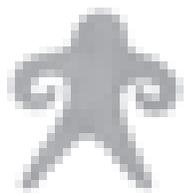


RETHINK TOURISM IN THE ANDAMANS

**TOWARDS BUILDING A BASE
FOR SUSTAINABLE TOURISM**

JUNE 2008



andamanid

RETHINK TOURISM IN THE ANDAMANS
TOWARDS BUILDING A BASE FOR SUSTAINABLE TOURISM
Published in India, 2008 by EQUATIONS

This publication may be reproduced in whole or in part for educational, advocacy or not-for-profit purposes. We would appreciate your seeking permission from us, letting us know of the use you wish to put it to, and acknowledging us as the source.

Citation:

EQUATIONS, INTACH Andaman & Nicobar Islands Chapter, Society for Andaman & Nicobar Ecology, Kalpavriksh, Jamsetji Tata Centre for Disaster Management – TISS, Tata Institute of Social Sciences, ActionAid International India (2008) “Rethink Tourism in the Andamans – Towards Building a Base for Sustainable Tourism”, Bangalore, India.

Core Group:

EQUATIONS:

Syed Liyakhat (Project Coordinator), Vidya Rangan, Deepa Kozhisseri and Rosemary Viswanath
Field Team: Amit Biswas, Arvind Soreng, Ashok Mistry, Binata Halder, Jhantu Talukder, K. Krishna, Kuldeep Kujur, Nabin Baroi, Nirmal Mondal, Pratap Dhali, Sangita Dhali, Vinod Lakra, Sangeeta Varadharajan and Malvika Tekta.

Indian National Trust for Art and Culture Heritage – Andaman & Nicobar Islands Chapter:
Samir Acharya, Convener.

Society for Andaman & Nicobar Ecology: Samir Acharya, Secretary.

Kalpavriksh: Pankaj Sekhsaria and Seema Bhatt

Jamsetji Tata Centre for Disaster Management – Tata Institute of Social Sciences:
Prof. Janki B. Andharia, Chairperson, JTCDM

ActionAid International – India, Tsunami Response Programme, Andaman and Nicobar Islands:
Anupama Muhuri, Harjeet Singh.

Advisory Panel:

Prof. Jayati Ghosh, Centre for Economic Studies and Planning, School of Social Sciences
Jawaharlal Nehru University

Mr. Niranjana Khatri, General Manager ITC, Welcomenvion Initiatives, ITC – Hotels

Mr. K T Suresh, Executive Director YUVA, General Body Member EQUATIONS

EQUATIONS (Equitable Tourism Options)

415, 2-C Cross, 4th Main, OMBR Layout, Banaswadi, Bangalore 560 043, India

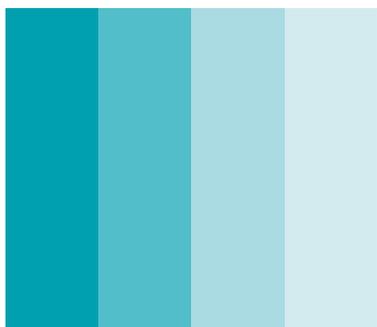
Ph: +91-80-25457607/25457659; Fax: +91-80-25457665

Email: info@equitabletourism.org; Website: www.equitabletourism.org

Editing and Layout design: CEPHA Imaging Pvt Ltd., Bangalore, India

Cover Photos: Tourists at North Bay. In the background – New Wandoor Beach

Pictures courtesy: EQUATIONS, Pankaj Sekhsaria and Seema Bhatt



Acknowledgements

On behalf of all six collaborating organisations, EQUATIONS would like to express our heartfelt gratitude to the people of the Andamans, especially all those community members who took time off from their daily schedules to interact with us and help build this research report. Their cooperation, perspectives and suggestions have been invaluable and to them we dedicate this report. We are very grateful to local elected representatives from all the field areas that the project covered, for interacting with the field team and putting forth their views on issues related to tourism affecting community members in their constituencies. School and College Principals who cooperated in our intervention on the debate and essay competition on Tourism in the Andamans helped us capture the views of young people on the future of tourism in the Islands deserve our thanks. Acknowledgements are also due to the Zilla Parishad, the Andaman and Nicobar Island Administration and all the officials from various departments and related bodies who gave time and shared their perspectives willingly on a range of issues this report investigates. Our thanks to members of the local hotel and tourism industry, especially members of the Andaman Chamber of Commerce and Industry for sparing time to work with the research team on understanding and capturing the industry's perspective on these issues. Our Advisory Panel members contributed willingly their time and expertise to steer the direction and perspectives of the research and recommendations. We are indeed grateful to them. Lastly, we are indebted to all those tourists, who despite being on a holiday took precious leisure time off to respond patiently to our questionnaires and make a valuable contribution to this endeavour.

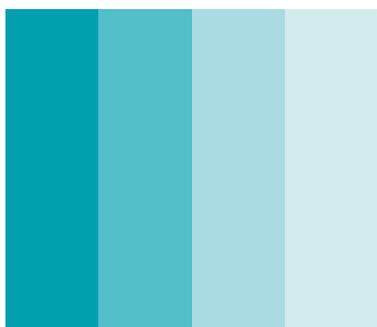
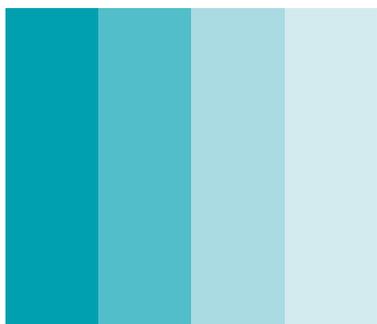


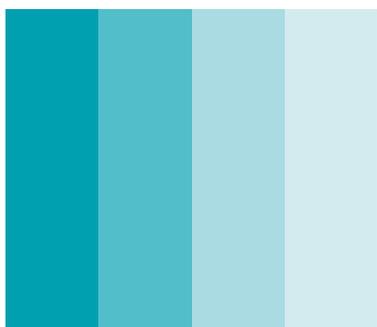
Table of Contents

<i>Acknowledgements</i>	iii
<i>Commonly Used Terms</i>	v
<i>List of Figures, Tables, Maps</i>	vi
<i>Abbreviations</i>	x
1 Introduction	1
2 Research Methodology	3
3 Introducing the Andaman Islands	13
4 Status of Tourism in the Andaman Islands	25
5 Institutional, Governance and Policy Framework for Tourism Development in the Islands	75
6 Socio-cultural Impacts of Tourism in the Andamans	99
7 Economic Impacts of Tourism in the Andamans	119
8 Environmental Impacts of Tourism in the Andaman Islands	145
9 Tourism and Lack of Institutional Coordination in the Andamans	195
10 Perspectives on Development of Tourism in the Islands	205
11 Recommendations	217
<i>Bibliography</i>	233
<i>Annexures</i>	241
<i>Brief Profile of Collaborating Organisations</i>	313
<i>Colour Plates</i>	315



Commonly Used Terms

Bally	a young tree
Bigha	unit of land measurement equivalent to about 1/3 acre. It was standardized under British colonial rule at 1600 square yards (0.1338 hectare or 0.3306 acre)
Donghie	small-sized country boat with an outboard diesel engine used for fishing, transportation of people, material in Andaman Islands
Gram	village
Gram Sabha	the general body of the gram panchayat
Gram Swaraj	local self government
Gram Panchayat	village level local self government institution
Panchayat	local self government institution, comprising of one or more than one village
Sarpanch	head of five, head of the Nyaya Panchayat or local level dispute settlement body
Up-Sarpanch	deputy to the Sarpanch
Pradhan	head of gram panchayat
Up-Pradhan	deputy to the Pradhan
Panchayat Samiti	block level self government institution
Pramukh	head of the Panchayat Samiti
Up-Pramukh	deputy to the Pramukh
Zilla Parishad	district level self government institution
Adhyaksh	chairperson of the Zilla Parishad
Up-Adhyaksh	deputy chairperson of the Zilla Parishad



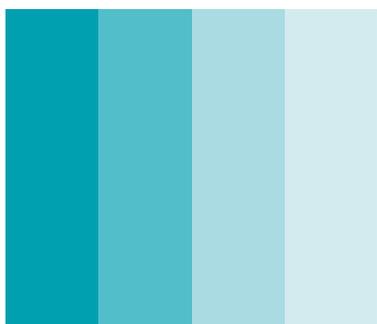
List of Figures, Tables, Maps

Figure 3.1	Growth of Population of Andaman & Nicobar Islands (1951–2001)
Figure 4.1	Tourist Arrivals to the Andaman & Nicobar Islands (1980–2006)
Figure 4.2	Intra-year Seasonality in Domestic Tourist Arrivals to the Andaman & Nicobar Islands (2000–2006)
Figure 4.3	Intra-year Seasonality in Foreign Tourist Arrivals to the Andaman & Nicobar Islands (2000–2006)
Figure 4.4	Visitation of Tourist Spots in and around Port Blair by Domestic and Foreign Tourists
Figure 4.5	Walkway Created in Mangrove Forest at Baratang, Leading to Limestone Caves
Figure 4.6	The Beautiful Radhanagar Beach, Havelock Island
Figure 4.7	Laxmanpur Beach, Neil Island
Figure 4.8	Redskin Island Beach
Figure 4.9	Destinations in the Andamans Visited by Domestic Tourists
Figure 4.10	Gender and Age Profile of Tourists Visiting the A&NI
Figure 4.11	Nationality of Foreign Tourists Visiting the Islands
Figure 4.12	Reasons for Domestic Tourists to Visit the Andaman Islands
Figure 4.13	Reasons for Foreign and Domestic Tourists Choosing the Andamans as a Holiday Destination
Figure 4.14	Attractions for Tourists Visiting the Andaman Islands
Figure 4.15	Reasons that Make the Andamans Different from Other Island/Beach Destinations
Figure 4.16	Main Activities Tourists Spent Time on During their Holiday in the Andamans
Figure 4.17	Cellular Jail, Port Blair
Figure 4.18	Corbyn's Cove Beach, Port Blair
Figure 4.19	Islands in the Mahatma Gandhi Marine National Park
Figure 4.20	Tourists on a Glass Bottom Boat, Near Red Skin Island
Figure 4.21	Means of Making Booking for Accommodation in the Andaman Islands
Figure 4.22	Sources of Information to Tourists about Place of Stay in the Islands

Figure 4.23	Factors that Influence the Tourists' Choice of Place of Stay in the Islands
Figure 4.24	Satisfaction Levels of Tourists with Accommodation Facilities
Figure 4.25	Improvement of Restaurants in the Andamans: Response from Tourists
Figure 4.26	Rating of Tour Operators' Services by Domestic Tourists Visiting the Islands
Figure 4.27	Increase in Number of Daily Flights into Andaman & Nicobar Islands (A&NI) in Comparison to Increase in Tourist Arrivals
Figure 4.28	Airlines Used by Domestic and Foreign Tourists to Arrive at the Islands
Figure 4.29	Tourist Responses on how Air Connectivity to the Islands Should Improve
Figure 4.30	Rating of Potential Cruise Circuits by Domestic Tourists According to MoTC Cruise Tourism Study
Figure 4.31	Rating of Potential Cruise Circuits by Foreign Tourists as from MoTC Cruise Tourism Study
Figure 4.32	Radhanagar Beach Where ANIIDCO's Property is Being Leased to Taj Group of Hotels for Development
Figure 4.33	Baludera Beach, Baratang
Figure 4.34	Grub Island, Mahatma Gandhi Marine National Park
Figure 6.1	Hypothetical Evolution of a Tourist Area
Figure 6.2	Host Attitudinal/Behavioural Responses to Tourist Activity
Figure 6.3	Queue for Tickets at Phoenix Bay Jetty, Port Blair
Figure 6.4	Woman Selling Fruits Near Havelock Island Jetty, Beach no. 1
Figure 7.1	Contribution of Primary, Secondary and Tertiary Sectors to the Andaman & Nicobar Islands Economy
Figure 7.2	Ownership Pattern in Accommodation Establishments: Form of Ownership (a) Establishments in Port Blair (b) Establishments Outside of Port Blair
Figure 7.3	Ownership Pattern in Accommodation Establishments: Place of Origin of Owner (a) Establishments in Port Blair Only (b) Establishments in Other Islands
Figures 7.4, 7.5	<i>Donghie</i> Owners Take Domestic Tourists from Nilambur Jetty to Limestone Caves, Baratang
Figure 7.6	Tea Stall Owner, Beach No. 3 Bazaar, Havelock Island
Figure 8.1	Wall of Dolphin Resort, Beach no. 5, Havelock Island
Figure 8.2	Peerless Resort, Corbyn's Cove, Port Blair
Figure 8.3	New Restaurant being Constructed at Wandoor
Figure 8.4	Biodiversity Park, Road being Constructed at Chidiyatapu
Figures 8.5, 8.6	Cane Leaves Used for Roof Thatching
Figure 8.7	Material Used for Construction in Tourism Establishments
Figure 8.8	Source of Freshwater in Tourism Establishments
Figure 8.9	Daily Water Usage by Tourism Establishments
Figures 8.10, 8.11	Disposal of Solid Wastes in Havelock
Figure 8.12	Dumping of Wastes on Beaches in Andamans is a Common Sight, this is from Corbyn's Cove
Figure 8.13	Disposal of Solid Wastes Generated by Tourism Establishments
Figure 8.14	Landfill Near Corbyn's Cove, where Garbage from Port Blair is Dumped

Figure 8.15	Disposal of Sewage by Tourism Establishments
Figures 8.16, 8.17	Tents Provided by IP&T at Radhanagar Beach, Havelock Island
Figure 8.18	Advertisement for Snorkelling at Mahuadera, Wandoor Beach
Figures 8.19, 8.20	Signages Installed by the Department of Environment & Forests at Baratang
Figure 10.1	Rating of Holiday Experience across Various Parameters by Domestic Tourists. (a) Domestic Tourists; (b) Foreign Tourists
Figure 10.2	Tourists' Perceptions on how their Holiday Experience in the Islands can be Improved
Figure 10.3	Overall Willingness to Contribute Towards Sustainable Tourism Practices
Figure 10.4	Domestic and Foreign Tourists Willing to Contribute Towards Sustainable Development in the Islands. (a) Domestic Tourists; (b) Foreign Tourists
Table 3.1	Mean Maximum and Minimum Temperatures and Humidity Levels at Port Blair in 2006
Table 3.2	Land Utilisation in Andaman District
Table 3.3	Tribal Population in Andaman & Nicobar Islands (1951–2001)
Table 3.4	Settlement into the Andaman & Nicobar Islands since the 1950s
Table 3.5	Household Population in Andaman & Nicobar Islands by Language Spoken as per 2001 Census
Table 3.6	Distribution of Population on the Basis of Sex and Rural–Urban (1981–2001)
Table 4.1	Tourist Arrivals into the Andaman & Nicobar Islands (1980–2006)
Table 4.2	Types of Tourists Visiting a Destination
Table 4.3	Facilities Provided by Accommodation Units in the Andaman Islands
Table 4.4	Foreign Tourist Arrivals by Different Modes of Transport (2000–September 2007)
Table 4.5	List of Cruise Liners that Docked in the Andaman & Nicobar Islands during 2006–2007
Table 5.1	Total Number of Elected Officers of PRIs in Various Regions of the Andaman & Nicobar Islands
Table 5.2	Situational Analysis on the Implementation versus Non-Implementation of the MoTC–WTO Master Plan for Tourism on the Environment of the A&NI
Table 5.3	Comparative Analysis of Tourism Plans and Policies Developed Thus Far for the Andaman & Nicobar Islands (A&NI)
Table 6.1	Doxey's Irritation Index
Table 7.1	Contribution of Primary, Secondary and Tertiary Sectors to Gross Domestic Product (GDP) of Andaman & Nicobar Islands
Table 7.2	Gross State Domestic Product (GSDP) at Factor Cost by Industry of Origin at 1999–2000 Prices
Table 7.3	Trends in Contribution of Tourism to the Gross State Domestic Product (GSDP) of the Andaman & Nicobar Islands (A&NI)
Table 7.4	Contribution by Each Tourist to the Gross State Domestic Product (GSDP) of the Andaman & Nicobar Islands
Table 7.5	Receipts and Expenditure of the Andaman & Nicobar Islands (1998–1999 to 2007–2008)

Table 7.6	Trends in the Share of Tourism in Revenue Receipts of Andaman & Nicobar Islands 2004–2007
Table 7.7	Total Workers (Main and Marginal) and Non-workers in the Andaman & Nicobar Islands as per 2001 Census
Table 7.8	Composition of Workforce in the Andaman & Nicobar Islands Based on National Industrial Classification (NIC) as per 2001 Census
Table 7.9	Composition of Workforce in Hotels and Restaurants in the Andaman & Nicobar Islands as per 2001 Census
Table 7.10	Number of Permanent and Temporary Employees in Accommodation Establishments
Table 7.11	Place of Origin of Permanent and Temporary Employees in the Accommodation Sector
Table 7.12	Status of Purchases Made by Tourists in the Islands
Table 7.13	Factors Influencing the Strength and Type of Linkages between Tourism and Agriculture
Table 8.1	Important Forest Areas Used for Tourism Purposes in the Andamans
Table 8.2	Status of Water Supply in Andaman Islands by the Andaman Public Works Department (APWD)
Table 8.3	Approximate Daily Consumption of Water in Tourism Establishments
Table 8.4	Methods of Disposal of Solid Wastes in Tourism Establishments in Andamans
Table 8.5	Sewage Disposal by Tourism Establishments
Table 9.1	Pretty's Typology of Participation
Map 2.1	Map of Andaman & Nicobar Islands and Areas Covered in Andaman for the Study
Map 3.1	Location of the Andaman and Nicobar Islands in the Indian Ocean
Map 3.2	Detailed Political Map of the Andaman and Nicobar Islands
Map 3.3	Distribution of Tribes of Andaman in the years 1800 and 2000
Map 4.1	Popular Tourist Spots in the Andamans

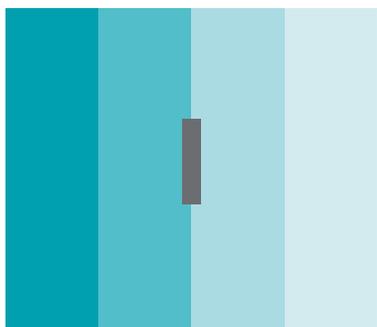


Abbreviations

A&NI	Andaman & Nicobar Islands
ANIIDCO	Andaman and Nicobar Islands Integrated Development Corporation
ANIFPDL	Andaman and Nicobar Islands Forests and Plantation Development Corporation
ATR	Andaman Trunk Road
APTDC	Andhra Pradesh Tourism Development Corporation
AGMU	Arunachal Pradesh–Goa–Mizoram and Union Territories
ADB	Asian Development Bank
BJP	Bharatiya Janata Party
BOD	Biochemical Oxygen Demand
CGWB	Central Ground Water Board
CSO	Central Statistical Organisation
COD	Chemical Oxygen Demand
CRZ	Coastal Regulation Zone
CZMP	Coastal Zone Management Plan
CFL	Compact Fluorescent Lamps
CEPAT	Continuing Education Program in Agricultural Technology
DANICS	Delhi–Andaman and Nicobar Island Civil Service
DANIPS	Delhi–Andaman and Nicobar Island Police Service
EEZ	Exclusive Economic Zone
FICCI	Federation of Indian Chambers of Commerce and Industry
FI	Field Investigator
FGD	Focus Group Discussion
FSI	Forest Survey of India
GoI	Government of India
GBR	Great Barrier Reef
GBRMP	Great Barrier Reef Marine Park
GBRMPA	Great Barrier Reef Marine Park Authority
GHG	GreenHouse Gas
GDP	Gross Domestic Product

GSDP	Gross State Domestic Product
HTL	High Tide Line
HRACC	Hotel & Restaurant Approval & Classification Committee
HRLN	Human Rights Law Network
IAS	Indian Administrative Service
ICAR	Indian Council for Agricultural Research
INC	Indian National Congress
INTACH	Indian Natural Trust for Art and Cultural Heritage
IPS	Indian Police Service
IP&T	Information, Publicity and Tourism
ICZMP	Integrated Coastal Zone Management Plan
IFC	International Finance Corporation
IDA	Island Development Authority
JAS	Jamaica Agricultural Society
JMA	Jamaica Manufacturers' Association
KTDC	Kerala Tourism Development Corporation
LTC	Leave Travel Concession
MSL	Mean Sea Level
MoU	Memorandum of Understanding
MoEF	Ministry of Environment and Forests
MHA	Ministry of Home Affairs
MoS	Ministry of Shipping
MoTC	Ministry of Tourism and Culture
MSW	Municipal Solid Waste
NEERI	National Environmental Engineering Research Institute
NSS	National Sample Survey
NDZ	No Development Zone
NGOs	Non-Governmental Organisations
PBMC	Port Blair Municipal Council
PTG	Primitive Tribal Group
PADI	Professional Association of Diving Instructors
PWD	Public Works Department
QPWS	Queensland Parks and Wildlife Service
RAP	Restricted Area Permit
RADA	Rural Agricultural Development Authority
SACONH	Salim Ali Centre for Ornithology and Natural History
SHG	Self Help Group
SICTA	Standard International Classification for Tourism Activities
SPSS	Statistical Package for Social Sciences
TISS	Tata Institute of Social Sciences
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEP	United Nations Environment Programme
UT	Union Territory

USP	Unique Selling Proposition
UNWTO	United Nations World Tourism Organization
IMO	United Nations Maritime Organization
IUCN	World Conservation Union



Introduction

The Andaman & Nicobar Islands (A&NI) are a group of picturesque islands and islets lying along a long and narrow arc in the south-eastern part of the Bay of Bengal. While relatively isolated until the early twentieth century, these islands of breathtaking natural beauty gained slowly in popularity as a tourist destination. As in many other parts of the country, tourism has been identified a priority sector for development in the islands, particularly the Andamans.

The islands have seen a steady growth of both foreign and domestic tourist arrivals. There have been a plethora of master plans and studies in the period 1987–2005, focusing on the potential for tourism promotion in the islands. In particular, the Ministry of Tourism – Government of India and World Tourism Organisation – report titled “Development Strategy for Environmentally Sustainable Tourism in the Andamans” that was released in April 1997 has been the most detailed exercise in strategising how tourism could be developed in the islands. However, all these reports and studies aim at promoting unhindered tourism, without recognising its current and potential impacts on the islands.

The tsunami of end 2004 and the resultant dip in tourist numbers led to a strong push by the Ministry of Tourism and the A&NI Administration to “bring the tourists back”. The proposed opening up of 15 islands with 50 sites for intensive tourism, massive investment in tourism infrastructure, improved connectivity to and between the islands and incentives for domestic tourists on availing leave travel concession were among these efforts. This context provided further impetus to this research as these plans, as much as the earlier ones, were not based on detailed studies of how tourism functions, operates in and impacts the islands and on whether the ground realities supported the assumptions, which these plans and promotional schemes were pushing for.

Tourism does present advantages and opportunities, but it does not come without a price. Considering the islands’ ecology, economy, socio-cultural dynamics and geopolitical realities, it is important to study the impact of tourism development to be able to advocate clear strategies for the future direction of tourism. Therefore, this research was undertaken to examine the current status of tourism in terms of its existing and likely impacts on various aspects and also to examine the impacts of proposed tourism development plans.

The report is an outcome of a research project titled “Building a Base for Advocating Sustainable Tourism in the Andamans,” conceived and implemented by EQUATIONS, the Society for Andaman and Nicobar Ecology (SANE), INTACH A&NI Chapter, Kalpavriksh, Tata Institute for Social Sciences (TISS) and ActionAid International (India, A&N Unit) in 2007. It aims, through primary and secondary data collection, at an analysis of the current status of tourism and proposed tourism development plans and at an

assessment of the social, cultural, economic, environmental, institutional and policy impacts of tourism on the Andaman Islands. It also aims, through extensive consultations and interviews, to collate the perceptions, experiences and perspectives of a range of players in tourism – regarding the extent to which tourism benefits them and what the dynamics and issues around tourism development are. We believe that this report is more than an enquiry into the research questions but also an attempt to capture the peoples' perspective on tourism in the islands. We hope that this is a beginning to a process of generating a peoples' report on tourism, which will raise concerns and draw attention to issues of tourism as a vehicle for sustainable development and to the sustainability of tourism in the islands.

We hope that the research process and this report will enable institutions of local self-government to play a more proactive and decisive role in tourism development. We also believe it will serve to stimulate debate on tourism among various sections of civil society in the islands and encourage them to exercise their stake and influence in the direction tourism development takes. This report is aimed at being one more step towards democratising tourism and dealing with the challenge of making it more sustainable and equitable in its benefits.

2

Research Methodology

2.1 Introduction to Methodology

The objective of this research is to evaluate the current status of tourism development in the Andaman Islands and assess the impacts of ongoing and proposed tourism plans on the communities and environment of the islands. As this was the first research of its kind to be conducted on comprehensively studying tourism and its impacts in the Andamans, there were significant demands on the volume and the extent of data to be collected. These demands guided the specific methodological approach and tools for data collection that were felt to be the most efficient and effective with the available resources.

This chapter details the scope and research methodology adopted for this study. It articulates the research questions, design, sampling procedures, data collection and data analysis techniques. The various limitations faced during the study are also presented in the concluding section of the chapter.

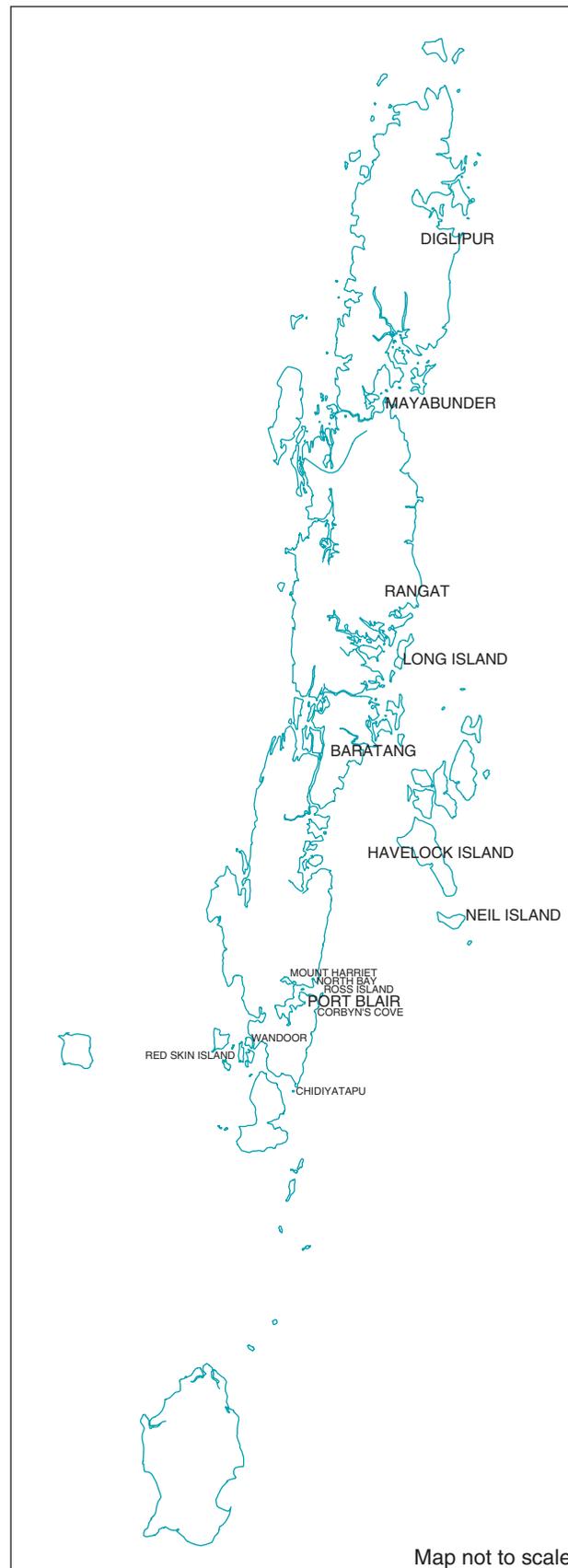
2.2 Geographical Scope of the Study Area

The geographic scope of this research on tourism is restricted to the Andaman Islands because of the Protection of Aboriginal Tribes Act, 1956, which *inter alia* recognises the rights of Nicobarese over their lands and prohibits access and residence of non-Nicobarese in Nicobar except with the permission of the Deputy Commissioner. Therefore, by extension of this Act, tourism is also prohibited in the Nicobar Islands. Within the Andaman Islands, this study has focussed on two broad types of areas and islands:

- a. areas where tourism is already taking place, that is that tourists visit, and where the support infrastructure for tourism activities has also been developed (e.g., accommodation units, taxi hire and other auxiliary services)
- b. areas where tourism is being proposed, that is those islands, regions and sites that have been specifically identified by the Tourism Department and other policies formulated for tourism development

Within this scope, the islands and areas that have been visited and where data has been collected for this study are as follows:

- ♦ Port Blair (Port Blair town, Wandoor, Chidiyatapu, Redskin, Ross Island, Mount Harriet North Bay and Corbyn's Cove)



MAP 2.1 Map of Andaman & Nicobar Islands and Areas Covered in Andaman for the Study.

- ♦ Neil Island
- ♦ Havelock Island
- ♦ Baratang Island
- ♦ Rangat
- ♦ Long Island
- ♦ Mayabunder
- ♦ Diglipur

Many of the observations and inferences made in this study will also be relevant to other areas in A&NI where tourism may be developed in the future.

2.3 Research Methodology

2.3.1 Research Questions

The main research questions that this study has investigated are as follows:

1. What is the current status of tourism in the Andaman Islands?
Within this question, the research has investigated the existing level of tourism activity in the islands with respect to the following aspects:
 - ♦ tourists – (domestic and foreign) volume, types, seasonality, activities and motivation
 - ♦ tourism industry (accommodation establishments, travel agencies, tour operators and tour guides) – number, types and their existing scale of operations
 - ♦ infrastructure and other facilities supporting tourism – transportation, water, electricity and waste management
 - ♦ government – the role of different government bodies in developing tourism
 - ♦ community – the extent of local community involvement and the benefits from tourism
2. What are the perceptions of different sections of society and different agencies on the development of tourism in the Andaman Islands?
 - ♦ Perceptions of community representatives, industry, institutions of local self-government and A&NI Administration on tourism issues facing the islands
3. What are the proposed plans and projects for tourism development in the Andaman Islands?
In relation to this question, the research has investigated the plans and policies of the following:
 - ♦ Ministry of Tourism, Government of India
 - ♦ A&NI Administration
 - ♦ Tourism industry
 - ♦ Other relevant national, international policies pertaining to tourism
4. What are/will be the impacts (positive and negative) of tourism development in the islands considering existing level of tourism and proposed plans for tourism respectively?
In relation to this question, the analysis of impacts has been carried out along four axes:
 - ♦ socio-cultural
 - ♦ environmental

- ♦ economic
- ♦ institutional

2.3.2 Research Design

The scale of this research and the extent of data needed have required a combination of primary and secondary data sources, using both quantitative and qualitative analysis techniques. The detailed sourcing of data and techniques used were as follows.

2.3.2.1 Primary sources of data

- ♦ Tourists – Primary data was collected from both domestic and foreign tourists visiting the islands, using a detailed questionnaire survey (refer Annexure 1 for a copy of the questionnaire). However the questionnaire survey did not differentiate between tourists who were entering the islands, were in the midst of their stay or those that were leaving.
- ♦ Accommodation sector – For tourism accommodation units (such as resorts, hotels, lodges, guest houses, holiday homes and home stays) data was collected through a questionnaire survey and supplemented by focus group discussions (FGDs) with the Chamber of Commerce and Industry and one-on-one interviews with select hotel owners and operators (refer Annexure 2 for a copy of the questionnaire).
- ♦ Travel agencies and tour operators – For travel agencies and tour operators, data was collected primarily through FGDs with the A&NI Chamber of Commerce and Industry, where tour operators are also represented. In addition, interviews were conducted with select agencies from the government's official registered list. The comprehensive list of tour operators in Port Blair was generated by physical verification of offices and advertisements.
- ♦ Local community – Primary data from local communities was collected at each site through a random stratified sampling approach. At each site, the local community, including households, was stratified on an occupational and income basis that included those linked directly or indirectly to tourism activities and its impacts –
 - ♦ agriculture – land-owning and landless labourers
 - ♦ fisherfolk – including those selling fish in the market
 - ♦ shopkeepers and hawkers
 - ♦ hotel, resort and shack owners
 - ♦ taxi and autorickshaw drivers
 - ♦ tourist, snorkelling, diving and trekking guides
 - ♦ health workers

Within each stratum, representative samples of 1–5 people were interviewed randomly. At some sites, certain distinctive local community groups which are important and closely linked to the tourism activities were also interviewed; for example, *donghie* owners at Baratang. Also, as it was a specific research requirement, at each site and within each stratum, special efforts were made to interview and interact with women.

- ♦ Government – Primary data was collected from different bodies and units within the government using different techniques. At the level of the A&NI Administration,

in-depth interviews were conducted with the Lieutenant Governor and senior officers (Secretary, Deputy Secretary and Directors) of relevant departments; in some cases (like with the Tourism Department) three rounds of interviews were undertaken at different points of the study. At the local government level, interviews were conducted with local elected representatives (*Pradhan / Up-pradhan / Sarpanch / Up-Sarpanch / Panchayat Samiti* and *Zilla Parishad* member) at each field site. As the perspectives of local elected representatives was a priority for the study, information from interviews at field sites was supplemented by an FGD with a representative set of elected representatives also.

2.3.2.2 Secondary sources of data

This research has drawn data from several secondary resources including reports of the Government of India, A&NI Administration, UN agencies, NGOs working in the islands and web-based sources. Important secondary data on certain specific questions like visitation statistics, number of cruise ship arrivals, number of helicopter users and so on have been directly sourced from the relevant departments of the Administration. Important secondary sources of data for the study are given below:

- ♦ Island Wise Statistical Outline 2005, Directorate of Economics and Statistics, A&NI Administration
- ♦ Basic Statistics 2005–2006, Directorate of Economics and Statistics, A&NI Administration
- ♦ Tourist arrival (domestic and foreign) in A&NI 1980–2006 (overall and month wise), Department of Information, Publicity and Tourism (IP&T), A&NI Administration
- ♦ Country-wise arrival of foreign tourists into A&NI for the year 2001–2007, Immigration section, A&NI Police Department, A&NI Administration
- ♦ Revenue receipts, A&NI Administration, 2004–2008, Department of Finance and Planning, A&NI Administration
- ♦ Forest Statistics, Department of Environment and Forests, A&NI, 2005
- ♦ Data pertaining to the islands from the Central Statistical Organisation (CSO), National Sample Survey (NSS), Union Budgets and Census of India 2001
- ♦ The Andaman and Nicobar Islands in the Twentieth Century: A Gazetteer prepared for the A&NI Administration by Kiran Dhingra, Oxford University Press, 2006 (second edition)

2.3.3 Population and Sample

Tourists – The A&NI have been receiving an increasing number of tourists in the last two decades, although there was a dip in 2005 because of the tsunami. According to the 2006 statistics of the Department of IP&T, A&NI Administration, total arrivals in the islands were as follows:

domestic tourists: 118,648
foreign tourists: 9,051

The sample size chosen for primary data collection from tourists was 1 per cent each of the total domestic and foreign tourist arrivals, that is 1,200 domestic tourists¹ and 108 foreign tourists were interviewed.

Accommodation sector – the research has tried to capture trends of the sector in Port Blair and other islands separately, as the issues and consequent analysis would differ for these two regions. In both regions, the attempt was to interview 100 per cent of the accommodation sector. In Port Blair, according to official statistics, the number of registered accommodation units is 63 of which 63 per cent, that is 41 units, were interviewed. A few unregistered units were also interviewed. In each of the other six field areas, all the accommodation units (whether registered or unregistered) were approached and interviewed to capture the ground-level scenario of tourism in the islands. It is important for the research team to state that the quality of responses to the questionnaire survey with the accommodation sector was unsatisfactory. This has had a bearing on the extent of in-depth quantitative analysis possible on several important indicators pertaining to tourism industry activities (for example, growth rate, occupancy rates, number of people directly and indirectly employed, revenue generation and profits from tourism activity). The team has used qualitative observations and interviews from the field to supplement some of the data gaps.

Travel agencies and tour operators – The total number of registered and unregistered tour operators and travel agencies based in Port Blair is approximately 70. The associations were approached and invited for a common discussion to elicit their perspectives on challenges and concerns pertaining to the tourism industry on the islands.

2.3.4 Data Collection

For this research, given the extent of data that had to be collected and the location-based challenges, a range of instruments was used for data collection from different groups. These are mentioned below.

Questionnaire – Questionnaire or interview schedule was the instrument used for collecting data from tourists – both foreign and domestic. This was chosen as the most efficient and effective method, given the size of the sample and resources. The questionnaires were administered by a team of field investigators (FIs) comprising educated youth from the islands, having completed a course in sustainable development conducted by the Tata Institute of Social Sciences (TISS) and having a keen interest on tourism issues. The FIs were oriented on tourism issues and were trained by the research team from the partnering organisations. A combination of interviewer-completion and respondent-completion approaches was adopted to fill questionnaires, depending on the choices of the respondents. The questionnaire was first pilot tested among 25 tourists in each category and changes were accordingly made to it before administering it on the sample. A street survey method was predominantly adopted for collecting data where tourists were approached at prominent tourist spots in field areas such as beaches. In some cases, hotels and restaurants that were frequented by tourists served as collection points. An important caveat, however, is that the questionnaire did not differentiate between tourists on the basis of what stage of their holiday they were at while responding. We understand that responses to many of the questions may be significantly different between tourists who have just arrived in the islands and not yet been on their holiday vis-à-vis tourists who have already had their holiday. The questionnaire

tool was also used to collect data from accommodation establishments in the field area. In this case, the data was collected through a household survey approach where each hotel or establishment was individually approached at its location and the interviewer then administered the questionnaire. The data collected from questionnaires was then entered into the Statistical Package for Social Sciences (SPSS) software, using services of a professional data entry person to enable analysis.

In-depth interviews – The primary instrument for collecting qualitative data from those groups to whom the questionnaire method could not be applied was in-depth interviews. This was the chief method of data collection administered to the government and to local community representatives. Interviews were conducted by senior members of the project research team. In the case of the government, an interview guide was prepared keeping a detailed list of questions and checklist for every department/official being interviewed. Data collected from interviews was documented through notes taken by the interviewers rather than through tape or video recordings as the latter would not have been appropriate with several government officials (Refer Annexure 3 for the list of government officials interviewed).

Field observation – Field observation has been another important instrument for collection of qualitative data needed for this study, especially for that on the socio-cultural and environmental impacts of tourism activity. At each field site, the research group spent considerable lengths of time at different locations to observe tourist behaviour, the interaction of tourists with local people and the impacts of such interaction. Data recorded through field observation was immediately documented. The research group had the benefit of conducting field observation at different points of the study for improved analysis; for example, for observing tourist behaviour at a beach during off tourist season and peak tourist season.

Participant observation – In certain cases, to develop an improved understanding of how tour operators functioned and how guided/package tours were conducted, a participant observation method was also adopted. Here, members of the research team went as tourists to different sites/spots to observe tourist behaviour and the functioning of guided tours, and to get a first-hand experience of how local community members viewed and interacted with tourists. Such participant observation was conducted at Port Blair, Wandoor, North Bay, Ross (near Port Blair) and Smith Islands, Redskin, Baratang, and Havelock and Neil Islands. Observations were documented through field notes.

Focus group discussions – In order to overcome the shortcomings of the questionnaire survey on accommodation establishments and to get a collective perspective from the group, two FGDs were conducted (Refer Annexure 4 for details of dates, venue and participants at the consultations). The first was with the Andaman and Nicobar Chamber of Commerce and Industry at Port Blair, where participants comprising members of the Chamber were involved in different aspects of the tourism industry, including accommodation/hotel sector, travel agencies and tour operators. The second FGD was held in Port Blair with elected representatives from the different islands including *Pradhan*, *Up-pradhan*, *Sarpanch*, *Up-Sarpanch*, *Panchayat Samiti* members and *Zilla Parishad* members. The perspective of elected representatives on tourism in the Islands was a specific requirement of the study and given the large size of the constituency and the geographical spread, it was decided that an FGD was the most appropriate method for collecting data from this group. Data from the FGDs has been documented in writing and through audio visuals.

Participatory perspective gathering – In order to gather perspectives from the youth on tourism-related issues, a creative set of instruments was designed and used in the research. This involved conducting an essay competition and debate competition among school and college students from different field areas. For this purpose, all the secondary and senior secondary schools, and all colleges in Andaman Islands were selected. The topics for the essay competition were as follows:

- ♦ Who really benefits from tourism?
- ♦ A vision for tourism in the islands
- ♦ Tourism and its links to the environment in the islands

A total of 140 essays was received from students of 35 schools and 5 colleges. Of these, 7 school and 5 college students were chosen to participate in inter-school and inter-college debate competitions on the topics “Tourism has changed the Andamans for the better” and “Vitamin Sea: Why more tourism is good for the Andamans,” respectively. The judges for the competition were distinguished persons representing the industry, media and the Administration from the islands. The instrument of essay and debate competitions enabled the youth to participate more actively in discussing tourism issues in the islands. Data collected from the essays and debates were documented and compiled in the chapter on perspectives. (Refer Annexure 5 for details of the winners of the essay and debate competition).

In addition to these instruments of collecting primary data, factual information has been supplemented by several secondary sources as mentioned earlier.

2.3.5 Data Analysis

The data collected from primary and secondary sources was quantitatively and qualitatively analysed. For quantitative techniques, a statistical package SPSS was used. This package was used to develop in-depth analysis of questionnaire surveys. The frequency distribution, cross tabulations of various indicators, co-relation between variables, pie charts and graphs were all generated using SPSS and MS Excel, to strengthen the analysis and recommendations.

2.4 Research Challenges and Limitations

- ♦ In some cases, on account of bad weather, especially during the monsoon months, field visits could not be undertaken to sites like Hut Bay in Little Andaman, where tourism has stopped since the earthquake and tsunami in December 2004. Hence, these islands have been left out of the scope of this study.
- ♦ The time-bound nature of research has compelled the primary survey in the Andamans to be conducted between the months of July and October. Consequently, this study could not capture from field visits the nature, form and debates of tourism that prevailed in the islands in other months.
- ♦ Collecting primary data from accommodation establishments in the islands through administration of the questionnaire was not very successful. In spite of repeated visits, personal requests and even commitment from the managers, several units did not provide data stating “personal reasons” as the cause.

