancelled and they should be forcibly evicted within three months of the deadline being over, without any further claim to land or any other form of rehabilitation.

18. Similarly, those among the pre-1978 families that have shifted to their allotted sites but have occupied more land than they were entitled to, should also be given three months notice to vacate the extra land occupied by them. On the expiry of this notice period, the allotments of those who have not complied with this notice should be cancelled and they should be forcibly evicted within three months, without any further claim to compensation or land.

19. All post 1978 forest encroachments should be completely removed forthwith and, in any case, within six months. Post 1978 encroachers (except for foreign nationals) should be allotted homesteads in revenue land and training and opportunity for self-employment or for other types of livelihood activities provided.

20. The forest officials in the ANI should be given requisite powers to do this, including:

    - Power of summary eviction of encroachments: As in the case of Madhya Pradesh, vide Section 80A, IFA, 1927.
    - Magisterial powers to assistant conservators of forests: The Assistant Conservators of Forests should be appointed as executive magistrates/special executive magistrates in order to oversee the evictions carried out by the Range Officers on receipt of orders of eviction from the estate officers.

21. For the purpose, an effective action plan should be prepared and implemented under direct supervision, monitoring and control of a committee comprising of the Lt. Governor, Chief Secretary, Principal Chief Conservator of Forests of ANI, and reputed local NGO representatives. The Chief Secretary, ANI, may be asked to file a monthly progress report in the Supreme Court.

22. In order to prevent any further encroachments and rampant immigration, the Administration should, within three months, regulate the entry of people to the islands by having the Islands declared as an inner line area and by imposing relevant restrictions under section 3 and other provisions of the Environment (Protection) Act of 1986. In accordance with this, non-residents entering the islands should have to invariably register

themselves so that those who do not return to the mainland within a reasonable time can be traced and, where they have illegally encroached on land, can be evicted from these encroachments at the earliest. In addition, entry to the more vulnerable and forested areas of the Islands should be restricted.

23. Once this regulation is in position, the administration should in a time bound manner issue identity cards to all the residents so that there is no gap in the period of identification and issuance of ID cards. This would ensure that fresh illegal encroachers are easily identified. Subsidised travel to the Islands should, once identity cards have been issued, be available only to bonafide residents of the Islands.

24. Divisional Forest Officers and, where relevant, village protection committees, as described later, should be made responsible for prevention, early detection and quick eviction of new forest encroachers.

25. The forest department should be strengthened and appropriate village institutions set up for the purpose, as detailed later.

26. The Andaman Trunk Road should be closed to all vehicular traffic from Miletilak in South Andaman to the northern boundary of the S. Andaman Island. Similarly, it should be closed to all traffic from Kadamtala (corresponding to Prolobjig camp No.3) in Middle Andaman up to Kaushalya Nagar (corresponding to Porlobjig camp No. 15). This should be done within three months. Further, no person except for the Jarawas living in the Reserve should be allowed to enter the Reserve by any means unless he/she is permitted by the Principal Chief Conservator of Forests, and the Secretary, Tribal Welfare, ANI Administration, and no such permission should be granted unless the person is proceeding on bonafide work related to the welfare of the tribals or the protection of the area.

27. The felling of 27 trees for the 33 KV transmission line from Bamboo Flat to Minnie Bay, and 17 trees for construction of rural road from Adajig to Flat Bay Village should be permitted as a one-time relaxation, as these projects are already in their final stages, a small number of trees are involved and, reportedly, necessary clearances had been obtained from the MoEF prior to the Supreme Court’s order of 10.01.01. However, all other proposals or clearances under the Forest (Conservation) Act of 1980 or the Environment (Protection) Act of 1986, where diversion of land or felling of trees or other activities that would have an impact on the environment, are still to be undertaken, should be put up for review by the Supreme Court.

28. For the conservation and protection of the forests and other ecosystems, an effective action plan should be prepared by the ANI Forest Department, in consultation with local NGOs and experts. This plan should also envisage a suitable enhancement of the protected area network, especially in the main islands of the Andaman and in the Nicobar Group. All unworked forest areas in Diglipur, Mayabunder, Middle Andamans and Baratang should be made into national parks, leaving a buffer belt between the national park boundary and the edge of revenue settlements, for protection by village protection committees. In addition, there should be a consolidation of the nearly hundred small island parks and sanctuaries and they should be constituted into viable units encompassing the marine areas surrounding them. This plan, after being approved by the MoEF, should be strictly implemented. The necessary funds, vehicles, equipment, human power, police help and legal power required for the effective implementation of this action plan should be made available by the ANI administration.