Therefore, the questionnaires for several accommodation units are incomplete, which affects the extent of quantitative analysis possible from this. Data however, has been supplemented using other qualitative methods like interviews and FGDs.

- ♦ Interviews with few senior and important officials within the A&NI Administration could not be conducted on account of their hectic travel schedules and non-availability of appointments.
- ♦ Reliable and recent secondary data on several indicators like total number of accommodation units in Port Blair, nature of the informal tourism industry in Port Blair and on a few other islands and total number of people employed in tourism activities (directly and/or indirectly) were not available as there are no official records of these. The analysis in this report is limited because of the lack of this data.

2.5 Ethical Considerations

The research team and collaborating organisations in this project have taken care and caution to ensure that the research process and outcomes are ethically sound. The general principles followed have been as follows:

- ♦ all subjects/respondents should take part freely and on the basis of informed consent
- ♦ ensuring the confidentiality of information and anonymity of names wherever requested
- ♦ ensuring that data is neither fake nor plagiarised and that results are not falsified

The research team has conducted this study with the full knowledge of the A&NI Administration, the Department of IP&T and by seeking due permission from the village heads or local elected representatives wherever required.

2.6 Report Format

This research report has been structured keeping in mind that all readers may not be familiar either with tourism or A&NI or both. Chapter 1 is an introduction to the project, and the context of the study, the broad objectives. Chapter 2 has detailed the research methodology followed for the study. Chapter 3 has introduced A&NI – their historical and political background; geographical location; geological, ecological and topographical specifics; and basic information about the people living in the islands. Chapter 4 has discussed the present status of tourism development in the Andaman Islands from its inception, recent trends and then a detailed current status of tourism. This will include analysis of primary data collected and supplemented by secondary data to represent the current status on tourists – arrivals, kinds, motivation and expectations with case studies of Israeli tourists and tourists availing LTC; industry – model, scale, number of units, challenges with a case study of Havelock and Baratang Islands; tourism-supporting infrastructure. Chapter 5 has detailed the current institutional and developmental framework for tourism in the Islands examining the role of different government bodies at all levels – national, regional and local. It specifically addresses the

governance structure prevalent in the islands with emphasis on the role of institutions of local self-government (*panchayati raj* institutions). Chapters 6 to 9 highlight the major findings of the study on the impacts of tourism along four different dimensions – socio-cultural, environmental, economic and institutional, including other national/international case studies wherever relevant. Chapter 10 presents the perspectives of different stakeholder groups on development of tourism in the islands by collating all the primary information and interactions conducted during the course of the study. Chapter 11 concludes with recommendations that would be of relevance to different bodies and agencies concerned with tourism. A list of important annexures to the report and bibliography is provided at the end.

NOTES

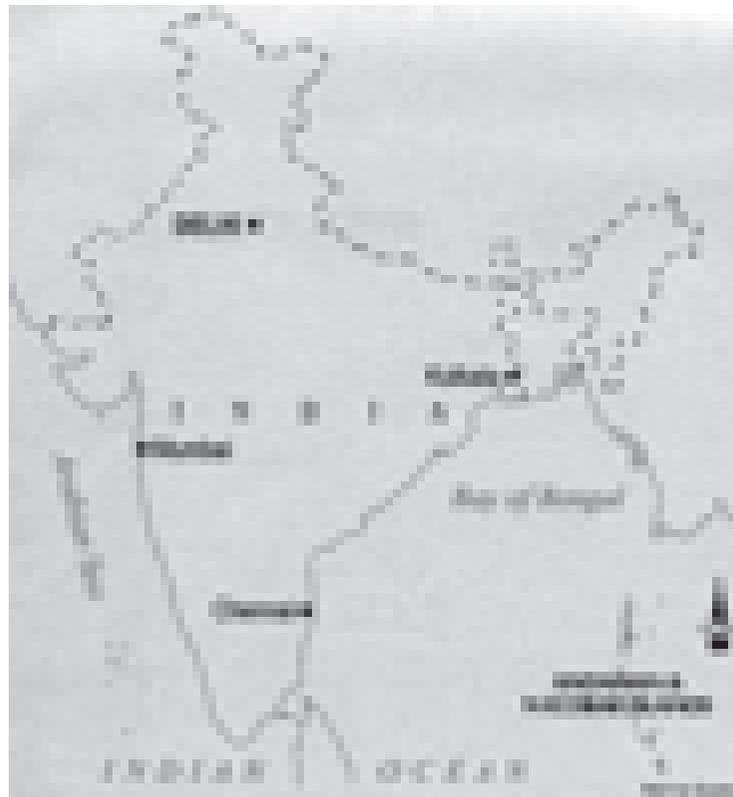
- 1 Of these, 918 were considered as valid and used for data entry and analysis.

3

Introducing the Andaman Islands

3.1 Location of the Andaman Islands

The Andaman and Nicobar Islands (A&NI) is the largest archipelago in the Bay of Bengal. Aligned in a north-south direction, it comprises 572 islands, islets and rocks congregated into two major groups – the Andaman and the Nicobar groups. The Andaman group, which is located closer to Myanmar, consists of 550 islands, islets and rocks and covers a land area of 6,408 km². This group includes large islands such as the Middle Andaman, North Andaman, South Andaman, Baratang, Rutland, Islands of the Ritchie’s Archipelago consisting of Havelock Island, Neil Island, and Little Andaman.



MAP 3.1 Location of the Andaman and Nicobar Islands in the Indian Ocean

Source: IP&T

The Nicobar group consists of 22 islands having a total land area of 1,841 km². Great Nicobar (the southernmost island of the Nicobar chain) is the largest island (1,045 km²). The total area of the A&NI is 8,249 km² and the total length of the islands' coastline is about 1,962 km, accounting for about one-fourth of the total coastline of India. The Andamans are separated from the Nicobars by the 10 degree channel (the 10 degree latitude). Port Blair, the capital of the union territory (UT), is located at a distance of 1,255 km from Kolkata, 1,190 km from Chennai and 1,200 km from Vishakapatnam, by sea. In terms of its location in the Indian Ocean, Port Blair stands at a distance of 688 km from Yangon in Burma, 770 km from Phuket in Thailand, 1,093 km from George Town in Malaysia and 1,122 km from Medan in the Sumatra Island of Indonesia.¹

3.2 Geological Profile

The islands originated as a result of a gigantic geological upheaval between the Cretaceous period (90 million years ago) and the Miocene period (15 million years ago) followed by twin geological phenomena of land subsidence due to volcanic activity and simultaneous elevation by corals. This theory is supported by various geological studies. Given the similarity between the geological structures of the Arakan Yoma (Burma), Andamans, Nicobars and the Indonesian chains, it is also possible that those ranges evolved similarly. There is also an alternative surmise that the Andamans group was initially a finger of the Arakans into the sea, which separated by gradual subsidence, forming the embryo of A&NI. The peaks that rose were subjected to erosive forces of the wind and sea, which contributed sediments to the valleys, filling them up with siliceous, organic, planktonic and fine ferruginous material. The weight of the material led to further subsidence and volcanic activity that resulted in the emergence of the seabed above the water in the form of these islands. Further elevation took place in more recent periods, continuing to this day, with coral or shell conglomerate being deposited on land and also enlarging the submarine hilltops with coral and fringing reefs. Subsidence continues even today due to volcanic activity, and there is evidence to prove this; it has been noted in Havelock, Rangachang on the east coast of South Andaman, north foreshore of Little Andaman, north end of North Sentinel and north of Great Andaman.² (Note: This was before the earthquake of December 2004.)

3.3 Geographical Profile

The Andaman group of islands is principally divided into the Great Andaman Islands and the Little Andaman Island. The main islands in the Great Andaman Islands are made up of North, Middle, Baratang and South Andaman Islands. These are surrounded closely by Landfall Island in the north, Narcondam in northeast, Barren Island in the east and the islands of the Ritchie's Archipelago, also in the east, of which there are Havelock and Neil Islands apart from the others. To the south are Rutland and Cinque Islands. North and South Sentinel Islands and Interview Island are important islands in the west. Baratang Island is situated between Middle and South Andaman Islands. The

Labyrinth group of islands is situated southwest of South Andaman. Little Andaman Island is about 55 km south of South Andaman across the Duncan Passage. Of the land area of 6,408 km² of the Andaman Islands, forests occupy about 5,629 km², constituting reserve and protected forests,³ of which approximately 2,118 km² is under the tribal reserve.⁴ The elevation of the Andamans ranges from 0–732 m, with Saddle Peak in North Andaman Island being the highest.

3.4 Meteorological Profile

The Andaman Islands are situated in the equatorial belt and are exposed to marine influences, and have a tropical climate that is warm, moist and equable. The temperature normally ranges between 18°C and 35°C, and the meteorological average is an annual average of 30°C and a minimum of 23°C. Humidity of the islands has been recorded between 77 and 80 per cent, with February recording the lowest humidity⁵ of 70 per cent. The proximity of the sea and abundant rainfall prevent extremes of heat, and these islands experience both the northeast and the southwest monsoons. The southwest monsoon commences during April/May, accompanied by high winds, with heavy downpours right from July to September. The northeast monsoon usually commences during October and rains continue into December. The average annual rainfall ranges between 3,000 and 3,500 mm. In some years, the islands experience rains during all the months of the year. Cyclones usually occur during the southwest monsoons, accompanied by very strong winds, mainly during May and in some years during mid-April. From June until August, the rains become heavy, with wind speed reaching up to 20 knots, resulting in reduced visibility, sudden squalls and near cessation of fishing activity. The northeast monsoon winds also carry the possibilities of their storms becoming stronger than those of southwest monsoon winds. December and January are generally calmer and the best weather is experienced in February. It is also dry between February and April, with April being the hottest month. Although the islands fall in the path of almost every storm that passes over the Bay of Bengal, they have been relatively less affected, of which three storms (in 1891, 1921 and 1989) were considered severe with wind speeds of 48–63 knots.⁶



MAP 3.2 Detailed Political Map of the Andaman and Nicobar Islands

Source: IP&T

TABLE 3.1 Mean Maximum and Minimum Temperatures and Humidity Levels at Port Blair in 2006

Month	Mean Maximum Temperature	Mean Minimum Temperature	Mean Relative Humidity at 8.30 hours
January	29.9	22.9	70.19
February	31.1	24.3	71.61
March	30.5	23.7	70.1
April	31.9	24.3	67.9
May	30.9	23.6	78.0
June	29.7	23.8	89.0
July	29.9	25.0	85.0
August	29.5	24.5	84.0
September	28.8	23.2	90.0
October	29.9	23.8	83.0
November	30.7	24.9	75.0
December	30.0	23.5	71.0

Source: "Basic Statistics", 2005–2006, Directorate of Economics and Statistics (DES), Andaman & Nicobar Islands Administration.

3.5 Ecological Profile

Forests – The forests in the Andaman and the Nicobar group of islands occupy 7,606 km² or 92.2 per cent of the total geographical area of 8,249 km²; of this 5,883 km² is forests in the Andaman group and 1,723 km², in the Nicobar group. (Note: The DES puts the forest cover in 2006 as 5,629 km² for Andamans and 1,542 km² for the Nicobars). Of the total forest cover, dense forests with crown density of 40 per cent and above constitute 85.9 per cent, open forests with crown density less than 40 per cent constitute 1.7 per cent and mangroves constitute 12.7 per cent. The legally notified forests cover 7,170. 69 km² (86.93 % of the geographical area); of this, 4,242 km² are protected forests and 2,929 km² are reserved forests.

Marine ecosystem – The A&NI coastline is 1,962 km long and has around 35,000 km² of continental shelf that provides potential fishing grounds. The 200 miles of Exclusive Economic Zone (EEZ) around A&N group of islands is vast and covers a sea area of 0.6 million km², which is about 30 per cent of the EEZ of India.

Coral reefs – The A&NI are fringed by one of the most spectacular and extensive reefs in the world that hold significance nationally and globally as the last pristine reefs in the Indian Ocean. However, the extent of reefs in the A&NI is not accurately known yet and recent surveys report it as 11,939 km². There are two protected areas for reefs in the Andamans – the Mahatma Gandhi Marine National Park and the Rani Jhansi Marine National Park, both having adjoining reefs that need inclusion. There are also large areas of reef outside these protected areas (PAs) with very little protection efforts going into them. Reefs have become globally threatened due to various environmental and climatic factors, along with greater use of their resources both directly through activities such as overfishing and indirectly through recreational tourism.

Mangroves – Mangrove areas are also known for their diversity of various marine organisms. It is clear that any degradation of coastal ecosystems such as coral reefs and mangroves will have an adverse impact not only on the unique biodiversity of fragile coastal ecosystems but also on coastal fisheries and tourism. The estimated area of mangroves in 1957 in the islands was about 1,200 km². Another estimate made in 1986–1987 using LANSAT imagery reported a total of 777 km² for A&NI

of which 287 km² was for the Nicobars. In 1999, the Forest Survey of India (FSI) estimated 966 km².

Wetlands – Swampy areas in lowland evergreen forests have been almost totally destroyed by conversion to agriculture, with the only substantial tracts remaining in Baratang and Little Andaman Islands, and the Jarawa Reserve off the west coast of South and Middle Andamans. Little Andaman Island has wetland ecosystems found nowhere else in the A&NI; these include long stretches of freshwater streams, open saline marshes, peat bogs and large tracts of freshwater grassy marshes. Open swamps have also been drained in a number of places, making this an increasingly rare habitat. There are also significant wetlands in revenue areas that need protection. Areas exist in Chouldhari, Bamboo Flat, Sippighat, Wandoor, Baratang, Mayabunder and North Andaman Island. Freshwater wetland ecosystems of the islands have at least two restricted range endemic bird species, Andaman Crane and Andaman Teal, besides being a very important nesting habitat for saltwater crocodiles and providing feeding areas for bat species.

Biodiversity – The A&NI is one of the richest and most uniquely biodiverse areas in the world, with a high degree of endemism. The islands are an internationally acknowledged hotspot of biodiversity, with over 3,552 species of flowering plants (with 223 endemic species), 5,100 species of animals (100 freshwater, 2,847 terrestrial and 503 endemic), 4,508 marine species (of which 220 are endemic), 52 species of mammals (with 33 endemic), 244 species of birds (96 endemic) and 111 species of amphibians and reptiles (66 endemic).

3.6 Land Use Profile

The Andaman Islands retained most of their forest cover till Independence in 1947, as there was very little demand for timber during the colonial period. From 1950 onwards, there was a steady stream of settlements and migration of people into the islands. In this period, land requirements changed and forestry operations resumed both to make more land available and to meet industrial demands in the mainland, especially that of the Indian Railways.

The tribal reserves for the Jarawa and the Onge that were notified in 1957 had large portions denotified in the 1960s and 1970s, as there was a demand for land for providing connectivity between the islands through the Andaman Trunk Road (ATR) and for settlement. Dhingra (2005) writes that the anthropologically accepted average space of 2.25 km² for a forest tribal was conveniently forgotten when the issue of obtaining land for settlement was considered and then it was put at 1 acre (4.0469 m²) per Jarawa. The official number of Jarawas was further reduced from 500 to 300. The Jarawa right to land of 1,125 km² was reduced to 300 km² and prime Jarawa land was taken over. First, it was for the purpose of constructing the ATR right through their territory in 1959, and then, in 1965 and 1970, to move in settlements along the road. The Onge numbering about 129 were settled in Little Andaman over an area of 732 km² until 1967. When subsequent surveys revealed the availability of timber, flat cultivable land and prospects for plantations, the argument turned against their numbers; that 732 km² was available for 129 individuals was seen as iniquitous. They were eventually given 252 km² on the banks of Dugong Creek for settlement. This was after 6,700 acres (of which 1,593 acres were clear felled) for red oil palm plantation and 47,325 acres was given to the Andaman & Nicobar Islands Forest & Plantation Development Corporation.

The remaining 14 per cent of land is revenue land and is used for human settlements, agriculture and other human-based activities. Most of the revenue land is along coastal areas where people are settled. The entire rural and revenue area is under CRZ-IV (Coastal Regulation Zone- category IV), except a very small area under CRZ-II and no development is permissible within 200 m of the hightide line in CRZ-IV areas. Of the 14 per cent of revenue land only 21 per cent is under intense cultivation and another 11 per cent is classified as fallow land and cultivable wasteland; plantation crops cover 45 per cent of the revenue land. The situation has changed after the earthquake of December 2004 with subsidence in the south and land having come up in the north.⁷

TABLE 3.2 Land Utilisation in Andaman District

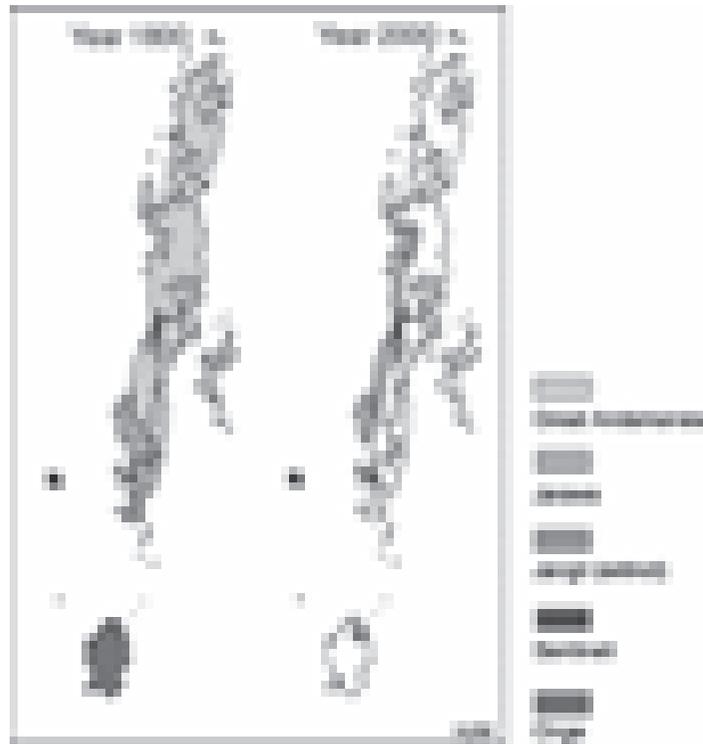
Land Use	Area in Hectares (1997–1998)	Percentage of Total Land Area
Total land area	6,40,800.00	
Total reporting area	59,765.79	9
Area not available for cultivation	17,132.57	3
Other uncultivated land excluding fallow land	24,668.39	4
Fallow land	3,715.37	1
Total cropped area	14,249.53	2
Net sown area	14,249.46	2
Area sown more than once	700.07	

Source: "Basic Statistics", 2005–2006, Directorate of Economics and Statistics (DES), Andaman & Nicobar Islands Administration.

A section on land use in the Andamans will be incomplete without accounting for the use of land by the defence establishments. A unified military command has been established with the local naval chief holding administrative control. There is a brigade of the Army in Brichganj, which is rapidly developing into a cantonment, with a landing craft flotilla. There is an Air Force base in Car Nicobar with Port Blair serving as the main air transport service and supply line. The Navy has a substantial presence at Minnie Bay in Port Blair with bases at Kamorta, Nancowry Harbour, and at Campbell Bay and Diglipur, airstrips have been constructed.⁸

3.7 Demographic Profile

Indigenous communities – The Andaman Islands are home to four indigenous tribes. The Great Andamanese people numbered around 6,000 in the 1850s, when the islands were colonised by the British for establishing a penal colony. Today they number 43 and have been marginalised to Strait Island on the southeast coast of Middle Andaman. The Onge who now inhabit Little Andaman Island were the next to be contacted in 1920 and they met a fate similar to that of the Andamanese. The Sentinelese, estimated to be 39 in number, have for long inhabited North Sentinel Island 60 km southwest of South Andaman Island. The Jarawas are in the interior and west coast of South and Middle Andaman and currently number about 240. Dhingra (2005) gives a detailed account of the profile of indigenous communities in Andaman Islands and their steady decimation.



MAP 3.3 Distribution of Tribes of Andaman in the years 1800 and 2000

Source: *Lonely Islands*, George Weber, <http://www.andaman.org/maps/textmaps.htm>

TABLE 3.3 Tribal Population in Andaman & Nicobar Islands (1951–2001)

	1951	1961	1971	1981	1991	2001
Great Andamanese	23	19	24	26	45	43
Onge	(150)	129	112	97	95	96
Sentinelese	—	(50)	NE	NE	(100)	(39)
Jarawas	(50)	(500)	NE	31	(280)	(240)
Nicobarese	11,902	13,903	17,874	21,984	26,000	28,653
Shompen	(20)	71	92	223	250	398

Note: NE not estimated.

Figures in brackets are estimates.

Source: “Basic Statistics”, 2005–2006, Directorate of Economics and Statistics (DES), A&NI Administration.

Local and settler community and history of settlement in the islands – During the British era, the British government allotted house sites and agricultural lands under the A&NI Regulation, 1926 to “convicts” who had been jailed at the Cellular Jail in the islands. Around the same time, 45 Karen families from Burma were brought to the Andamans to clear the forest in 1925. Soon, the Karen people from Burma settled as agriculturalists in Middle Andaman. There are around 3,000 Karens in the islands now, with the main concentration living just south of Mayabunder in Middle Andaman.

According to government sources,⁹ after Indian independence in 1947, the problem faced by the government was one of settling people in the islands to provide labour for exploitation of natural resources and to make use of the agricultural land. The displaced agricultural people of the then East Pakistan (now Bangladesh) provided a good option and so the idea of colonisation of the islands emerged. Consequently, during 1949–1952, 450 refugee families from East Pakistan were settled in the A&NI on about 3,000 acres of land in South Andaman. Settlement was opened up in South, Middle and North Andaman for them, and the majority settlement in the Diglipur area occurred between 1950 and 1959. The table below provides details of the “*colonisation and rehabilitation*”¹⁰ scheme adopted by the government and A&NI Administration in the 1950s. For elaborate explanation on growth of settlements and populations in the Andamans, Dhingra (2005) is an excellent reference.

TABLE 3.4 Settlement into the Andaman & Nicobar Islands since the 1950s

Year	Name of State	Number of Families	Area of Settlement (Tehsil)
1953	East Bengal	97	Ferrargunj
1954	East Bengal	438	Rangat
	Kerala	35	Rangat (Betapur)
1955	East Bengal	390	Ferrargunj and Rangat
	Kerala	37	Rangat
	Tamil Nadu	4	Rangat
1956	East Bengal	221	Diglipur
	Kerala	42	Diglipur
1958	East Bengal	194	Mayabunder
	Kerala	6	Ferrargunj
1959	East Bengal	217	Mayabunder
	Tamil Nadu	14	Diglipur
	Bihar	120	Rangat (Baratang)
1960	East Bengal	250	Mayabunder
	Tamil Nadu	17	Diglipur (Milangram)
	Bihar	64	Diglipur (Ramnagar)
1961	East Bengal	228	Port Blair (Havelock)
	Kerala	14	Port Blair (Rangachang)
	Bihar	13	Diglipur (Jagannath Dera)
1967	East Bengal	323	Mayabunder (Billiground)
1969–1971	East Bengal	375	Little Andaman

Source: Andaman District Administration, <http://andamandt.nic.in/history.htm>

The people from Chhota Nagpur (also know as “Ranchis”) were also brought into the islands by the British as labourers to work in the forests. These people from Chhota Nagpur have settled on Baratang Island and have also spread themselves throughout the islands. In the last few decades, there has been consistent migration from mainland India, mainly from West Bengal, Tamil Nadu, Andhra Pradesh, Bihar and Kerala into the islands. According to Dhingra (2005), after the 1970s, the A&NI have seen an unplanned influx from Tamil Nadu (10.2% per year), Andhra Pradesh (8.7% per year) and Bihar (6% per year) where annual growth rate of influx has been far in excess of the average decadal growth in the islands of approximately 4.8 per cent per year. The growing demand for migrant labour with increasing construction in the islands could be possible reasons for this migration. Today, the population of the islands is a mix of lingual communities from different parts of India, which are the basis of social organisation. With the growing influx,

there are growing tensions between those who consider themselves legitimate inheritors of the place, such as the local borns and later settlers, and migrants, because of shifting balance of numbers.¹¹ Such a dynamic demographic profile of the islands makes it difficult to define the term “local community”, as it does not constitute any homogeneous group. In addition, the question of identity regarding who belongs to the islands and who do not is paramount for the islanders. There is a palpable difference in perception and behaviour between the “settler” communities and the consequent “migrant” communities. These dynamics will have to be borne in mind while considering any developmental activities and its potential or intended beneficiaries.

Apart from the above, an account of defence personnel will help complete the picture. The first naval base was established in 1962 with fourteen naval personnel in Port Blair. From here, the base has grown and the islands have served as an important military base through the acquisition of large tracts of land. The defence personnel number about 4,500 and another 20,000 may be added to include defence civilians and families.

TABLE 3.5 Household Population in Andaman & Nicobar Islands by Language Spoken as per 2001 Census

Language Spoken	Total Population (number of people)
Bengali	64,706
Hindi	49,469
Kannada	323
Malayalam	26,075
Marathi	539
Oriya	841
Punjabi	1,752
Tamil	53,536
Telugu	32,979
Urdu	1,492

Source: “Basic Statistics”, 2005–2006, Directorate of Economics and Statistics (DES), A&NI Administration.

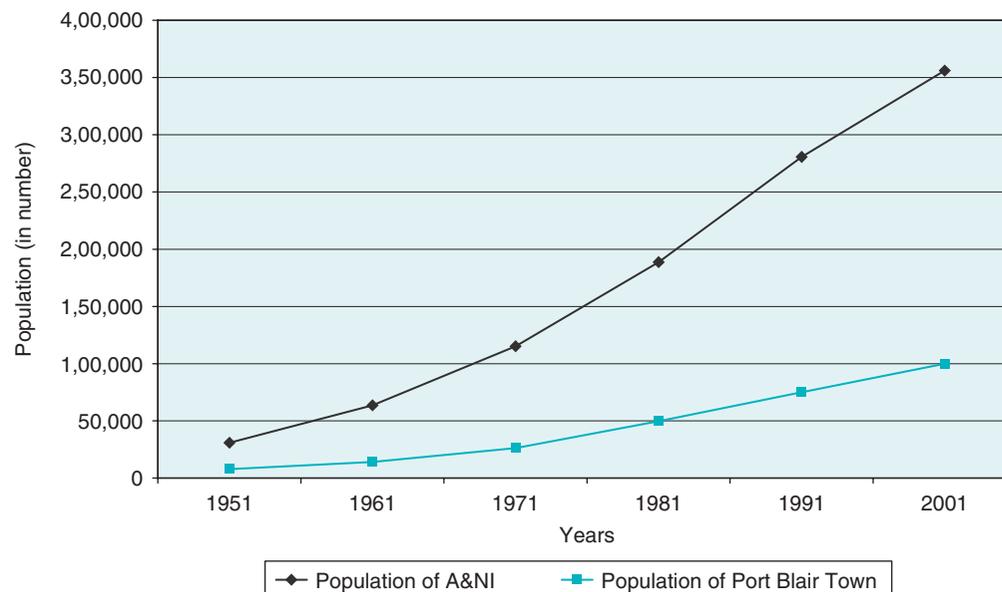


FIGURE 3.1 Growth of Population of Andaman & Nicobar Islands (1951–2001)

Source: “Basic Statistics”, 2005–2006, Directorate of Economics and Statistics (DES), A&NI

Now, there are 503 inhabited villages in the A&NI of which 334 are in the Andaman District on eleven islands and the remaining 170 villages, hamlets, and small and individual family units on 12 islands in the Nicobar district. The total population according to the 2001 census is 356,152.

As the figure above shows, there has been a sharp rise in population of the A&NI since 1951. Between 1951 and 1961 alone, the decadal increase in population was 105.19 per cent, rising from 30,971 in 1951 to 63,548 in 1961 – evidence of the settlement carried out in many areas during the 1950s. Ever since, the population has been increasing steadily, reflecting the increasing migration into the islands from mainland India. It is also important to note the steady rise in population of Port Blair town, which has also been increasing every decade by an average 60 per cent. Data also shows that the density of population in the islands has increased from 5 persons per km² in 1951 to 43 persons per km² in 2001. However, given that the land mass available for human habitation in the islands is significantly less, the density in population is likely to be very much higher in areas like Port Blair town. The capacity of small island systems to absorb such high human density needs to be seriously considered in the light of increasing migration trends.

TABLE 3.6 Distribution of Population on the Basis of Sex and Rural–Urban (1981–2001)

Serial number	Particulars	1981	1991	2001
1	<i>Total population</i>	1,88,741	2,80,661	3,56,152
	Male	1,07,261	1,54,369	1,92,972
	Female	81,480	1,26,292	1,63,180
2	<i>Rural population</i>	1,39,107	2,05,706	2,39,954
	Male	78,401	1,11,986	1,28,961
	Female	60,706	93,720	1,10,993
3	<i>Urban population</i>	49,634	74,955	1,16,198
	Male	28,860	42,383	64,011
	Female	20,774	32,572	52,187
4	<i>Scheduled tribe population</i>	22,361	26,770	29,469
	Male	11,586	13,750	15,127
	Female	10,775	13,020	14,342

Source: Andaman & Nicobar Islands at a Glance 2006 Directorate of Economics and Statistics (DES).

3.8 Occupational Profile

The main occupation of the people in the Andamans is public administration, defence sector and other social sector (25.5%) as per the 2001 census. This is followed by construction (13.11%); wholesale and retail trade (8.5%); agriculture, hunting, forestry and fishing (7.07%); transport, storage and communication (6.14%); and manufacturing and repairs (5.18%).

3.8.1 New Vulnerabilities

The earthquake of 26 December 2004 and the tsunami that came in its wake is the biggest disaster to have hit the A&NI in living memory. Official figures list 3,513 people as either dead or missing and 7,992 hectares¹² as the paddy and plantation land that was affected. A total of 938 boats were fully damaged, while the number of livestock

reported to have been lost in the disaster was 1,57,577.¹³ The Nicobar group of islands was much worse hit than the Andaman Islands. While the Nicobar Islands account for only 22 per cent and 12 per cent of the area and population, respectively, of the entire chain of Islands, 98 per cent of the deaths and 76 per cent of loss of agricultural land occurred here.

Sekhsaria¹⁴ writes that the tectonic movements triggered by the earthquake, which catalysed the tsunami, also caused a huge and permanent shift in the lay of the A&NI. Assessments show that the Andaman Islands experienced a permanent uplift of 1–2 m while there was a subsidence of up to 4 m in the Nicobar group of islands. Surveys by ecologists and environmental researchers conducted after December 2004 provide corroborating evidence. Huge coral reef areas totalling more than 60 km² along the western and northern coasts of the Middle and North Andaman Islands have been permanently exposed and destroyed. In the Nicobar Islands, the ecosystems that were most badly hit on account of the subsidence, the tsunami waves and the permanent ingress of sea water included forests along the coastline – particularly the mangroves and littoral forests. Faunal species that primarily reside in littoral forests such as the Nicobari Megapode (*Megapodius nicobariensis nicobariensis* and *M. n. abbotti*) and the Giant Robber Crab (*Birgus latro*) were amongst the worst hit. There is also evidence that the region where the islands are located have become seismically more active since December 2004. Nearly 20 earthquakes of a magnitude of over M6 in addition to several hundred of lesser intensity have been recorded in the region after December 2004.¹⁵

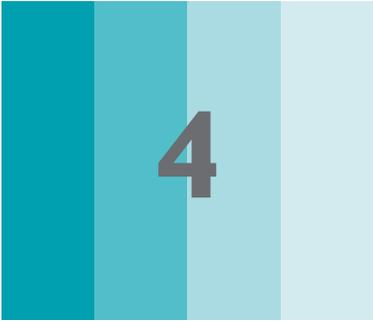
3.9 Conclusion

The islands, undoubtedly, have a unique history, geopolitical location and demographic profile that has resulted in its occupational and land use patterns. Their ecological fragility and geological sensitivity add to their unique profile. Increased seismic activity and increased threat on account of these need to now be made an important aspect of policy and development planning in the islands. Similarly, the change of the topography of the islands on account of the tectonic movements needs to be factored in, both, for the ongoing relief and rehabilitation work here as well as for future planning. An understanding and incorporation of these aspects should be the basis of dealing with the present and future situations in the A&NI

NOTES

- 1 See <http://www.timeanddate.com/worldclock/distances.html?n=1037>, data retrieved April 2008.
- 2 Dhingra, K, (2005) “The Andaman & Nicobar Islands in the Twentieth Century – A Gazetteer”, prepared for Andaman & Nicobar Administration published by Oxford University Press, New Delhi, pp. 3–4.
- 3 DES (Directorate of Economics and Statistics) (2006a) “Andaman and Nicobar Islands at a Glance, 2006”, Andaman & Nicobar Islands (A&NI) Administration, Port Blair, India
- 4 ANET (Andaman and Nicobar Islands Environment Team) (2003) “Andaman and Nicobar Islands Union Territory – Biodiversity Strategy and Action Plan”, National Biodiversity Strategy and Action Plan – New Delhi, India. Government of India–United Nations Development Programme (GoI–UNDP)
- 5 Dhingra (2005) p. 9.
- 6 Ibid., p. 10.

- 7 ANET (2003).
- 8 Dhingra (2005) pp. 273–274.
- 9 Andaman Island District Administration – history - <http://andamandt.nic.in/history.htm>, data retrieved April 2008
- 10 As used by the Administration in its website <http://andamandt.nic.in/history.htm>, data retrieved April 2008
- 11 Dhingra (2005) pp. 167–168.
- 12 More recent statistics from the A&NI administration indicate that the total agricultural land lost was 10,837 hectares of which 9,107 hectares is said to be plantation land, whereas 1,730 hectares is paddy land. The island wise break up for this figure is not available.
- 13 Sekhsaria P. “Andaman & Nicobar: New Vulnerabilities”, *THE HINDU*, November 2007, available online at <http://www.hindu.com/mag/2007/12/23/stories/2007122350110400.htm> data retrieved April 2008
- 14 Ibid.
- 15 See http://earthquake.usgs.gov/regional/world/historical_country.php#indian_ocean, data retrieved April 2008



4

Status of Tourism in the Andaman Islands

An important objective of this research is to provide an in-depth status of tourism and tourism-related activities in the Andaman Islands. Such an understanding is critical, as it should form the basis on which we analyse the impacts of tourism and formulate future strategies and policies for the sector.

This chapter presents a detailed status of tourism in the Andamans by examining trends in tourist arrivals and their seasonality, geographic concentration of tourism activities, profile and typology of tourists visiting the islands, motivation of tourists to visit the islands and major activities tourists currently engage in while on their holiday in the islands. It also provides an overview of the tourism industry in the Andamans with a focus on the accommodation sector. As transportation is integral to tourism in any destination, this chapter includes a section that details the air and ship transport sectors in the islands and their links to growth in tourism. Lastly, we enlist some recent plans and proposals for developing tourism in the Andamans that have been put forth by both the Central Government and the Andaman & Nicobar Islands (A&NI) Department of Information, Publicity and Tourism, in an attempt to provide the reader with a picture of what's in store for tourism in the coming years in the islands.

4.1 Tourist Arrivals to the A&NI: Trends in Domestic and Foreign Arrivals

Andamans is a relatively new tourism destination in India. According to statistics of the IP&T, A&NI Administration, in 1980, the total number of tourists visiting the islands was less than 10,000. Over the years, the numbers have steadily grown until they crossed the one lakh (100,000) mark in 2004. In 2005, after the tsunami, arrivals dipped to 32,381 but the following year, numbers rose again to 127,504 tourists.¹

Figure 4.1 indicates that the rise in arrival of domestic tourists has been much more steady and significant than the rise in arrival of foreign tourists. Of the total arrivals into the islands, 93 per cent are domestic tourists, whereas only 7 per cent are foreign tourists – reflecting a predominant visitation by those within the country. Across the 26 years for which tourist arrival data is available (Refer Table 4.1), the growth rate of domestic tourists is an astounding 1,243 per cent, whereas that of foreign tourists is a much lesser 332 per cent.

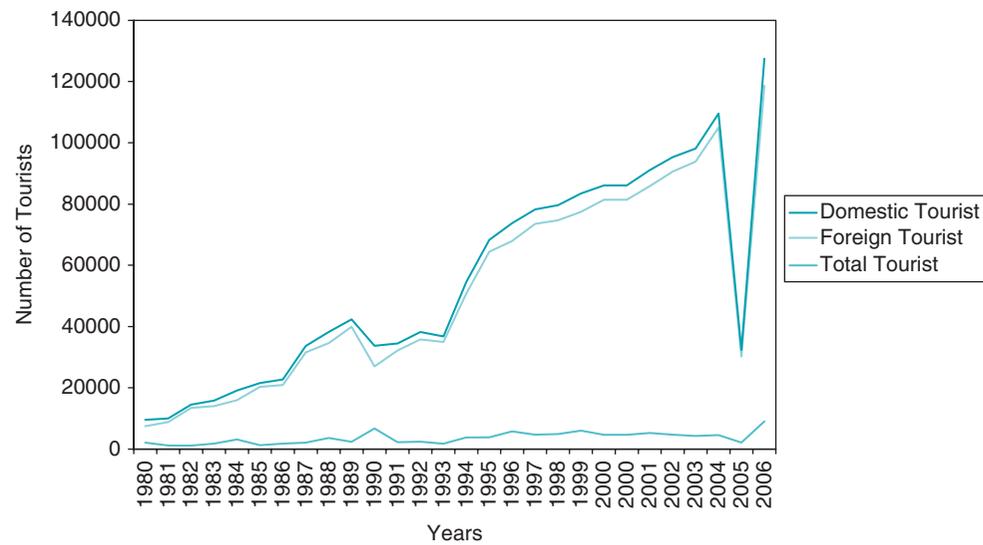


FIGURE 4.1 Tourist Arrivals to the Andaman & Nicobar Islands (1980–2006)

Source: IP&T, Tourist arrivals data

TABLE 4.1 Tourist Arrivals into the Andaman & Nicobar Islands (1980–2006)

Year	Domestic Tourists	Foreign Tourists	Total Tourists
1980	7,500	2,096	9,596
1981	8,835	1,170	10,005
1982	13,444	1,102	14,546
1983	14,020	1,817	15,837
1984	16,000	3,152	19,152
1985	20,291	1,264	21,555
1986	20,942	1,791	22,733
1987	31,591	2,085	33,676
1988	34,589	3,663	38,252
1989	39,967	2,392	42,359
1990	27,019	6,697	33,716
1991	32,242	2,248	34,490
1992	35,817	2,435	38,252
1993	35,000	1,771	36,771
1994	50,737	3,798	54,535
1995	64,490	3,849	68,339
1996	67,958	5,796	73,754
1997	73,558	4,724	78,282
1998	74,732	4,915	79,647
1999	77,448	6,035	83,483
2000	81,432	4,684	86,116
2001	85,866	5,249	91,115
2002	90,629	4,707	95,336
2003	93,899	4,281	98,180
2004	1,05,004	4,578	1,09,582
2005	30,225	2,156	32,381
2006	1,18,648	9,051	1,27,504

Source: Department of Information, Publicity and Tourism (IP&T), Andaman & Nicobar Islands Administration, 2006

It is our inference that the main reason for this rise in the domestic segment is the growth in the arrivals of travellers, who are mainly government employees working in different parts of the country with public sector enterprises and banks. The impact of this growth in number of travellers visiting the islands by availing LTC is discussed later in the chapter. Therefore, we can conclude with reasonable certainty that the increase in arrivals of tourists into the A&NI has largely been on account of domestic visitors, although an increase has been registered in both categories. As Figure 4.1 indicates, the arrival of tourists into the A&NI, although rising throughout, saw a sharp increase in the mid-1990s, thereby steadily rising until the sharp dip in 2005 on account of the tsunami. A closer look at the fall in arrivals after the tsunami indicates that arrivals of domestic tourists reduced by 72 per cent (from 105,004 to 30,225), whereas the arrival of foreign tourists reduced by 53 per cent (from 4,578 to 2,156). The greater fall in arrival of domestic tourists could be on account of the deep fear psychosis regarding the ocean that stepped into tourists' minds following the tsunami.

If we correlate the tourist arrival figures with the population of the A&NI, we see that for every 100 persons in the islands, there are 3 tourists at all times of the year.² Further, considering the fact that all tourists have to go through Port Blair town, for every 100 residents of Port Blair town, there are 10 tourists.³ These figures are an indication of the additional pressure that the islands face on account of increasing tourist arrivals.

4.2 Seasonality of Tourist Arrivals in the A&NI

Seasonality in tourism is one of the most important aspects that needs to be studied, while considering the pattern of tourist arrivals as well as the impact of tourism in any destination. According to Butler (2001) seasonality is defined as “a temporal imbalance in the phenomenon of tourism, which may be expressed in terms of dimensions of such elements as numbers of visitors, expenditure of visitors, traffic on highways and other forms of transportation, employment and admissions to attractions”.⁴ Butler further notes two basic origins of the phenomenon of seasonality – “natural” and “institutional”. Natural seasonality is the result of regular variations in climatic conditions – temperature, rainfall, snowfall and daylight. Seasonality is also an issue in tropical regions such as the Caribbean and Indian subcontinent where extreme temperatures, high rainfall and humidity can lead to reduced tourist demand at certain times of the year. Institutional seasonality, according to Butler, is the result of human decisions that can be due to a combination of religious, cultural, ethnic and social factors. Periods of religious worship, holidays or pilgrimages, or school and industrial holidays are good examples of institutional seasonal variation in demand for tourism services.

In the A&NI, based on official monthly tourist arrival data, the following Figures 4.2 and 4.3 indicate the nature of seasonality in arrival during the year of both domestic and foreign tourists.