29. Appropriate regulations under existing Acts like the Environment (Protection) Act of 1986, with similar objectives as The Delhi Preservation of Trees Act, 1994, currently in force in the Union Territory of Delhi, should be set in place in ANI, within six months, to regulate the felling of trees on non-forest land.

30. The Forest Department should be immediately strengthened in order to be able to effectively prevent poaching.

31. Forest officers should be given adequate powers, under the Indian Forest Act of 1927 (IFA,) as has been done in other states, to meet the threat of poaching. These could include:

    - Power of confiscation: as provided for vide Section 52, 52A, 52B and 52C IFA, 1927 in Bihar, Section 52A and 52B in Himachal Pradesh, Section 52, 52A, 52B, and 52C in Madhya Pradesh, Section 62A to 61G of Goa, Section 61a to Section 62G of Gujarat, and Section 61A to 61G of Maharashtra.

    - Increase in the limit fixed for amount of compensation for trees under section 68(3) IFA, 1927: The present limit of Rs. 50 is required to be increased to Rs. 10000/- as in Goa.

32. A co-ordination mechanism should be set up where the forest department, the civil administration, the Coast Guard and the Combined Defence Command in ANI can take co-ordinated action against poachers, especially against foreign poachers.

33. No exotic species of fauna or flora should be introduced into the islands. Accordingly, a suitable set of guidelines and procedures should be developed for the purpose.

34. A time bound action plan should be drawn up to deal with the exotics already on the island, including weeds, and their removal/eradication should be taken up on a war footing, including the translocation of elephants back to the mainland and the inhibition of breeding, by deer, by darting the alpha males with anti-fertility drugs, as has been successfully tried in other countries.

35. The practice of distributing timber and NTFP free to settlers should be discontinued. Instead, rural populations should be formed into village forest protection committees and, as per the joint forest protection norms prevalent in other parts of the country, the amount of timber and NTFP required by village communities should be given to them on the basis of a memorandum of understanding, in return for their role in protecting the forests adjacent to their settlements and in detecting and preventing encroachments.

36. Government departments, including defence and PWD, should be supplied fuel wood and other required forest produce by the forest department and should not be permitted to directly collect these from the forests.

37. Concurrent efforts should be made to minimise demand for forest-based resources. The Administration should encourage the use of sawdust as fuel, as is the practice in many other parts of the country. They should also investigate the possibility of replacing firewood as a domestic fuel by gas and consider giving a one-time subsidy for the purchase of gas stoves and cylinders to the poor rural population. Adequate supply of LPG to the Islands should be ensured on a priority basis.

38. The extraction of sand should be phased out and no further extension should be granted after the current extension is over on 30 September, 2002.

39. As already mentioned earlier, alternate material for construction, including treated bamboo and soft woods, should be encouraged as this is less damaging to the environment and safer in case of an earth quake. Stone dust should be utilised where use of concrete is essential.

40. No concrete or permanent infrastructure for tourism should be built on any forest area in the Islands. Tourist activities in forest areas should be restricted to tented accommodation or temporary wooden/prefabricated structures that can be dismantled easily and moved to another site. These areas should remain under the control of the forest department who

should be responsible for ensuring that the quantum and type of tourism is such that it does not in any way degrade the forests or other ecosystems.

41. A proper eco-friendly tourism plan should be developed for the Islands within one year. This plan should also do an economic and a distributional analysis to highlight how tourism can make a net contribution to the economy of the Islands and how the economic benefits can be equitably distributed among the various segments of the local society and generate local employment.

42. 42)Such a plan must be in conformity with the requirement for conserving the ecological and cultural integrity of the Islands and not pose a security threat to this strategically important area.

**Miscellaneous Recommendations**

43. The forest department and the administration of ANI should make public at the beginning of each year the proposed uses of natural resources, including forests. This detailed information specifying, among other things, uses, locations, quantum, purpose and users, and giving details of the basis on which these decisions have been made, should be published in the local news papers and also made available on a web site to be maintained for the purpose by the administration. At the end of each year, actual use, deviations from the proposals and the reasons thereof, must also be similarly made public.

44. The various forest working plans/protected area management plans should also be made accessible to the public, as soon as they are approved. Copies should be kept at all public libraries and other accessible places in the Islands. In addition, copies should be freely made available to the general public, on demand, after charging actual costs of photocopying.

45. All officers of the administration, including forest officers, should undergo an orientation training of at least five days, every three years, to acquaint themselves with the ecological characteristics of the Islands and the options available for their economic development in an environmentally and socially sustainable manner. Officers being posted from the mainland to these islands should be so oriented within three months of their posting.

46. The Government of India and the ANI Administration should consider setting up an Island Development Institute in ANI, that can become a centre of research, training and education for managing island and coastal ecosystems in a sustainable manner. This institute could not only cater to national needs but, over time, also become a regional institution. A proposal to the effect already exists and was submitted to the IDA many years back. It can be suitably modified and considered.

47. There are many areas that need to be properly researched and many problems that need innovative solutions. These include:

- A assessment of the ecological differences between worked and un-worked forests.
- Methods of returning the worked and encroached forests to a their natural state.
- Methods of further working forests in a manner that minimises impact on biodiversity and the environment.
- Methods to conserve soil and water.
- Feasibility of generating energy through non-conventional methods, including wind and tidal energy.
- Methods of treating garbage and other pollutants, thereby protecting the coastal and marine environment from degradation.
- Methods of using alternate building materials that are environmentally friendly and sustainable.

These and other required studies should be commissioned on a priority basis so that their findings can be urgently applied for the betterment of the islands.

### *SOME POSSIBLE IMPLICATIONS OF THE RECOMMENDATIONS*

1. There is likely to be some loss of employment, as detailed below, if these recommendations were followed.

   a. Loss of about 300 jobs if Kitlpy Industries close down as a result of these recommendations.

   b. Loss of about 2000 jobs if the Andaman & Nicobar Islands Forest and Plantation Development Corporation closes down.

   *c. Loss of some employment (exact quantum not known) due to the ban on export of timber. However, this is likely to be very small, as very little timber was being sent to the mainland by private sawmills. In 1998-99 it was 923 cum, in 99-2000 it was 570 cum and in 2000-01 it was 614 cum.*

   d. Surplus staff in the forest department due to curtailing of forest working and extraction.

   e. Some loss of livelihood due to the banning of extraction of sand.

   f. Some loss of road transport related employment due to the banning of traffic on the Andaman Trunk Road.

   g. Need for additional sources of livelihood for about 2300 post 1978 forest encroachers, once they are removed from the forests.

2. However, following from these recommendations, there will also be significant cost saving and additional employment opportunities, as detailed below.

   a. Savings on transport subsidies to the forest based industry to the tune of rupees five to six crores per year.

   b. Savings from the closing down of two forest depots, one in Chennai and one in Kolkata, reportedly around rupees one crore a year.

   c. Additional employment for setting up forest protection forces.

   d. Additional employment in regenerating encroached areas and earlier worked forests.

   e. Additional employment in the shipping sector due to increased ferry traffic after closing down the Andaman Trunk Road.

3. There are other relatively untapped or under-utilised areas of employment that can be developed. Including:

   a. Fisheries – especially coastal – with local involvement. Current estimates suggest that only a small proportion of the fishery potential is being tapped. The islands have a continental shelf of 16 to 35 thousand sq km (according to different sources) and an exclusive economic zone (EEZ) of 600,000 sq km., which is 28% of the total Indian EEZ. The total potential has been variously calculated to be between 12,000 and 1,60,000 tonnes of fish (Master Plan for Andaman and Nicobar islands for the Development of Fisheries, Government of India, Ministry of Agriculture, 1989), just from the shelf area. However, more recent estimates are between 45,000 and 1,60,000 tonnes pa. According to the ANI administration, the current levels of harvest are just a fraction of the harvestable potential (Volume II, page 136).

b. Production of goods/food for local use – and the consequent removal of subsidies for transportation of these goods from the mainland. At present, almost all the goods for local consumption come from the mainland. Their transportation, by ship, also costs the government dearly in subsidies. However, many of these goods can be produced locally. This would not only promote local employment and save on subsidies, but also cut down on the requirement for cargo space.

c. Handicrafts. There is great potential for developing artisanal handicrafts industry and this could provide significant additional employment.