An analysis of Figure 4.2 indicates that, in the case of domestic tourists, there does not seem to be very high variation in the arrival of tourists in different months of the year, although there is a marginal but discernible increase in arrivals in the months of January, November and December. In the year 2006, in contrast to previous years, we see a more significant rise in arrivals from the month of August to December. This is most probably on account of the increased number of travellers availing LTC visiting

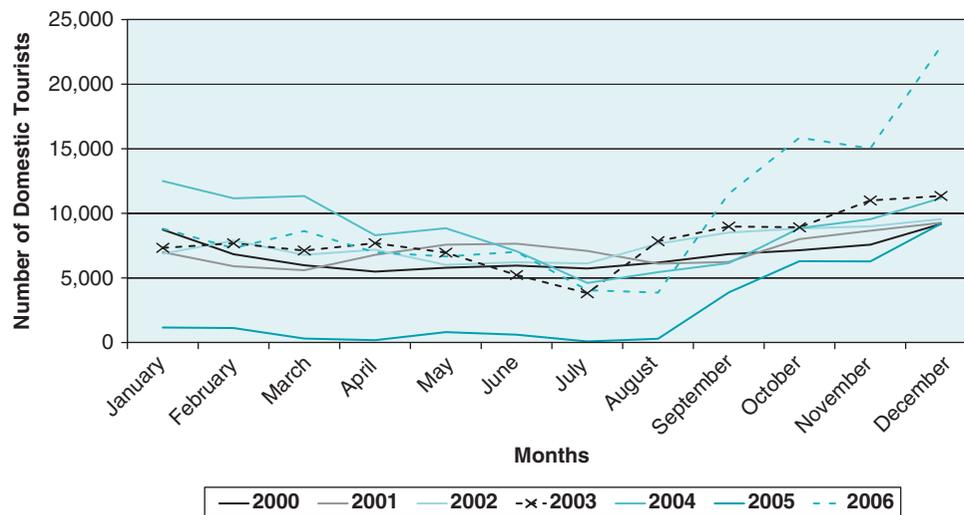


FIGURE 4.2 Intra-year Seasonality in Domestic Tourist Arrivals to the Andaman & Nicobar Islands (2000–2006)

Source: Monthly tourist arrival data provided by IP&T, A&NI Administration, December 2007.

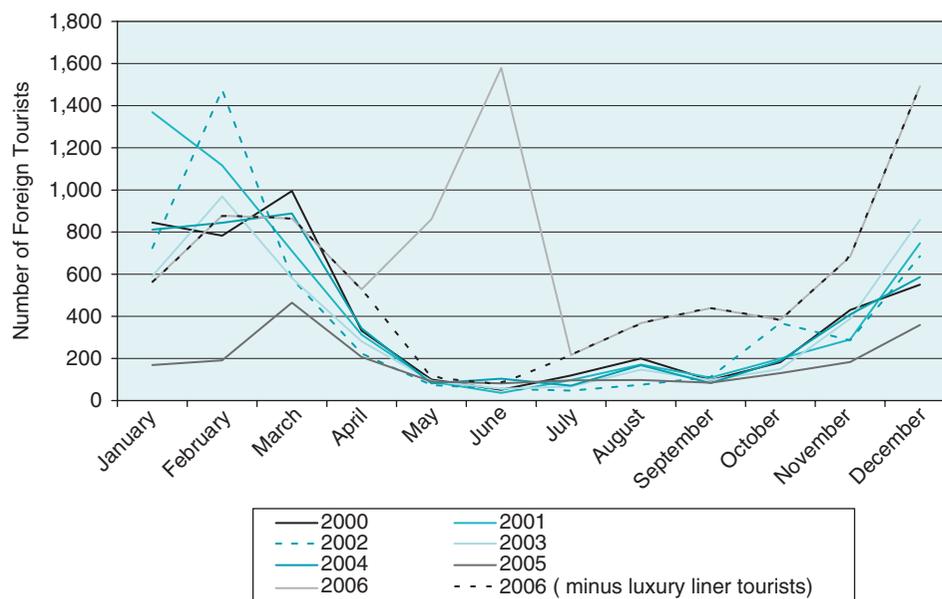


FIGURE 4.3 Intra-year Seasonality in Foreign Tourist Arrivals to the Andaman & Nicobar Islands (2000–2006)

Source: Monthly tourist arrival data provided by IP&T, A&NI Administration, December 2007.

the islands as a result of the change in the LTC policy after the tsunami in 2004. This aspect and its implications are being discussed later in the chapter.

Among foreign tourists, the variation in arrival figures across months of the year is more significant. We see that the months of January to March, at the start, and mid-October to December, at the end of the year, see markedly more arrivals than the

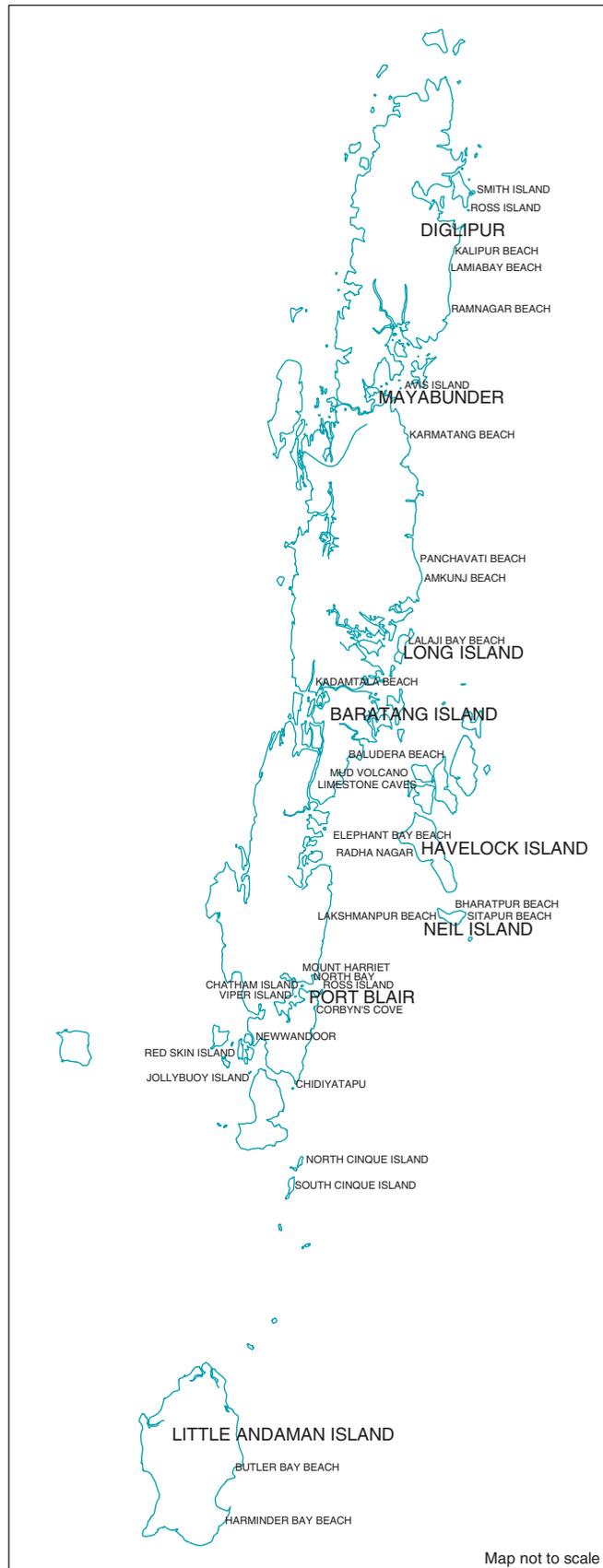
summer and monsoon months of April to September. Therefore, in the case of foreign tourists, mid-October to end-March could be considered the peak tourist season, with April to September being the lean or off season. In the year 2006, we notice some sharp peaks in foreign tourist arrivals in the months of June and December when tourist arrival figures are unusually high as compared to previous years and the season in general. This, we believe, is on account of the IP&T including the tourists from luxury liners that docked in these months at Port Blair for half a day to one day in their calculation of foreign tourist arrivals. Data on docking of cruise ships in the A&NI in 2006 and 2007 obtained from the Directorate of Shipping confirms that in June 2006, two cruise ships and in December 2006, one cruise ship, carrying approximately 750 passengers each, docked at Port Blair. Considering that these ships docked for less than a day at Port Blair, tourists arriving on these ships should not be considered significant and technically not included in the foreign arrival statistics. If we subtract this segment of tourists (those who arrived by luxury liners), we see that the same pattern follows for 2006 as in the previous years (as shown in the Figure 4.3).

However, an understanding of seasonality cannot be limited to studying variations in tourist arrivals only as this in turn has a bearing on the nature of tourist activity and employment as well. In highlighting this point, Butler⁵ notes that the most commonly held response to seasonality is that it presents a challenge to tourism businesses and entrepreneurs who need to find ways out to effectively market the destination in the off season and to ensure that profitability of the enterprise is not jeopardised. He further states that little attention is given to the other economic, social and environmental impacts of seasonality in tourism. From an environmental point of view, there are advantages and disadvantages to the seasonal nature of tourism where some may consider it useful that the environment can recuperate in the off season after being overused in the peak season. From a cultural point of view, there is no doubt that tourism can disrupt traditional patterns of life, and so the off season represents the only time when the local communities can live their “normal” way of life.

In the case of A&NI, all of the above factors pertaining to seasonality need to be examined to understand the impacts of tourism.

4.3 Geographic Location of Main Tourism Sites in the Andaman Islands

While the whole of the Andamans is known for its natural beauty, tourism is concentrated in certain specific parts. A study of the profile of popular tourist spots indicates several possible reasons for this. The capital town of Port Blair, for example, on account of its historic significance and being the only entry point into the A&NI, sees a high number of visitors. Islands such as Havelock and Neil that are currently the most popular among foreign tourists probably owe their high visitation to their relative proximity to Port Blair (both islands can be reached within a three-hour journey by ship from Port Blair) and greater connectivity. Other popular spots such as Baratang and Barren Islands gained in popularity on account of certain unique attractions like the limestone caves in the case of the former and the active volcano in the case of the latter. Such popularity of spots has increased over the years but it is important to note that the A&NI Administration is now keen to widen the tourist attractions portfolio of the islands by opening up more areas and creating attractions on some others. Map 4.1 below provides a rough depiction of the popular tourist spots in the A&NI.



MAP 4.1 Popular Tourist Spots in the Andamans

Below, we provide a brief description of the popular tourist spots visited by both domestic and foreign tourists. It also includes results from this study's primary survey with tourists on spots and locations visited.

Port Blair – The capital town of the Andaman and Nicobar Islands is the first port of call for all tourists. The town has grown as a tourist centre with a profusion of hotels and lodges. There are several day trips in and around Port Blair conducted by the Tourism Department and private tour operators, which is the primary itinerary of domestic tourists. The town also has historical importance as it houses the Cellular Jail, a site that is most visited by tourists. It also has the Anthropological Museum (originally built in 1975 and located in Middle-point it shares information on the indigenous and primitive tribes of the A&NI), Samudrika Museum (with 350 species of sea-life and rare varieties of coral, the museum reflects the marine life and wealth submerged in the waters of these islands), Andaman Water Sports Complex, Corbyn's Cove – a popular beach with both tourists and local population, and Mount Harriet (the summer headquarters of the Chief Commissioner during British Raj and the highest peak in the South Andamans (365 metres high) which are on the tourist circuit. Chidiyatapu, the southern most tip of the South Andaman Island with rich mangrove covers and several bird species is another popular spot. There are several day trips to islands around Port Blair such as Ross Island (once the seat of British power and capital of these islands), Viper Island, Wandoor (which is the entry point to the Mahatma Gandhi Marine National Park covering an area of 281.5 km² made up of open sea, creeks and 15 islands, with coral reefs, a plethora of coral fish and other marine life abounding in this area) and North Bay.

Our primary survey with tourists revealed that the popularity of Port Blair town itself differs greatly between domestic and foreign tourists. In terms of average length of stay, it is five days in the case of the average domestic tourist but only one to one-and-a-half days for the average foreigner. But for the fact that Port Blair is the only entry point into the islands that forces all travellers to pass through it, it is likely that the time spent by the foreign tourist would be even lesser. Figure 4.4 represents the visitation of popular tourist sites in and around Port Blair by domestic and foreign tourists.

As Figure 4.4 depicts, almost all tourist spots in Port Blair see far greater visitation by domestic than by foreign tourists. In fact, our survey revealed that 43.5 per cent of foreign tourists did not visit any spot within Port Blair indicating that they used it purely as a transit point into the Islands. Among those foreigners who visited spots, Aberdeen Bazaar (the main shopping area in the town), Cellular Jail and Corbyn's Cove (the popular beach and swimming spot) register the highest arrivals. The high visitation by domestic tourists of nearly all spots within Port Blair indicates the popularity of the package tour model.

Baratang Island – Around 65 km from Port Blair by road, Baratang is a popular place for day trips among domestic tourists. The chief attractions are the limestone caves and the mud volcanoes. It was thrown open to tourists in 2003. During the peak tourist season, it is estimated that close to 1,000 people visit the limestone caves on a single day. The Forest Department has a mangrove canopy walk (Figure 4.5) that connects to a trail through moist deciduous forests that leads to the limestone caves. Nearby Nilambur jetty is Parrot Island (*Totatekri*), which is also a popular site where tourists can watch thousands of parakeets nesting.

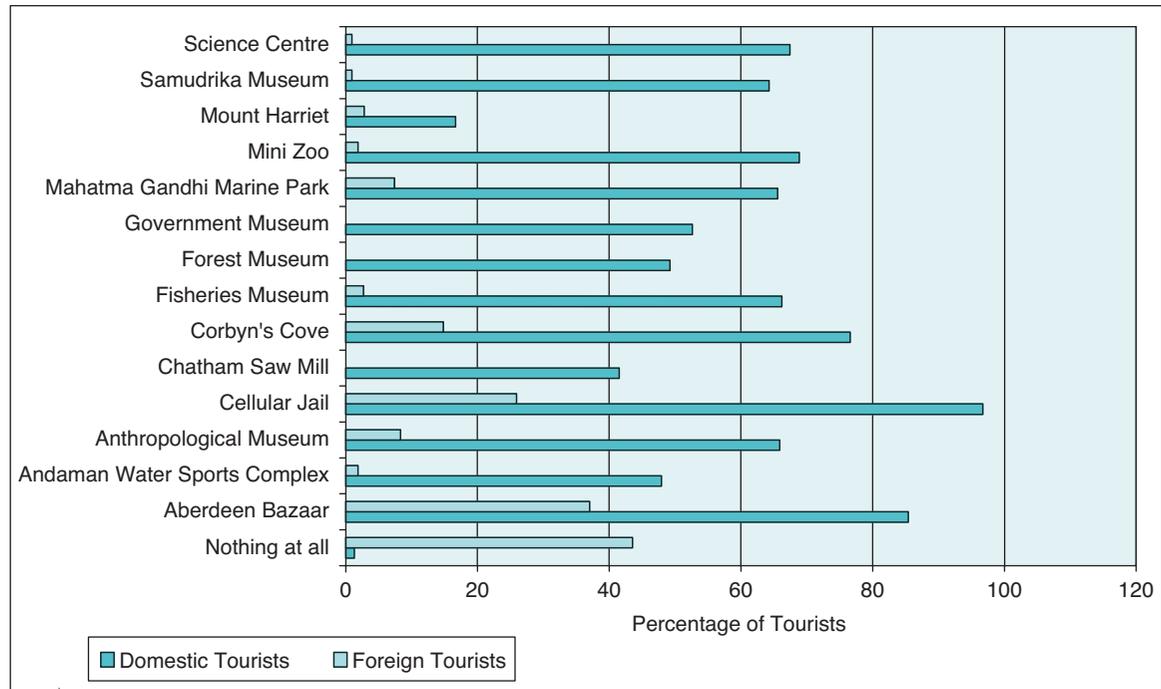


FIGURE 4.4 Visitation of Tourist Spots in and around Port Blair by Domestic and Foreign Tourists



FIGURE 4.5 Walkway Created in Mangrove Forest at Baratang, Leading to Limestone Caves

Barren Island Around 139 km from Port Blair, the island is about 3 km in diameter and has the only active volcano in India that erupted twice recently – in 1991 and 1994–1995. *Chatham Island* – Located very close to Port Blair town, Chatham has Asia's oldest saw mill, still in use, on a tiny island connected by a bridge over a stretch of sea. There are buses from Port Blair to Chatham. Guided tours are conducted in the saw mill.

Diglipur – It is at a distance of 265 km from Port Blair and is located in North Andaman Island. There are boats that ply between Port Blair and Diglipur as also regular bus service. The twin islands of Ross and Smith connected by a sand bar is one of Diglipur's many attractions. To the south of Diglipur are Saddle Peak, Kalipur Lamiya Bay and Ramnagar beaches. The only hydroelectric project in the A&NI is on river Kalpong in Diglipur and is visited by a few tourists.

Havelock Island – An island around 39 km northeast of Port Blair, it has been popular with tourists since the mid-nineties. There are daily boats to Havelock from Port Blair. It has the famous Radhanagar Beach (Figure 4.6) that was voted by Time magazine as one of Asia's most beautiful beaches in 2004.⁶ The write-up quotes:



FIGURE 4.6 The Beautiful Radhanagar Beach, Havelock Island

Along with the Iles du Desappointment near Tahiti, Beaches No. 5 and No. 7, Havelock Island, the Andamans, boast two of the least alluring names of any shoreline on the planet.... Havelock Island is largely untouched by humankind too – visited by a mere 10,000 tourists a year (compared with the millions swarming Phuket across the water). That means plenty of room on the beach for everyone.

Havelock is, by far, the most popular island among foreign tourists and reasonably visited by domestic tourists. Beach No 7 – Radhanagar – is the most popular spot. After Port Blair, Havelock has seen highest investment in tourism-linked accommodation and infrastructure with over 20 accommodation units including shacks, high-end eco-hotels, budget hotels and the government-run Dolphin Guest House. It has three daily ships operating from Port Blair and a few connecting it to other islands such as Neil and Long Islands.

Jollybuoy Island – Located inside the Mahatma Gandhi Marine National Park, the Jollybuoy Island is known for its coral cover. Tourists are ferried to Jollybuoy from Wandoor by boat and taken snorkelling to view the corals.

Long Island – Located to the east of Middle Andaman Island and 85 km from Port Blair is the Long Island. The remote Lalaji Bay is gaining popularity among foreign tourists. There is one resort that has opened recently.

Mayabunder – It is 159 km from Port Blair, situated in the northern part of middle Andaman. Mayabunder has some beautiful beaches; the best-known of these, the Karmatang beach, is also a turtle nesting ground. Avis Island, also with beautiful beaches, is just a short boat ride from Mayabunder. Mangrove-lined creeks are also an attraction. In terms of tourist infrastructure, there are 2 government guest houses (the APWD guest house has spectacular views and is very popular on that count) and 3 privately run lodges in Mayabunder.

Neil Island – Around 37 km from Port Blair, this remains the other most popular island with foreign tourists, after Havelock. Its three beaches – Bharatpur, Lawmanpur and Sitapur (Figure 4.7) are much quieter than Havelock's popular spots and therefore increasing more in popularity. There are relatively recent accommodation facilities here – 3 privately run resorts and 1 government guest house. There is one ship that plies from Port Blair to Neil every day of the week.



FIGURE 4.7 Laxmanpur Beach, Neil Island

Rangat – Around 93 km from Port Blair, Rangat can be reached by both sea and road via the Andaman Trunk Road (ATR) that goes through the Jarawa Reserve. Cuthbert Bay beach is a turtle nesting ground, whereas Amkunj and Panchavati are well-known beaches.

Red Skin – This is another island in the Mahatma Gandhi Marine National Park, Port Blair, with good coral and marine life. No overnight stay is permitted. Tourists are ferried to Red Skin by boat from Wandoor and taken snorkelling to view the corals. (Figure 4.8)



FIGURE 4.8 Redskin Island Beach

Viper Island – The Britishers constructed a prison here that was abandoned with the construction of the Cellular Jail in Port Blair. It has gallows atop a hillock where condemned prisoners were hanged. Tourists are ferried by boat to Viper Island from Port Blair.

Results from our primary tourist survey reveal that among foreign tourists, Havelock and Neil are the most popular islands, with very few tourists visiting others such as Long Island and Rangat. In fact, from the foreign tourists surveyed, more than half – 53.7 per cent

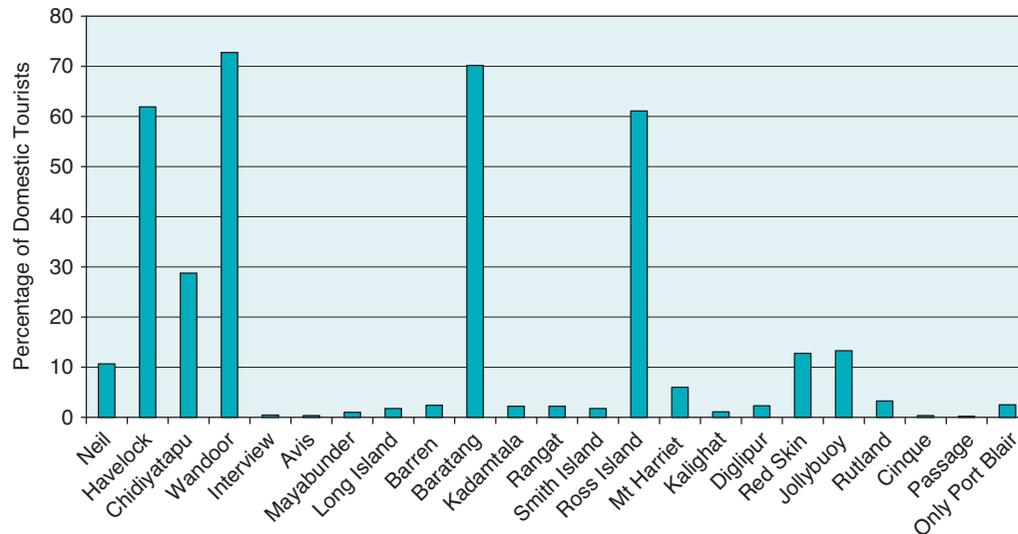


FIGURE 4.9 Destinations in the Andamans Visited by Domestic Tourists

visited only Havelock during their trip to the A&NI with 25.9 per cent visiting Havelock and Neil and 15 per cent visiting Havelock and other islands. However, among domestic tourists, the spread of destinations visited is wider. There are two possible reasons for this. Firstly, the itinerary followed by the average domestic tourist (as designed by the tour operator) includes visiting Port Blair town and surrounds, an overnight trip to Baratang and possibly a short trip to Havelock Island. This differs substantially from the itinerary of the average foreign tourist visiting the islands, who would rather choose one of two Islands (usually Havelock or Neil) and spend longer periods of time there. The second reason for the diversity in the areas visited by domestic tourists could be because of those visiting relatives living in specific islands. Figure 4.9 presents the visitation of areas in the Andamans by domestic tourists based on our primary tourist survey.

4.4 Profile and Typology of Tourists Visiting the Islands

This section addresses the question – “who are the tourists visiting these islands”, by looking at the details of the visitor profiles of domestic and foreign tourists on the basis of age group, gender and the place of origin of the tourists. Data and analysis is based on the primary tourist survey conducted with both categories as part of this research study and supplemented by other data. The maximum number of foreign tourists visiting the islands are the Israelis (42.6%) and the biggest chunk of domestic tourists are those who visit the islands availing their LTC (72.7%), whose visit into the islands has been encouraged by the central government.⁷ Both these groups are examined through case studies.

4.4.1 Age and Gender Profile of Tourists

The age group of tourists visiting any destination is important to capture as it might have a significant bearing on the nature of activities undertaken during the holiday and the demands made by tourists. To capture the importance of age structure of the tourists visiting the islands, tourists were segregated into seven age groups (Refer Figure 4.10.b). From our primary survey on domestic tourists, it was found that 28.4 per cent are in the 31–40 age group, 25.2 per cent are in the 26–30 age group and 17.5 per cent are in the 41–55 age group. Our primary survey revealed that 41 per cent of foreign tourists who visited the Andamans are in the age group of 20–25 years and 37 per cent in the age group of 26–30 years. A total of 22 per cent are in the age group of 31–40 years. We find that the highest percentage of foreign tourists visiting Andamans fall in the 31–40 years age group. It is important to note that 95 per cent of the foreign tourists visiting the islands fall in the age group of 20–40 years, of which 65 per cent are in the 20–30 years age group. This undoubtedly has a bearing on the tourist activities undertaken, as we see a greater enthusiasm for adventure sports such as snorkelling, scuba diving and trekking. Age profile also impacts the expenditure pattern of tourists. Younger tourists tend to spend less on accommodation and food and expend on adventure activities, whereas the opposite is the case of older tourists.

The gender profile, as in Figure 4.10a, indicates that in the case of domestic tourists a larger percentage – approximately 70 per cent – comprised males. While many groups visit as families, especially the tourists on LTC, the business travellers largely tend to be

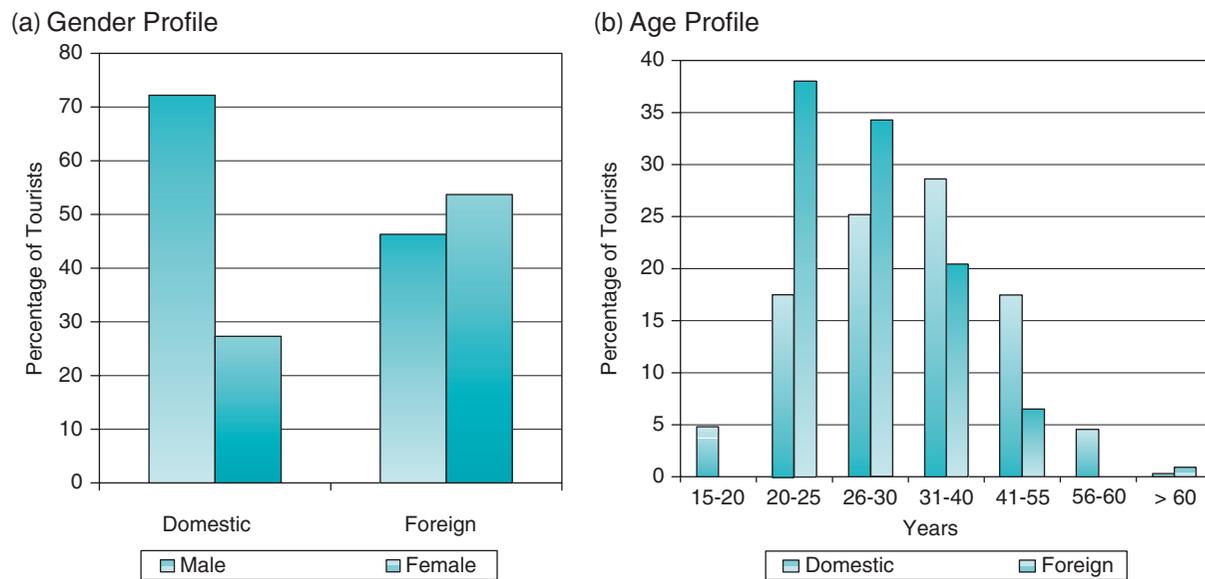


FIGURE 4.10 Gender and Age Profile of Tourists Visiting the A&NI

men. However, among the foreign tourists, the gender distribution of tourists is more balanced with a 55:45 proportion of female:male. Most foreign tourists visit as couples or as groups of friends but several lone women tourists from countries in Europe such as the United Kingdom, Germany and Austria were also noted. The gender profile on tourists would have a bearing on the socio-cultural aspects of tourism with links to aspects such as safety in the islands and cultural impacts.

4.4.2 Nationality and Place of Origin of Tourists

A close understanding of the country and place of origin of tourists visiting any destination is critical from a sustainability, positioning and promotion point of view. This is especially important for overseas visitors as it has an impact on transportation, connectivity, marketing and the final impacts of tourism in the destination. Such an analysis can also help policy makers ensure that dependency on a particular source market is reduced and that the tourist profile is more varied. In the Andamans, among foreign tourists, a large variety of nationalities are seen visiting the islands. The distribution of foreign tourists among different nationalities is depicted in Figure 4.11 based on the results of the primary tourist survey conducted as part of this study.

The Figure 4.11 indicates that while there is a wide cross-section of foreigners visiting, the largest number of foreign tourists visiting the Andaman Islands is from Israel (42.6%). This is followed by British (15%), Americans (7%) and Germans (6%). In comparison, data from the Immigration Department of the A&NI from 2001–2006 indicates that Israelis account for 14 per cent of all foreign entrants into the islands. This is followed by Germans (8.5%), French (8%), British (6.7%), Americans (6.6%) and Italian (6.2%).⁸ Immigration data available for the months January–September 2007 indicate that 17 per cent of entrants into the islands were Israeli and 15 per cent British. There is a difference between the data emerging from our primary tourist survey and immigration data, especially with respect to the percentage of Israeli tourists in the islands.

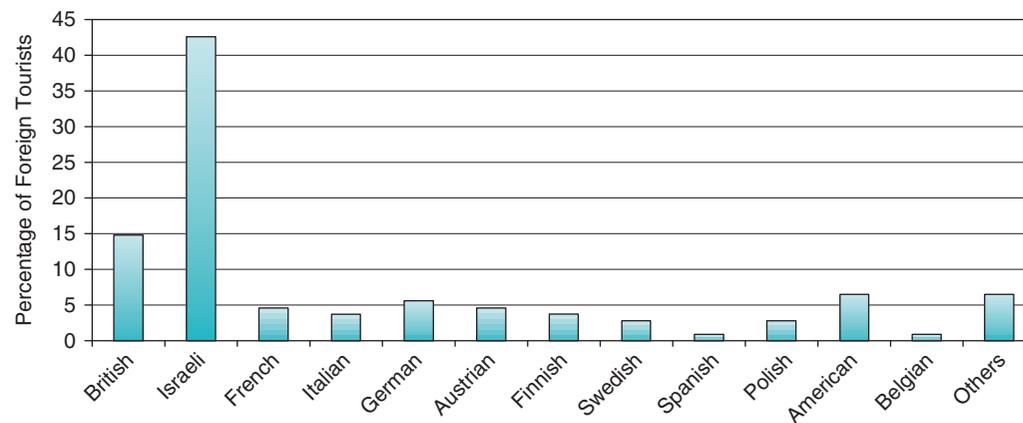


FIGURE 4.1 I Nationality of Foreign Tourists Visiting the Islands

Undoubtedly, data indicates that Israelis account for the highest proportion of foreign tourists visiting the islands. Further, data from the Immigration Department, A&NI indicates that the number of Israelis visiting has steadily increased in recent years – it has increased from a total of 287 in 2001 to 1,356 in 2006 – showing a 372 per cent increase. In the first nine months of 2007 alone, there were 1,077 Israelis visiting the islands, indicating that if we include the months of October–December that are the peak months for foreign tourist arrivals, this number would probably be above 2,000. Further, trends of increasing number of tourists from Israel is a particular feature since the early 2000 and can be noticed in few other destinations within India that are popular on the Israeli tourist circuit such as Goa, Manali (in Himachal Pradesh) and Banaras (in Uttar Pradesh). Therefore, it is a category that cannot be ignored and must receive special attention from a number of concerns. The case study exemplifies many of these concerns.

Among domestic tourists, majority come from the states of Bihar, Orissa, Jharkhand and West Bengal that house steel plants such as Rourkela, Bhilai, Bokaro and the Tata Steel City in Jamshedpur. Other than the steel plants, which during the time of this research saw a large number of LTC travellers visiting the islands, other LTC travellers come from New Delhi, Haryana and Rajasthan. Among the non-LTC domestic visitors, a significant proportion comes from the cities of Chennai, Bangalore and Mumbai.

BOX 4.1

Israeli Tourists in the Andaman Islands

As data from the Immigration Department of the A&NI reveals and primary surveys conducted as part of this study confirm, a substantial proportion of foreign tourists visiting the islands are Israelis. Given the large numbers in which Israelis visit the islands, we considered it of value to insert this case study that captures these observations and experiences from the ground.

The average Israeli visiting the Andamans falls in the age group of 20–30 years (72% of our Israeli respondents were in this age group), typically travelling as part of a group of 6–8 young people. Female tourists outnumber males (54% respondents in our survey were female).

BOX 4.1—cont'd

Conversations with tourists indicated that the majority of Israelis visiting the islands are those who have recently completed compulsory army term and are on a vacation paid for by the Israeli government. Most Israelis fall within the category of “backpacker tourists”. Their visit to the Andamans is almost always part of a circuit tour of India that includes Goa, Banaras (in Uttar Pradesh) and Kulu Manali (in Himachal Pradesh).

Our survey revealed that for 93 per cent of Israeli tourists, this was their first visit to Andamans and 76 per cent of them stated that they chose the Andamans as a holiday destination based on the recommendations of their friends who have been here before. The attractions to them, as can be inferred from the questionnaire survey, are the beaches and the climate of the islands. A fair number of them show interest towards popular beachside activities such as swimming, snorkelling and even diving. More than this, for Israeli tourists, and probably for all other foreign tourists as well, solitude and opportunities for relaxation in the Andamans offered at affordable prices are important determinants in their choice of holiday destination.

Havelock is the place to head for. The Israeli tourist, as soon as he or she lands in Port Blair, hurries to Phoenix Bay jetty to get on to the first boat to Havelock. Almost half the numbers of Israeli tourists go only to Havelock and few are interested in spending any time in Port Blair town itself. Our survey reveals that the average length of stay in Havelock is 2–3 weeks (30% spent 1–2 weeks and 37% spent 3–4 weeks in Havelock), whereas some are known to stay for even close to 2 months. After Havelock, the next popular destination is Neil Island, although in comparison, the number of tourists visiting Neil Island is negligible.

Beachside huts or “shacks”, as the Israelis call them, are the most preferred places for accommodation by the Israeli tourists owing to their affordability. Our survey reveals that what they look for in the place of stay is primarily cleanliness with a good view; it is ok if the hut is not centrally located but safety is preferred. The information about the place of stay is largely obtained by word of mouth or recommended by previous visitors to the Andamans. It was observed during the research team’s frequent visits to Havelock and also reported by staff of resorts in Havelock that the most popular activity for the Israeli tourists is to read and to swim in the day when it is high tide. They may sometimes hire bicycles, or even motorcycles now, to go round Havelock or to pick up things from the Beach No. 3’s bazaar. The more curious ones among them venture out to camp, fish or snorkel, for which, as the local community informed us, they would take the help of local fisherfolk. Interactions also reveal that Israelis rope in local fisherman to take them to some out of bound islands although the Restricted Area Permit (RAP) and guidelines issued by the A&NI Police at Havelock clearly forbid this.

Their food patterns are interesting – unlike many other foreign tourists visiting the islands, Israelis often visit the main Beach No. 3’s bazaar for a meal or buy fish from the market and barbeque it themselves. When not cooking for themselves, they would prefer to eat from the in-house restaurant. However community interactions reveal that they often buy fish straight from the fisherfolk or chicken from the poultry farm in order to optimise on costs.

There are however many concerns that local communities in Havelock and Neil have raised specifically in relation to the behaviour of Israeli tourists. Our community interactions reveal that villagers are displeased with the attire of foreign tourists in general (since majority of tourists visiting are Israelis, they tend to associate scanty dressing with Israelis). Many hotels and resorts have begun to post a note asking the tourists to be suitably clad. Also, according to local community members, they find the Israeli tourists rude and quarrelsome. It is also rumoured that abuse of drugs is high among this set of tourists. We were also informed

Continued

BOX 4.1 Israeli Tourists in the Andaman Islands—cont'd

informed of cases when tourists have alleged theft of their articles on local people, including fishermen and local youth employed at the resorts, who have then been harassed by the police. The tourists, especially Israeli, it is alleged, take the matter to higher authorities in Port Blair and there is pressure from there on the local policemen. Local people claim that sometimes tourists file FIRs claiming theft to claim compensation linked to insurance. All of this has prompted the people to begin demanding for a set of guidelines for tourist behaviour in the islands.

BOX 4.2**LTC Travellers to the Andaman Islands**

Among domestic tourists visiting the islands, those who visit by availing Leave Travel Concession (LTC) have always been the highest in number. LTC is a benefit extended by governmental agencies to their employees to visit either their home town or any other place of their choice with their family every two years. While it is possible that prior to 2004, many government employees – especially from states such as West Bengal and Bihar were availing their LTC and visiting the islands, the post-tsunami tourism promotion strategy of the government gave a fillip to “LTC tourism”. To boost the islands’ tourism industry after the tsunami, the Government of India, in May 2005, issued a Memorandum (No. 31011/3/2005-Estt. (A)) relaxing LTC Rules so that all Central Government employees could avail their LTC to the A&NI in place of their home town. It further permitted Group A and Group B government servants to avail of this facility via air from either Kolkata or Chennai.⁹ With this relaxation in rules and the greatly improved air connectivity, the number of LTC travellers to the islands rose from 2006, as the change permitted several employees to travel by air and see the islands. As a result, now on an average 700 LTC travellers visit Andamans in a single day¹⁰.

Most LTC travellers visit with family as LTC rules permit it to be availed for the spouse and two dependent children of the employee. In general, LTC travellers visit the islands as part of a packaged tour arranged for them by a tour operator from their city, in association with a travel agency based in Port Blair. Many stay in budget accommodation or mid-range hotels in Port Blair and spend most of their time sightseeing in and around Port Blair with few visits to other islands like Havelock or Baratang.

In terms of their behaviour and activities, field observations noted that most LTC tourists preferred boarding the bus and sightseeing rather than relaxing on the beach. In fact, as part of our domestic tourist survey, more than 50 per cent of LTC travellers interviewed stated that they spent most time sightseeing rather than swimming or relaxing on the beach. Being part of an organised tour, the LTC traveller has little chance or interest in interacting with local communities in the islands.

During the period of this research, an interesting trend was noted in LTC tourism that led to a serious controversy and debate on the possible abuse of the LTC scheme to the islands. As it has relevance to a discussion on the profile and behaviour of tourists visiting the islands, this is briefly discussed here. It must be stated that this note draws mainly from discussions with the A&NI Chamber of Commerce and Industry and private hotel owners in Port Blair who strongly reported the case of abuse of the LTC scheme in the islands.

Since July 2007, LTC travellers, largely from the five steel plants of Bhilai, Bokaro, Rourkela, Durgapur and Tata Steel City in Jamshedpur began visiting the islands in large numbers (this is

BOX 4.2—cont'd

confirmed by the results of our primary survey with tourists and further supported by official statements both from the Administration and the Andaman Chamber of Commerce). However, unlike other LTC travellers, this section, it is alleged (by the Andaman and Nicobar Chamber of Commerce) were travelling to the islands only to collect a cash back offer put forward by a few travel agencies who were abusing the LTC system to reap unfair profits and cheat the exchequer. The alleged modus operandi was that a few travel agencies had devised a way to abuse the LTC system by booking tickets for apex fares either from low-cost airlines (such as Air Deccan) or the apex fares of Indian Airlines and Jet Airways but claiming reimbursement for full fare. Consequently, it is claimed, that many employees began availing LTC only to claim the cash back that was being offered by the travel agents who also produced fraudulent bills and boarding passes. But the impact of this hoax was deeply felt by the tourism industry in the islands as travellers began opting to stay in cheap, low-cost accommodation (largely in the form of rented out homes or the paying guest variety) in Port Blair resulting in falling occupancy rates in Port Blair hotels that normally accommodated these travellers. In addition, the frenzied booking of all airline tickets by these travel agencies resulted in genuine tourists and local people needing to travel either not able to get tickets or getting them at very high prices.

In order to protest such an abuse of the system, the Andaman Chamber of Commerce staged an organised protest and campaign in the month of September 2007 appealing to authorities at the A&NI Administration and Central Government to put an end to this practice. In addition, the increase in number of LTC travellers to the islands reached such unmanageable limits during these four months that even the local community began to consider them a bane.

This apparent “scam” has opened up a public debate on what kind of tourists need to be visiting the islands. Many questions are being raised – If the intended benefit of relaxing rules on availing LTC was to boost tourism and through it the economy of the islands, has this been achieved? What are the impacts of subsidised travel to the Andamans from an ecological and economic sustainability point of view? Should “LTC tourism” be banned in the Islands?

There are many government officials including the Lt. Governor himself who believe that banning LTC tourism *per se* is not a solution as domestic tourists must have the right to visit the islands and learn about its history and natural beauty.¹¹ The Andaman Chamber of Commerce itself makes the point that it is not against LTC tourism but demands a regulation of it so that LTC travellers can visit the islands during the lean months but that their visits during the period from October–February be reduced so that more foreign tourists can be encouraged. It is clear that given the large numbers in which they visit the islands, a clear policy adopted towards regulating LTC and analysing the impacts of this strategy to boost tourism is the need of the hour.

4.4.3 Typology of Tourists Visiting the Islands

An analysis of the typology of tourists visiting a destination is a starting point to understanding the motivation, experiences, demands and impact of tourism experienced by visiting the destination. Literature on the typology of tourists in tourism research broadly identified two tourist typologies – “interactional” and “cognitive normative”.¹² Interactional tourist typologies are based on the nature of interaction between the tourist and the destination area whereas cognitive–normative typologies categorise

tourists on the basis of the motivation of their activities. For example, another typology developed recognises *allocentrics* (adventuresome, individual travel), *mid-centrics* (individual travel to destinations with facilities) and *psychocentrics* (packaged holidays to popular destinations), depending on how tourists' conform to societal or individual desires.¹³

There are other more simple ways of classifying the tourists who visit a destination. Table 4.2 provides such a basic classification of different types of tourists.

TABLE 4.2 Types of Tourists Visiting a Destination

By product						
Mass Tourism			Alternative Tourism			
<i>Package Tour</i>			<i>Ecotourism</i>			
By nature of the activity						
Active			Passive			
<i>Adventure Tourism</i>			<i>Sightseeing</i>			
<i>Ecotourism</i>			<i>Beach Holiday</i>			
<i>Golf</i>			<i>Cruise</i>			
By purpose						
Business			Pleasure			
			<i>Need for Change, See Something New</i>			
			♦ <i>Culture (ethnic)</i>			
			♦ <i>History, Heritage</i>			
			♦ <i>Nature-based (eco-) tourism</i>			
			♦ <i>Farm-based, Rural Tourism</i>			
			♦ <i>Personal Development, Health</i>			
			♦ <i>Visit Friends, Family</i>			
			♦ <i>Social Status (to brag!)</i>			
			♦ <i>Recreation</i>			
By age and socio-economic group						
Backpackers	Empty Nesters	DINKS	SINKS	Early/Active Retirees	Boomers	Youth
18–24 years, no children. Attracted to adventurous activity. Consider themselves travellers not tourists. Generally well-educated. Cost conscious.	Parents whose children have flown the family nest. Between 45 and 55 years of age, well educated, high disposable income.	Double Income No Kids	Single Income No Kids		Members of the baby boom generation in the 1950s.	Between 18 and 25 of age, not well-educated, low disposable income, are used to travelling.