d. Swiftlet nest cultivation. This is potentially a very lucrative activity. There is great demand for swiftlet nests in the nearby Southeast Asian countries, and 1 kg fetched between Rupees one and two lakhs. A note describing the potential has been enclosed in Volume II, page 300.

e. Orchids cultivation. This, again, has tremendous potential, as these islands have a large number of very beautiful and rare orchids.

f. Spices/ Medicinal plants – without expanding agricultural land. All official settlers in the islands were given two hectares of flat (valley) land and two hectares of hill land. Much of this hill land is still forested and its conversion to agricultural land, apart from not being economically viable, would also cause significant soil erosion and disrupt the water cycles. Therefore, this land can be used for activities conducive to soil and water conservation, like high value spices/medicinal plants. There are many valuable spices and medicinal plants that are found in the Islands.

g. Eco tourism. This, again, has tremendous potential. High value specialised ecological tourism can generate a fair amount of local employment at all levels.

h. Water and soil conservation works. These are desperately needed in the ANI, which has acute water shortage and is also losing a lot of its topsoil, thereby disrupting the terrestrial, coastal and marine ecosystem. Existing schemes of the government of India, like the watershed programme, can be extended and strengthened in these islands to both conserve the environment and generate employment.

4. Consequently, the potential for additional employment, if properly developed, is enough to offset any adverse impacts of the recommendations. Besides, if the Island is developed as a centre of education, research and training in island and coastal management, as recommended earlier, many additional jobs can be created. In fact, over time, caution will have to be exercised to ensure that the requirement for human power in the Islands does not exceed the local supply, necessitating further migration from the mainland.

5. There is also some concern expressed by the ANI forest department that if felling in unworked forests was banned then the worked forests and plantations would not be able to support even the local demands for timber. However, detailed discussions with the department and a scrutiny of documents and data brings out the following facts:

   a. The total area of worked forests in the Andamans, excluding Little Andaman, is approximately 1,00,000 ha.

   b. Most of these forests were worked in a manner such that only a proportion of the mature trees of commercial species were extracted and the immature ones left.

   c. Therefore, in each hectare of the worked forests there should now be a large number of mature trees that were either left behind as mother trees or that were immature when the logging was done fifty to sixty years ago, but are now mature and ready for harvesting.

   d. As the surplus number of commercial trees, in excess of what would have been their numbers in a natural forest, have to be removed in order to allow the forests to return to as close a natural form as possible, the extraction of these mature trees would serve the dual purpose of providing timber for local consumption and returning the forests to a near-natural profile.

   e. It has been estimated that at least 10 cum per hectare can be safely and sustainably extracted from these worked forests, though once working plans are made the figure might go up. Therefore, given that the total available worked forest is 1,00,000 ha, the total availability of commercial timber would work out to 10,00,000 cum. This would be enough to meet the local timber demands (calculated at 30,000 cum per year currently, but likely to go down once timber conservation efforts are put in place) for at least 30 years, by which time additional timber would have become mature and harvestable.

f. In addition. There are over 12,500 ha of plantations of hardwoods done in the islands (annex 4). It is estimated that these plantations, that in any case need to be cleared so that the land can be regenerated, will provide 300 to 500 cum per hectare, depending on the species. This would work out to between 37,50,000 cum to 62,50,000 cum of timber, which would by itself be enough to meet the local hardwood requirements (calculated to be about 25,000 cum per annum - for details see Volume II –page 154-55, 161) for between 150 and 250 years. Needless to say, both in the plantations and in the worked forest areas, extraction should start first in the earliest plots and proceed to newer ones so that adequate time is given for regeneration.

6. The forest department has also expressed a concern that if no export of timber is allowed to the mainland then this might lead to the artificial manipulation of timber prices locally and prices would be artificially forced down, as the forest department would have no option but to sell their timber locally or have it perish. However, considering that the forest department saw mills have a combined capacity of 29,000 cum pa they could, if required, process all the timber that is harvested in a year, thereby preventing it from deteriorating. Besides, once the capacity to treat timber has been enhanced, as recommended, there should be no danger of any timber being wasted if the local sawmills do not pick it up. In case timber in any month is not picked up, felling for subsequent months or seasons could be trimmed to take this into consideration.

7. A concern has also been expressed that forests need to be worked in case they are to remain healthy and “over mature” and dead trees need to be removed. There is also the view that once a tree reaches a certain age, it has a “negative increment” and, therefore, must be cut. However, these arguments do not stand up to scientific scrutiny. Forests have existed and continue to exist in areas where they have never been “managed” by human beings. There are many examples of this in the Andaman and Nicobar Islands itself. The concern for negative increment and for “healthy” forests is a concern that might be relevant to commercial plantations but is certainly not tenable where natural forests are concerned. In fact dead trees are as important a part of natural ecosystems, both as habitat to specialized species of fauna and flora and an input into the soil, as are live trees.

W.P(C)No. 202 OF 1995

ITEM Nos.16 to 25 & 29 COURT No. 1 SECTION PIL

S U P R E M E C O U R T O F I N D I A

RECORD OF PROCEEDINGS

I.A. No. 502 in W.P.(C) No. 202/1995

T.N. GODAVARMAN THIRUMALPAD Petitioner

VERSUS

UNION OF INDIA & ORS. Respondents

(for intervention)

with I.A. No. 737 in I.A. No. 502 in W.P.(C) No. 202/1995

(for directions)

I.A. Nos.723-724 in W.P.(C) No. 202/95.

(for intervention and clarification/modification)

WITH

I.A. No. 711 in I.A. No. 502 in W.P. (C) No. 502/1995

(For intervention/modification/clarification and directions)

I.A. No. 738 in I.A. No. 502 in W.P.(C) No. 202/1995

(for intervention on behalf of Andaman Furniture Industries Association)

with

I.A. No. 739 in I.A. No. 502 in W.P.(C) No. 202/1995

(for clarification/modification of order dated 23.11.2001 on behalf of Andaman Furniture Industries Association)

Date : 07/05/2002 These Petitions were called on for hearing today.

CORAM :

HON'BLE THE CHIEF JUSTICE

HON'BLE MR. JUSTICE ARIJIT PASAYAT

HON'BLE MR. JUSTICE H.K. SEMA

After hearing the learned Amicus Curiae, counsel for the parties and taking into consideration the affidavit of the Union of India - Ministry of Environment and Forests in relation to survey of eco-system of Andaman and Nicobar Islands, the learned Amicus Curiae has made certain suggestions.

There does not seem to be any objection to this Court in accepting the Report of Shri Shekhar Singh that some modifications have been suggested. We therefore, in the first instance, accept the Report of Shri. Shekhar Singh.

On a query being raised by us, Mr. Altaf Ahmed, learned Additional Solicitor General, appearing for The Union Territory of Andaman & Nicobar Islands on instructions informed the Court that there is no social forestry in Andaman & Nicobar Islands. The wood which is being cut is from the natural forest and plantation of teak etc. has taken place in the forest, which had been worked and approximating 40,000 cubic metres of wood is cut from the forest annually for the purposes of the small mills the total logging of wood being approximately 1,30,000 cubic metres per year. In the last two years, this figure has come down but the fact remains that instead of resorting to social forestry and thereby providing employment to the people in growing forest at the present moment the natural forests are being cut and the timber sawn.

Andaman & Nicobar Islands is one of the hot spots and is in the eco-fragile area and has, therefore, the eco-diversity thereby has to be preserved. For this, it is essential that the natural forest is protected and re-generation allowed to take place.

We are also informed that the existing saw-mills have a subsisting licence valid till 30th March, 2003. The saw-mills and the other wood-based industries in the Andaman & Nicobar Islands are not permitted to cut the trees and supplies to them are made only by the Government itself or through its Corporation. Some of these saw-mills and industries have logs of wood and sawn timber in their stock. It would therefore be iniquitous to deprive them of an opportunity to utilise the stock for which payment has been made to the Government for the purchase of wood. However, it is to be borne in mind that fresh logging of wood must cease immediately.

After taking all facts and circumstances into consideration, we issue the following directions:

(1) All felling of trees from the forest of little Andaman Islands, the national park and sanctuaries, the tribal reserves and all other areas shall stand suspended.

(2) For the areas in which there are working plans, the Government through the Chief Secretary shall disclose on an affidavit -

- (i) The extent of felling and re-generation permitted under these working plans during the last 10 years.
- (ii) The compliance with re-generation/re-plantation/ re-forestation targets under the working plans and reasons if any for the shortfall.