Source: Barcelona Field Studies Centre, www.geographyfieldwork.com

In the case of the Andamans, a range of tourists visit the islands and their typologies are distinctly different between domestic and foreign tourists. Among domestic tourists, our observations reveal that majority of the tourists fall into the “mass tourism – package tour” classification with very few cases of alternate tourists. On the basis of nature of activity, majority are “passive” tourists spending time sightseeing and on beach holidays, with very few currently coming in on cruises. In the case of the foreign tourists, our observations indicate that on the basis of product, very many tourists are alternative

tourists with interest in ecotourism, but there are certain groups that also follow the mass tourism model, although not in the same kind of package-tour way that the majority of domestic tourists visit. On the basis of nature of activity, many are passive tourists, satisfied with beach holiday with relatively few exploring options of adventure tourism and ecotourism. This could also be due to the fact that these specialised products have not yet been developed to a great extent in the islands frequented by foreign tourists. Lastly, on the basis of socio-economic group, we observe that most foreign tourists visiting the islands can be categorised as “backpackers” and a significant number as “empty nesters” as well. This classification also correlates to the age profile of foreign tourists as revealed by our primary tourist survey where the bulk of tourists visiting are in the age group of 20–25 years (37%).

While the above is only a suggestive classification of the typology of tourists visiting the islands, research is needed to further determine what specific economic, social or cultural impact each specific type of tourist might have on the islands. For example, the extent of economic benefit that “backpackers” might bring in might vary significantly from that of “empty nesters”. Further, a more detailed understanding of classification of tourist on the basis of activity would be critical to observe, analyse and then work upon to determine how the people of Andamans want to position the islands and the kind of tourists they would like to receive. Such research can gain from the analysis of what motivates tourists to visit the Islands; this is discussed in the following section.

4.5 Motivation Factors for Tourists Visiting the Andaman Islands

The factors motivating tourists to visit the Andamans are critical to understand the expectations of tourists and what they come looking for. Firstly, visiting a place can be for a variety of reasons, of which being on holiday is only one. In the case of our primary survey with tourists, among foreign tourists, 100 per cent of them were visiting the islands on holiday. However, this changes with domestic tourists whose reasons for visiting the islands includes visiting relatives or family, research and work, and job posting and holiday. Figure 4.12 presents the distribution of reasons for visitation of domestic tourists to the islands based on our primary tourist survey.

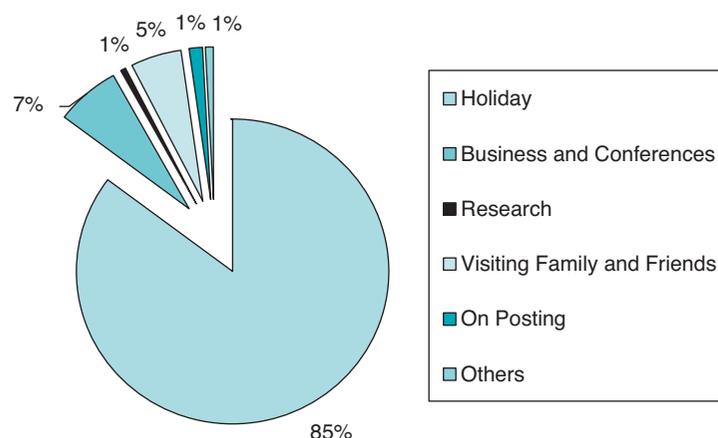


FIGURE 4.12 Reasons for Domestic Tourists to Visit the Andaman Islands

However, when both foreign and domestic tourists were asked for reasons why they specifically chose the Andamans as their holiday destination, interesting responses emerged from our primary survey as shown in Figure 4.13.

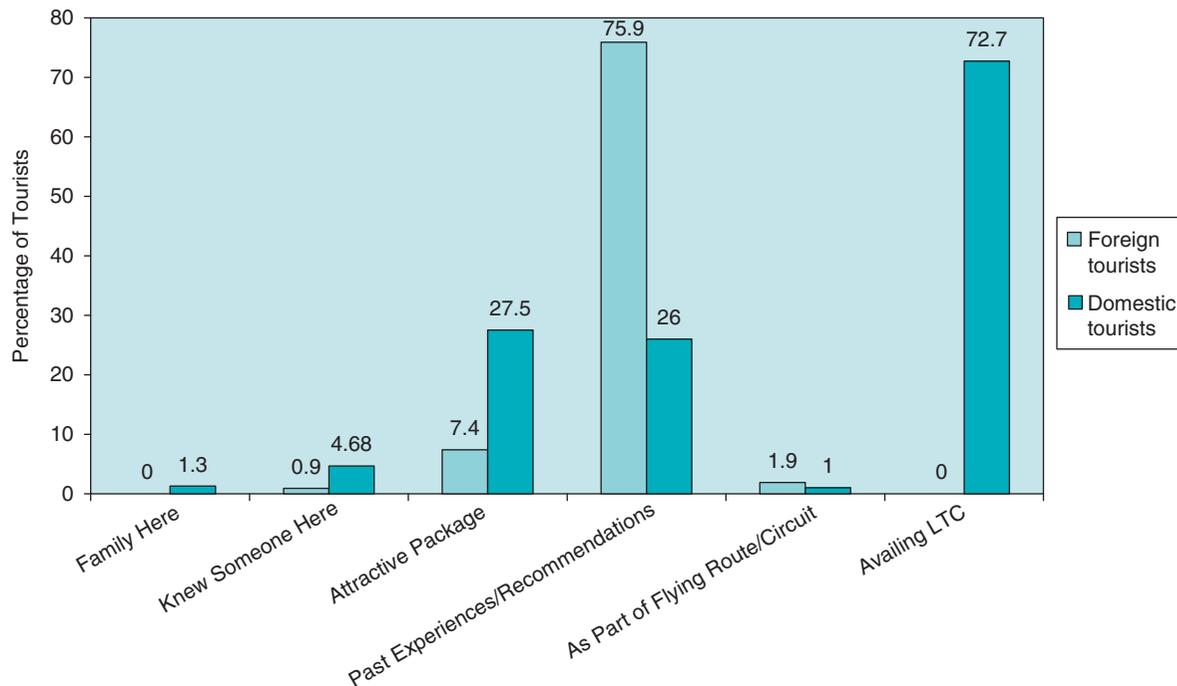


FIGURE 4.13 Reasons for Foreign and Domestic Tourists Choosing the Andamans as a Holiday Destination

The Figure 4.13 clearly shows that for foreign tourists the chief reason for choosing the Andamans as a holiday destination was on the basis of past experiences or recommendations of others (75.9% of respondents). It therefore makes a definite difference if, for instance, the beaches of Havelock Island are featured in TIME Asia, as it is an important motivating factor for foreigners to choose the Andamans as a holiday destination. For domestic tourists, the predominant reason for choosing to visit the Islands is the opportunity to avail LTC. The attractiveness of the package is a more important determining factor for domestic than foreign tourists, and this further supports the point made earlier that most domestic tourists visit the islands on package tours much unlike foreign tourists. To specifically understand what attracts tourists to the Andaman Islands, our primary survey captured the following responses as represented in Figure 4.14.¹⁴

As Figure 4.14 reveals, it is evident that more than 90 per cent of foreign and domestic tourists coming to the islands are drawn by its beaches. Apart from the beaches, 53 per cent of foreign tourists consider the islands as a good destination for relaxation also and 68 per cent of them said activities such as diving and snorkelling also attracted them to the islands. Its beaches therefore are the Unique Selling Proposition (USP) of the islands. For a closer understanding of factors that contributed to Andamans as the choice for their holiday, tourists were asked what they thought made the Andamans

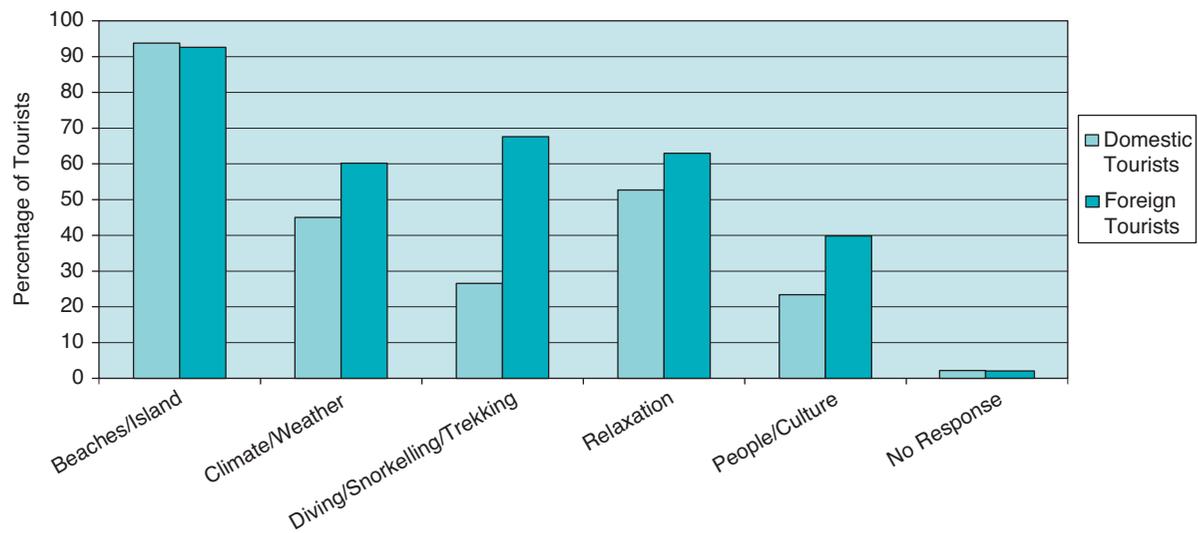


FIGURE 4.14 Attractions for Tourists Visiting the Andaman Islands

distinctly different from other beach/island destinations known to them. As Figure 4.15 indicates, apart from its obvious natural beauty, it is the untouched and pristine nature of these islands which is a main attraction for both domestic and foreign tourists with approximately 80 per cent of foreigners and 55 per cent of domestic tourists selecting this option. The relatively lower cost of holiday is an important factor for domestic tourists.

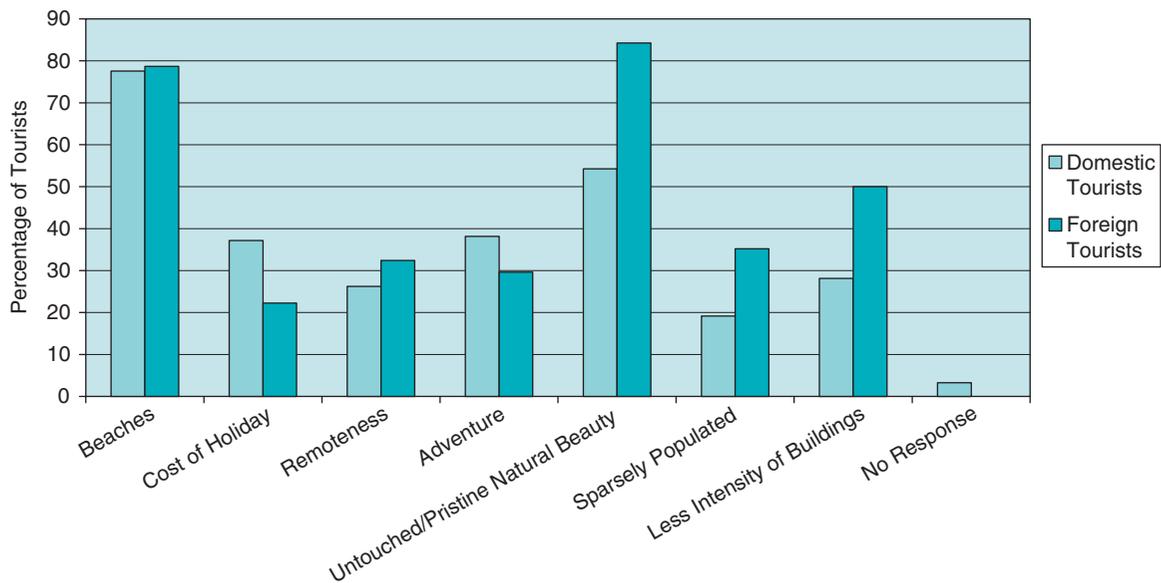


FIGURE 4.15 Reasons that Make the Andamans Different from Other Island/Beach Destinations

All tourists interviewed said that the Andamans is unlike any other destination they have ever been to and that they come to Andamans for its remoteness, fewer visitors and to spend their time on quiet beach stretches. Many of the tourists who have visited many South Asian destinations including Phuket, Bali and Sri Lanka are drawn to the Andamans as these have not yet turned into crowded holiday islands and many even wish for it to remain a well-kept secret.

4.6 Major Activities of Tourists on the Islands

The activities that tourists engage in at any destination are the strongest indicators of the sustainability of tourism in economic, social and ecological terms. The results of our primary survey with tourists visiting the islands reveal that relaxing on the beach, swimming and sightseeing are what tourists spent most of their time doing in the islands.

As the Figure 4.16 indicates, foreign tourists spend most of their time relaxing on the beach and swimming but sightseeing is the most important activity of domestic tourists. Below is a brief description of the main activities that tourists engage in while on holiday at the Andamans.

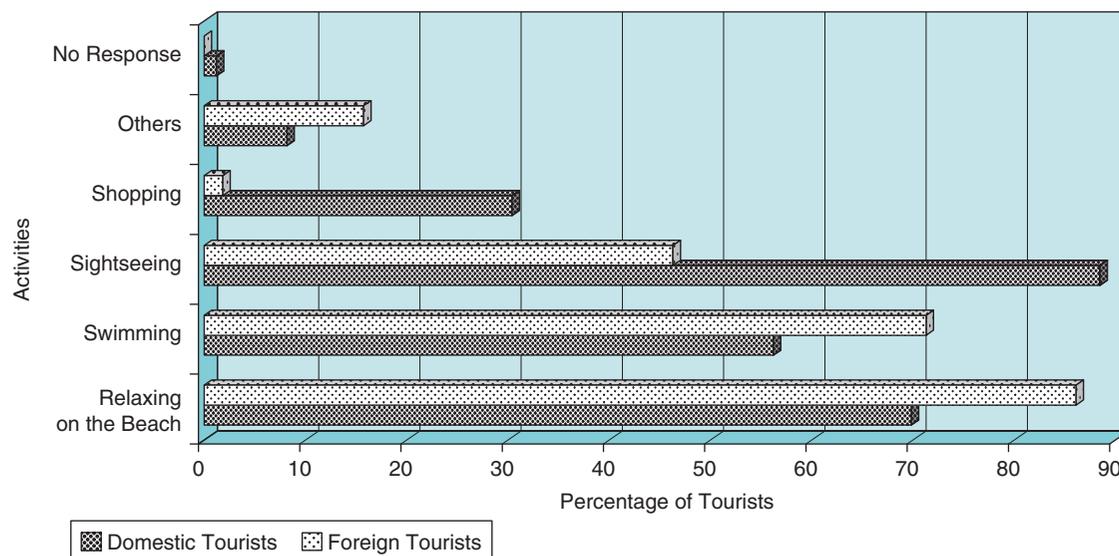


FIGURE 4.16 Main Activities Tourists Spent Time on During their Holiday in the Andamans

Sightseeing – Most domestic tourists visiting the Andamans go on sightseeing tours conducted by tour operators in Port Blair. Their standard itinerary involves two days to sightsee in and around Port Blair, including places such as the Cellular Jail (Figure 4.17), Corbyn's cove (Figure 4.18), Anthropological Museum, Samudrika Museum, the Mahatma Gandhi Marine National Park (Figure 4.19) and the Mini zoo. It also includes a day trip to Baratang (by road from Port Blair) and sometimes a day trip to Havelock.



FIGURE 4.17 Cellular Jail, Port Blair



FIGURE 4.18 Corbyn's Cove Beach, Port Blair



FIGURE 4.19 Islands in the Mahatma Gandhi Marine National Park

Snorkelling – This is a very popular activity in the Andamans, mostly for foreign tourists. Tourists are taken snorkelling to Red Skin, North Bay and Jollybuoy where there are good corals. Almost all tourists visiting these islands are taken snorkelling by locals. Those who do not go snorkelling are taken to view the corals on glass-bottomed boats (Figure 4.20). In Havelock and Neil Islands, foreign tourists go snorkelling on their own. There is also snorkelling at the Andaman Water Sports Complex and Corbyn's Cove Tourism Complex.



FIGURE 4.20 Tourists on a Glass Bottom Boat, Near Red Skin Island

Scuba diving – Scuba diving, which involves swimming underwater while using self-contained underwater breathing apparatus, is another activity that has many takers. The Andamans, with its rich marine and underwater life is said to be one of the world's best and safest places for scuba diving. Professional Association of Diving Instructors (PADI) certified divers visit the Andamans for diving. Villagers take the tourist into the sea to spots from where they can dive. From Havelock, tourists are taken diving to Hara Tikri or John Lawrence on a *donghie*. The Andaman and Nicobar Scuba Diving Society situated at Wandoor provides scuba diving opportunities.

Fishing – This is an activity offered by few hotels. High-end tourists hire a boat and go fishing. Villagers also take tourists fishing in their *donghies*. Game fishing, it is widely believed, has immense potential in the Andamans.

Trekking – Given its tropical forest cover, trekking also has many takers in the islands. There is a nature trail from Mount Harriet to Madhuban close to Port Blair. Havelock and Neil Islands have many trekking trails that largely see foreigners with very few domestic takers.

BOX 4.3

A Tale of Two Islands Transformed: Havelock and Baratang

Havelock – Paradise for Foreign Tourists?

Tourism is roughly a decade old in Havelock. It was after the Department of Tourism built its Dolphin Resort in 1994 that tourism picked up in Havelock. In 1996, Havelock used to get 50–60 tourists a year. From 2000 onwards, Havelock started attracting even more tourists. The local community and resort owners feel that the popularisation of Radhanagar beach by the TIME Asia feature has made a tremendous difference in attracting foreign tourists to Havelock. Word spread and it became popular with foreign backpackers with every passing year. Today it gets 60–65 tourists a day in the peak foreign tourist season.

Havelock mainly receives foreign tourists who stay for an average of 14 days on the island, as revealed by our primary tourist survey. While domestic tourists do visit it, their average length of stay is far less. The popularity of Havelock among foreign tourists can be gauged from the fact that more than 50 per cent of foreign tourists interviewed in our primary survey revealed that they had visited only Havelock during their trip to the Andamans. Further, 26 per cent said they had visited Havelock and Neil Islands and 14 per cent Havelock and other islands. Therefore, Havelock is central to the itinerary of the foreign tourist visiting the Andamans.

This increase in number of visitors has led to a simultaneous growth in the number of resorts on the island. Today, the total number of resorts in and around Havelock (all kinds included – high-end to budget) is approximately 25 – a veritable change from the days of the lone Dolphin Resort in 1994. Many members of the local community in Havelock have invested in setting up resorts, eco-hotels and beachside huts in the hope of cashing in on the tourism boom in the island. Occupancy rates are 100 per cent in all resorts during the peak season, so much so that many tourists are sent back by resort owners and end up sleeping on the beach!

Havelock's population of 5,354 persons (as per the 2001 census) is largely made up of Bengalis, with smaller but rising numbers of other lingual groups such as Tamilians, Telugu

Continued

BOX 4.3 A Tale of Two Islands Transformed—cont'd

and Malayalis. A rough calculation of the population of Havelock Island as against the number of tourist arrivals shows that on an average Havelock sees 6,687 tourists every month that is higher than its constant population of 5,354! This has implications for infrastructure of the island – roads, water resources, health care and the rising number of accommodation facilities for tourists which in turn also affects the local culture. Cultivation (of paddy, coconut, arecanut, banana and vegetables), fishing and government jobs form the main occupations of the people of Havelock. With the rise of tourism, there has, undoubtedly been an interface with the local community and economy. Of the total population of Havelock, roughly 20 per cent of the households have an interface with tourism according to Ajith Kumar Roy, the Pradhan of Havelock. But with most households there are still not very many where tourism is the main source of revenue. Tourism only supplements incomes from agriculture or fishing.

But undoubtedly, for many in Havelock, tourism has become an important supplementary source of income. Tourism has opened many options for employment of youth on the island, who otherwise did not have anything to do. The desire to make quick money by running errands especially during the tourist season lures teenagers away from studies and hard work required in agriculture. Prices of fish and vegetables and other goods are consistently rising. Many of these concerns were expressed by parents and panchayat leaders who said that in a slow and subtle manner. Local people in Havelock are being pushed out by unregulated tourism. Many of them have started operating autos, jeeps or taxis, work as staff in the hotels and resorts, and so generally the opportunity for employment has increased. Fishing has become lucrative with the influx of visitors.

Tourism has also had certain undesirable impacts in Havelock, which the local community is currently grappling with. One such direct outcome of the tourism boom in Havelock is that land prices have skyrocketed. According to the Pradhan, ten years ago one *bhiga* of land cost Rs 20,000; now one *bhiga* costs Rs 15–25 lakh or more. The cost of land by the seashore is much higher. The land is being bought by outsiders as locals do not have the money to buy land from each other. With the influx of tourists, islanders have difficulty getting tickets on the boats. Often islanders have to return from the jetty unable to get tickets even if they have to get to Port Blair on important work. There are times during the peak season when tickets to Havelock are sold in black as well. Tourism has also led to the problem of increased garbage on the island resulting in huge pile-ups behind Radhanagar beach and the jetty.

There have also been stray incidents of drug abuse and obscenity by tourists in Havelock. All of this has recently led the Havelock village panchayat along with the A&N Police to issue “Rules for Foreign Tourists” in Havelock that prohibits the possession, sale and use of drugs, camping on beaches, obscenity and visiting unauthorised beaches and islands. Several households interviewed expressed serious concerns over children and youth being influenced by nudity and foreigners’ public display of affection.

Havelock is a transformed island today and much of it is owing to the rise in tourism. The people of Havelock are keen to welcome tourists but the challenge is to ensure that the cost–benefit ratio of increasing tourism in Havelock tips in their favour.

Baratang – A Flood of Domestic Tourists?

Baratang’s claim to fame is its limestone caves that were opened for tourists in 2003. While there are other attractions like mud volcanoes and Parrot Island, the limestone caves are the

BOX 4.3—cont'd

major attraction. Tourists visit only one out of the 180 caves as the rest are dangerous to enter. A mangrove walk has been created by the Forest Department in the place leading to the caves. Most tourists visiting comprise domestic LTC travellers who are brought on day package tours from Port Blair by local tour operators. During the period January 2007 to July 2007, 74,000 permits have been issued for visits to the limestone caves according to Forest Department officials at forest camp at Nilambur (the panchayat within which the limestone caves are located).

The Forest Department has prepared informational material on the ecology of the region that is distributed among tourists. In order to reduce pollution and waste collection in the region, the department ensures that all waste is regularly collected from all forest areas visited by tourists and disposed in a landfill.

The increase in the number of tourists has led to private players beginning to run mechanised boat services to the limestone cave. Additionally, in a recent move, the Administration has stopped *donghie* owners from plying their crafts stating safety reasons and replacing them with motor boats. This has jeopardised the livelihood of 150 families dependent on income from ferrying tourists. According to the 2001 census, Baratang has a population of 6,062 including people from the Ranchi community, Bengalis, Telugu, Tamilians and Malayalis. Much of the employment that tourism has generated for Baratang is by providing opportunities for boat owners and *donghie* owners who ply tourists from the jetty to the caves. C.S. Danish has two boats – one fishing boat and the other one for tourists. Just fishing, he said, is not adequate for his family. C. Balu came to Baratang in 1982 and works with the Forest Department. It has been four years since his wife and he opened the tea stall next to the jetty. “You would not even get a cup of tea here if it were not for tourism,” he says.

4.7 Tourism Industry and Establishments in the Andaman Islands

The structure of the tourism industry is complex and multilayered. It includes a host of direct and indirect activities that contribute to tourism but are not entirely dependent on it. As observed by Holloway (1998) “The demand for tourism is met by the concentrated efforts of a wide variety of tourist services. Because some of these services are crucial to the generation and satisfaction of tourist’ needs, while others ply only a peripheral or supportive role, defining what is meant by a ‘tourism industry’ is fraught with difficulties”.¹⁵

As per the UNWTO’s basic statistics module on tourism, an industry is defined as “a group of establishments engaged in the same kind of productive activities”. However, the set of tourism characteristic activities does not comprise a unique industry conforming to this definition. Consequently, it defines a tourism characteristic industry as “a group of establishments whose principal productive activity is a tourism characteristic activity”. Tourism industries are the group of all tourism characteristic industries. Special segments such as travel agencies and tour operators are also considered. (For a complete listing of all tourism-related activities that are internationally classified and accepted, refer Annexure 6 for the SICTA (Standard International Classification for Tourism Activities).

In the A&NI, one of the challenges that tourists face is precisely due to the poor coordination between different segments of the industry. This is because coordination

is an inherent challenge in the case of the tourism industry, which is exacerbated in the case of the A&NI due to the logistical difficulties faced on the ground that then translates into difficulties for the tourist. This section examines the status of three such tourism-related establishments – accommodation units, restaurants, and travel agencies and tour operators – in the context of the Andaman Islands.

4.7.1 Accommodation Establishments

Accommodation establishments are an integral part of a tourist's demand from the place they visit and are also a critical factor in determining their holiday experience in general. With the aim of providing standardised, world class services to the tourists, the Government of India, Department of Tourism has a voluntary scheme for classification of fully operational hotels in the following categories:

1. Star hotels: 5 Star Deluxe, 5 Star, 4 Star, 3 Star, 2 Star and 1 Star
2. Heritage hotels: Heritage Grand, Heritage Classic and Heritage

The Hotel & Restaurant Approval & Classification Committee (HRACC) inspects and assesses the hotels based on facilities and services offered. Although this is the criteria followed for the categorisation of the hotels, during our primary survey with accommodation establishments in the islands, we found that very few of the category hotels have come up in the islands. Most of the accommodation facilities available at the islands were in the form of mid-range or budget hotels, resorts and lodges.

The primary tourism industry survey through this project was carried out separately on accommodation units in Port Blair and in other islands, as the demand for accommodation and consequently the structure and status vary between these two sectors. Results from our survey indicate that within Port Blair, 87.2 per cent of accommodation units interviewed were registered, but outside of Port Blair, only 55 per cent of units were registered. This reveals that there is a section of tourism-related accommodation establishments that are unregistered in other islands (such as Havelock and Neil) and other areas (such as Diglipur) where tourism is coming up. The high percentage of unregistered units within the tourism industry on the islands is something the Administration needs to take into cognisance.

In terms of a detailed description of the concentration and distribution of accommodation units across islands, the highest concentration of the accommodation units could be observed in Port Blair followed by Havelock. The concentration could be for different reasons. Firstly, Port Blair being the only entry and exit point for outsiders into the A&NI, demand for rooms would obviously be high. Secondly, the connectivity between Port Blair and other islands is also such that ships returning from Havelock, Neil or other islands that tourists frequent return to Port Blair in the evenings whereas their return flights depart only the next morning (the Port Blair airport does not have night landing facilities and so all airport activities take place until noon every day only) forcing a night's stay at least in Port Blair town. These apart, the rise in number of LTC travellers and their itineraries being centred around Port Blair is also a reason for increase in demand for hotel rooms. Within Port Blair, most of the accommodation units are concentrated in Goalghar, Delanipur, Phoenix Bay, Aberdeen Bazaar and Middle Point, whereas a few are located in more picturesque locations, such as the

Sinclairs Hotel, ANIIDCO's Megapode Nest and ITC Welcomgroup Fortune Resort Bay Island. In Havelock, most resorts or hotels are concentrated along Beaches 1 and 5. The total number of accommodation establishments is approximately 25 according to the Pradhan of the Govind Nagar *panchayat* in Havelock. Other islands where a primary survey was conducted have a far lesser number of accommodation units: Neil has 3; Diglipur, 7; Mayabunder, 6; Rangat, 5 and Long Island, 3. While Baratang receives a lot of tourists, it does not have any accommodation units, as all tourists make day trips and the itinerary has not required night stay. Therefore, we observe that apart from Port Blair and Havelock, where rise in tourist arrivals and the structure of the itinerary has increased the demand for number of rooms, in other islands, there is no fixed pattern followed and private entrepreneurs have used their discretion in setting up small units.

The Andaman Chamber of Commerce and Industry (ACCI) is of the opinion that the investment in the hotel industry in Port Blair has largely been the result of private investment and entrepreneurship with very little incentive from the Administration. In other islands, many of the resorts or shacks that have come up have been the result of the entrepreneurship of the resident local community. Therefore, while these are not high-end and do not meet international standards, they are basic, clean and affordable; this makes them popular with backpackers and other tourists with tight budgets. In terms of the facilities offered by the accommodation units, results from the survey are produced in Table 4.3.

TABLE 4.3 Facilities Provided by Accommodation Units in the Andaman Islands

Facilities Provided	% of Respondents		Services Provided	% of Respondents	
	Port Blair	Outside Port Blair		Port Blair	Outside Port Blair
Restaurant and Bar	47.1	52.0	Laundry	19.5	12.5
Conference Room and Banquet Hall	1.1	0	Tour Guides/Package Tour Services	9.2	17.5
Both of the Above	13.8	12.5	Both the Above	27.6	17.5
Vehicle Hire	8.0	5.0	Currency Exchange/ Internet	2.3	2.5
All the Above	3.4	0	None of the Above	11.5	20.0
None of the Above	24.1	25.0	All the Above	27.6	25.0
No Response	2.3	5.0	No Response	2.3	5.0
Total	100.0	100.0	Total	100.0	

The increasing competition in the accommodation sector has led to the introduction of new facilities and services provided by units. While some hotels have invested in improving facilities such as conference and banquet halls, the majority of accommodation units still provide only basic facilities and services. Even in this, within Port Blair, 24 per cent of units interviewed said that they do not even have an in-house restaurant therefore indicating that they offer purely lodging services. The table above indicates that 9.2 per cent of the units in Port Blair and 17.5 per cent in other islands offer tour guide or package tour facilities indicating an improvisation in the products they offer their guests. However, there are many units that are still not offering more modern facilities such as currency exchange, credit card and the internet, which could be a major determining factor especially for international tourists. The study also elicited responses

from the industry on what are the most popular means through which bookings are made at their establishments, which are presented in Figure 4.21.

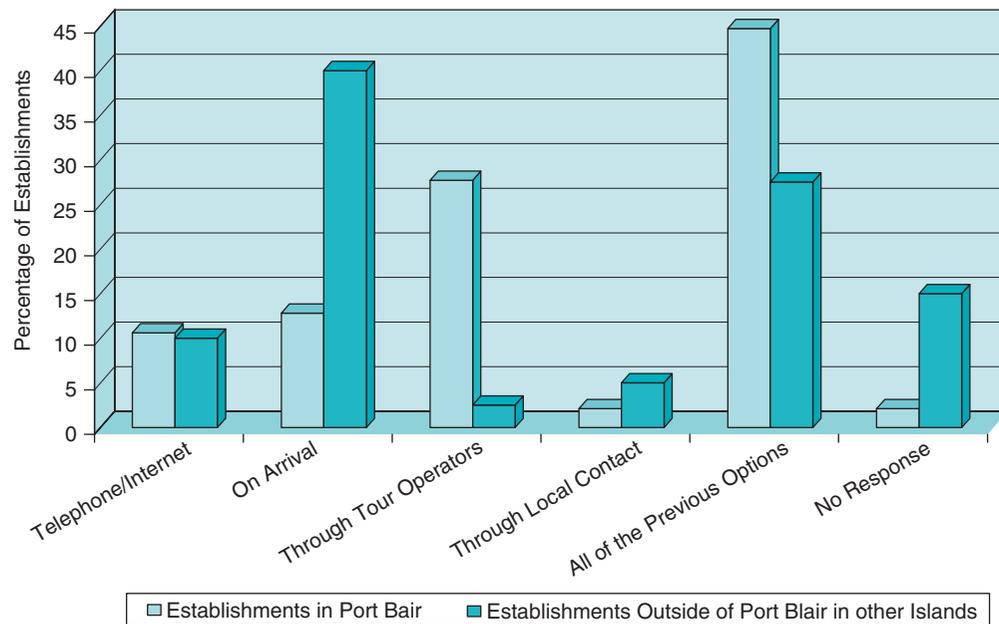


FIGURE 4.21 Means of Making Booking for Accommodation in the Andaman Islands

On the issue of making bookings at establishments, it was observed that use of telephone was a prominent means of booking among establishments in Port Blair and other islands. However, with other means of booking, the variation between Port Blair and other islands is quite significant. On-arrival bookings, for example, are much higher in other islands than in Port Blair, whereas booking through tour operators is much higher in the case of Port Blair. These results can be juxtaposed with responses from our primary tourist survey, where 37.3 per cent of domestic tourists had asked for accommodation on arrival as against 80 per cent of foreign tourists. It can thus be inferred that foreign tourists, who do not spend much time in Port Blair but head straight for the islands usually rely on accommodation being available on arrival without booking in advance. But domestic tourists, who largely come through package tours arranged by tour operators and who spend considerable time in Port Blair usually book in advance. The facility of internet bookings has still not evolved in the Islands. Only 10 per cent of the interviewed units have this facility available for booking. This might be an area for consideration, especially with foreign tourists who often work through the internet to organise their trips and rarely come through tour operators. Thus, the islands are still far from capitalising on the information technology advancement. However, they have good networks with other domestic tour operators across the country, which brings them business.

The questionnaire survey was not able to elicit an adequate response from the tourism establishments to capture precise occupancy rates from primary data. But as a ballpark figure, the overall occupancy rates in 2006 according to the ACCI were as follows:

- ♦ 50 per cent in the high-end range (i.e. room tariff above Rs 1000 a day)¹⁶
- ♦ 70–80 per cent in the mid-level range (room tariff below Rs 1000 a day)

The owners of these units were not very well aware of the government policies that have come up for the development of tourism in the islands. Of the total 87 units that were interviewed, only 32 per cent had some knowledge of the plans, policies and schemes that the Administration had in place for the tourism sector.

4.7.1.1 Tourists' Responses and Satisfaction with Existing Accommodation in the Islands

This section presents results from our primary survey with tourists on a series of parameters that influence the choice of their place of stay in the islands and how they rated the existing accommodation and restaurant facilities available in the Andamans.

Source of Information to Tourists About Place of Stay in the Islands

As Figure 4.22 indicates, one of the primary sources of information about places of stay in the islands is “word of mouth”, indicating that tourists have heard of these places, which are either recommended by friends or from local people on reaching the islands. This is an important factor to consider as it is the most informal means of sourcing information about place of stay. Among domestic tourists, not surprisingly, travel agents (48%) and Tourist Information Centre (25%) are important sources of information. The internet (38%), Lonely Planet (22%) and word of mouth (60%) are the most important sources of information for foreign tourists.

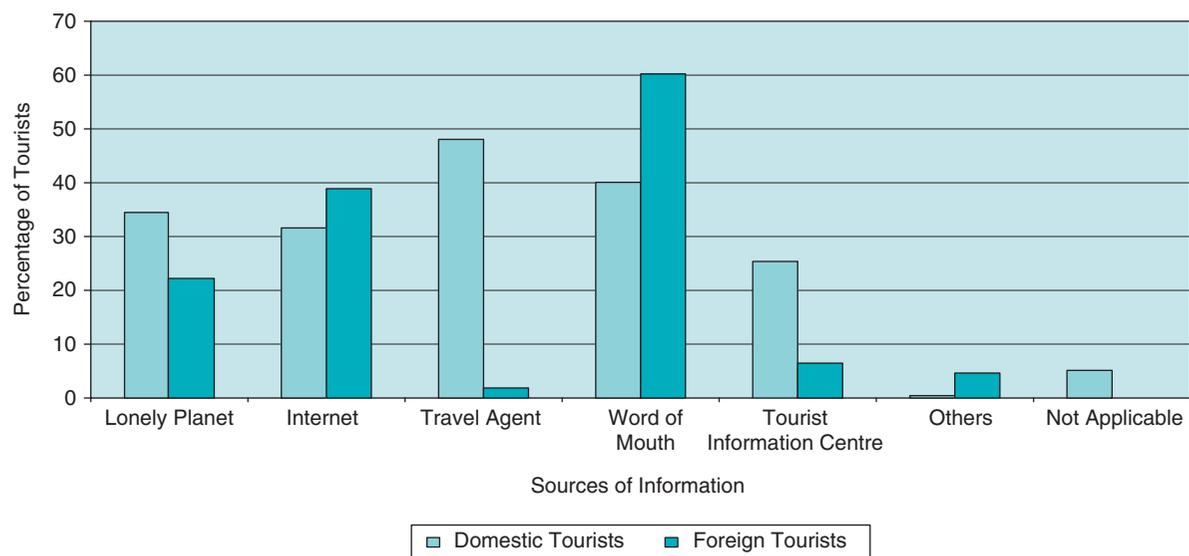


FIGURE 4.22 Sources of Information to Tourists about Place of Stay in the Islands

Factors Influencing Choice of Place of Stay

While discussing the various factors that influence the tourists' choice of a particular place of stay in the islands, cleanliness was rated the most important deciding factor by both domestic and foreign tourists after the “view” the establishment offered (Figure 4.23). One point of difference in the perspectives of domestic and the foreign tourists was on the issue of the safety of location; this factor has been accorded higher priority by domestic tourists than foreign tourists. An average of 30–40 per cent of both domestic and foreign tourists also selected affordability as an important criterion for making the choice of their place of stay.

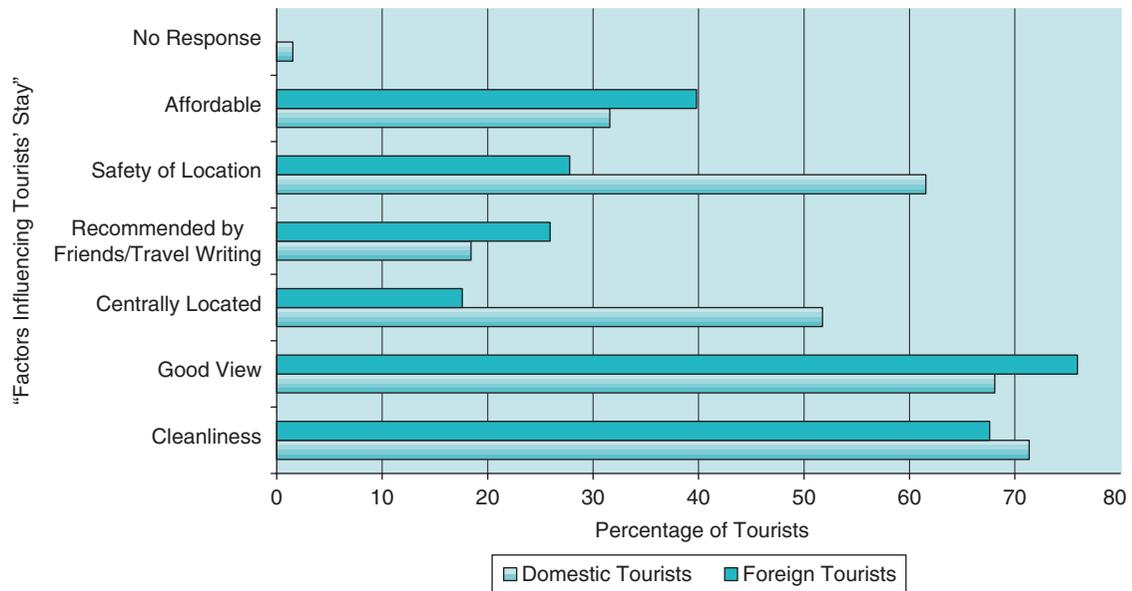


FIGURE 4.23 Factors that Influence the Tourists' Choice of Place of Stay in the Islands

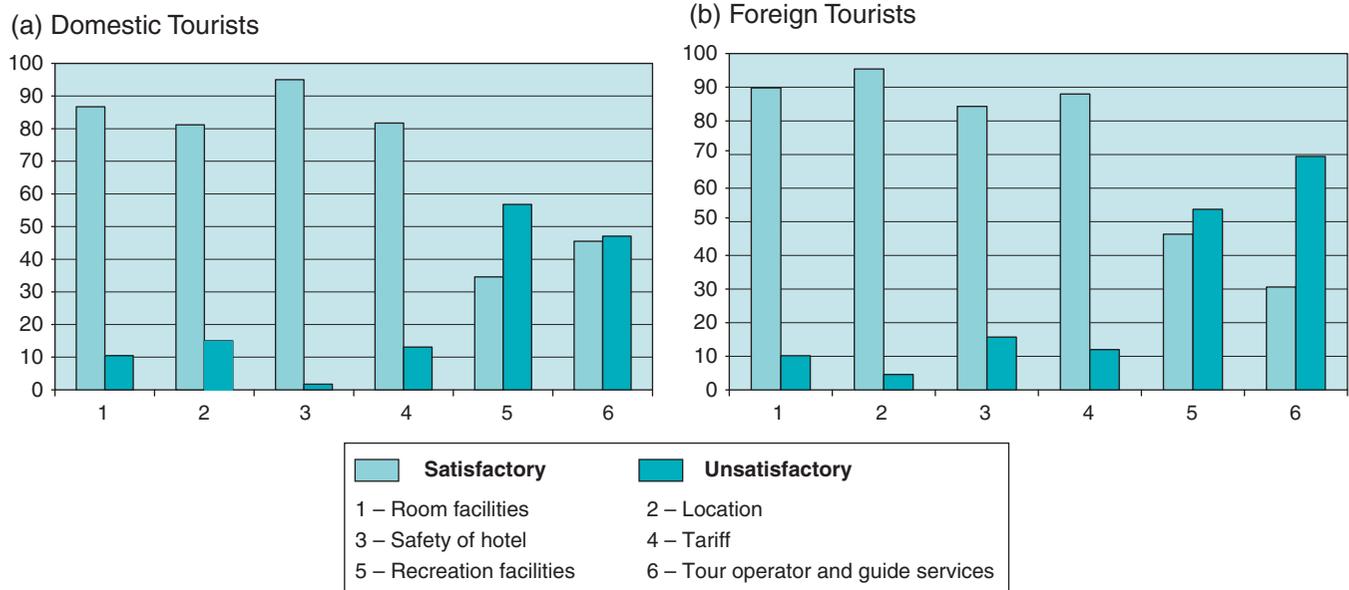


FIGURE 4.24 Satisfaction Levels of Tourists with Accommodation Facilities

Only 20 per cent of the foreign tourists considered the safety of accommodation also an important factor. At the same time it was 68 per cent of the domestic tourists who also gave weight to this factor.

Satisfaction of Tourists with Existing Accommodation Facilities Available in the Islands

Figure 4.24 presents the satisfaction levels of domestic and foreign tourists with their place of stay across various parameters.

On the issue of satisfaction of their stay at the chosen accommodation, foreign as well as domestic tourists seem to be more or less content with services offered. The responses of domestic and foreign tourists show a similar trend with regard to services such as room facilities, safety measures, location and even tariff of establishments. There was however discontent with recreation facilities provided, where almost 54 per cent of foreign tourists and 57 per cent of domestic tourists found this service unsatisfactory. Even the services of tour operators and guides were marked unsatisfactory by 70 per cent of foreign and 45 per cent of domestic tourists.

4.7.2 Food and Restaurants

For the tourist, food is one of the most important factors that can either make or mar their holiday experience. On a general level, the food and restaurant business in Port Blair has improved significantly in recent years with many new restaurants, even those specialising in specific cuisines (like Chinese food or sea food) coming up. Hotels such as Annapurna (vegetarian), Ananda and Lighthouse (known for sea food) are popular options among tourists. However, in islands other than Port Blair, the availability of a variety of food cuisines is restricted by connectivity and price factors. Field observations indicate that in highly popular islands such as the Havelock Island, local communities have tried to improvise with food by either preparing European or Chinese dishes or in some cases even Bengali food to cater to this large segment of domestic tourists. There are no speciality restaurants, and tourists looking for speciality cuisine would have to go to one of the high-end resorts such as Barefoot or Wild Orchid.

Our survey with tourists revealed the following about their levels of satisfaction with food availability on the islands:

- ♦ 61.2 per cent of domestic and 84.3 per cent of foreign tourists preferred dining in the in-house restaurant of their hotel which means they do not venture out in search of food or into the market much
- ♦ 9.3 per cent of domestic and 45 per cent of foreign tourists felt that vegetarian food was not available easily on the islands as against only 7.5 per cent domestic and 13.9 per cent foreign feeling that they had problems with availability of non-vegetarian food
- ♦ Availability of alcoholic drinks did not seem an issue with either domestic or foreign tourists with majority holding that it was either available at their place of stay or elsewhere in the islands

The responses from tourists on how they would like the restaurants in the islands to improve is presented below. Figure 4.25 indicates that the predominant demand of

foreign tourists (51%) is that the pricing of food needs to be improved – a clear indicator that they find the price of food very high. Among domestic tourists, nearly 60 per cent seek an improvement in hygiene standards and 53 per cent in service at restaurants. These would be important points for entrepreneurs and restaurant owners to bear in mind.



FIGURE 4.25 Improvement of Restaurants in the Andamans: Response from Tourists

4.7.3 *Travel Agencies and Tour Operators*

Tourist products can be sold to tourists in many ways – either direct, through travel agents (the retailers of the tourism industry) or through tour operators or brokers (who can be called the wholesalers of tourism).¹⁷ Travel agencies are the retailers of tourism services who act as intermediaries between the real suppliers/producers of a tourist service and the consumer.¹⁸ A variety of services associated with travelling such as transport (including car rentals), accommodation and package tours on a fee or contract basis, are sold to the public through travel agencies. In contrast, tour operators can be viewed as the wholesalers of tourism as they buy a range of different tourist products such as airline seats, hotel rooms or coach transfer facilities in bulk, “packaging” these for subsequent sale to travel agents or directly to tourists. The components of a package tour might be pre-established, or can result from an “a la carte” procedure, where the visitor decides the combination of services he or she wishes to acquire (Holloway, 1998). With the use of technology, these distinctive categories have blurred in many cases.

The role of travel agencies and tour operators in the islands applies largely in the context of domestic tourists as the majority of foreign tourists do not visit through tour operators but design their own tours. Tour operators organising for the Andamans are based both in the mainland (cities such as Kolkata, Delhi) and in Port Blair. Our primary

survey in Port Blair indicates that the number of functional tour operators is close to 70. The standard “Andaman package” offered to tourists is a five-day trip to Baratang–Chidiyatapu–Mahatma Gandhi Marine National Park. It starts with arrival at Port Blair and a harbour cruise after lunch to Ross and Viper Islands. On day two, there is a two-hour drive through dense forest to Baratang, passing the Jarawa Tribal Reserve to the limestone caves and mud volcano. A visit to the Baludera Beach and Parrot Island is thrown in. On day three, they leave for Chidiyatapu from Port Blair and return in the evening. On day four, a visit to the Mahatma Gandhi Marine National Park is arranged, where tourists are taken on glass-bottomed boats to view corals in either Red Skin or Jollybuoy Islands. The rate charged varies from Rs 3,200 to Rs 5,000 a night for each couple that is inclusive of accommodation in an air-conditioned, double-bedded room, where applicable, and airport or harbour transfers and sightseeing in a car with no air conditioning. It however does not include food and entry tickets.

The above description clearly indicates that these tours are oriented much more towards sightseeing rather than an experience of the islands. Domestic tourists who avail of these tours find it good value for money but in order to more deeply understand the level of satisfaction with tour operator facilities, the results from our tourist survey is presented below¹⁹ (Figure 4.26).

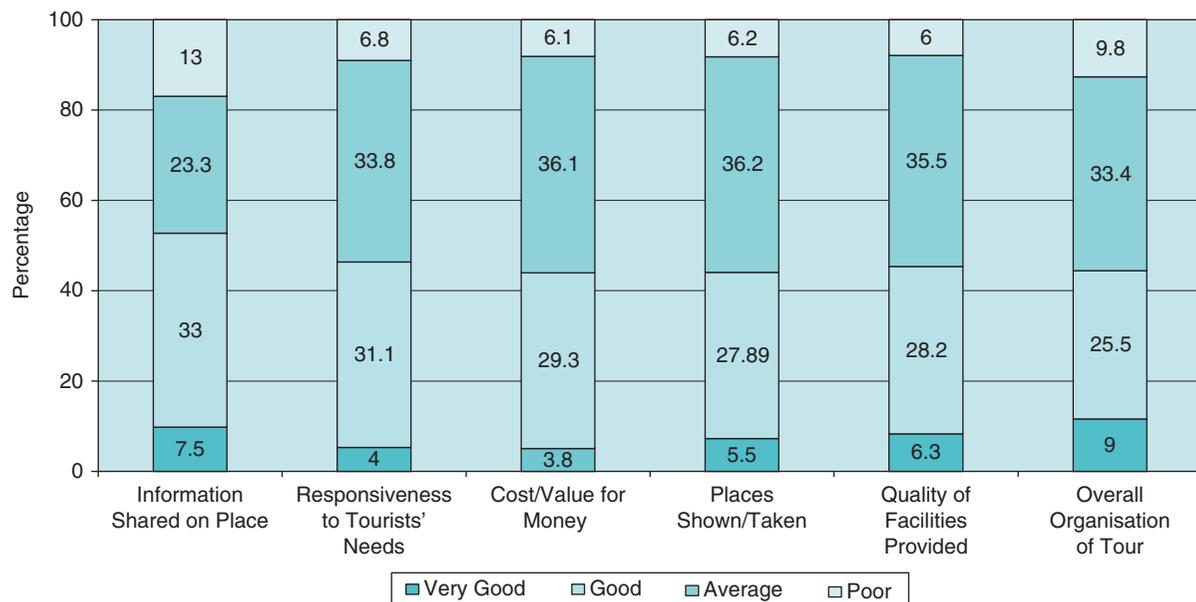


FIGURE 4.26 Rating of Tour Operators’ Services by Domestic Tourists Visiting the Islands

As Figure 4.26 indicates, while most tourists have rated the performance of tour operators as average, among the services offered, “information on place” and “overall organisation of tour” have received a relatively poor rating by tourists. This could be interpreted either as a response to the quality of information about the particular sightseeing attraction or as a certain keenness shown by tourists to learn more about the Andaman Islands, which could certainly be improved.

4.8 Supporting Infrastructure to Tourism in the Andaman Islands: Transportation and Connectivity

Tourism is the outcome of the travel and stay of people, and the development of transport, both public and private, has a major impact on the growth and direction of tourism development. This has certainly proven true in the case of the Andamans. Earlier, the islands were primarily connected to the mainland by sea route with air travel being limited to just one flight a day operated by the national airline – Indian Airlines. However, with the boom in the domestic aviation sector, connectivity to the islands by air has greatly improved and the industry credits the increase in tourist arrivals to the Andamans to this very factor.

4.8.1 Travel by Air

4.8.1.1 Mainland to the A&NI

Travel by air is the most popular means of arrival into the islands. Currently six airlines – Indian Airlines, Jet Airways, Jet Lite (earlier Sahara), Spice Jet, Air Deccan and

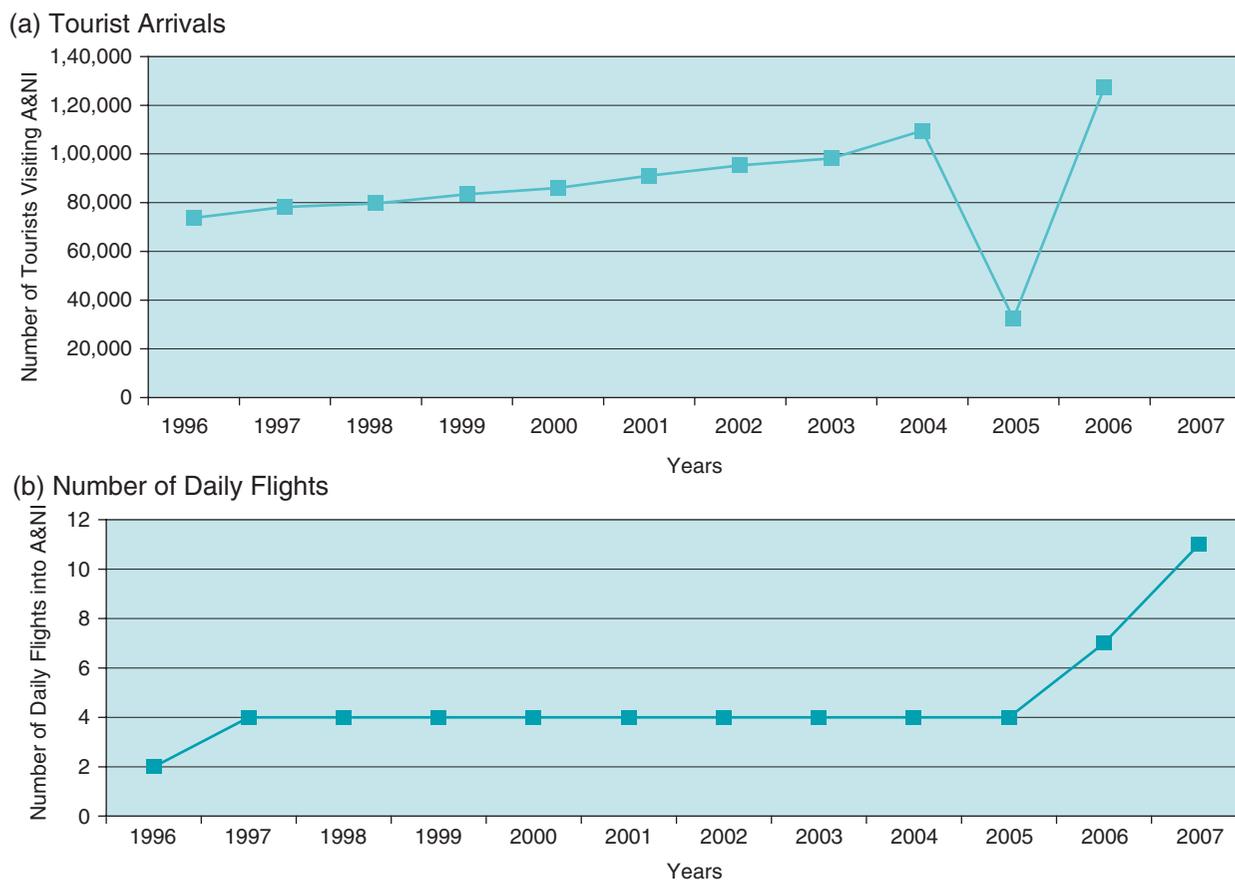


FIGURE 4.27 Increase in Number of Daily Flights into Andaman & Nicobar Islands (A&NI) in Comparison to Increase in Tourist Arrivals

Sources: Interview with IP&T, A&NI Administration, December 2007 and Department of IP&T, A&NI Administration, September 2007, respectively.

Kingfisher Airlines ply to Port Blair from two ports, Kolkata and Chennai, resulting in a total of 11 daily flights into the A&NI. The growth in the number of daily flights and correspondingly in the number of passenger seats into the islands has matched the increase in tourist arrivals, especially since the year 2005, as Figure 4.27 shows.

That air travel is the most popular means of arriving into the islands is evident from results of our primary survey with tourists according to which 97.8 per cent of domestic tourists and 93 per cent of foreign tourists arrived into the islands by air. This is corroborated by data from the Immigration Department reproduced in Table 4.4, which shows the clear preference for the air route among foreign tourists.²⁰

TABLE 4.4 Foreign Tourist Arrivals by Different Modes of Transport (2000–September 2007)

Year	By Ship (%)	By Flight (%)	By Yacht	By Luxury Liner	By Non-Scheduled Charter Flight	Total
2000	981 (18.35)	3,096 (57.9)	168	1,102	0	5,347
2001	1,597 (30.48)	2,456 (46.8)	166	1,019	0	5,238
2002	1,302 (27.6)	1,984 (42.1)	172	1,253	0	4,711
2003	1,446 (34.01)	2,185 (51.4)	158	462	0	4,251
2004	1,232 (27.2)	2,713 (59.9)	259	208	113	4,525
2005	400 (18.5)	1,466 (67.8)	68	222	6	2,162
2006	930 (10.3)	4,873 (53.9)	240 (2.65%)	2,936 (32.5%)	55 (0.6%)	9,034

Source: Immigration Department, Andaman & Nicobar Islands (A&NI) Administration, September 2007.

As the table above indicates, the proportion of foreign tourists arriving into the islands by ship has decreased from an average of 30 per cent in the early 2000s to 10 per cent in 2006. This has been matched by a consistent increase in the share of tourists arriving by air, except for the year 2006 when there was a minor dip. If we analyse data on arrival by different modes of transport for the year 2006, arrival by ship accounts for 10.3 per cent and that by air for 53.9 per cent. Although data shows arrival of foreign tourists by luxury liners to be 32.5 per cent, as mentioned earlier, these numbers cannot be considered significant as the luxury liners make a half-a-day to one day halt only in Port Blair en route to other countries, thereby not impacting the Andamans to any significant extent. Therefore, if we deduct the luxury liner segment, we note that the number of tourists arriving by air into the islands is as high as 80 per cent in 2006. Further, to understand the relative preferences for different airlines, we present results from our primary tourist survey (Figure 4.28).

The Figure 4.28 indicates that while Air Deccan – the low-cost airline – is the most popular option among foreign tourists, the distribution among domestic tourists is more even between Indian Airlines, Jet and Air Deccan.²¹ There are proposals to increase the number of ports connecting Port Blair to the mainland, including, possibly, to certain international destinations such as Colombo and Phuket. International charter flights between Phuket and Port Blair used to operate in the pre-tsunami days but have hence stopped and according to the Directorate of Civil Aviation, there are no current plans to resume these either.

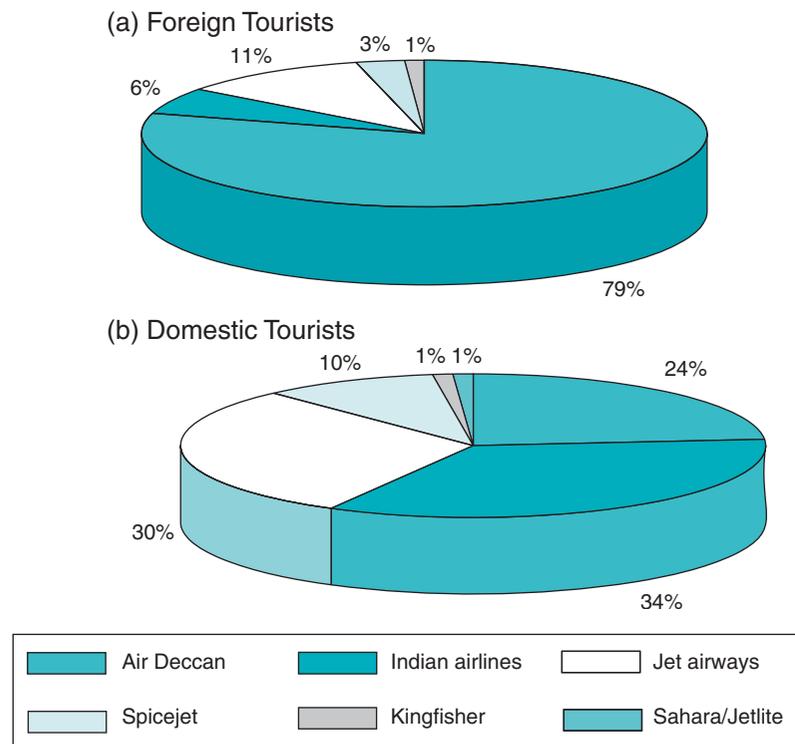


FIGURE 4.28 Airlines Used by Domestic and Foreign Tourists to Arrive at the Islands

Our survey results also indicate that 33 per cent of domestic and 30 per cent of foreign tourists experienced difficulties in getting air tickets and that 11 per cent of domestic and 40 per cent of foreign tourists did not find the current flight timings convenient. The response from tourists regarding aspects of air transport to the islands that they would like to be improved is produced in Figure 4.29.

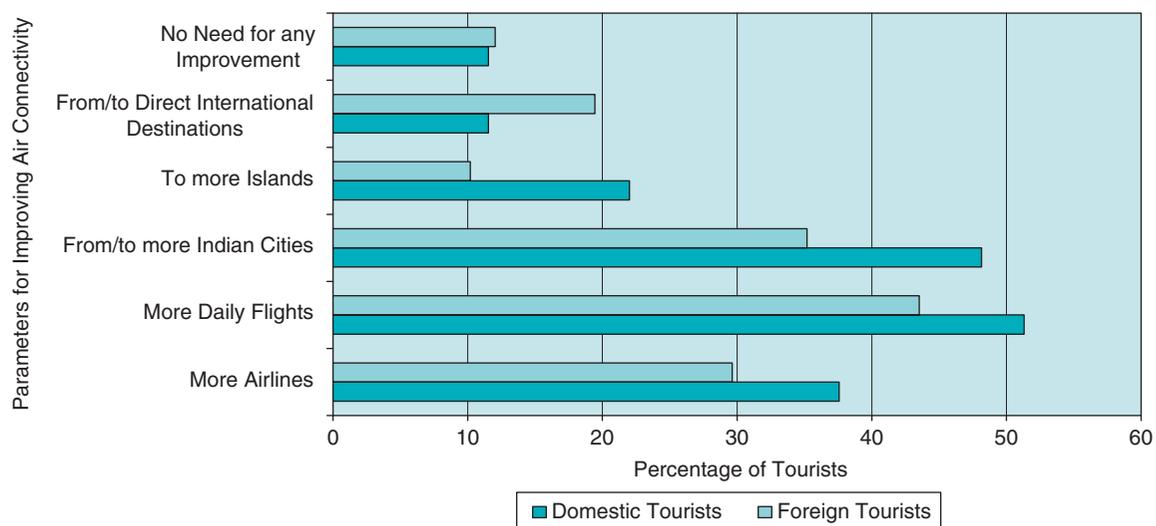


FIGURE 4.29 Tourist Responses on how Air Connectivity to the Islands Should Improve

The figure indicates that the predominant responses are in favour of having more daily flights to the islands and connectivity to more Indian cities.

4.8.1.2 Inter-island travel by air

The A&NI Administration and Directorate of Civil Aviation have also begun renting out helicopters for use by tourists to get to popular islands such as Havelock. While the helicopters are meant for priority use by important persons like the LG, senior bureaucrats and the Member of Parliament, when available, they are rented out to tourists at the rate of Rs 850 per person one way to Havelock. The Directorate of Civil Aviation is planning to increase capacity and get two more helicopters (15-seaters with air conditioning) to cater to the increasing tourist demand and possibly start plying even to Diglipur – which has an air strip.²² The Directorate also holds that private parties have so far only expressed interest to lease out their helicopters to the Directorate and not enter operations in the sector as it is economically non-viable. Therefore, it is unlikely that the privatisation of air services will take place as private operators will not be able to absorb the loss.

4.8.2 Travel by Ship

There are currently five ships that ply between Port Blair and mainland India to three ports – Chennai, Kolkata and Vishakapatnam. These are *MV Akbar*, *MV Harshvardhan*, *MV Swarajdeep*, *MV Nancowry* and *MV Nicobar*. Each of the ships in this sector has the capacity to carry 750–1,500 passengers. However, a very low percentage of tourists arrive into the islands by ship as it takes much longer (travel time from Chennai to Port Blair by ship is four days one way). In the peak tourist season, the percentage of tourists:locals in the foreshore sector (ships plying to all the islands in the North, Middle and South Andaman region) might be 40:60 but in the tourist off-season it might fall to 10:90. However, in the mainland sector, the real rush for tickets is in the vacation (summer vacation time) when islanders travel to mainland – at other times, the ships to mainland run at only 50 per cent capacity.²³

However, despite the low tourist traffic by ship in the Mainland–island sector, inter-island travel in the islands is practically completely dependent on boats. (Although travel by helicopter is an option, as the previous section highlighted, this is an expensive option for most tourists.) The Directorate of Shipping currently has 16 boats that ply in the foreshore sector. However, by its own admission, the Directorate believes that the current status of shipping services in the islands is such that it cannot even meet the needs of islanders let alone tourists. The Directorate states that ships are being run at highly subsidised rates, and within this scheme, the demand for tourists is being catered to as well. The afternoon boat to Havelock Island was basically started at the behest of the Department of IP&T as otherwise there was only one boat a day. There is constant pressure on the Directorate from the Tourism Department to cater more to the needs of tourists. But now, especially in the post-tsunami context, the priority of the Directorate is to cater to local connectivity needs, relief and rehabilitation requirements (especially in the Nicobar sector) – tourism is not a priority.²⁴

Given this state of affairs, the Directorate itself has been encouraging private boat operators to start plying in the foreshore sector where they can cater to the demands of tourists specifically. The government, however, is running the shipping services at

highly subsidised rates and incurring huge losses in the bargain. Even if a private operator is given the permission to operate, few can do it at such low prices and if prices are raised they might not be assured of passengers because the difference between ticket prices of their boats and those of the government run boats would be very wide. At the most, high-end tourists might be willing to avail their services but backpackers and other tourists may not. As of now, three private operators have shown interest in plying boats only in the Port Blair–Havelock sector to cater specifically to tourist demand.

4.8.2.1 Cruise tourism in the Andaman Islands

Serious consideration is being given to the development of the Andaman Islands as a cruise tourism destination. In order to step up infrastructure facilities at Port Blair and create adequate space and facilities for docking of large cruise liners, the Port Management Board is operationalising a proposal of revamping the Port Blair Harbour and jetty.²⁵ Now, the islands are not yet on any cruise circuit, although last year, there were a few international cruise liners that docked at Port Blair, the list of which is given in Table 4.5.

TABLE 4.5 List of Cruise Liners that Docked in the Andaman & Nicobar Islands during 2006–2007

Serial Number	Name of Port in A&NI	Name of the Cruise Liner	Date of Arrival	Date of Departure	Last Port of Call
1	Port Blair	<i>MV Coasta Allegra</i>	19.05.2006	20.05.2006	Colombo
2	Port Blair	<i>MV Coasta Allegra</i>	8.06.2006	8.06.2006	Phuket
3	Port Blair	<i>MV Coasta Allegra</i>	19.06.2006	20.06.2006	Colombo
4	Port Blair	<i>MV Spirit of Adventure</i>	28.11.2006	28.11.2006	Chennai
5	Port Blair	<i>MV Coasta Marina</i>	15.12.2006	15.12.2006	Chennai
6	Port Blair	<i>MV Spirit of Adventure</i>	25.01.2007	25.01.2007	Phuket
7	Port Blair	<i>MV Prince Danao</i>	1.02.2007	1.02.2007	Paradeep
8	Port Blair	<i>MV Coasta Marina</i>	3.03.2007	3.03.2007	Phuket
9	Port Blair	<i>MV Chistopher Columbo</i>	12.03.2007	13.03.2007	Phuket
10	Port Blair	<i>MV Europa</i>	28.03.2007	28.03.2007	Phuket

Source: Department of Port Management, Directorate of Shipping Services, A&NI Administration, Port Blair.

As the table indicates, most of these cruise liners docked for half-a-day to one day only at Port Blair, and therefore tourists arriving by these liners to the islands should be given significance. For instance, 758 passengers aboard the cruise liner *Costa Allegra* that docked at Port Blair in May 2006 were taken for a tour of Corbyn's Cove and the Cellular Jail only before again boarding the cruise liner and carrying on with their journey.

The tourism industry is certainly very keen on developing cruise tourism in the islands. Mr. Keki M. Master, Vice President, S.M. Baxi & Co, Shipping Support Services, said “[t]he A&N Islands have tremendous tourism potential and if foreign cruise liners make the islands a destination, the islands will be immensely benefited. Apart from boosting tourism in the islands, it will bring economic prosperity to the islanders”.²⁶ The A&N CCI also holds that there are private cruise liners ready to operate in the

Andaman seas but the question is one of profitability for the operators and how economical operations will be in the region.

Media reports indicate that the A&NI Administration, Department of IP&T, would start operating a cruise liner by the end of 2008 from the Andaman Islands to Malaysia and Thailand.²⁷ Over the past two years, many state governments have also come forward with plans to develop cruise tourism involving the Andamans. The Andhra Pradesh Tourism Development Corporation (APTDC) proposed in 2005 to start a cruise line from Vishakapatnam to Andamans via Chennai at a cost of Rs 35–40 crore.²⁸ In 2007, an expression of interest was put out by the Kolkata Port Trust inviting reputed international cruise ship operators to bid for developing cruise tourism in the Kolkata–Saugor–Puri–Andaman circuit.²⁹

In a detailed study on the potential for cruise tourism in India titled “Cruise Tourism: Potential and Strategy Study: Final Report” prepared in December 2005 by CRISIL Limited for the Ministry of Tourism, many proposals were made to develop the Andamans as a potential cruise destination for the country. Two of the circuits in which the Andamans have been proposed are as follows:

1. “Sunshine Cruise to Beaches”
 - ♦ Chennai – Colombo – Andaman – Chennai
 - ♦ Chennai – Andamans – Vishakapatnam – Paradip
 - ♦ Vishakapatnam – Kolkata – Andamans
2. “High Sea Cruise” or “Cruise to Nowhere”
 - ♦ Chennai – Andaman High Seas
 - ♦ Vishakapatnam – Paradip – Andaman High Seas

The study has made recommendations for the development of Port Blair into a world class cruise harbour. Further, as part of the market survey with domestic and foreign

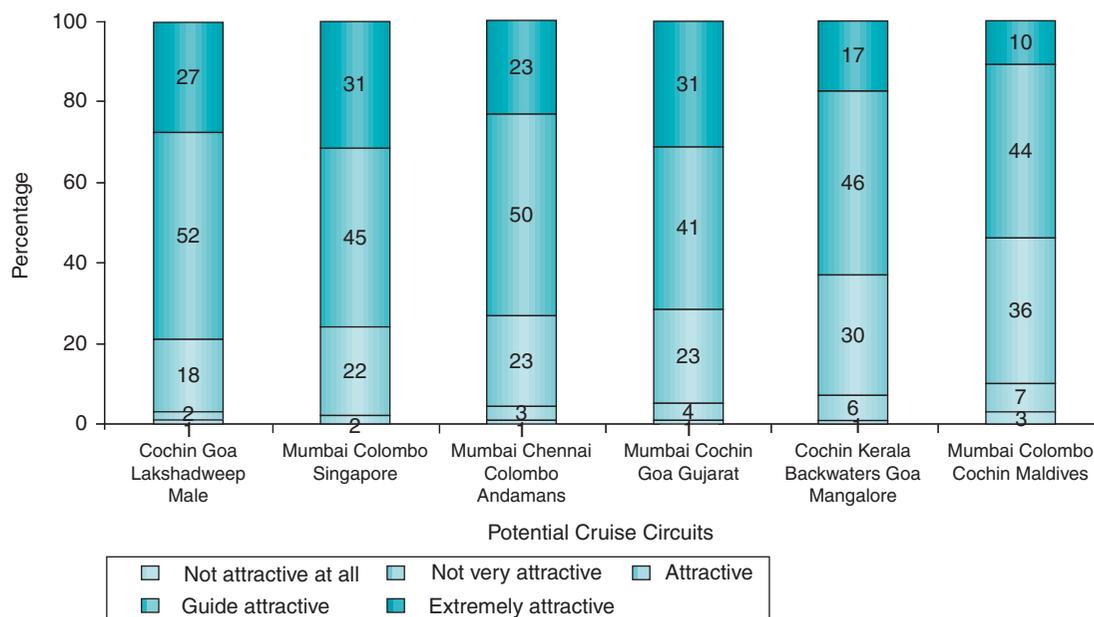


FIGURE 4.30 Rating of Potential Cruise Circuits by Domestic Tourists According to MoTC Cruise Tourism Study

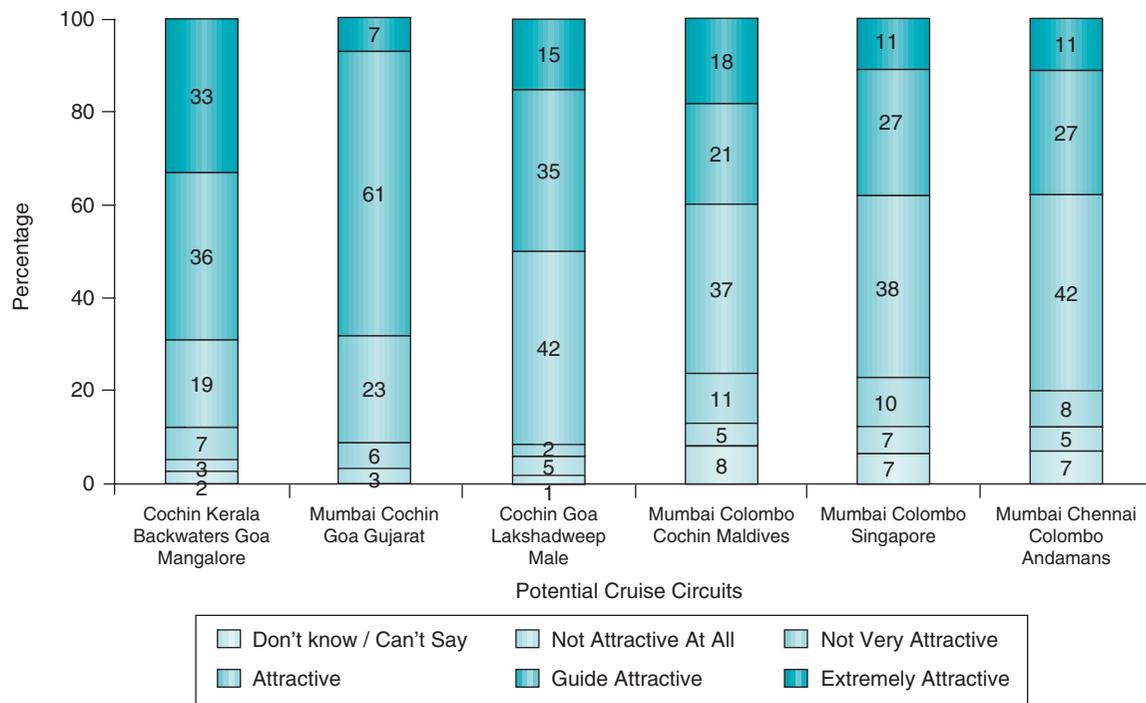


FIGURE 4.31 Rating of Potential Cruise Circuits by Foreign Tourists as from MoTC Cruise Tourism Study

Source: "Cruise Tourism: Potential and Strategy Study: Final Report", Ministry of Tourism, Government of India, December 2005.

tourists that the Cruise Tourism study carried out for the Ministry of Tourism and Culture (MoTC), Government of India, the proposed cruise circuits with Andamans on them have received reasonably good responses from both domestic and foreign tourists as captured here (Refer Figures 4.30 and 4.31)

Cruise tourism is likely to be pursued aggressively for the A&NI. The draft cruise shipping policy being worked out by the Ministries of Shipping and Tourism could be an indicator of what policy recommendations and guidelines are in store for this proposal in the islands.

4.9 Current Tourism Plans and Initiatives Being Proposed by the IP&T

In previous sections of this chapter we have looked at the status of tourism in the islands, the profile of the tourists visiting, their motivation, status of tourism establishments and the status of support infrastructure and connectivity to the islands. This section puts forth, in brief, recent plans and initiatives for tourism promotion proposed by the Central Government (MoTC) and A&NI Department of Information, Publicity & Tourism (IP&T) in an attempt to present upcoming plans for the development of tourism in the islands. Note that this section does not cover the policies and master plans of the government, which have been detailed in the next chapter.³⁰

4.9.1 Proposals and Plans of the IP&T

In early 2005, the Department of IP&T had identified 50 sites on 15 islands of the Andamans to be developed for tourism. But this proposal was stalled as, according to the Department of IP&T, 27 of these sites fall under the Protected Areas of the islands, and were therefore denied permission by the Department of Environment and Forests. Hence, according to the department, the development of tourism infrastructure in the remaining 23 sites that fall under Revenue Land will be initially taken up. The 23 sites identified are as follows:

- ♦ Neil Island (Bharatpur, Laxmipur and Sitapur)
- ♦ Havelock (Kalapather, Vijaynagar and Radhanagar [Figure 4.32])



FIGURE 4.32 Radhanagar Beach Where ANIIDCO's Property is Being Leased to Taj Group of Hotels for Development

- ♦ Long Island (Lalaji Bay and Long Island Village)
- ♦ Baratang (Baludera beach)
- ♦ Rangat (Amkunj, Padmanabhapuram and Cuthbert Bay)
- ♦ Mayabunder (Karmatang, Avis Island and Kalipur)
- ♦ North Andaman (Smith Island)
- ♦ South Andaman (Mahuadera, Kurmadera, Colinpur, Badabalu, Chidiyatapu, Wandoor and Jahaji Beach)

However in some of the above mentioned areas conflicts may arise because development needs to be undertaken in violation of environmental laws, as in the following cases:

- ♦ Baludera beach – clearance to be sought for CRZ (Figure 4.33)
- ♦ Cuthbert Bay is a wildlife sanctuary
- ♦ Kalipur – clearance yet to be sought from Forest Department
- ♦ Jahaji beach is a wildlife sanctuary and a turtle nesting site



FIGURE 4.33 Baludera Beach, Baratang

The other plans on the anvil of the IP&T have been of opening up new islands such as Grub, Chester, Snob, Ross and Smith. However, this may not come through as the A&NI Department of Environment and Forests is against this proposal.³¹

4.9.2 Ecotourism Activities Proposed by the A&NI Department of Environment and Forests

Apart from the IP&T, the A&NI Forest Department too is involved in tourism development.³² It has undertaken “ecotourism” activities, which are permissible in the Protected Areas of the islands. The department is proposing to open Alexander Island (beside Jollybuoy and Red Skin) for tourism as it has attractive beaches and is much more accessible from Port Blair, thereby making travel also cheaper. Grub Island (Figure 4.34) is another island to which the department is planning to start taking tourists on short trips in glass bottomed boats to view corals but without docking in order to avoid damaging the corals.

4.9.3 Proposals by IP&T that Have Been Sent to MoTC for Approval

The Department of IP&T, A&NI has also submitted several proposals in tourism for central assistance. Proposal for development of tourist destination at Havelock Islands and proposal for development of tourism destination at Ross Island have been sent to Ministry of Tourism. It includes the following:

1. Face-lifting of jetty area – setting up a tourist facilitation centre, passenger waiting hall, restaurants, toilets, travel desk, ticket counter, internet browsing centre and shops. The shops are to be removed from jetty and given houses in the facilitation centre.



FIGURE 4.34 Grub Island, Mahatma Gandhi Marine National Park

2. Refurbishment of Dolphin resort at Havelock for which funds have been sourced from Ministry of Tourism and Culture under additional central assistance.
3. At Kalapather in Havelock – construction of shelters in beach area, change rooms, toilets and fast food.
4. Face-lifting of Radhanagar Beach. Shops outside beach are to be dismantled. They are to be housed in prefabricated or eco-friendly structures. The department will either construct shops or provide funds to *panchayat* to build with specification.

4.10 Chapter Summary

The A&NI have seen a significant growth in tourist arrivals over the last 20 years; there are a total of 1,27,504 tourists who arrived into the A&NI in 2006 in comparison to the 10,000 in 1980. In terms of the composition of tourist traffic, in 2006, 93 per cent of all tourists were domestic and only 7 per cent, foreign. Further, over the last 26 years, the growth rate of domestic tourists is an astounding 1,243 per cent, whereas that of foreign tourists is a much lesser 332 per cent. This indicates that currently, in terms of tourist arrivals, the islands are dominated by domestic tourists. In terms of seasonality of tourist arrivals, by analysis of monthly tourist arrivals into the islands, we note that there is no distinct season with regard to domestic tourists. However, there is a distinct season with foreign tourists, with the months of January–mid-March and mid-October–December seeing substantially greater arrivals of foreign tourists than other times of the year. Now, the geographic concentrations of tourism activities in the Andamans is restricted to Port Blair town; surrounding areas and islands such as Wandoor, Chidiyatapu, Ross Island, North Bay and Mount Harriet; and select other islands/areas such as Havelock, Neil, Baratang, Diglipur, Long Island and Rangat. The popularity of attractions in and around Port Blair is greater for domestic tourists

then foreigners (as revealed by our primary survey with tourists where 43.5 per cent of foreign tourists stated that they had not visited any location or tourist spot in and around Port Blair). Outside of Port Blair, Havelock is the most popular island for tourists with high visitation by both domestic and foreign tourists. However, the popularity of Havelock is much more significant in the case of foreign tourists as it forms the centre point of most foreign tourist itineraries with average length of stay of foreigners being close to two weeks on the island.

A closer look at the profile of tourists visiting the islands indicates that in terms of gender, there are more males among domestic tourists but more females among foreign tourists. The age profile of tourists indicates that visitors to the Andamans (both domestic and foreign) fall largely within the 20–40 years category, highlighting that the islands are popular among young tourists. Data on the country of origin of foreign tourists reveals that a substantial proportion of foreign tourists coming to the Andamans are Israelis (43.5% of respondents in our primary survey), followed by the British. Among domestic tourists, majority are those who visit the islands by availing LTC and these are largely from the states of West Bengal, Bihar, Jharkhand and Delhi. Analysis on the typology of tourists visiting the islands reveals that while most foreign tourists would fall within the category of “backpacker” tourists, domestic tourists tend to visit in families or small groups – a factor again linked to their visit being on account of availing LTC.

To understand the rationale for specifically choosing the Andamans as a holiday destination, our survey revealed that the main reason for foreign tourists was the past experiences and recommendations of others, while for domestic tourists, it was the opportunity of availing LTC. Further, our survey revealed that the main attraction in the Andamans for tourists (domestic and foreign alike) are its beaches and the main reasons that make the Andamans different from other island destinations are its beaches and its untouched and pristine natural beauty. The major activities undertaken by foreign tourists on their holidays in the islands are swimming and relaxing on the beach, whereas for domestic tourists it is sightseeing. This indicates a distinct difference in the itinerary and holiday pattern of foreign and domestic tourists that would have differentiated impacts on the economy, environment and society of the islands.

As in most other destinations, the tourism industry in the Andamans is also multilayered and complex. Among different segments of the tourism industry, the accommodation sector has seen the most investment in the last seven years, with substantial investment also coming from the local community. Now, the highest concentration of accommodation units is in Port Blair, followed by Havelock Island. Our survey with tourists indicates that among foreign tourists, the Internet, information passed on by ‘word-of-mouth’ and the *Lonely Planet* are important sources of information about places to stay in the islands, whereas for domestic tourists, travel agencies do most of the booking as they are “packaged tours”. For most tourists, cleanliness and a good view are determining factors for the choice of their place of stay, with safety of the location being an additional factor of importance for domestic tourists. Our survey further revealed that now tourists seem satisfied with room facilities, tariff, location and safety aspects of accommodation units available in the islands but showed dissatisfaction on aspects of recreational options available and tour guide facilities offered by hotels. The food and restaurant sector in the Andamans has seen improvement in recent years,

especially in Port Blair town, with a better variety of restaurants opening up. However in the islands, availability of variety and vegetarian food is still quoted as a problem by many tourists. In terms of options for improvement, most tourists have indicated the pricing of food and variety as parameters that need improvement.

The travel agency and tour operator segment of the tourism industry of the Andamans is now catering to the needs of domestic tourists only, as most foreign tourists make their own trips without using tour operator facilities. Tour operators based in big metros such as Delhi and Kolkata arrange frequent trips to the islands (mostly for LTC tourists) and are complemented by local travel agencies in Port Blair. Our survey with domestic tourists visiting the islands revealed that now most are satisfied with the services and operations of their tour operators.

Developments in the transportation sector and boom in the Indian civil aviation sector have greatly influenced tourist inflow into the islands as well. From an earlier state of only 2 daily flights (from Chennai and Kolkata) operated by Indian Airlines, this has today increased to 11 daily flights into the islands by six airlines, resulting in the majority of domestic and foreign tourists opting to travel to the islands by air. Among different airlines, Air Deccan – the low-cost carrier – is the most preferred option of foreign tourists, whereas Indian Airlines, Jet Airways and Air Deccan are all used by domestic tourists. Tourists have indicated that more daily flights to islands and flights to more Indian cities are two areas where they would like to see improvement in the air travel sector to and from the islands. Inter-island travel by air (through use of helicopters), although an option, is not availed of by many tourists as it is much more expensive than travel by ship and is restrained by the limited number of helicopters at the disposal of the Civil Aviation Department. But the proposal of expanding the fleet and reserving certain helicopters for the exclusive use of tourists is being considered by the Administration. Although travel by ship is a less preferred option by tourists arriving into the islands, it is the chief mode of inter-island travel in the Andamans. A limited number of boats being plied by the Administration and the increased pressure from tourist traffic have led to a serious crisis of shortage of ship tickets to popular islands such as Havelock, during the peak foreign tourist season. To overcome this and the massive losses that the Shipping Directorate is incurring on account of providing subsidised services, the Administration is seriously considering opening up the inter-island ship travel segment to private investors and operators. The proposal of developing cruise tourism to the A&NI is also being seriously worked on by both the central Ministry of Tourism and the A&NI administration. The Central Government's proposal involves making the Andamans a cruise destination on circuits to South-east Asia and Sri Lanka.