(3) The working plan of the Andaman & Nicobar Islands should be re-worked on the basis as was applied to the State of M.P. and others, namely that before any felling of trees, there should first be compulsory afforestation/re-generation, the felling permissions would be based upon the extent of re-generation of forest undertaken and not the other way round.

(4) No felling of tree (under the working plan or otherwise) shall be permitted for meeting any raw material requirements of the plywood, veneer, black board, match stick or any other wood - based industry.

(5) In drawing up the new working plans the Government shall formulate a Committee with one Ecologist who is proficient with the ecology of Andaman.

(6) The working plans so formulated shall be placed before this Court within a period of twelve weeks.

(7) The trees felled under the working plan in the manner indicated aforesaid should be utilized for the requirements of the local inhabitants.

(8) The licences of all the saw-mills and wood-based industries shall not be renewed after 31st March, 2003. This will not debar the authorities from canceling licences in accordance with law, if there is no breach of the Licence Committee by the Licencees before that date.

(9) The ecology of the area does not permit any kind of industrial activity for which the wood is likely to be consumed. Therefore, licences of wood-based industries shall stand cancelled but they will be permitted to exhaust the existing stock till 31st March, 2003.

(10) The Union of India if it so adopts and thinks appropriate may take steps for re-locating the dislocated wood-based industries in the main land area anywhere in India as long as it is not within the vicinity of forest area. Henceforth for meeting the local requirements it is only the Government saw-mills which shall operate.

No fresh wood or logs shall be given to any of the saw-mills or the wood-based industries till fresh working plans are prepared and submitted to this Court and the approval obtained.

(11) With immediate effect, there will be no movement of logs or timber in any form including sawn timber from Andaman & Nicobar Islands to any part of India or anywhere else.

(12) Regularisation of encroachments on forest land in any form, including allotment/use of forest land for agricultural or horticultural purposes, shall be strictly prohibited.

(13) All those families who have been identified as having encroached on forest land prior to 1978 and have not yet shifted to their allotted

rehabilitation sites, shall be given one month's notice to vacate their encroachments and shift to the allotted land. Failing this, their allotment shall be cancelled and they shall be forcibly evicted within three months of the deadline being over, without any further claim to land or any other form of rehabilitation. Such notices should be issued within six weeks.

(14) Similarly, those among the pre - 1978 families that have shifted to their allotted sites but have occupied more land than they were entitled to shall also be given one month's notice to vacate the extra land occupied by them.

On the expiry of this notice period, the allotments of those who have not complied with this notice shall be cancelled and they should be forcibly evicted within three months, without any further claim to compensation or land. Such notices should be issued within six weeks.

(15) All post 1978 forest encroachments shall be completely removed within three months.

(16) For the eviction of encroachers, an effective action plan shall be prepared and implemented under direct supervision, monitoring and control of a Committee under the Chairmanship of the Lt. Governor with Chief Secretary, Principal Chief Conservator of Forests and reputed NGO representatives, its members. The Chief Secretary, Andaman & Nicobar Islands, shall file every month an affidavit about progress of eviction of encroachments.

(17) The process of issue of identity cards to all the residents shall be completed within a period of six months.

(18) The extraction of sand shall be phased out @ minimum 20% per year on reducing balance basis to bring the sand mining to the level of 33% of the present level of mining within a maximum period of 5 years.

(19) The approvals accorded by Ministry of Environment & Forests under the Forest (Conservation) Act, 1980, shall be reviewed by a Committee consisting of Secretary, Environment & Forests, Director General of Forests and at least one non-official member of the Forest Advisory Committee constituted under the Forest (Conservation) Rules to restrict the approvals to the barest minimum needed to serve emergent public purposes. Felling of trees shall commence only after the process of compensatory afforestation has actually been undertaken on the ground. In future, the proposals shall be considered for approval only after detailed Environmental Impact Assessment has been carried out through an independent agency identified by Ministry of Environment & Forests.

(20) Specific actions shall be undertaken by Ministry of Environment & Forests/Andaman & Nicobar Islands Administration on the other recommendations of Shri Shekhar Singh Report which are not specifically dealt with in above orders. Ministry of Environment & forests and the

Andaman & Nicobar Islands Administration shall file an affidavit within three months giving details of action taken by them on each of such recommendations.

Copy of this order be sent by the Registry to the Chief Secretary, Andaman & Nicobar Islands for information and compliance.

***Source: andamanisles.com***

# ANNEXURES

# ANNEXURE III