We also see that both the Central Government and the A&NI Department of Tourism have several ongoing short-term and long-term projects for tourism development in the islands. Many of these projects involve improving existing facilities in Havelock and Port Blair and the development of new attractions like golf courses, amusement parks and sound & light shows. More Important, the earlier proposal of opening up 50 sites in 15 Islands in the Andamans for tourism – a proposal made by the A&NI Administration in its post-tsunami tourism promotion strategy – has not been implemented on account of opposition from the A&NI Department of Environment and Forests. The status of this proposal will be a critical factor in determining the spread of tourism in the Andamans and needs to be monitored closely.

NOTES

- 1 It must be stated that there are concerns with the process of data collection adopted by the department, especially with regard to tourist arrivals that need consideration. There is strong evidence of double counting of visitors, lack of clarity on who is treated as a tourist (for example, whether a visiting relative or a businessman is also being counted as a tourist). Further, our analysis indicates that there are high risks of double counting tourists and of including cruise tourists who have docked at the port for half-a-day to one day at the most, while counting the arrivals of foreign tourists. Therefore, although this report has used this official data for all analytical purposes in this report, we would strongly urge the department to reconsider its data collection methods and to ensure that tourist arrival data is more accurate and captures the right segment of tourists.
- 2 The figure is arrived at by the following calculation: Average monthly arrivals of tourists in 2006 (1,27,504/12 = 10,625)/ Projected population of A&NI in 2006 as per 2001 census (3,94,000) = 2.7 per cent.
- 3 Figure arrived at by the following calculation: Average monthly arrivals of tourists in 2006 (1,27,504/12 = 10625)/ Projected population of Port Blair town in 2006 as per 2001 census (1,10,610) = 9.6 per cent.
- 4 Butler, R.W. (2001) "Seasonality in Tourism: Issues and Implications", in Tom Baum and Svend Lundtrop (eds), *Seasonality in Tourism*, pp. 5–23, Elsevier, Oxford.
- 5 Ibid.
- 6 Perry, A. (2004) "Best Beaches You Can Get To – Beaches No 5 and No 7, Havelock Island, Andaman Sea, India", *TIME Asia*, Vol. 164, No. 20, 22 November.
- 7 In actual numbers: Number of Israeli tourists = 46/108 and Number of domestic tourists on travel to the A&NI by availing LTC = 668/918, where 108 is the sample size for foreign tourists and 918, the sample size for domestic tourists.
- 8 An important note is that for the primary survey conducted as part of this study, those who responded "British" as nationality have been categorised under this head. Other nationalities from the United Kingdom such as Scottish and Irish have been included in the category "Others" as appears in Figure 4.10. However, immigration data tabulates "UK" and "British" separately and it is unclear whether the UK figure includes the British or not.
- 9 CCS (LTC) Rules, 1988 - Visit to Andaman & Nicobar Islands instead of Home Town LTC and travel by air from Kolkata or Chennai to Port Blair and back – relaxation thereof, Official Memorandum, Ministry of Personnel, Public Grievances and Pensions, Government of India, 25th May 2005. [http://persmin.gov.in/circular_reports/estt/estt\(A\)/LTC%20to%20Port%20Blair.htm](http://persmin.gov.in/circular_reports/estt/estt(A)/LTC%20to%20Port%20Blair.htm) data retrieved April 2008.
- 10 Andaman Chamber of Commerce and Industry.
- 11 As stated to the research team in a personal interview on 28.10.2007 at Port Blair.
- 12 Hvenegaard, G.T. (2002) "Using Tourism Typologies for Ecotourism Research", *Journal of Ecotourism*, Vol. 1, No. 1, <http://www.multilingual-matters.net/jet/001/0007/jet0010007.pdf>, data retrieved March 2008.
- 13 Murphy (1985).
- 14 Note that our primary survey did not distinguish between tourists on the basis of which point in time they were on their holiday to be Islands – i.e. just arrived, just departing, have seen the Islands or have not. Therefore, these responses do not differentiate between those tourists who have actually been on their holiday and those who are going to start their holiday. The pre-holiday expectations and post-holiday experiences therefore have not been differentiated.
- 15 Holloway, Christopher J., *The Business of Tourism*, Fifth Edition, Addison Wesley Longman Limited 1998, pp. 67–69.
- 16 Classification of high end made by Andaman Chamber of Commerce during consultation.
- 17 Andaman and Nicobar Islands Chamber of Commerce during a consultation with the project team.
- 18 Holloway, Christopher J., *The Business of Tourism*, Fifth Edition, Addison Wesley Longman Limited 1998, pp. 67–69.
- 19 As foreign tourists do not usually use tour operator services on their holiday to the islands, their responses have not been elicited

- 20 Disaggregated data from official sources for arrival of domestic tourists by different means of transport into the islands is not computed and therefore not represented here.
- 21 Both Kingfisher and Spice Jet started operations to the Andaman and Nicobar Islands only in October 2007. As data collection for this project took place from July–October 2007, this could be a reason for the relatively low per cent of users of both these airlines.
- 22 Discussion with Mr. N Ravichandran, Officer-in-charge (Operations), Directorate of Civil Aviation, A&NI Administration on 27.7.2007 in Port Blair.
- 23 Data and information reproduced in this section is based on the interview with Directorate of Shipping, A&NI Administration, July 2007.
- 24 Interview with Director (Shipping Services), Commender Rajendra Kumar, 23/7/07, Directorate of Shipping Services
- 25 As told by Commander Rajendra Kumar, Director (Shipping Services), Directorate of Shipping, A&NI Administration in an interview on 23/7/07 in Port Blair
- 26 “Cruise ship calls at Port Blair”, A&NI Press Release, 19th May 2006, http://www.and.nic.in/cruise_ship.htm data retrieved April 2008.
- 27 “Andaman and Nicobar Tourism plans to operate a luxury cruise liner by 2008”, November 3rd 2007, <http://www.travelbizmonitor.com/articleDetails.aspx?id=1415§ionid=36&name=Top%20Stories> data retrieved April 2008.
- 28 “APTDC mulls cruise liner from Vizag to Andamans”, The Hindu Business Line, June 1st 2005, <http://www.thehindubusinessline.com/2005/06/01/stories/2005060102341700.htm> data retrieved April 2008.
- 29 “Invitation of Expression of Interest by Kolkata Port Trust for development of cruise tourism in the river Hooghly & coastal tourism in the Kolkata-Sagar-Puri / Kolkata-Sagar-Puri-Andaman circuit” Kolkata Port Trust, www.ipa.nic.in/Osd.doc data retrieved April 2008.
- 30 This section draws from information on plans and policies that has been provided to the research team directly by the A&NI Department of Tourism during the course of this research study. Several of them have not been dated.
- 31 As shared by Dr. Alok Saxena, Chief Conservator of Forests (Wildlife), Department of Environment and Forests, A&NI Administration in an interview, July 2007.
- 32 Annual Plan 2007-08 Detailed Programme (U-72), Sub Sector: Forestry and Wildlife, Scheme No. 15, Department of Environment and Forests, Eco-Tourism Scheme, July 2007.

5

Institutional, Governance and Policy Framework for Tourism Development in the Islands

The current institutional and governance framework for tourism development in the Andaman Islands is complex and multilayered on account of several factors. Being a union territory (UT), direction and financial support for tourism development in the islands largely comes from the Centre while responsibility for implementation rests with the relevant departments of the Andaman and Nicobar Islands (A&NI) Administration. In addition to the Central and State Governments, there are other bodies – at the national and international level – that have also influenced tourism development in the islands. This chapter presents a detailed outline of three aspects of the framework in which tourism now develops as a context, to understand the implications referred to in coming chapters. The first part focuses on the different institutions involved at various levels and their roles with regard to tourism issues in the islands.¹ The second part details the process of governance, especially local self-governments prevalent in the islands, and the consequent implications for development of tourism. The third part provides an overview of the multiple policies and plans that have been prepared for guiding tourism development in the islands.

5.1 Institutional Framework: Roles of Various Institutions at Different Levels Influencing Tourism Development in the Andamans

5.1.1 Central-level Institutions

The UTs are specified in Schedule I, Part II of the Constitution of India and are administered in accordance with the provisions of Articles 239–241 of the Constitution. Under the Government of India (Allocation of Business) Rules 1961, the Ministry of Home Affairs (MHA) is the nodal ministry for all matters of UTs relating to Legislation, Finance and Budget, Services and appointment of Lieutenant Governors and Administrators.² The Union Territory Division of the MHA deals with all legislative and constitutional matters relating to UTs, including the National Capital Territory of Delhi. It also functions as the cadre controlling authority of the Arunachal Pradesh–Goa–Mizoram and Union Territories (AGMU) cadre of Indian Administrative Service (IAS) and Indian Police Service (IPS) as well as the Delhi–Andaman and Nicobar Island Civil Service (DANICS) and the Delhi–Andaman and Nicobar Island Police Service (DANIPS). Moreover, it is responsible for overseeing the crime and law and order situation in the UTs. Importantly, all the demands for grants submitted by the UTs to the Union Government are channelised through the MHA making it the key ministry with respect to financial matters of the UT as well.

5.1.1.1 Ministry of Tourism and Culture (MoTC)

The central MoTC is the nodal agency guiding and supporting tourism development in the A&NI. Although it is only after 1997, when the MoTC–WTO (now UNWTO) master plan was prepared, that the islands have been identified as an important site for tourism promotion and the Centre has extended support in promoting and marketing the islands through its “Incredible India” campaign. The islands have also availed of Central Government schemes such as the large revenue generating schemes and rural tourism schemes under which projects for tourism have been sanctioned. The Central Government has commissioned several studies on tourism in the A&NI in the past five years. Major among these have been the “Development Strategy for Environmentally Sustainable Tourism in the Andamans” (UNDP/WTO Project IND/93/032), a project financed by the UNDP with the World Tourism Organization (WTO) as executing agency on behalf of the MoTC and A&NI Department of Tourism and undertaken by planning consultants Shankland Cox Entec, April 1997; “Carrying Capacity Based Developmental Planning for Implementation of Master Tourism Plan in the Andaman Islands” prepared by National Environmental Engineering Research Institute (NEERI), October 2000 and “Perspective Plan for Tourism Development in Andaman & Nicobar Islands: Draft Report”, May 2002 by A.F. Ferguson and Co. However, none of these master plans have been yet implemented in the islands.

5.1.1.2 Island Development Authority (IDA)

Established in 1986 by the then Prime Minister Rajiv Gandhi, the IDA was instituted to be the highest policy-making body for the island territories of India to “formulate policies and programmes for an ecologically sound, sustainable and integrated development of Andaman & Nicobar and Lakshadweep group of Islands”.³ Institutionally, the IDA is under the Chairmanship of the Prime Minister with its Secretariat located within the Planning Commission. A Standing Committee of IDA, set up under the Chairmanship of Deputy Chairman, Planning Commission evaluates various programmes, their constraints and strategies of implementation, and follows up on the recommendation of the IDA. During Rajiv Gandhi’s era, the IDA met regularly, sponsored many scientific studies and took major policy decisions, which, if implemented, would have had far-reaching implications. However, the activities of the IDA took a back seat in the 1990s after his death, with occasional meetings and no clear role in developing policies for the islands.⁴ After a long gap, the Tenth Meeting of IDA was held in January 2003 at Port Blair, A&NI at which a Standing Committee of Secretaries was set up for the development of A&N and Lakshadweep Islands. After the Congress-led UPA government took over in 2004, the IDA was convened for the first time in June 2007. While previous IDA meetings have dwelled largely on issues of land distribution, concessions to islanders and regulating immigration into the islands, the XI meeting discussed tourism prominently. It recommended that a single window clearance should be provided for tourism projects in the A&NI.⁵ The MoTC yet again reiterated the need to promote high- value, low-volume tourism in the islands and that although the Maldives and Mauritius model is recommended, the islands must be uniquely developed.

5.1.1.3 Ministry of Environment and Forests (MoEF)

Apart from the MoTC, there are other important central-level ministries that intervene on specific aspects of tourism development across the country, including in the Andamans. One such body is the MoEF that has direct jurisdiction and administration over the protected areas and the entire coast of the A&NI. Any activity within these forest areas and nearby or along the coast, including tourism, needs the direct approval of the MoEF. In recent years, with the MoEF also entering the tourism arena, especially in promotion of ecotourism, such initiatives have also been introduced in the Andamans.

5.1.1.4 Ministry of Shipping (MoS)

Another ministry that plays a highly influential role vis-à-vis the islands is the Ministry of Shipping. Considering the dependency of the islands on shipping services and the increase in demand on account of tourism, the ministry has had a pivotal role in ensuring the smooth operation of shipping services in the islands and thereby indirectly on tourism as well. In addition, the Ministry of Shipping is slated to play a pivotal role in implementing the central government's cruise tourism plans that have been developed since 2005 and in which the A&NI have been identified as a clear cruise destination.⁶

5.1.2 Departments of the A&NI Administration

5.1.2.1 Department of Information, Publicity and Tourism (IP&T)

The IP&T is the main administrative unit concerned with the development of tourism in the A&NI. The vision of the tourism department is "to exploit to the maximum the natural beauty and beaches of the Andamans Islands to promote tourism".⁷ The department believes that tourism has significant potential for revenue generation for the A&NI Administration and employment for islanders. The IP&T is the nodal agency of the Administration that is supposed to coordinate with central-level agencies and all other departments on the A&NI Administration on issues related to tourism. The IP&T believes that while the MoT is not the single authorising agency on issues, it is certainly the most important central-level ministry with which it coordinates on tourism projects. Being a UT with little funds of its own to develop tourism, the IP&T capitalises on central-level schemes (such as the large revenue generating schemes or rural tourism schemes) to develop projects on tourism for the islands.

5.1.2.2 Department of Environment and Forests

The department is the nodal agency with regard to environment and forests in the islands. Unlike other departments of the Administration which are accountable to the central MHA, the Department of Forests comes directly under the central MoEF. In 2002, with the Supreme Court Orders, the department was converted from a "commercial" department to a "service" department.⁸ Earlier, regulating the timber trade was one of the most important activities of the department, as it generated large amounts of revenue for the A&NI Administration. But the regulation on timber trade

following the Supreme Court Order of 2002, led to a reordering of the department's priorities now privileging conservation of the island ecology. The forest area of the islands (reserved and protected) directly comes under the jurisdiction of this department, which is responsible for conservation of this area. Any development activity within these boundaries requires their permission.

The department per se is not involved in tourism development or promotion activities. But it has undertaken some "ecotourism" activities which are permissible in the protected areas of the islands. Even here, the department is basically involved in providing basic amenities and the minimum requirements such as clearing trekking tracks, providing signages, basic accommodation or tents and so on. There is no large-scale promotion of tourism or provision of services related to tourism that the department is involved in. Even revenue generation from tourism is not a priority. The department essentially defines its role as a facilitator of ecotourism and other permissible activities, which are regulated, in select protected areas of the islands. The coordination with the tourism department is high because the forest department is responsible for giving the necessary permits.

5.1.2.3 Department of Social Welfare and Tribal Welfare

The present mandate of the department is to preserve the lifestyle of the Primitive Tribal Groups (PTGs) that inhabit the A&NI and minimise, to the best possible extent, their interaction with non-tribals.⁹ With regard to the trend of "Jarawa tourism" that was on the rise along the Andaman Trunk Road (ATR), the administration has clearly discouraged such forms of tourism on the ATR. It issues notice to all tour operators warning them against participating in any such form of Jarawa tourism. The department is clear that Jarawas or any other tribe should not be marketed or sold as products of tourism and that tribes should be kept far away from tourism. In this sense, the department has no specific role in tourism development on the islands except to ensure that tourism does not contribute in any way to the cultural or physical degradation of these tribes. There is not much coordination with the Department of Tourism on any matter at all.

5.1.2.4 Directorate of Civil Aviation

The Directorate is concerned with the regulation and use of air transport services within the territory of the A&NI which largely involves the use of its fleet of helicopters and fixed-wing aircraft. The responsibility of regulating air transport services from the mainland to the islands rests with the central Ministry of Civil Aviation. The priority use of the helicopters is for emergencies such as transporting patients, evacuating and for use of VIPs.

The current interface of the Directorate with tourism is in renting out its helicopters for tourists to visit certain popular islands such as Havelock and Neil. While the priority use of helicopters is reserved for VIPs to undertake visits or tours of other islands, since 2002 it has also been hired for tourist use on an individual request basis. The department added a new helicopter to its fleet in 2005, which was bought from the funds of the tourism department to increase the availability of helicopter services for tourists to Havelock, Neil, Mayabunder and Hut Bay. However, as part of government policy, the helicopters service is run at highly subsidised rates and therefore the revenue generation

from renting copters out to tourists is negligible. But the department feels that as its fleet capacity increases, there is more scope to keep aside one helicopter mainly, not exclusively, for tourist use, where an advance reservation system would be put in place and prices increased accordingly. The A&NI Administration Department of Tourism has provided funds for the purchase of a new helicopter for priority use for tourists.

5.1.2.5 Directorate of Shipping

Shipping facilities are the backbone of the islands and the nodal agencies entrusted with the task of ensuring smooth and efficient shipping services in the islands are the Directorate of Shipping, A&NI Administration and the Shipping Corporation of India. The priority of the Directorate is to ensure that the needs of islanders for their inter-island movement and supply of their basic necessities is met. Tourism comes only next. Shipping services in the islands have been subsidised for decades,¹⁰ and today, in spite of the reality that the islanders might be able to pay more for these services, the Directorate admits that there is political pressure that will not allow the tickets prices to be raised.¹¹ The current state of shipping services is that the Directorate is woefully short of ships to even meet the local demand. But as it feels that tourism should not be completely ignored it is accommodating the needs of tourists as far as possible within its present constraints.

There is constant pressure on the Directorate from the Department of IP&T to cater more to the needs of tourists. In the peak tourist season, the ratio of tourists to locals in the Foreshore sector might be 40:60, but in the tourist off-season it might fall to 10:90.¹² But now, especially in the post-tsunami context, the priority of the Directorate is to cater to local connectivity needs, relief and rehabilitation requirements (especially in the Nicobar sector) and not to cater to tourists needs. The Directorate is coordinating directly with the central MoS in the purchase of new ships, improvement of shipping services in the islands and even discussing policy initiatives such as the privatisation of shipping services in certain sectors of the islands. The port facilities, which come under the Port Management Board, are also being looked into seriously and there are plans to revamp the entire port.

5.1.2.6 Department of Police

The main role of the Department of Police in the context of tourism is in issuing of the Restricted Area Permits (RAPs) to foreign tourists. The foreigners and immigration branch of police is responsible for issuing of RAPs to foreigners at the airport and seaport. It is given initially for a period of 30 days and is extendable for 15 days. On issues of tourist security, the islands currently do not have any tourism police deployed. The particular police stations are responsible for the stay and movement of foreigners. While the islands are a fairly safe destination, the movement of foreigners at all time is recorded by police stations and through forms which are submitted by tourism establishments housing foreign tourists.

5.1.2.7 Public Sector Companies Involved in Tourism Activities – ANIIDCO and ANIFPDL

Apart from the above listed departments, two other public institutions currently involved in tourism activities in the islands are the Andaman and Nicobar Islands

Integrated Development Corporation (ANIIDCO) and the Andaman and Nicobar Islands Forests and Plantation Development Corporation (ANIFPDL).

ANIIDCO was incorporated on 28 June 1988 under the Companies Act, 1956 for rapid economic growth of the islands, with the main objective of developing and commercially exploiting the natural resources for the balanced and environment-friendly development of the territory. The chief areas of operation of ANIIDCO are in the sectors of fisheries, tourism, finance, industry and supplies.¹³ As part of its tourism sector activities, ANIIDCO currently runs one three-star hotel – the Megapode Nest that has an average occupancy of 70 per cent through the year and an approximate turnover of Rs 2.5 crore.¹⁴ The management feels that this hotel is currently running on a no-profit-no-loss basis mainly on account of the high number of employees, who, the management feels, have low productivity. Plans are on to expand the number of rooms on the property and outsource the catering and other services to improve efficiency. Apart from Megapode Nest, ANIIDCO also runs two restaurants in Port Blair, but these do not bring in much revenue.

ANIIDCO's future plans in tourism include developing a shopping complex on a 10,000 m² property in Port Blair that would also house a three-star hotel and developing their 48-acre beach-front property on Havelock Island. For the latter, the bidding process is complete and major brand owners such as the Taj Group, the Park Group and the Casino Group have expressed interest. This project, to be developed on lease by ANIIDCO in collaboration with one of the big companies, is to be a flagship project for the corporation that envisages a 150-room property with an investment of approximately 150–200 crores.¹⁵

The ANIFPDL was incorporated under the Companies Act, 1956 in 1977 with its headquarters at Port Blair by the Government of India (GoI) in the wake of acceptance of the recommendations of National Commission on Agriculture. The main objective of forming the corporation was to develop and manage the inaccessible forests in Little and North Andaman on the principle of sustained annual yield and to undertake cultivation of agricultural and horticultural crops, namely red oil palm, rubber, spices, medicinal and aromatic plants.¹⁶ In recent years, in addition to its forestry projects, the corporation has begun venturing into tourism, especially ecotourism activities.

5.1.3 International Intergovernmental Organisations: UNDP and UNWTO

With the rising discussion on tourism the world over, a large number of international intergovernmental organisations have begun intervening in the sector in various forms. However, specifically in the context of the Andaman Islands, only two of these – the United Nations World Tourism Organization (UNWTO) and the United Nations Development Programme (UNDP) – have been active on tourism. In October 1995, the Ministry of Civil Aviation and Tourism (now MoTC), A&NI Administration, WTO (then only WTO, not UNWTO) and UNDP began work on the preparation of a “Development Strategy for Environmentally Sustainable Tourism in the Andamans” (UNDP/WTO Project IND/93/032) commissioned by the Ministry of Civil Aviation and Tourism, GoI. The final report that was submitted in April 1997 presented a comprehensive long-term Tourism Structure Plan for the Andamans with proposals for both the spatial and product development of tourism in the islands. This report was presented to the Steering Committee of the project and accepted on their behalf by

His Excellency Ishari Prasad Gupta, the then Lieutenant Governor of the islands. The Steering Committee accepted this report in principle as a “framework for guiding the development of the tourism strategy and policies of the islands subject to such adjustments as may be necessary for practical or political reasons”.¹⁷ It is unclear whether the A&NI Administration or the MoT has taken on the task of implementing the Master Plan in its entirety. However, the Tourism Vision Document of the A&NI Administration has clearly articulated its desire to implement the recommendations of the MoTC–A&NI Administration–WTO–UNDP report. It has also suggested undertaking another detailed research study as a continuation of the previous one that could assess the status of the tourism sector and suggest strategies accordingly.

In the post-tsunami context, the UNWTO launched a massive tourism recovery programme titled the Phuket Action Plan, which however did not include India.¹⁸ There has since then been no direct activity by either of these organisations in the islands.

5.2 Governance Framework in the Andaman and Nicobar Islands and Implications for Tourism

The administrative identity of the Andaman and Nicobar Islands as a “union territory” as against a “state” assigned by the Constitution of India has specific implications for understanding how any development activity, including tourism, functions in these Islands. This section presents the existing governance structure in the islands emerging from the context of being a UT. It also examines in detail the current system of local self-governance, as it has important implications for efforts towards democratising tourism development here.

5.2.1 *The Context of the Union Territory*

Historically, the A&NI were declared as a scheduled district in 1874 under the Scheduled Districts Act with the main objective of providing simple and good administration in these areas. Under the Government of India Act, 1919 too, the territory of A&NI, being too small to have a Legislature, continued to remain under Central Legislature, with powers vested in the then Governor General to make regulations under the Act and to extend laws of other parts of India to it as scheduled district. The position continued under the Government of India Act, 1935 except that the Governor General was empowered to make regulations for peace and progress and for good governance of A&NI. Until A&NI came under the occupation of Japanese forces during the Second World War, the archipelago was used by the British Government in India as a penal settlement. Even after Independence the Union Constitution Committee in its report submitted on 21 October 1947 favoured direct administration of A&NI by the Centre.¹⁹

The term “Union Territories” was phrased in the Constitution (Seventh Amendment) Act, 1956 which substituted the term for what were earlier referred to as “Part C States” in the original Constitution of India, 1949. The special feature of the Part C states was that they were administered by the President through a Chief Commissioner or a Lieutenant Governor acting as his agent. Since then, several parts of the country identified in 1956 as UTs have progressed to becoming states (such as Manipur, Himachal Pradesh,

Tripura and Delhi) but the A&NI have remained a UT. Accordingly, Article 239(1) of the Constitution states: “Save as otherwise provided by Parliament by law, every Union Territory shall be administered by the President acting, to such extent as he thinks fit, through an administrator to be appointed by him with such designation as he may specify”. Thus, the administrative head of a UT is an Administrator as an agent of the President and not a Governor acting as the head of the state. Legislatively, Article 246 (4) of the Constitution grants exclusive legislative power over a UT to the Parliament. However, in the case of select UTs, the President has legislative power, namely to make regulations for the peace, progress and good government of these territories. This power of the President overrides the legislative power of Parliament inasmuch as a regulation made by the President as regards these territories may repeal or amend any Act of Parliament which is for the time being applicable to the UT (Article 240(2)).²⁰ Subsequent to these original provisions, the Government of Union Territories Act, 1963 permitted the establishment of a Legislature in a few UTs (such as Puducherry). However, the A&NI continue to be administered by the Administration – the Lieutenant Governor. In addition, the A&NI have one Parliamentary constituency and elect one representative during the general elections to the Lok Sabha (Lower House) of the Parliament.²¹

Being directly under the administration of the Central Government, directives for development and funds for the same come from New Delhi and are implemented by the A&NI Administration, headed by the Lieutenant Governor. The formation of an Assembly is currently being strongly debated in the islands with many opining that it might be a reality soon. Many successive government bodies, including, most recently, the Report of Parliamentary Committee on Home Affairs have strongly supported the need for constituting an Assembly in the islands. The perspectives and implications of this move have been discussed in Chapter 9 of this report.

The absence of an elected legislative body in the islands has serious bearing on the form and pace of all developmental activities. Therefore, in the context of tourism development as well, much of the direction and decisions on the sector come from the central MoTC and are only implemented by the local Department of IP&T. However, despite being administered as a UT and with no elected government at the federal level, the islands do have a strong history and identity of local self-governance institutions.

5.2.2 Local Self-Government in the Islands

Before the 73rd Constitutional Amendment and the enforcement of the A&NI (Panchayats) Regulation Act 1994, the islands had village *panchayats* and village councils and an indirectly elected council called the A&N Pradesh Council. The Council had a membership of 30 which included Administrator, the Member of the Lok Sabha, the Chairperson of the Port Blair Municipal Council, 25 members elected by various *panchayats* or village councils and one person each belonging to the Scheduled Tribes (STs) of the Nicobarese, Andamanese, Onge and Shompen,²² and one woman nominated by the Administrator. Thus, there has been a long history of a strong local self-governance movement in the islands.²³

In the wake of the 73rd Constitutional Amendment, the President promulgated the Andaman and Nicobar Islands (Panchayat) Regulation, 1994 that extends to the whole territory of the A&NI. This excludes the areas that fall under the Port Blair Municipality and the Tribal Reserved Areas (as identified in the Andaman and Nicobar Islands

(Protection of Aboriginal Tribes) Regulation, 1956). However, it is important to note that despite the fact that the islands have scheduled tribes, no part of the A&NI figures in the list of Schedule V and VI Areas of the Constitution. There has been little anthropological study of the systems of local governance or self-governance prevalent among these indigenous communities, especially the Negroid tribes. However, suffice it to say that whatever were their systems of governance, have not been integrated into the governance system adopted in the islands.

On the basis of the Panchayat Regulation Act, a three-tier *panchayat* system was introduced which contained the following:

- ♦ *gram panchayat*
- ♦ *panchayat samiti*
- ♦ *zilla parishad*

The election to the office of the *grama pradhans* are to be held directly. The *pramukh* and *up-pramukh* of the *panchayat samiti* are to be elected from among these elected representatives and the *adhyaksha* and *up-adhyaksha* of the *zilla parishad* from among the *samiti* members. The tenure of *panchayats*, *grama pradhans* and *samiti* members is five years, whereas the office bearers of the *zilla parishad* are elected for the duration of the financial year. Reservation of seats for women and STs is applicable at all three levels.

5.2.2.1 Membership

Table 5.1 presents the total number of elected officers of Panchayati Raj Institutions (PRIs) in various regions of the islands:

TABLE 5.1 Total Number of Elected Officers of PRIs in Various Regions of the Andaman & Nicobar Islands

Serial Number	Region	Gram Panchayat	Panchayat Samiti	Zilla Parishad
1.	Diglipur	13	1	—
2.	Mayabunder	8	1	—
3.	Rangat	14	1	—
4.	Port Blair	10	1	1
5.	Ferrargunj	15	1	—
6.	Little Andaman	4	1	—
7.	Campbell Bay	3	1	—
Total		67	7	1

Source: Table 1.3, "Basic Statistics", 2005–2006, Directorate of Economics and Statistics (DES), A&NI Administration

The total membership in each of these is as follows:

- ♦ in the 67 *grama panchayats*, total membership is 759, including 67 directly elected *pradhans*
- ♦ in the 7 *panchayat samitis*, a total of 67 elected members (each constituency electing one member and also including (a) a proportion of *pradhans* of *grama panchayats* by rotation for a prescribed period and (b) the MP)
- ♦ in the *zilla parishad*, there are 30 elected representatives (one each from 30 constituencies and (a) 7 *pramukhs* from the *panchayat samiti* and (b) the MP)

5.2.2.2 Powers and Functions

The Andaman and Nicobar Islands (Panchayat) Regulation, 1994 has vested each level of PRI institutions with enormous powers and functions to enable them to function effectively as units of local self governance. Most of these are very relevant to the context of tourism development and have therefore been detailed here.

1. At the level of the *grama panchayat* – The Second Schedule to the Regulation lists out a comprehensive range of matters in respect of which the *grama panchayat* will have authority so as to enable it to function as an institution of self-governance in the preparation of plans for economic and social justice. These have been categorised under nine spheres as (a) sanitation and health, (b) public works, (c) education and culture, (d) self- defence and village defence, (e) planning and administration (f) community development, (g) agriculture, preservation of forests and pasture lands (h) animal husbandry and (i) village industries. A complete list of these matters has been reproduced in Annexure 7.

In addition, the *grama panchayat* has the following specific powers and functions:

- ♦ in respect of all roads, streets, bridges, culverts and other properties that are placed under its direct management and control by the Administrator, the power to widen, open, enlarge or undertake any other maintenance activity
 - ♦ duty of collection of land revenue and other recoverable arrears, if directed by the Administrator
 - ♦ organise a Village Volunteer Force whose services may be utilised for general watch and ward purposes in the village
 - ♦ administer all such properties (such as open sites, public roads and streets; public channels and water sources; drains, sewers and drainage works; sewage, rubbish and other offensive matter; public lamps, lampposts and connected apparatus) that are placed under its direct management and control by the Administrator
 - ♦ levy a wide range of taxes, including those on the following:
 - ♦ owners or occupiers of buildings
 - ♦ professions, trades and employment
 - ♦ on vehicles
 - ♦ on cattle
 - ♦ on theatre or show tax on entertainment and amusements
 - ♦ a lighting tax
 - ♦ a drainage tax
 - ♦ fees for providing sanitary arrangements
 - ♦ fees for sale of goods in markets
 - ♦ license fee for plying the public ferry
2. At the level of the *panchayat samiti* and *zilla parishad* – in extension to the powers and functions of the *grama panchayat*, the other two tiers of the system have also been vested with similar and in certain cases greater powers to enable them to function effectively. These have been detailed in Schedules V and VI of the Regulation and have been reproduced in Annexure 8.

Overall the Regulation provides a sound base for vesting the requisite powers in the islands' PRIs to enable them to function as units of local self-governance. In addition,

the Regulation has suggested the setting up of a Finance Commission for the UT to review the financial position of *panchayats* and make recommendations on the distribution of net revenue proceeds between the Administration and *panchayats*. The Finance Commission was set up in 1995 and its recommendations are still being considered by the A&NI Administration.

5.2.2.3 Port Blair Municipal Council

The town of Port Blair has a Municipal Council that represents the town population and is responsible for its administration. The main functions of the council are providing basic urban services such as sanitation and conservation, potable water, street lighting, disposal of carcasses, shelter and lodging facilities, provision of civic amenities, namely parks and gardens, community assets, namely footpath, drain and retaining wall. Initially, the Municipal Board had an area of 14.14 km² with population of 60,000 and 11 wards in 1980, which has been extended to 17.74 km² and a population of 1,25,000 divided into 18 wards in recent years. The council has important functions in the context of increasing tourism growth in the town, which are primarily as follows:

- (a) ensuring the supply of water to meet the needs of the residents of Port Blair and cater to the needs of hotels and tourists
- (b) putting in place appropriate building bye-laws for construction of hotels, resorts and other related structures within their own jurisdiction
- (c) develop mechanisms for the proper disposal of sewage and solid waste generated by the town

In relation to its functions of providing civic amenities, the council has invested in some activities such as lighting, setting up of dust bins and other facilities at popular tourist spots within the city area such as the Cellular Jail, the Marina and Corbyn's Cove.

5.2.2.4 District Planning Committee

The Andaman and Nicobar (Municipal) Regulation 1994 provides for constitution of a District Planning Committee to consolidate the plans prepared by the *panchayats*, municipalities and the tribal administrative bodies in the reserved areas, and to prepare a draft development plan for the UT. Importantly, the District Planning Committee is the apex organisation responsible for decisions on the allocation of funds for local planning and development activities in the A&NI.

5.2.2.5 Role of PRIs in Tourism Development Activities

Now, however, the role of PRIs in respect to development of tourism in the islands is very minimal. At the highest level, the *zilla parishad* does not have special funds allocated for tourism but uses grant money to construct support infrastructure such as roads and public toilets, and for provision of drainage facilities at tourist spots. At the local village level, the *panchayat* is only approached for provision of building clearance to any enterprise, including tourism establishments such as hotels, resorts and shacks, on the island. All other clearances and permissions are sought from Port Blair directly giving very little room for the position and influence of the *panchayat*. In few important

panchayats in tourism areas such as Havelock, Neil, Baratang, Wandoor and so on, *panchayats* run guest houses that are let out to tourists and are indirectly involved in other activities such as clearing garbage from tourist spots and maintaining roads. Apart from these initiatives, there is no decision-making power or influencing power of *panchayats* on tourism development matters in the islands.

5.2.2.6 Status of Devolution of Powers to PRIs and Progress of Decentralised Planning in the Islands

The Parliamentary Standing Committee on Home Affairs, in its Report on Administration in the Andaman and Nicobar Islands (2006),²⁴ notes that consequent upon the 73rd and 74th Amendments to the Constitution, although the participation of the people in planning and execution of developmental works in the UT started at the grassroot level, the process of delegation of powers and functions to PRIs have been very slow. The subjects apportioned to them are limited and even in those areas the transfer has not been complete. In actual practice, only the activities of Public Works Department (PWD), that is rural roads and rural water supply have been transferred to PRIs until now on a mutual agreement between the PRIs and PWD. Even though, the activities of PWD had been transferred, funds and functionaries required for proper upkeep and maintenance of the transferred assets were yet to be provided. In respect of other departments, vis-à-vis, agriculture, electricity, fisheries and rural development, though the Administration had specified the functions to be transferred to the PRIs, nothing concrete had been done so far to execute the orders of the Administration in its true letter and spirit. Consequently, the Committee recommended that local bodies may be delegated more powers and functions without further delay so that they can meet the people's aspirations. Further, the Committee recommends that these bodies should be supported by adequate staff, finance and other logistics.

The Ministry of Panchayati Raj, GOI in a specific Joint Resolution for the A&NI sent out in March 2007²⁵ also made the following observations and recommendations:

- ♦ It observed that “Although the devolution of functions to the three tiers of PRIs has been provided for in the A&N Panchayati Raj Regulation, substantive operationalisation on the ground of devolved activities requires acceleration through the preparation and implementation of a detailed Activity Map comprising all 29 subjects in the Eleventh Schedule”.
- ♦ With regard to the devolution of finances, the Resolution observed that a large sum of Rs 93.45 crores remains unutilised by the PRIs of A&NI of the total disbursements of grants till 2006–2007 and recommended that the Administration assist the PRIs in duly spending this amount.
- ♦ It directed that the District Planning Committee must meet before the 10th of October each year to fulfil its duties of finalising a consolidated plan for the islands and submit its recommendations to the Administrator.
- ♦ It recommended the opening of a separate budget head or “panchayat sector windows” under the Budget of the UT that would allow for effective devolution and proper implementation of powers of the three tiers.
- ♦ The Resolution lists a set of 13 specific steps that would be undertaken by the Union Ministry to strengthen PRIs in the islands. These steps include technical assistance to undertake further PRI reform, securing funding assistance, establishment of a capacity and infrastructure development scheme – *gram swaraj*, capacity building

and training of elected representatives, creating awareness about PRIs among the youth, women, student community and aspirants to PRI offices, computerisation and e-governance – and assisting the Administration in the modalities of maintaining a *panchayat* database.

It is important to keep this assessment and these steps in mind as later chapters of this report discuss the potential role for *panchayats* in determining the direction of tourism development in the islands.

5.3 Policy Framework for Developing Tourism in the Andaman Islands

As stated earlier, much of the thought on how tourism is to be developed in the islands has taken place through a plethora of plans, policies and development strategies commissioned by both the central MoTC and the A&NI Administration, as well as some independent studies. Of these, two – the A&NI Tourism Policy 2003 and the A&NI Tourism Vision Statement (2002–2027) – have been prepared by official authorities while the others are commissioned studies or reports. This section provides an overview of the plans and policies as well as a comparative analysis across broad indicators that will highlight what the policy thrust has been thus far on the model and direction that tourism must adopt for the islands.

5.3.1 Tourism Policy 2003, A&NI Administration

The Tourism Policy for the A&NI is a rather simplistic document serving very little of its purpose of providing guideline and principles for implementation. The one-page document states its vision to develop the islands “as a quality destination for eco-tourists through environmentally sustainable development of infrastructure without disturbing the natural eco-system with the objective of generating revenue, creating more employment opportunities and synergies and socio-economic development of the island”. Much of the ambitious plans and projects for tourism in the Andamans have been delineated through a plethora of commissioned master plans prepared by research institutes and interested parties, the details of which are given in the following sections.

5.3.2 Tourism Vision (2003–2027), A&NI Administration

The vision document on tourism begins thus:

The limited scope for industrial activity on the islands coupled with the decline in the wood-based industry pursuant to the Supreme Court judgement dated May 7, 2002 has led to tourism being identified as a thrust sector for economic development, revenue and employment generation on the islands. Keeping in view the fragile ecology and limited carrying capacity of the islands, the objective of the Andaman and Nicobar administration is to strive for sustainable tourism.

The policy document outlines six objectives:

- ♦ to address the growing unemployment problem by placing thrust on tourism
- ♦ higher revenue generation through tourism
- ♦ promoting concepts of ecotourism
- ♦ promoting the private sector in tourism
- ♦ to harmonise ecology and tourism for the benefit of people of the islands

The Vision Statement reads “To develop Andaman and Nicobar Islands as an up market island destination for eco-tourists through environmentally sustainable development of infrastructure without disturbing the natural eco-system with the objective of generating revenue creating more employment opportunities and synergise socio-economic development of the islands”. The policy outlines a series of vision targets spread over four terms 2003–2007, 2008–2012, 2013–2017, 2018–2022 and 2023–2027 that list out the priority activities of the Administration in each. The main thrust is on opening more islands for tourism, obtaining relaxation in restrictions such as the Coastal Regulation Zone (CRZ) and RAP, improving transport facilities especially the inter-island shipping services, implementing the “master plan proposed by the UNDP/WTO report”, developing newer products like water sports complexes and investing in promoting the islands internationally.

5.3.3 Development Strategy for Environmentally Sustainable Tourism in the Andamans, April 1997, Ministry of Civil Aviation and Tourism – GoI, A&NI Administration, WTO and UNDP

The Department of Tourism, Ministry of Civil Aviation and Tourism²⁶, GoI and the A&NI Administration, Department of IP&T, in association with the UNWTO (then just the World Tourism Organisation) had undertaken a project with UNDP funding for developing a long-term strategic Master Plan to enable environmentally sustainable tourism in the Andaman Islands.

The plan document has been divided into the following three volumes:

1. Volume 1: Tourism Structure Plan for the Andamans
2. Volume 2: Action and Development Programme
3. Volume 3: Basic Studies and Analyses

Volume 1 talks about major spatial planning and zoning recommendations. The spatial development strategy has basically attempted the development of tourism in various zones. The concept of having such strategy is to have phased development in the islands, whereby most important “marketable attractions” get developed in the first place. The plan claims that such a spatial strategy finally leads to a competitive tourism development and almost all the areas of islands are brought under tourism phase by phase.

Volume 2 of the plan basically deals with policy issues and proposed institutional arrangement for tourism development. The plan proposes the following for removal or relaxation of institutional constraints:

- ♦ reduction of the coastal development prohibition zone from 200 m to 30 m behind the High Tide Line (HTL) in areas scheduled for tourism development

- ♦ de-reservation of forest land in similar areas
- ♦ removal of restrictions on the internal movement of foreigners and abolition of police entry permits for foreigners
- ♦ simplification of procedures for entry into forests or protected areas

The other institutional arrangement championed by the plan is private sector participation.

In the analysis of the existing scenario (Volume 3), the document has given adequate analysis of socio-cultural characteristics, historical developments, economic profile and tourism potential of the islands. Economic review, analysis of tourist attractions and market prospects of tourism in the Andaman Islands have got a special emphasis in the report. The market potential and tourism promotion has been compared with other island destinations such as Mauritius, Maldives, Seychelles and other South East Asian and Pacific locations. The possible tourism products (such as scuba diving, yachting, port fishing, boat cruises and general water sport) for making Andaman on par with other island destinations are also suggested. Improvement of infrastructure and investment climate has been recognised as conditions for realising the potential of the islands. The plan talks about environmental assets of the island as possible products to attract “high-value, low-volume, internationally competitive tourism”.

5.3.4 Carrying Capacity Based Developmental Planning for Implementation of Master Tourism Plan in the Andaman Islands prepared by NEERI (National Environmental Engineering Research Institute), October 2000

In response to concerns that were expressed by the MoEF as to whether an increase in tourism as envisaged in the MoTC–WTO Master Plan would cause adverse impacts on the ecology of the islands and the life style of the indigenous tribal peoples of the island; on the advice of the MoEF, the MoTC requested NEERI to undertake a Carrying Capacity Study, that is an assessment of the maximum development activities including tourism that can be sustained by the island, before implementing any of the recommendations of the Master Plan.²⁷

While NEERI (2000) undertakes a detailed assessment of several environmental parameters of the islands, of significance is to note what it said on the potential impacts if the MoTC–WTO plan was implemented. Below is a summary table from the report

TABLE 5.2 Situational Analysis on the Implementation versus Non-Implementation of the MoTC–WTO Master Plan for Tourism on the Environment of the A&NI

Non-implementation of Master Tourism Plan	Implementation of Master Tourism Plan
Haphazard Growth of Beach Resorts and Hotels Encroachment in Non-Confirmatory Area	Planned Development of Beach Resorts Land Provision in Appropriate Land-use Category
Inadequate Infrastructure Facilities	Infrastructure Development Inbuilt in the Plan

Continued

TABLE 5.2 Situational Analysis on the Implementation versus Non-Implementation of the MoTC–WTO Master Plan for Tourism on the Environment of the A&NI—cont'd

Non-Implementation of Master Tourism Plan	Implementation of Master Tourism Plan
Perceived Potential Damage to Ecological Resources	Recommendation and Monitoring Mechanism for Protection of Bio-Diversity
Reduced Financial Receipts	Increased Financial Outlay
Scarcity of Essential Resources	Proper Planning for Providing Storage Facility for Essential Resources
Growing Inaccessibility to Tourist Spots <i>Slower Transport Services</i>	Improved Conveyance to Tourist Destinations Faster Conveyance Systems
Inefficient Handling, Treatment and Disposal of Sewage and Solid Waste	Captive Facility for Handling, Treatment and Disposal of Sewage and Solid Waste
Crowding of Tourist Destinations	Dispersal of Tourist Packages
Reliance on Existing Dwindling Resources	Promoting Captive Water and Power Availability
Encroachment in Forest Land and Effects There On	Provision of Only Temporary Camping Facilities in Forest
Non-restrictive Use of Turtle Nestling Beach	Blanket Ban on Use of Turtle Nestling Beach
No Plan for Education and Awareness on Eco-Tourism	Training and Awareness Inherent in Master Tourism Plan

Source: NEERI (2000).

that compares the scenario and environmental impact on the islands if the MoTC–WTO Master Plan were implemented and if it were not.

In effect, the NEERI report concluded as follows:

- ♦ Implementation of Master Tourism Plan would streamline the unplanned tourism activities and provide better facilities to tourists
- ♦ Not developing tourism as per the Master Plan does not offer any environmental benefits; rather haphazard tourism activities in the absence of the Master Tourism Plan will result in environmental degradation.

5.3.5 Perspective Plan for Tourism Development in Andaman & Nicobar Islands: Draft Report, MoT, May 2002

The report that was prepared by A.F. Ferguson and Co. provides an analysis of the existing limitations for development of tourism in the islands and on the basis has drawn up a Tourism Development Strategy and Action Plan. It suggests that the principles around which the perspective plan has been developed are as follows:

- ♦ zero-impact / eco-tourism through the adoption of zoning systems
- ♦ natural rather than manmade attractions
- ♦ growth as per carrying capacity to allow for regeneration
- ♦ high-value tourism (to balance returns with lower volumes)
- ♦ spatial distribution through a “Hub and Spoke” concept
- ♦ sustainable tourism

The hubs identified were as follows:

Area	The Spokes								
	Hub Resorts	Beaches	Island	Adventure	Mobile Culture	Cruise	Heritage	Nature	Forest
North Andaman	Diligpur	✓	✓	✓	✓		✓	✓	✓
North to Middle Andaman	Mayabunder	✓	✓	✓	✓		✓	✓	✓
Middle Andaman	Rangat	✓	✓	✓	✓				✓
South Andaman	Port Blair, Havelock, Neil	✓	✓	✓	✓	✓	✓	✓	✓
Little Andaman	Little Andaman	✓		✓	✓			✓	✓
Nicobar	Car Nicobar, Katchal, Great Nicobar	✓		✓	✓	✓		✓	✓

And the area-wise development strategies were as follows:

Period	Nature of Development
0-2 years	<ul style="list-style-type: none"> ♦ concentrate on existing tourist destinations and products ♦ Port Blair will continue to be the only entry point
3-5 years	<ul style="list-style-type: none"> ♦ develop Diglipur as the second entry point ♦ circuits for development: <ul style="list-style-type: none"> –Diglipur and Mayabunder –Port Blair, Baratang, Rangat –Port Blair, Little Andaman
6-10 years	<ul style="list-style-type: none"> ♦ Cruise tourism in Nicobar Islands
>10 years	<ul style="list-style-type: none"> ♦ Develop Great Nicobar as the third entry point ♦ Great Nicobar, Katchal and Car Nicobar will be the fourth circuit

The report also provided a detailed set of institutional guiding points addressing each department of the Administration and the roles they are to play in supporting tourism development.

5.3.6 FICCI Study on Andaman and Nicobar, an Emerging World Class Tourist Destination for the New Millennium, 2002

The only industry initiative the Federation of Indian Chambers of Commerce and Industry (FICCI) provides a thrust on marketing and promotion of the islands as an international destination. It outlines the specific improvements required in the air transport and shipping services and pitches for developing forms of tourism such as

cruise tourism and business tourism in the islands. It also mooted for the declaration of the island as a “Special Tourism Area” such that an integrated approach could be adopted for its planning and development.

5.3.7 Comparative Analysis of the Various Plans, Policies and Reports

It is essential for us to understand the thrust of these documents as they clarify the intention of both the Administration as well as other interested parties on what they prioritise in the strategy for sustainable development of tourism in the islands. Such an analysis will also help bring out the critical lacunae that exist in these policies and help highlight the need for addressing these in future policies. Below is a table generated that compares the above detailed plans and policies across select key indicators that are important constituents of any holistic tourism policy or strategy plan.

TABLE 5.3 Comparative Analysis of Tourism Plans and Policies Developed Thus Far for the Andaman & Nicobar Islands (A&NI)

Parameters (Arranged According to Broad Themes and Issues or Impacts)	Tourism Vision of the A&NI	UNDP/MoT Report	NEERI Report^a	A.F. Ferguson Report, MoTC	FICCI Study
<i>1. Tourism Product Development and Marketing</i>					
Cruise Tourism	✓	✓	NA	✓	✓
Development of Tourism Market	✓	✓	NA	✓	✓
Overseas Promotional Strategy	✓	✓	NA	✓	✓
High Value, Low Volume Tourism	✓	✓	NA	✓	✓
Opening Up More Areas/Islands	✓	✓	✓	✓	✓
Opening Up of the Nicobars for Tourism	✓	x	NA	✓	x
<i>2. Tourist Infrastructure and Connectivity</i>					
Accommodation Expansion	✓	✓	NA	✓	✓
Direct International Connectivity Via Air/Sea Routes	✓	✓	NA	✓	✓
Infrastructure Support	✓	✓	✓	✓	✓
Single Window Clearance for Tourism Projects	x	x	NA	✓	x
Subsidies/Tax Holidays/Incentives for Industry	x	✓	NA	✓	x
<i>3. Local Community Participation and Benefits from Tourism</i>					
Capacity building	✓	✓	✓	✓	x
Employment Generation for Local Community	✓	✓	NA	✓	✓
Interface with Local Self-Governments	x	✓	x	x	x
Local Community Benefit	✓	✓	NA	✓	x
Local Community Participation	x	✓	✓	✓	x
<i>4. Tourism Impacts</i>					
Awareness Building of Tourists	x	✓	✓	x	x
Awareness Building among Local Community	✓	✓	✓	✓	x

TABLE 5.3 Comparative Analysis of Tourism Plans and Policies Developed Thus Far for the Andaman & Nicobar Islands (A&NI)—cont'd

Parameters (Arranged According to Broad Themes and Issues or Impacts)	Tourism Vision of the A&NI	UNDP/MoT Report	NEERI Report ^a	A.F. Ferguson Report, MoTC	FICCI Study
Carrying Capacity of the Islands	✓	✓	✓	✓	✓
Conservation of Natural Resources/Use of Non-Conventional Energy Sources	✓	✓	✓	x	x
Impacts of Tourism on Indigenous Communities	x	x	x	x	x
Impacts of Tourism on Women/Children	x	✓	NA	x	x
Negative/Adverse Impacts of Tourism	x	✓	✓	✓	x
Sustainable Tourism	✓	✓	✓	✓	✓
<i>5. Institutional and Regulatory Issues</i>					
Collection of Tourism Statistics/Maintenance of Database	x	x	NA	✓	x
Regulation of Tourism	x	x	✓	x	x
Removal/Easing of RAP for Foreigners	✓	✓	NA	✓	✓
Removal/Dilution of CRZ	✓	✓	✓	✓	✓
Restriction of Tourist Numbers	x	x	✓	x	x
Revenue Generation through Taxes	✓	x	NA	x	x
Suggestions for Alternate Structures/Processes Within the Current Institutional Framework	✓	✓	✓	✓	x

Notes:

NA not applicable.

^aAs the NEERI Report was essentially undertaken to assess the environmental carrying capacity of the implementation of the UNDP/WTO Tourism Strategy, it does not propose any specific tourism strategies of its own and therefore many indicators are not applicable to this study for our assessment.

A reading of the table summarises for us what has been the thrust of the several plans and policies that have been developed and put forward thus far concerning the development of tourism in the islands. The repeated areas of thrust for tourism development are as follows:

- ♦ promoting “high value” tourism in the islands where “high value” has not been satisfactorily defined by any document
- ♦ articulating the demand for opening up more islands in the Andamans for tourism and extending it to the Nicobars as well
- ♦ improvement in connectivity to and between the islands including a clear demand for direct international connectivity
- ♦ infrastructure support in terms of making land, water, power and other facilities available for tourism
- ♦ product development through new forms of tourism especially a clear emphasis on development of cruise tourism in the islands
- ♦ removing or dilution of what all of these reports consider as “institutional constraints” such as the RAP for foreign tourists and the norms relating to CRZ applicable for the Islands
- ♦ aggressively promoting the islands with a well-worked out marketing strategy that focuses primarily on the foreign tourist

We note that while all reports talk of the islands' carrying capacity constraints and the need for promoting sustainable tourism, parameters of sustainability like conservation of natural resources, local benefit, the need for regulation of tourism and restriction of tourist numbers do not get addressed in several of the reports. The significant indicators that are not addressed at all or are addressed in an unsatisfactory manner in the reports and amount to critical lacunae are as follows:

- ♦ the need for building awareness among tourists on environmental and social issues before their visit to the islands
- ♦ the need to address impacts of tourism on women, children and the indigenous communities of the islands
- ♦ the need to ensure local community participation and an engagement with institutions of local self-government in the islands
- ♦ the need to regulate tourism and restrict tourist numbers if required²⁸
- ♦ the need to generate revenue through taxation of the tourism industry units

An understanding of the policy framework for tourism development in the islands is incomplete without taking cognisance of the specific recommendations that the Supreme Court appointed Shekhar Singh Commission prescribed on what it called "inappropriate tourism" in the islands, which have been accepted by the Apex Court and which the Administration is mandated to implement. To quote from the report:

40. No concrete or permanent infrastructure for tourism should be built on any forest area in the islands. Tourist activity in forest areas should be restricted to tented accommodation or temporary wooden/pre-fabricated 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. 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 the strategically important area.

Tourism development in the islands has not conformed to these recommendations and neither has the eco-friendly tourism plan or the distributional analysis been conducted as recommended.

5.4 Summary

The framework for implementing and developing tourism in the Andamans is undoubtedly complex. At an institutional level, it is clear that the Central Government has provided the major push, impetus and direction that tourism development should

take with the A&NI Administration playing the role of the implementer. It is clear that very little policy directive has come from the islands and this is a matter of serious concern. Research also indicates that the level of coordination between different departments within the A&NI Administration on tourism issues is not high. It is from analysing this structure that an integrated approach to tourism is missing since functions of forest conservation, protection of tribal rights and welfare, transportation, servicing of ships and maintenance of ports is fragmented across a host of departments at the Centre and in Port Blair. A simple decision on promoting tourism at a single site or island requires extensive co-ordination between these. Ministries and departments bring issues of power and jurisdiction into play that there is yet no sign that these issues, sometimes conflicting in nature, have been resolved through consultation among these various bodies.

At the governance level, despite a long history of local self-governance and a progressive act, the implementation and functioning of Local Self Governing Institutions (LSGI) – both *panchayats* and the municipality leave much to be desired in the tourism context. Overall, attempts are being made to strengthen devolution of administrative and financial powers to LSGI. The ongoing debate on constitution of a Legislative Assembly for the islands is being viewed by local communities and *panchayats* as a welcome step to overcome the existing democratic deficit in the development process.

At the policy level, the Central Government has commissioned several research studies on tourism development potential, goals and strategies for the islands. These studies have been undertaken by a wide range of institutions ranging from the UNDP and UNWTO, research institutions, trade and industry bodies, and consultancy groups. A comparative analysis of the various policies indicates a bias towards prioritising infrastructure development, connectivity, accommodation needs and promotion and marketing strategies in the context of tourism while neglecting important sustainability and conservation criteria. This reflects an inherent bias in the system towards promoting a certain model of tourism that does not integrate participatory and sustainability criteria, thereby reflecting an inadequacy in the approach adopted by both the Central Government and UT administration. Further, the non-implementation of these plans as well as the complete non-adherence to the specific recommendations of the Shekhar Singh Commission pertaining to tourism can be interpreted as the impunity of the Administration towards these recommendations or at best callousness and lack of political will to work towards developing tourism holistically and sustainably in the islands.

NOTES

- 1 This section primarily draws from interviews conducted with senior officials (Special Secretaries, Secretaries, Directors and Deputy Directors) of various departments of the A&NI Administration in the months of July, August and October 2007 as part of primary research for the project. For a list of officers interviewed with dates please refer Annexure 3.
- 2 Ministry of Home Affairs, Government of India, Annual Report 2006–2007, Chapter VI, p. 65, <http://mha.nic.in/pdfs/ar0607-Eng.pdf>, data retrieved February 2008
- 3 “Induction Material 2003: Notes on the Functioning of Various Divisions”, Planning Commission, Government of India, 2003.
- 4 “Island Development Authority (IDA) Meeting: A Retrospect”, SANE Newsletter, February 2003, http://www.andaman.org/BOOK/Sane/Newsletter_2003-02/news_2003-02.htm, data retrieved January 2008

- 5 Minutes of the Eleventh meeting of the Island Development Authority (IDA) under the chairmanship of the Prime Minister, 15 June 2007.
- 6 Refer “Cruise Tourism Potential and Strategy Study: Final Report”, Ministry of Tourism, Government of India, conducted by CRISIL Limited, December 2005.
- 7 As stated by Mr Tamta, Special Secretary, Department of IP&T in a personal interview on 26 July 2007 at Port Blair.
- 8 As stated by Mr Nishit Saxena, Deputy Conservator of Forests, Department of Environment & Forests, A&NI Administration in a personal interview conducted in July 2007, Port Blair.
- 9 As stated by Mrs S.K.P Sodhi, Director, Tribal Welfare Department, A&NI Administration in a personal interview in July 2007.
- 10 According to Dhingra (2005), it was the Buch Committee, constituted in 1957 and chaired by C.A. Buch to assess the working of the Shipping Department in the islands that provided the first justification for the subsidisation of the shipping services in the Islands. In Dhingra’s analysis, “Fastening on the term of reference that alluded to the promotion of ‘rapid development’ of the Islands, ... the Committee recommended that for some years to come, ‘the shipping services must be considered the means to a definite end, which is not commercial profit, but the acceleration of the progress of the development schemes’. It visualized shipping services as one of the factors, along with the ‘gradual slackening of existing restrictions into the Islands’ that would spur the movement of population into the Islands, and in turn attract business enterprise and volumes of traffic that would gradually reduce operational losses of the shipping sector. It accepted therefore that till such point was reached where the shipping services offered could be sold at a margin of net gain, the vessels must show losses. ‘Such losses, the Committee feels, must be regarded as indirect expenditure on development.’”
- 11 As stated by Commander Rajendra Kumar, Director, Shipping Services, Directorate of Shipping, A&NI Administration in a personal interview in July 2007.
- 12 Ibid.
- 13 See <http://aniidco.nic.in/tryprofile.htm>, data retrieved February 2008
- 14 As stated by Mr C. Uday Kumar, General Manager, Andaman & Nicobar Islands Integrated Development Corporation Limited (ANIIDCO) in a personal interview conducted on 18 July 2007 at Port Blair.
- 15 Ibid.
- 16 See <http://forest.and.nic.in/frst-anifpc1.htm#future>, data retrieved February 2008
- 17 Verbatim from “Development Strategy for Environmentally Sustainable Tourism in the Andamans: Final Report Volume I – Tourism Structure Plan for the Andamans”, Introduction, p. ii.
- 18 The Phuket Action Plan was one of the UNWTO’s primary activities under its tsunami recovery programme. Covering tourism destinations in four tsunami affected countries – Sri Lanka, Thailand, Maldives and Indonesia – the main goal of the Phuket Action Plan was to speed up recovery of the tourism sector in the affected destinations, by restoring traveller confidence in the region so that visitor flows resume as quickly as possible. The plan also aimed to help destinations resume normal operations by maximizing the use of existing tourism infrastructure and by helping small tourism-related businesses and employees. It was financed by a wide array of supporters including financial institutions such as the Asian Development Bank (ADB) and International Finance Corporation (IFC), corporate powers such as VISA International, UN agencies such as the United Nations Development Programme (UNDP) and United Nations Economic and Social Commission for Asia and Pacific (UNESCAP) and few individual member governments as well, Source: “Tourism Relief for the Tourism Sector: Phuket Action Plan”, UNWTO, February 2005.
- 19 The 121st Report of the Department-related Parliamentary Standing Committee on Home Affairs on Administration of Union Territories (A&NI, Pondicherry and Chandigarh) presented to Rajya Sabha on 2 August 2006, http://rajyasabha.nic.in/book2/reports/home_aff/121streport.htm, data retrieved November 2007
- 20 Basu (1998), pp. 261–263.
- 21 The sitting MP is Mr Manoranjan Bhakta of the Indian National Congress (INC) elected in the 2004 election with 85,794 votes, defeating his nearest candidate Mr Bishnu Pada Ray of the Bharatiya Janata Party (BJP) who secured 55,294 votes. as reported in “Voting Preference by Electorates”, Table 3.3, Basic Statistics 2005–2006.
- 22 While the Andamanese and Onge live in the territory of the Andaman Islands, the Shompen have lived in Great Nicobar.

- 23 Gupta (2000), pp. 323–327.
- 24 The 121st Report of the Department-related Parliamentary Standing Committee on Home Affairs on Administration of Union Territories (A&NI, Pondicherry and Chandigarh) presented to Rajya Sabha on 2 August 2006, http://rajyasabha.nic.in/book2/reports/home_aff/121streport.htm, data retrieved November 2007
- 25 Joint Resolution for Andaman and Nicobar Islands, NO. N-12012/1/06/P&J, Government of India, Ministry of Panchayati Raj, 16 March 2007.
- 26 The Department of Tourism, Government of India in 1997 was under the administrative mandate of the Ministry of Civil Aviation as a separate Ministry for tourism had not yet been created. The separate Ministry of Tourism and Culture was created in 2000.
- 27 We quote from the foreword to the NEERI Report: “Ministry of Tourism (MoTC), Government of India in association with World Tourism Organisation (WTO) had undertaken a project with United Nations Development Programme (UNDP) funding for developing long-term strategic Master Plan to enable environmentally sustainable tourism in Andaman Islands. Five zones, viz., Capital Area, Havelock Island Area, Long Island Area, Mount Diavolo Area and Saddle Peak Area have been selected for resort development considering scuba diving opportunities on the offshore reefs and shoals. Implicit as in the development of any environmentally sensitive group of islands, concerns have been expressed that increase in tourism as envisaged in the Master Plan would cause adverse impacts on the ecology and life style of the indigenous tribes of Andaman Islands. As a result, on the advice of the Ministry of Environment and Forests (MoEF), UNDP retained National Environmental Engineering Research Institute (NEERI) to undertake Carrying Capacity based Study incorporating assessment of maximum tourism that can be sustained by the Islands, before recommendations in the Master Plan are implemented”. NEERI (2000)
- 28 The only report to have stated the need for restriction in the number of tourists visiting the A&NI is the NEERI Report, which states “It is recommended that the tourists visiting Islands should be restricted to 1,55,000 as envisaged in year 2005 which will be one-third of the population of the Islands. This criteria is adopted in several tourism dominated countries”.

6

Socio-cultural Impacts of Tourism in the Andamans

Smith (1989) in her seminal work *Hosts and Guests: The Anthropology of Tourism* writes eloquently describing the change in attitudes and equations between the two groups of people as tourism grows in any destination and we quote:

Tourism can be a bridge to an appreciation of cultural relativity and international understanding. However, catering to guests is a repetitive, monotonous business, and although questions posed by each visitor may be “new” to him, hosts can become bored as if a cassette has been turned on. If the economic goals of mass tourism have been realized and the occasional visitor is replaced by a steady influx, individual guests’ identities become obscured, and they are labelled “tourists” who, in turn, may be stereotyped into national character images. As guests become de-humanized objects, they are tolerated for economic gain, tourists have little alternative other than to look upon their hosts only with curiosity, and too, as objects.¹

Smith’s narrative of the change in attitudes towards tourists by the local community is an interesting starting point to our analysis of what the current and potential socio-cultural impacts of tourism are or can be in the Andamans. Such an analysis must be based within two important contexts: – firstly a historical understanding of the socio-cultural vulnerabilities and sensitivities of the people of the region and secondly an understanding of the stage at which tourism development is in the region.

The extent and degree to which any community experiences the socio-cultural impacts of tourism necessarily depends on their own state of society, culture, historical processes of community building, intra-community cooperation and conflict, cultural sensitivities and social vulnerabilities. In the case of the Andamans, Dhingra (2005) writes:

A set of people transplanted under traumatic circumstances to an isolated groups of islands ...the need for a sense of belonging to the country, in circumstances severe and exacting, or attended by the hope of a new dawn, as the case may have been, still dominates their psyche and they cling to each other and to a national pride in a manner that is strongly reminiscent of expatriate communities.

Thus, our understanding of how the local community in the Andamans perceives and experiences the social and cultural impacts of tourism must be based within the existing vulnerabilities they experience of being a “transplanted” and “settled” people.

Secondly, it is critical for our understanding of all impacts of tourism, but in specific to socio-cultural impacts, to bear in mind at what stage of tourism development a destination is in. A useful concept to use for this is Butler’s Tourism Area Life Cycle (TALC) Model that distinguishes five different stages that a tourism area goes through

over time. Box 6.1 provides a brief write-up on the model.² On the basis of our understanding of the status of tourism development, a qualitative adaptation of Butler's model to the case of tourism development in the Andamans would imply that the Andamans are at the end of the *involvement* stage nearing the *development* stage. Thus, the impacts of tourism, specifically its socio-cultural impacts, need to be analysed within this context and the stage at which tourism development in the Andamans is.

BOX 6.1

Butler's Tourism Area Life Cycle (TALC) Model

The TALC has come to be one of the best known theories of destination growth and change within the field of tourism studies. Butler's concept of the hypothetical model of an area's evolution was based on the product cycle concept – whereby sales of a product proceeds slowly at first, experiences a rapid rate of growth, stabilises and then declines. Butler explained the stages that a tourism area would go through, in relation to the number of visitors, as follows:

Exploration Stage – This is characterised by small numbers of tourists making individual arrangements to visit the place following irregular visitation patterns. At this stage, there are not many facilities developed that can be provided for tourists. The physical fabric and social milieu of the area would be unchanged by tourism and the arrival and departure of tourists would be of relatively little significance to the economic and social life of the permanent residents.

Involvement Stage – As the numbers of tourists increase, some local residents will enter the involvement stage and begin to provide facilities primarily and even exclusively for tourists. Contact between visitors and locals can be expected to remain high and might be more for those directly providing tourism services. As this stage progresses, some advertising specifically to attract tourists will emerge, a specific market area for tourism will begin to take shape, the first signs of seasonality or tourist arrivals adhering to a specific season will emerge and local residents will begin to start making adjustments

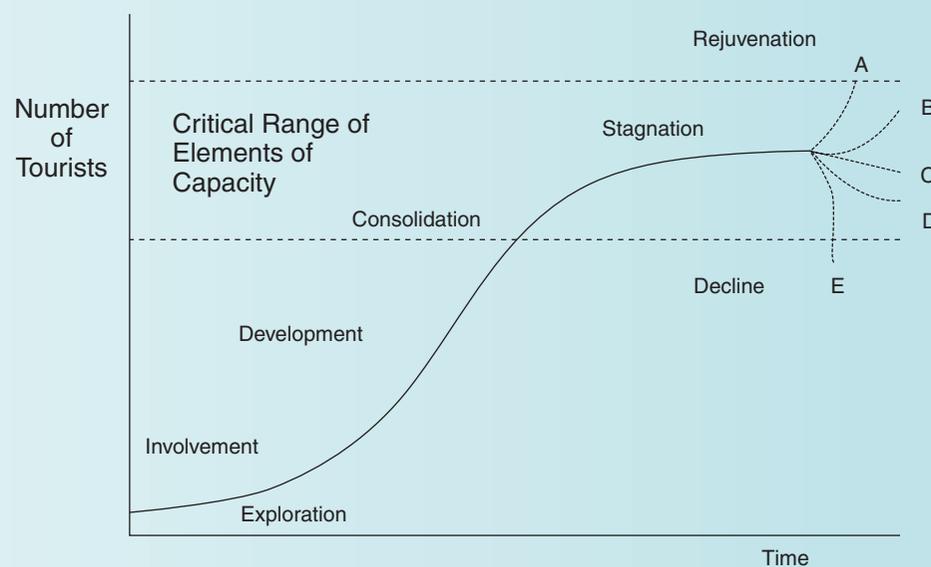


FIGURE 6.1 Hypothetical Evolution of a Tourist Area

Source: (Butler, 2001).

BOX 6.1—cont'd

to their social pattern and lifestyle to accommodate tourism. Some level of organisation in tourist travel arrangements will begin to take shape and the initial pressures will start showing on governments to provide for tourism infrastructure and connectivity.

Development Stage – This stage is characterised by a well-defined tourist market area with fervent advertising in tourist source countries or areas. As this stage progresses, local involvement and control of development will rapidly decline with the emergence of larger, more elaborate, more up-to-date facilities for tourists being provided by outsiders, particularly in accommodation. Natural and thematic attractions will be developed and the first signs of change in the physical appearance of the area will be noticeable. Regional and national planning will almost become necessary and the number of tourists in peak season will probably equal or exceed the permanent local population.

Consolidation Stage – As this stage approaches, the rate of increase in tourist arrivals will have begun to slow although total numbers will still increase. A major part of the local economy will be tied to tourism. Marketing and advertising will be far-reaching and efforts will be made to extend the tourist season and the tourism market area. Major franchises and chains in the tourism industry will make their presence felt. Also, the large numbers of visitors and the facilities provided to them will arouse feelings of discontent and some opposition among local residents, especially those not involved in the tourism economy directly.

Stagnation Stage – As the area enters stagnation stage, the peak numbers of visitors will have been reached. The capacity of many of the variables that tourism depends on have been reached or exceeded with attendant social, cultural and environmental problems. The area will continue to be an attraction but will no longer be in fashion. Surplus bed capacity will be available and the area will rely on repeat visitations. Natural and genuine attractions will have probably been replaced by artificial ones. New development will be peripheral to the new tourist area and there are likely to be changes in the type of visitor as well with it being dominated by the mass tourist.

The possible trajectories indicated by dotted lines A to E in Figure 6.1 are examples of a subset of possible outcomes beyond *Stagnation*. Examples of things that could cause a destination to follow trajectories A and B toward *Rejuvenation* are technological developments or infrastructure improvements leading to increased carrying capacity. Examples of things that could cause a destination to follow trajectories C and D are increased congestion and unsustainable development, causing the resources that originally drew visitors to the destination to become corrupted or no longer exist. Trajectory E is the likely path of a destination following a disaster or crisis.

Decline Stage – In this stage, the area will not be able to compete with other attractions and will experience a decline spatially and in tourist numbers. It will no longer appeal to vacationers but will be used for weekend or day trips. Property turnover will be high and tourist facilities will soon be replaced as the area moves out of tourism. Local involvement in tourism is likely to increase as local people are able to purchase facilities at a much more affordable rate as the market declines. Ultimately the area may become a veritable tourist slum or may lose its tourism function altogether.

Rejuvenation Stage – On the other hand, rejuvenation may occur, although this may not at all take place unless there is a complete change in the nature of attractions on which tourism is built. There are two alternative approaches to make this happen: one is the introduction of a man-made attraction. The second is to develop attractions from

Continued

BOX 6.1 Butler's Tourism Area Life Cycle (TALC) Model—cont'd

hitherto unused natural resources. In many cases, the combined efforts of the government and industry are required to make this happen and even then there is no guarantee that the area's attractiveness will improve.

Until now, the arguments are hypotheses put forward by Butler at the theoretical level, and it is only now that they have been tested with quantifiable data. But wherever they have been tested, destinations are seen to follow the broad stages of tourism lifecycle enunciated by Butler. These observations suggest that a change in attitude is required on the part of those who are responsible for planning, developing and managing tourist areas. Tourist attractions are not infinite and timeless and should be viewed and treated as finite and possibly non-renewable resources. They could then be more carefully protected and preserved. The development of the tourist area could be kept within predetermined capacity limits and its potential competitiveness maintained over a longer period.

With these contexts in place, we analyse the existing and potential impacts of tourism in the socio-cultural sphere. The social and cultural impacts of tourism are the ways in which tourism is contributing to changes in value systems, individual behaviour, family relationships, collective life styles, safety levels, moral conduct, creative expressions, traditional ceremonies and community organisations. In simplified terms, socio-cultural impacts are "people impacts", they are about the effects on the people of local communities of their direct and indirect associations with tourists and with tourism.

6.1 Tourist–Local Community Relationships

Socio-cultural impacts are the outcome of particular kinds of social relationships that occur between tourists and the local community as a result of their coming into contact. The nature of these relationships or "encounters" is a major factor influencing the extent to which understanding or misunderstanding is fostered by the tourism process. According to de Kadt (1979) such encounters occur in three main contexts – where the tourist is purchasing some good or service from the local community; where the tourist and members of the community find themselves side-by-side or, for example on a beach and thirdly, where two parties come face-to-face with the object of exchanging information and ideas. While the first two types are quantitatively more common, de Kadt states that when it is claimed that tourism can be a tool for greater intercultural understanding, it is the third type of interaction that is referred to. It is also to be noted that tourist–community encounters are staged within a network of expectations and goals. On the one hand, the tourist is mobile, relaxed, free-spending, enjoying his leisure and absorbing the experience of being in a new place. In contrast, residents are relatively stationary and, if employed by the tourism industry, spend a considerable portion of time catering to the needs and desires of visitors.

In the case of the Andamans, the degree of interaction with local community varies between foreign and domestic tourists. The majority of domestic tourists come on short package tours spanning 4–5 days and therefore time spent by them is usually at the tourist locations with very minimum interaction with the local community. The foreign tourists come for longer spells, spending a greater amount of time on the beaches and

at local food joints and market places. During interactions with the community it was learnt that foreign tourists learn about the place and people from those of the local community working in resorts and also through local fishermen, vendors at the bazaar and through shopkeepers.

This is in tune with findings of the primary survey, which revealed that a substantial percentage of foreign tourists (44%) and a slightly lower percentage of the domestic tourists (30%) believed their holiday had given them a sense of local culture, place and people of Andamans. This understanding of the place and people is built through interactions. An explanation for the percentage of the foreign tourists being higher than that of the domestic could be that for the foreign tourist this travel would have been a different cultural experience and any engagement would lead to a feeling of having understood partly how a place and its people live. Whereas for domestic tourists, the sense of being in just another part of India may not be an incentive to learn more about the place, people and their ways of life.

There are few frameworks that have been developed to assess the social impacts of tourism. The first was developed by Doxey (1975) following his research projects which were undertaken in Barbados in the West Indies and the Niagara in Ontario, Canada. Doxey suggested that the existence of reciprocating impacts between outsiders and residents may be converted into varying degrees of resident irritation. Such irritations may have their origins in the numbers of tourists and the threats which they pose to the way of life of permanent residents. The value system of the destination is at the root of Doxey's framework and it is this which he considered to be of paramount importance in an analysis of the social impacts of tourism. Drawing upon these theories, Doxey developed a Tourism Irritation Index (or Irridex) claiming that tourist destinations pass successively through stages of euphoria, apathy, irritation, antagonism and finally to the stage in which people have forgotten what they cherished and their environment is destroyed. (Refer Table 6.1.)

TABLE 6.1 Doxey's Irritation Index

Level 1. Euphoria	People are enthusiastic and thrilled by tourist development. They welcome the stranger and there is a mutual feeling of satisfaction. There are opportunities for locals and money flows in
Level 2. Apathy	Increasing indifference with larger numbers
Level 3. Irritation	Concern and annoyance over price rise, crime, rudeness, and cultural rules being broken
Level 4. Antagonism	Covert and overt aggression to visitors – people see the tourists as the harbinger of all that is bad
Level 5: The Final Level	People have forgotten what they cherished in the first place and what it was that attracted the tourist in the first place. They must now learn to live with the fact that their ecosystems will never be the same again

Source: Doxey (1975).

In the Andamans, the local community's responses towards tourism and tourists seem to be at the stage of euphoria bridging closer towards apathy and irritation in some islands such as Havelock and Neil which have been seeing tourism for 5–6 years now. The primary tourist survey revealed that only 2.8 per cent of the foreign tourists and 1.7 per cent of the domestic tourists knew of or had been involved in clashes with the local community. While this is certainly encouraging, the tourists' perspective on clashes

obviously differs from the community's perspective. Therefore, for instance, residents of Neil Island revealed during interactions with the field team, of how certain tourists (particularly Israeli) would behave in an unruly or rude fashion with local residents such as shopkeepers or *autorickshaw* drivers. But while this amounts to a clash in the eyes of the community member, it need not be so in the eyes of the tourist for whom this could be normal behaviour.³ This is also in conformity with the stage at which tourism is in terms of the life cycle – moving from the involvement to the development stage.

Another useful framework to address the varying attitudes towards tourists and tourism in any given community is given by Butler (2001) building on the framework of Bjorklund and Philbrick (1972). Figure 6.2 shows the matrix which is the basis for this framework.

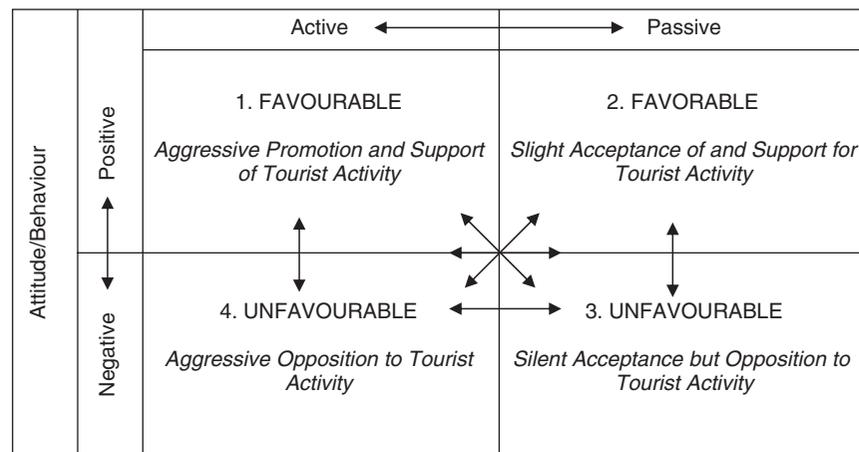


FIGURE 6.2 Host Attitudinal/Behavioural Responses to Tourist Activity

Source: Bjorklund and Philbrick 1972:8

The attitudes and behaviour of groups or individuals can be either positive or negative and either active or passive. Within any community all four forms may exist but the number of people experiencing one form of response may not remain constant. For example, entrepreneurs who are financially involved in tourism are likely to be engaged in tourism may fall into box 1 and engage in aggressive promotion but a small but vocal local group not involved in tourism may be led to aggressive opposition and fall in box 4. The majority of the population is likely to fall into boxes 2 and 3 of passive engagement with either silently accepting or resenting tourism.

In the case of the Andamans, this research study found most local community representatives to fall into box 2, that is slight acceptance of and support to tourism activity, with a few community members falling into boxes 3 (expressing feelings/attitudes of opposition to tourist activity) and fewer in box 1 (aggressive promotion of tourism). A more detailed summary of these perspectives on tourism is provided in Chapter 7 on *Perspectives*. However, in both the cases of Doxey's Irridex and Butler's framework, given that the Andamans are currently in a stage of *Involvement* proceeding towards *Development* of tourism, severe social impacts and sharp attitudinal changes towards tourists or tourism will not be experienced within the local community until tourism reaches the stages of *Consolidation*.

6.2 Tourism and Social Change

Arising from an understanding of the nature of relationships between tourists and local community members is our understanding of how tourism can contribute to social and cultural change in a community. According to Mathieson and Wall (1982) such forms of social change may vary but theorists agree that in respect to socio-cultural impacts, there is a threshold of tolerance of tourists by the local community which varies both spatially and temporally. They hold that as long as the numbers of tourists and their levels of impact remain below this critical level, and economic impacts continue to be positive, the presence of tourists in destination areas is usually accepted and welcomed by majority of the local population. According to the authors, the critical point of tolerance of the community varies with the following:

- ♦ the cultural and economic distances between the tourists and hosts. The greater the divergence of characteristics between the two groups, the more pronounced are the social impacts
- ♦ the capability of the destination and its population to physically and psychologically absorb tourist arrivals without undermining or squeezing out desirable local activities
- ♦ the rapidity and intensity of tourism development. When tourism is introduced gradually into a large, established economy, the waves of impacts are usually small

The authors also describe the most frequent situations that provoke feelings of tourist resentment. We describe and analyse these with examples from our field observations and interactions in various areas of the Andamans.

The physical presence of tourists – In the destination area, especially if they are in large groups, this leads to situations where residents have to frequently share facilities and services with visitors arising out of growing congestion which then causes feelings of resentment.

In the Andamans, two issues typify situations that lead to resentment against tourism and tourists in general. The first is in relation to tourism-induced price rise of essential commodities in Havelock as perceived by the local community. The second is the conflict related to the availability of boats and boat tickets.

The rise in prices of essential commodities is a natural economic phenomenon when demand suddenly shoots up, as it does in the cases of peak tourism season when tourists, hotels and resorts raise the demand for basic goods like fruit, vegetables and fish. But while it is essentially an economic phenomenon, price rise has significant social implications as well, as it affects family and community life of residents. During the peak tourist season in Havelock, the price of basic commodities like fish, fruit and vegetables increases. Usually one of three things happens: firstly, if local fishermen have had a good catch, the stock often does not find its way to the market place as the resort owners have booked it earlier for a higher price. Secondly, the remaining stock that does enter the markets is of inferior quality than that which is sold to resorts and at a much higher price than normal. This has led to tensions, arguments and fights amongst the local community and the fish-vendors. Thirdly, the increase in price of vegetables and fruit on the islands (other than in the town of Port Blair) is possibly because they are supplied from the mainland first to Port Blair, where the hotels buy the bulk of the produce, and whatever remains is then transported further to other islands. In response to this growing problem of tackling

price rise during the peak tourist season, the *Panchayat* of Vijaynagar, Havelock, intervened to regulate prices by fixing an upper limit on the rates of basic commodities sold in the market so that local communities could still afford them.

In other islands such as Neil Island, people are aware of the increasing prices of commodities. They do not, however, attribute this price rise to tourism. One possible reason for this could be that the price rise is not as distinctly seasonal as it is in the case of Havelock Island, which does not lead people to attribute it to tourism. It is a more general price rise that people attribute to increase in fuel prices that has happened over the years. Moreover, people also say that they do not mind giving a rupee or two more to their community brethren, because that way they are strengthening the local economy of each island.

The second impact being experienced in the Andamans and one that is related to the physical presence of tourists is over the issue of availability of boat tickets to local residents between popular sectors such as Port Blair–Havelock, where demand shoots up in peak foreign tourist season (Figure 6.3). Many community representatives interviewed voice dissent over the fact that during peak foreign tourist season, availability of boat tickets was very low due to increased demand from tourists which is not matched by an increase in frequency of boat trips made. This is further exacerbated by the fact that tour operators and a few local agents sell tickets to tourists in the black market knowing fully well that they can afford to pay higher prices, thus leaving local residents stranded. In another case, relating to the use of helicopter services between the islands, residents of Neil Island expressed their antagonism by narrating an incident where a local resident died as a helicopter was not sent to airlift the patient to Port Blair in time. Residents are disappointed and angry that helicopters come at the drop of a hat if tourists are stranded and need to catch their flights back in time but the same priority treatment is not what local community members can hope for.

Both these issues highlight cases of social impacts that are directly an outcome to the changing tourist:local population ratio in the destination which, as Butler indicates, is an important criterion determining the extent and severity of socio-cultural impacts of tourism experienced by local communities.



FIGURE 6.3 Queue for Tickets at Phoenix Bay Jetty, Port Blair

The demonstration effect – The introduction of foreign ideologies and ways of life into societies that have not been exposed to tourist lifestyles has tended to result in the “demonstration effect”. Demonstration Effects can be advantageous if they encourage people to adapt or work for things they believe they lack. More often it is detrimental and many authors point to the effect of tourists (particularly in the case of foreign-dominated tourism) who parade symbols of their affluence. Consequently, resentment grows among the resident population. Such resentment is heightened by the development of luxurious resorts, hotels and other facilities to woo the tourist. Tourists on vacation, often behave in a more uninhibited fashion than they would at home, and therefore, residents also develop misconceptions about tourists and their home cultures. Young members of local resident communities are particularly susceptible to the demonstration effect as they observe the freedom and material superiority of young tourists. Apart from this direct impact, the secondary impacts of the demonstration effect are also important to analyse. Mathieson and Wall (1982) note that demonstration effect might actually lead to changes in the internal structure of the local community that may occur through one of the following:

- ♦ changes in the roles of women
- ♦ changes in community cohesion
- ♦ changes in demographic structure
- ♦ changes in institutional structures and relationships

In most societies, relationships between generations are governed by strict patterns of authority and hierarchy that may be challenged in the wake of tourism creating jobs for local youth. The growth of tourism may also challenge existing gender structures with an increase in formal and informal employment opportunities for women. These impacts cannot be considered undesirable but are to be acknowledged as well.

In Andamans, incidents of local residents voicing dissent against scantily dressed foreign tourists have come to light. The attire of foreign tourists has become a cause of great distress among the community members, especially women, in Havelock and Neil Islands. The local residents feel that their movement to places earlier visited by them have now been restricted, as they do not visit places frequented by foreign tourists who are often clad in very skimpy clothing which is an embarrassing encounter for them. There have also been instances of tourists walking into villages in bikinis and shorts to draw water from wells to bathe after sea bathing and local women took strong offence to such behaviour. This concern is also shared by men and community leaders that their children and youth may one day start imitating the behaviour and mode of dressing of foreign tourists. The tourists’ perspective on this issue is reflected through the results of our primary survey where a significant percentage of both foreign (26.9%) and domestic (11.3%) tourists mentioned that they had come across nudity on the beaches. The situation is becoming more complex as tourists who earlier restricted themselves to the beach areas are now entering community spaces such as local markets more often. This has resulted in hotels putting up notices asking tourists to dress appropriately as well as the A&NI police issuing a circular to foreign tourists on not indulging in obscenity in public spaces. (However, the word “obscenity” has not been defined and can therefore be subject to multiple interpretations.)

The secondary impacts of the demonstration effect have also become visible in islands such as Havelock and Neil. Attitudinal differences towards tourism are palpable between members of different generations with the elders cautioning the

youth from getting too involved in tourism and neglecting traditional occupations like cultivating. Many of these voices were those of local women worrying about the socio-cultural impacts that tourism might have on their growing children and if they then would start following the “foreign” ways.

Tourism has also, in areas such as Havelock and Baratang, provided opportunities for women to engage in the economy (Figure 6.4). However, their engagement with tourism has been very limited with the setting up of petty shops and selling fish or fruit. There are also instances in Havelock and Baratang where women are making some direct income from tourism. In Baratang women have come together to run an eatery. In Havelock, a Self Help Group (SHG) has been formed, which runs a hotel in the bazaar and is popular with tourists. In households where tourism brings supplementary income, women are involved in some activities that bring remuneration from tourism.



FIGURE 6.4 Woman Selling Fruits Near Havelock Island Jetty, Beach no. 1

Another aspect of social change that needs to be acknowledged as tourism expands is its impact and influence on the child. The links between tourism and the exploitation of children in the form of sexual exploitation, trafficking and child labour is unfortunately quite established in many developing country tourism destinations. This is a reality in many established and upcoming tourism destinations in mainland India. It was important to understand whether this was also true of the islands. Perceptions of community members on the links between tourism and children varied. There were no reports of child sexual exploitation in the islands. On the issue of child labour the observations of the research team was that child labour was not very evident in the Andamans in the hotel and tourism sector. However, a study by the Human Rights Law Network (HRLN) for United Nations Children’s Fund (UNICEF) in 2006–2007 showed that 16 out of the 17 villages surveyed in North Andaman and 11 out of the 15 villages surveyed in South Andaman reported child labour. Each of these areas reported over

50 cases of child labour. Fishing and fish selling constitute 33 per cent of child labour identified in the study and domestic work was 19 per cent. The links in these cases to tourism are not always evident. The research also does not make it clear if these were children of local families or predominantly children of families that have recently migrated to the islands. This is an area that tourism policy-makers must monitor in the future as tourism creates an environment where child labour and child sexual exploitation fit in easily, particularly as a response to poverty in families.

Also important to recognise is the sentiment expressed by community members that as tourism opens up avenues for part-time employment younger and younger children are getting captivated by it. Field interviews revealed that children are now dropping out of school to take up small jobs in the tourism sector. A school teacher from Havelock who was interviewed stated that since the last 8 to 10 years, with the development of tourism, students have become negligent towards education in Havelock. “There are 1500 students in Havelock totally 50% of them are in tourism related jobs”, he said. They run *autorickshaws* and cars after 3.00 p.m. to earn money on the side. With instances such as these, it is obvious that immediate economic gains and quick money aside, the glamour of tourism is often what attracts children and youth to it, as described in the section on demonstration effect of tourism on local communities.

6.3 Tourism and Moral Conduct

Archer (1978) believed that one of the most undesirable but significant by-products of tourism are its effects on the moral standards of the local population. The growth of prostitution, crime, gambling and drug abuse has been mentioned as evils of tourist development. We examine the existence and potential fears of the communities in the Andamans of these socio-cultural impacts.

Prostitution – Mathieson and Wall (1982) provide the following hypotheses to understand the link between tourism and the rise in prostitution:

- ♦ By its very nature, tourism means that people are away from the puritanical bonds of normal living, anonymity is assured away from home and money is available to be spent. These circumstances are conducive to the demand for, survival and expansion of prostitution.
- ♦ Tourism may be in some cases also used as a scapegoat for a more general loosening of morals.

The authors also acknowledge the role of the media and tourism promotional material (especially of the “sun-sea-sand-sex” variety) that overtly focus on eroticism and sexual innuendoes do impact the psyche of the tourist and the perception that they build in their minds of the kind of destination they are visiting. In the Andamans, there were reports that directly linked tourism to prostitution. They are, however, fears expressed by elders and women in the communities, on the possibility of rising prostitution in the islands on account of tourism and this sentiment is important to take cognisance of.

Crime – A wide variety of questions can be asked concerning the contribution of tourism to crime that includes the following:

- ♦ Does tourism stimulate an increase in crimes against people and property? What types of crime, if any, are particularly associated with tourism?

- ✦ Does the tourist season in resorts attract criminals from other areas and provoke the unlawful ambition of local criminals?
- ✦ Does tourism affect the perceived levels of safety and security of the residents of the area?
- ✦ What measures are most appropriate to ensure the safety of both tourists and the local community?

Lin and Loeb (1977) point to three factors that could be critical in influencing the relationship between tourism and crime:

1. the population density during the tourist season
2. the location of the resort
3. the per capita incomes of the tourists and the local community, with large differences leading to increased crime

It is important to acknowledge that both local community members and tourists are at risk with increase in crime levels at tourist destinations. In addition, the insecurity might be higher for local residents who have to face the truth of a once crime-free home and society taking to crime because of or enhanced by tourism activities.

In the Andamans, our primary survey with tourists indicated that the islands are perceived as a safe destination by majority of them (96.5% of domestic and 90.7% of foreign tourists). To dwell deeper into the issue of safety and security, we asked both domestic and foreign tourists if they had encountered, witnessed or heard about tourists being attacked, molested or eve-teased while on their holiday in the islands. While over 90 per cent of both domestic and foreign tourists have not been attacked or molested, the percentage of those who have experienced eve-teasing on their holiday is higher – particularly among female tourists. Similarly, the local community in many islands did also not talk about any clashes with tourists. In Havelock Island, this perception was further substantiated with discussions with the Sub-Inspector of Police who said there have been no clashes between the local community and tourists. As reported in our case study on Israeli tourists, the reports of increased thefts have been there but the dynamics here have yet to be substantiated. While the incidents are not so frequent as to cause alarm, it must be noted that in the rest of the country a series of recent incidents of molestation, rape and even murder of foreign tourists, particularly young women, has thrown the Ministry of Tourism (MoTC) into a tizzy with responses such as increasing tourist police and setting up a special task force to look into the matter.⁴

Drug Abuse – In an interesting case study on drugs and tourism in Quepos and Manuel Antonio, Costa Rica, Bruehl (1998)⁵ explains the difficulty with both accepting and tackling the question of drugs abuse and its links to tourism. Her analysis of increasing substance abuse by tourists and local youth alike in this popular beach destination raises the problem of difficulty in analysing who was actually responsible for increasing use and sale of drugs – the tourists, the locals or the expatriates – as each party blamed the other. In a revealing statement, one government official interviewed by Bruehl stated: “If we detained all the tourists who did drugs here, no one would ever come back”. Bruehl concludes on a depressing note:

Drugs have existed in Quepos and Manuel Antonio as long as they have anywhere else. Drug abuse became a problem, however, with the advent of

tourism in the area. Tourism created an environment which caused drug use to rise to problematic levels and this same industry, which provides jobs for the majority of the people of Quepos and Manuel Antonio, has continued to perpetuate the drug problem in the area. It is paradoxical that the one industry which supports this society is slowing chipping away at it.

The problem of drug abuse is reportedly rising in the Andamans and, if steps are not taken to curb, it could turn into a bane for both local community members and tourists. Field interactions conducted during this study revealed that there is an increasing use and sale of drugs such as *ganja* and *charas* in Havelock Island. There have been instances in Havelock and Diglipur where people have been caught cultivating *ganja*. There have also been instances reported from Havelock where school students sell drugs to foreign tourists. Media reports indicated that in Wandoor a resort owner was arrested for possessing drugs and a young drug peddler arrested for catering to tourists from Havelock.

This recent case study of the suggested rape and murder of a young British female tourist in Goa has brought to the forefront, not just the issue of safety of female tourists in the country but also the kind of tourism that is taking place and even being promoted in Goa today that is certainly cause for worry. Britishers are the largest groups of tourist in Goa and the second largest in the Andamans and these trends are a warning call to the links between tourism and crime that need to be recognised early and checked. We reproduce two articles from the British media that analyses the link between tourism, drugs and crime in Goa.

BOX 6.2

The Dark Side of Tourism: Realities from Goa

Beware the Dangers of Goa: A Murder in the Indian Resort Underlines the Threat to Hosts and Tourists Alike

The belated admission by police in Goa that Scarlett Keeling, the 15-year-old British girl found dead on a beach last month, may have been murdered is as shocking in revealing local corruption as it is damaging to one of India's most popular tourist destinations. The police asserted initially that the girl had drowned after taking drugs. After a second autopsy, the arrest for rape of a suspect was challenged by her mother. The police are now attempting to delay matters further by ordering extra medical examinations to prove the girl's age. They are also seeking to deflect criticism of their work by blaming the mother for negligence, amid accusations of a cover-up, media reports of corruption and the mysterious disappearance of a man who claimed to have witnessed what happened.

The sordid affair has shone an unwelcome spotlight on the hinterland of this small state that has grown rich on a \$465 million tourist industry, accounting for 15 per cent of its economy. The availability of drugs, the lack of proper regulation and the influx of predominantly young Western tourists – 60 per cent of them British – have attracted the unscrupulous and the opportunists hoping to profit from the tourists' naivety. Criminal elements appear to have formed a cosy relationship with the police. A blind eye has been turned too often to what has been happening near the golden beaches. Goa has got rich on a louche image. It now looks a lot less carefree than the tourist posters proclaim. The problem for Goa is the

Continued

BOX 6.2 The Dark Side of Tourism: Realities from Goa—cont'd

same as the difficulty faced by other tourist destinations “discovered” by the young and the adventurous and trading on their fashionable, hippy associations. Ibiza, Bali, The Gambia and parts of Thailand are all places where the prevailing hedonism attracts a large number of free-spending tourists but runs counter to the more conservative views and mores of the host country. Entrepreneurs who have invested in the bars, clubs, pools and hotels that bring in the tourists are keen to encourage a lively reputation in the West. That same reputation, however, can cause resentment, disdain and confusion to the very people working in these resorts. A clash of assumptions can have dangerous consequences.

Such clashes have been increasing in Goa as the tourist numbers rise. The Indian media have reported 27 deaths of foreigners already this year, though police said many were from natural causes. The state government now needs to take an urgent look at regulation, the safety of women tourists, the rise in crime, availability of drugs and the impact, beyond the financial bonanza, of tourism on Goa’s values and way of life.

There are other aspects of this tragedy that are disturbing, however, and have little to do with India. The question many must ask is why a 15-year-old, who had never been abroad before, was left in the company of strangers by a mother who then travelled with other school-age daughters to another state. It is not only tourist authorities who must exercise responsibility. But those going on holiday must also understand the dangers of what can happen when the law, especially on drugs, is not enforced. Countries such as India, and local authorities such as Goa, cannot afford to build their tourist image on a dubious reputation for laxity and permissiveness. It puts tourists at risk – and also the entire industry.

The UK Times, 12 March 2008, http://www.timesonline.co.uk/tol/comment/leading_article/article3533402.ece, data retrieved April 2008.

***Britons in Goa: Death, drugs and extortion: the ashes of a paradise lost:
Once a backpacker’s dream, Goa has become the stuff of nightmares***

From his vantage point on a cushion in Anjuna’s German Bakery and Caf , Thomas Keller smiled nostalgically as he recalled first coming to Goa more than three decades ago. “It was 1974,” said the wiry 53-year-old from Denmark. “[Then] it was serious hard-core hippies. Now everybody can come and go.” And that may be the problem for Goa. When people like Mr Keller first arrived, they came overland, down the hippy trail that wound from Turkey through Iran and Afghanistan to this tiny former Portuguese enclave on India’s western coast. They were few enough in number to blend in among the coastal villages, and if they were in a blissed-out haze on marijuana or hash a lot of the time, nobody minded too much. Talking to Mr Keller in the organic caf  decorated with streamers and lanterns and with a deep, slow electronic soundtrack pumping from the speakers, it is easy to believe that Goa is still the same. But as some foreigners find out to their cost, it is not immune to the changes the rest of the world has seen – mass air travel, harder drugs.

Young Westerners can no longer set out in clapped-out trucks or buses across countries such as Iran or Afghanistan, and when they land here in their charter flights, they discover that the influx of euros, pounds and dollars has polluted the dream that drew them here in the first place. The secret of Goa got out a long time ago. Over the years the hippies have been joined by backpackers, gap-year students, techno addicts and now the two-week package tourists who congregate around the resort of Calangute. There is more commercialism, higher prices and a spate of hotel building in previous unspoilt areas. There has also been a large

BOX 6.2—cont'd

influx of Russians, who are said to be increasingly involved in the drug scene. The police are said to be unwilling or unable to crack down on much of the illegality that has resulted. Among the beach bars, I was openly offered everything from cannabis to cocaine, ecstasy and ketamine. “There are more drugs here than in other parts of India, but that is why the tourists come,” said the dealer.

All this has been brought into sharp focus by the death of a 15-year-old Briton, Scarlett Keeling, whose naked body was found on the edge of the ocean three weeks ago. Accidental drowning, said the police; rape and murder, said her mother, Fiona MacKeown, who successfully campaigned for a second post-mortem which began on Friday. She said it had already identified more than 50 bruises on her daughter’s body. Scarlett, who was brought to India with six of her eight siblings, was too young to be among the gap-year students whose deaths in far-flung places always make the headlines back home. But in Goa the British victims are often somewhat older, people who seem to come here because they want to taste the dream of youthful freedom before it is too late. People such as Michael Harvey, a 34-year-old from Manchester who was found dead last week in a guest house north of Anjuna, possibly from a drug overdose.

The Indian authorities argue that Goa remains safe. According to the most recent figures, 40 Britons died from natural and unnatural causes in Goa in 2007, and a further 10 have died so far this year. But that is because so many British people pass through this tiny corner of the country, which attracts two million tourists a year. In 2006 a total of 111 Britons died in the India, but more than twice that number, 224, died in Thailand, which is visited by half the number of Britons each year. The problem is that Goa’s laid-back image seems to make people think nothing bad can ever happen here, and when it does, their shock and outrage are all the greater. Three women tourists eating lunch at one of the beach shack bars that line the ocean all said they believed Goa was as safe as anywhere else, but suggested that people often failed to take basic safety precautions when on holiday. “You have to be aware,” said Sarah Hale, from Brighton, who is travelling in India for six months. “I would not walk alone at night here, but I don’t think I would anywhere.”

But not everyone appears to be so careful. Careless behaviour ranges from the ubiquitous riding of motor scooters without shoes or helmets to the level of intoxication – fuelled by both drinks and drugs - encountered among the tourists. “Goa is very safe for visitors,” the state’s tourism minister, Francisco Pacheco, said after Scarlett’s death. “This was an isolated incident. But people have to understand she was 15, and they left her behind when they went off. You have to blame the mother as well.”

Certainly it seems that Mrs MacKeown, who lives on a smallholding that has neither mains electricity or running water, was lulled into a sense of complacency. At the time of her daughter’s death, she was out of the state, visiting another hippy resort to the south. She left Scarlett in the care of a local guide, Julio, for whom the 15-year-old worked part-time, handing out leaflets, and his aunt. Mrs MacKeown said she believed her daughter was just friends with Julio, but having read her diary since her death she now knows the couple were having a sexual relationship. “I know that people are criticising me for that, but I tried to make Scarlett come with us,” she said. “We had fights about it.”

It appears the teenager was well known in some of the beach bars, and there is talk, too, that she was mixed up with the drugs scene – something her mother denies. There are also reports that she may have been the subject of competition between two or more young men. Police say they have spoken to two dozen people as part of the inquiry into the death of Scarlett, who was last seen alive leaving Luis’ bar at around 2am in the company of one

Continued

BOX 6.2 The Dark Side of Tourism: Realities from Goa—cont'd

or more men. The bar owner, Luis Coutinho, denies all knowledge of the incident, while one of the barmen, Samson da Souza – said to have been seen with Scarlett that night – failed to respond to inquiries when reporters visited his house.

The family say they received word from one potential witness, a British tourist, who said he saw Scarlett being assaulted behind Luis' bar at around 4am, but was too scared to come forward and has disappeared. One man who contacted the British High Commission in Delhi refused to go back to Goa to say what he had seen, saying he did not trust the police, who have been accused of corruption, both petty and major, inefficiency and a reluctance to investigate anything that might spoil Goa's idyllic image. It is alleged that police routinely pull over tourists on their motorbikes and demand on-the-spot fines. Those caught with a small amount of drugs are asked for money or sexual favours to make the problem go away. Last week a press photographer was asked to pay a 600 rupee (£7.50) "environmental fine" for allegedly over-revving the engine of his motorbike. The matter was quickly dropped once a press card was produced.

More serious corruption is alleged as a result of the drugs trade and the once notorious rave and "trance" scene that was finally suppressed a few years ago by the imposition of curfews. "The police used to take money from the party organisers, but when they were closed down they started taking money from the shopkeepers instead," said one Goan, whose family runs a store in Anjuna. "Until that point, nobody realised that the police had been taking bribes." Nor is Mrs MacKeown the first person to criticise the Goan police in the aftermath of a serious incident. Amanda Bennett's brother Stephen, 40, from Cheltenham, disappeared on a train between Goa and Mumbai in December 2006 and was subsequently found hanging from a mango tree. She has accused the police here of smearing his name and repeatedly refusing her request to initiate a criminal investigation.

Much of the friction appears to be the result of the desire of the Indian authorities to attract a different kind of tourist, and impatience or worse with the counter-culture types who persist in coming. "The backpackers still come here, but it has become more expensive," said Mike Rudd, a British writer who first visited Goa in the 1980s, sitting poolside at an Anjuna hotel. "The Goan government has made clear they do not want backpackers, but people with money."

Andrew Buncombe, *The Independent*, Sunday, 9 March 2008, <http://www.independent.co.uk/news/world/asia/britons-in-go-a-death-drugs-and-extortion-the-ashes-of-a-paradise-lost-793356.html>, data retrieved April 2008.

6.4 Tourism and Impacts on the Indigenous Primitive Tribes of the Andamans

In her analysis on the post-independence history of the islands, Dhingra (2005) concludes that of the many primitive tribes to have lived in the Andamans, the tribe most impacted by civilisation has been the Jarawas.⁶ Dhingra notes that being involved in a series of "off and on" conflicts with the Jarawas, it was the construction of the Andaman Trunk Road (ATR, "drawn on the map as a thick pencil line straight down the length of Great Andaman" as Dhingra puts it), right through the Jarawa reserve that sealed their fate. It is the ATR today that is used to ply tourists from Port Blair in South Andaman to popular tourist spots such as Baratang and other locations in Middle and North Andaman.

This has been the chief reason for enabling an exploitation of this primitive tribal community by the tourism industry and tourists. Tour operators take tourists on the ATR en route to Baratang with the covert mission of spotting Jarawas and this has even come to be called “Jarawa tourism”. This is corroborated by the results of our primary survey with domestic tourists (with whom the Port Blair–Baratang circuit is popular) where 66 per cent had confirmed travel on the ATR of which 22 per cent confirmed seeing Jarawas but a higher percentage – 30 per cent – responded by saying that they were led to believe that they would see or interact with these tribes. This clearly reflects that tour operators are still “selling” the primitive tribes as a tourist attraction and this stays in the tourist’s mind. The ATR has enabled an interaction between tourists and members of this primitive tribal community where the former see the latter as part of the “been there – done that” product of their holiday.⁷

An overview of promotional material on tourism brought out by the A&NI Administration indicates a change in the attitude towards these primitive tribes. The shift is clearly from an earlier stance of seeing the tribes as part of the tourism product that the Andamans offered to clearly stating in tourist material that while the Andamans are home to many primitive tribes interaction with them is prohibited. But, as our field survey indicates, it is the perception in the mind of the tourist that continues to expect to get a glimpse of a “naked tribe” that needs to change. The A&NI Administration would do well to expend more energy in spreading awareness among tourists on these indigenous communities, ensuring that tour operators strictly adhere to local regulatory norms, which do not allow buses to stop on the ATR, and thus ensure that tourism does not contribute to the further decline of these already endangered primitive people. Recent media reports suggest that the A&NI Administration is seriously working towards closing the ATR for tourists and opening an alternate sea route to travel to Baratang.⁸ If, indeed these reports are true, it would certainly be welcome and a reflection of the fact that maybe the A&NI Administration has finally woken up to act on an issue about which activists have been crying hoarse for years now.

6.5 Conclusion

In contrast with economic impacts that may be immediately felt or environmental impacts that may start manifesting themselves sooner, the socio-cultural impacts of tourism on local communities are more difficult to discern and take longer to appear in any destination. This chapter has captured the current and possible potential socio-cultural impacts that tourism has or will have on the local communities of the Andamans. Such an analysis needs to be based in two important contexts. The first is an understanding of the already prevalent sensibilities and vulnerabilities of the people of the islands of being a “settled” community and will therefore impact their responses to the socio-cultural changes that tourism brings with it. The second is a critical need to understand the stage at which tourism is in the islands that will go to determine the extent and severity of all impacts, but specifically, socio-cultural impacts that local residents experience. For this, a qualitative application of Butler’s TALC Model shows that tourism in the Andamans is currently in a stage of *Involvement* bordering on *Development* in few areas such as Havelock Island and Port Blair.

Socio-cultural impacts are the outcome of particular kinds of social relationships that occur between tourists and the local community, as a result of their coming

into contact. In understanding the tourist–local community relations in the Andamans, we note that the degree of interaction with local community varies between foreign and domestic tourists. The foreign tourist who stays for longer in the island and shows an inclination to learn more about the local people and lives lead to more interactions between them and the local community in contrast to the average domestic tourism visiting the island who is on a package tour with little inclination for such interaction. This is supported by results from our primary survey where 44 per cent of foreigners believed that their holiday in the Andamans had given them a sense of local people and culture as against only 30 per cent of domestic tourists saying so. An application of Doxey's Tourism Irritation Index to the Andamans reveals that the local community's responses towards tourism and tourists seem to be at the stage of *Euphoria* bridging closer towards *Apathy* and *Irritation* in some islands such as Havelock and Neil, which have been seeing tourism for 5–6 years now. The occurrence of direct clashes between tourists and the locals, is however, low in the islands. Further, through the application of tools developed by anthropologists to assess differing attitudinal changes to tourism within the local community, we learn that most local community representatives in the A&NI fall into the category of passive slight acceptance of, and support to, tourism activity, with few community members falling into passive categories of expressing feelings or attitudes of opposition to tourist activity and fewer in the category of actively aggressively promoting tourism.

In analysing how tourism is potentially leading to social change in the Andamans, we analyse two such causal factors for change – the first being change or friction caused by the physical presence of tourists and the second being the demonstration effect of tourism in the islands. Analysis of the first factor revealed two issues that were observed in the Andamans and especially in Havelock Island where the physical presence of tourism created situations that led to friction and resentment by the local community towards tourists and tourism. These were over the rise in prices of essential commodities in Havelock during peak tourist season that the local community perceives is directly on account of increased tourist demand. The second is the clash over purchase of boat tickets in the Port Blair–Havelock sector, where again local residents feel stranded on account of unavailability of tickets in peak tourist season. Although resentment arising out of both these situations is not high now and is within manageable limits, policy measures are required to ensure that they do not catapult into serious clashes that raise antagonistic feelings by the local community towards tourism development in their islands. In analysing the demonstration effect of tourism in the Andamans, we observe that tourism is gradually leading to a change in the lifestyle of youth in the islands, resulting in palpable fears among women and elders of the community that their young will go the “foreign way”. Interactions also reveal a discernible difference between different generations of the community in their attitude towards tourism with the youth welcoming it with open arms and the elders sounding caution. The direct impact of tourism on women and children is not yet visible in the Islands. There is a need to learn from the experiences of other destinations to ensure that tourism fosters positive change in the role of women and children and does not lead to their abuse or disempowerment.

On the links between tourism affecting moral conduct in the islands, we note that while the issue of prostitution linked to tourism has not surfaced, there are fears among women members of the community that it might, if not checked. While the Andamans currently enjoy a perception of being a safe destination to visit in the eyes of the tourist,

evidence from popular tourism destinations around the country such as Goa and Rajasthan indicate the need for policy-makers to regulate the behaviour of both tourists and local community members so as to ensure that crime remains low in the islands. Finally, we observe a definite increase in the use and sale of drugs in popular tourism areas of the Andamans and caution the authorities to take definitive steps towards curbing this.

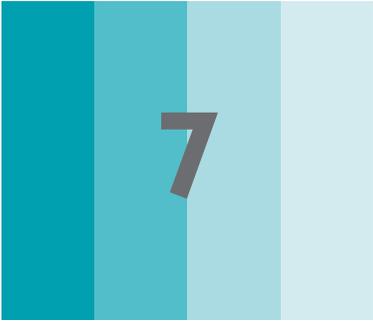
In our last section, we analyse the specific impacts of tourism and tourism behaviour on the indigenous primitive tribes of the Andamans, the Jarawas, in particular. The increasing use of the ATR by tour operators to ply domestic tourists from Port Blair to Baratang in Middle Andaman has increased the opportunity for tourists to “spot” these tribes. It has thus also increased the vulnerability of these tribes to the effects of tourist behaviour while on the ATR and their possible interaction with tourists. We dismally note that in spite of the A&NI Administration’s claim of discouraging tribal tourism in the islands, these tribes are still being portrayed as a part of the tour package offered by unscrupulous tour operators to curious domestic tourists. It is such a mentality of continued “product”-ising of these tribes that the A&NI Administration has to work to change. It will have to strictly implement regulations such as the closure of the ATR, which will ensure that these tribes are protected and are not affected by the possible ill-effects of tourism and tourist behaviour

NOTES

- 1 Smith (1989).
- 2 This write-up has been adapted from Butler (2006).
- 3 A limitation of this framework is the assumption that homogeneity characterises a community which is a particularly untenable assumption in the context of the Andamans. The model assumes that it is the whole community that becomes hostile to tourism, but often communities are heterogeneous and different sections of the community have different reactions. Although simplistic, it indicates that unbridled tourism will create social change that may develop into antagonistic attitudes on the part of the local resident community towards tourists.
- 4 Media reports claim that the year 2008 has seen half a dozen cases of rape and molestation reported in three weeks from Goa, Rajasthan, Uttar Pradesh and Kerala. What is worse is that these are the states where the tourism ministry’s much-touted tourist police exist. For now, tourist police exist in ten states, namely Goa, Rajasthan, Delhi, Andhra Pradesh, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Uttar Pradesh and Himachal Pradesh. These states also make for “Incredible India’s” top ten destinations for foreign travellers. Statistics released by the ministry show that foreigners love to visit Goa, Delhi, Rajasthan, Uttar Pradesh, Kerala, Andhra Pradesh and Maharashtra. Cases of rape and molestation have been reported from these very states. Source: *India Not So ‘Incredible’ for Foreign Women*, 24 January 2008, http://in.news.yahoo.com/indiabroadcast/20080124/r_t_ibn_nl_general/tnl-india-not-so-incredible-for-foreign-3a4f8c1_1.html, date retrieved February 2008
- 5 Bruehl (1998).
- 6 Dhingra (2005), p. 113.
- 7 Manak Matiyani writes eloquently, in a recent article, about the reality of how tourism and tourist behaviour impacts the Jarawas and we quote: “The journey through the reserve area is done in a convoy system that is meant to ensure that vehicles don’t stop or try to interact with the tribals. All the busses and the cars play a variety of loud blaring music throughout the journey. People throw an assortment of plastics, wrappers, chips packets and other things out of the cars during the journey and inevitably everyone gets off the vehicles before clearing the check post as the vehicles stop at the barrier... It is clearly wrong to say that the administration has done its best to ensure that the tribals are not used as a lure for tourist operators in the islands. I would have believed it had

Sagarkia, the government emporium not been selling Ongee masks and Jarawa dolls to tourists. Even if one forgave that saying that dolls representing different cultures are not offensive and should not be objected to, one can not overlook the gigantic statues of 'ancient tribals' that came up outside the governors' residence just before the President's visit to the islands. It is difficult to argue that the government is taking steps to ensure the tribals are not showcased for tourists when the government shows amazing insensitivity by doing such things. We can only thank the president's busy schedule which perhaps prevented her from being taken on a visit to the jarawa huts, as has been done previously by various government officials in the islands. Looking through *Youtube* videos on Andaman I found a comment by someone who said his uncle was posted as the governor of the islands and when he visited he was taken to see the ancient tribal communities and also got a spear made by them as a gift. I suppose like a lot of other things in the islands, the Andaman Administration wants to keep exclusive rights over jarawa tourism and not really stop it entirely". Source: Manak Matiyani, in an e-mail to the andamanicobar yahoo group list on 10 March 2008.

- 8 According to this media report, the Administration is working very seriously to devise a new ferry system from Shoal Bay No 14 to Baratang exclusively for the tourists and then close the ATR permanently for tourists. "ATR Closed for Tourists?", *The Light of the Andamans*, Vol. 33, No. 6, 28 February 2008



7

Economic Impacts of Tourism in the Andamans

A useful starting point to understanding the economic situation of the Andaman and Nicobar Islands (A&NI) is to quote Dhingra 2005 who states: “It would appear that, after fifty years of development and the formulation and revision of several strategies for economic growth, the Islands have arrived at a watershed”.

The islands economy has historically been agrarian based. Dhingra (2005) notes that even though the process of Five Year Planning was extended to the islands after they were handed over by the British, the smallness, remoteness and other related constraints made it difficult to implement any specific economic development strategy here in the early decades. According to Dhingra, in the 1950s and 1960s, attaining self-sufficiency in food was a focus of government in populating the islands. In the 1970s, the focus shifted to growth of plantations and cash crops. By the 1980s however, even though the government was keen to shift the economic base of the islands to manufacturing and industry, other problems such as unchecked growth in population and high migration began to start bearing on the economy. Questions about the islands’ carrying capacity demanded a rethinking of the possible economic development strategies that could be implemented. However, Dhingra concludes, that even today, with population growing and migration on, there are no clear strategies emerging.

Successive speeches by officials of the A&NI Administration, several policy documents, as well as our own field interviews and discussions with senior officials of the A&NI Administration highlight that now tourism is emerging as an important option for both revenue generation to the A&NI Administration and employment generation for islanders. Section 7.1 examines the economic impact of tourism development in the Andaman Islands in the context of the current economic condition of the islands.

7.1 Economic Condition of the A&NI

7.1.1 Trends in Gross State Domestic Product (GSDP)

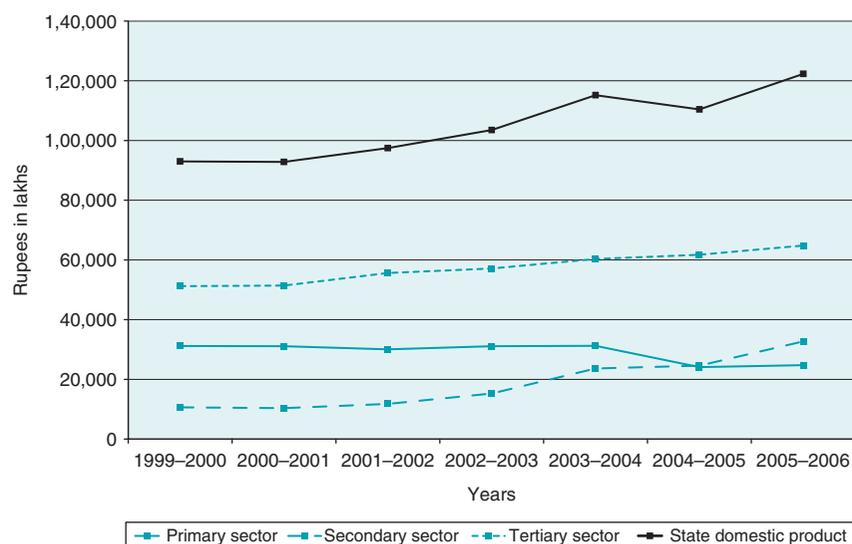
Figures relating to the Gross State Domestic Product of the islands provide the starting point to our understanding of the nature of the islands’ economy. Table 7.1 shows official statistics of the trends in contribution of the primary, secondary and tertiary sectors in the A&NI economy. As the figures indicate, the contribution of the primary sector, which was as high as 55 per cent in the early 1980s, has today fallen to 20 per cent. Both the secondary and tertiary sectors grew steadily in the 1990s, but secondary sector has shown a decline since 1998. In the case of the former, it was on account of growth in the manufacturing sector, while in the case of the latter, rise in construction

TABLE 7.1 Contribution of Primary, Secondary and Tertiary Sectors to Gross Domestic Product (GDP) of Andaman & Nicobar Islands

		Primary Sector (Rs in lakhs)	Share in Total (%)	Secondary Sector (Rs in lakhs)	Share in Total (%)	Tertiary Sector (Rs in lakhs)	Share in Total (%)	GSDP (Rs in lakhs)
At 1980–1981 prices	1980–1981	2,980	55.92	911	17.10	1,438	26.98	5,329
	1985–1986	4,002	57.58	894	12.86	2,054	29.55	6,950
	1990–1991	5,122	59.75	651	7.59	2,800	32.66	8,573
At 1993–1994 prices	1993–1994	21,536	42.34	10,107	19.87	19,226	37.80	50,869
	1994–1995	21,569	38.47	13,755	24.53	20,747	37.00	56,071
	1995–1996	21,601	38.76	13,176	23.64	20,952	37.60	55,729
	1996–1997	20,909	35.07	15,735	26.39	22,985	38.55	59,629
	1997–1998	19,339	30.14	17,684	27.56	27,140	42.30	64,163
	1998–1999	19,498	32.60	11,952	19.98	28,365	47.42	59,815
	1999–2000	18,750	28.94	14,596	22.53	31,445	48.53	64,791
	2000–2001	18,677	30.34	13,842	22.48	29,048	47.18	61,567
1999–2000 prices.	2001–2002	18,789	30.15	15,555	24.96	27,971	44.89	62,315
	2002–2003	19,770	30.70	14,447	22.43	30,180	46.87	64,397
	2003–2004	31,233	27.11	23,652	20.53	60,315	52.36	1,15,200
	2004–2005	24,097	21.82	24,609	22.29	61,712	55.89	1,10,418
	2005–2006	24,755	20.24	32,748	26.77	64,826	52.99	1,22,330

Source: Central Statistical Organisation (CSO) Data, Gross State Domestic Product (GSDP) of A&NI compiled from tables for 1980–1981, 1993–1994 and 1999–2000 series.

and salaries of government employees have been the main reasons for rise in the sector's contribution.¹ Figure 7.1 further depicts the trend in share of primary, secondary and tertiary sectors from 1999–2006 (at 1999–2000 prices) that indicates the growth in tertiary and secondary sectors and fall in primary sector contributions. In addition, the

**FIGURE 7.1** Contribution of Primary, Secondary and Tertiary Sectors to the Andaman & Nicobar Islands Economy

Source: Central Statistical Organisation (CSO) Data, Gross State Domestic Product (GSDP) of the A&NI, 1999–2000 series.

state per capita income of the islands that was Rs 29,620 in 2005–2006 is higher than the national average per capita income, which was Rs 25,358 (Central Statistical Organisation (CSO) Data, 2006–2007).

In terms of the composition of the GSDP by industry of origin, data for the last seven years (1999–2000 to 2005–2006) indicates that the sectors which have registered the highest growth (as per data for the compound annual growth rate) are construction (23.52% per year), electricity, gas and water supply (19.25% per year) and communication (15.34 % per year) as shown in Table 7.2. In the primary sector, during the same time period, agriculture has shown a marginal growth of 0.46 per cent per year, and there has been a significant negative growth in all other primary sectors activities including fishing. In the secondary sector, manufacturing has also shown negative growth indicating that growth in contribution of secondary sector has largely been due to the growth in construction and electricity sectors. In the tertiary sector, growth is attributable to communication, trade, hotels and restaurants, real estate, and the banking and insurance sectors. It is important to note that the growth in public administration has been only 0.85 per cent per year that points to the relative stagnation in incomes of government sector employees as well as stagnation in the number of public sector employees.

TABLE 7.2 Gross State Domestic Product (GSDP) at Factor Cost by Industry of Origin at 1999–2000 Prices (Rs in lakhs)

Industry	1999–2000	2000–2001	2001–2002	2002–2003	2003–2004	2004–2005	2005–2006	CAGR ^a (%)
1 Agriculture	19,299	19,968	21,391	22,115	22,348	19,322	19,933	0.46
2 Forestry and Logging	4,041	3,385	960	685	646	94	78	–43.10
3 Fishing	7,309	7,192	7,058	7,845	7,874	4,556	4,627	–6.32
4 Mining and Quarrying	517	525	646	436	365	125	118	–19.03
A <i>Sub-total of Primary</i>	<i>31,166</i>	<i>31,070</i>	<i>30,055</i>	<i>31,081</i>	<i>31,233</i>	<i>24,097</i>	<i>24,755</i>	<i>–3.24</i>
5 Manufacturing	3,603	2,817	2,423	2,176	3,568	2,809	2,816	–3.46
5.1 Manufacturing – Registered	1,545	719	465	255	1,430	645	636	–11.91
5.2 Manufacturing – Unregistered	2,058	2,098	1,958	1,921	2,137	2,164	2,180	0.83
6 Construction	6,118	6,149	7,923	11,842	18,575	19,070	26,836	23.52
7 Electricity, Gas and Water Supply	903	1,395	1,421	1,265	1,510	2,730	3,097	19.25
B <i>Sub-total of Secondary</i>	<i>10,624</i>	<i>10,360</i>	<i>11,766</i>	<i>15,283</i>	<i>23,652</i>	<i>24,609</i>	<i>32,748</i>	<i>17.45</i>
8 Transport, Storage and Communication	10,731	10,480	11,119	21,198	22,504	20,924	23,151	11.61
8.1 Railways	0	0	0	0	0	0	0	0
8.2 Transport by Other Means	9,400	8,965	9,388	2,728	10,043	9,501	9,631	0.35
8.3 Storage	42	42	42	41	41	41	41	–0.34
8.4 Communication	1,289	1,472	1,689	2,026	2,501	2,946	3,500	15.34
9 Trade, Hotels and Restaurants	6,620	6,658	7,322	9,444	9,960	8,478	10,021	6.10
10 Banking and Insurance	2,225	2,428	2,640	2,609	2,539	2,754	2,832	3.51

Continued

TABLE 7.2 Gross State Domestic Product (GSDP) at Factor Cost by Industry of Origin at 1999–2000 Prices (Rs in lakhs)—cont'd

Industry	1999–2000	2000–2001	2001–2002	2002–2003	2003–2004	2004–2005	2005–2006	CAGR ^a (%)
11 Real Estate, Ownership of Dwellings and Business Services	4,046	4,214	4,344	5,204	4,607	5,203	5,347	4.06
12 Public Administration	14,571	15,229	17,168	14,688	16,943	14,974	15,462	0.85
13 Other Services	13,028	12,384	13,040	13,406	13,681	17,815	17,994	4.72
<i>C Sub-total of Tertiary</i>	51,221	51,392	55,633	57,146	60,315	61,712	64,826	3.42
14 <i>GSDP</i>	93,011	92,822	97,454	1,03,510	1,15,200	1,10,418	1,22,330	3.99
15 Population	3,49,000	3,54,000	3,59,000	3,72,000	3,85,000	3,99,000	4,13,000	
16 Calculated State Per Capita Income (Rs in thousands)	26,651	26,221	27,146	27,825	29,922	27,674	29,620	

Note:

^aCompound Annual Growth Rate tabulated from CSO data.

^bGross State Domestic Product.

Source: Central Statistical Organisation (CSO) Data, GSDP of the A&NI, 1999–2000 series.

In this scenario, we note that the “trade, hotels and restaurants” sector has registered an annual compounded growth rate of 6.10 per cent and constituted roughly 8.1 per cent of the GSDP in 2005–2006. A caveat is that the analysis of tourism’s contribution to the GDP cannot be ascertained by looking at this sector alone as tourism activities are linked to many other sectors such as construction, transport, communication and real estate. In spite of this, as Table 7.3 shows, we see that the contribution of this sector to the islands’ GDP has been stagnant at 7–8 per cent over the last 20 years. This is an important indicator considering the fact that tourist arrivals to the islands for the last 26 years (1980–2006) have grown by astounding margins – 1,243 per cent for domestic tourists and 332 per cent for foreign tourists.²

TABLE 7.3 Trends in Contribution of Tourism to the Gross State Domestic Product (GSDP) of the Andaman & Nicobar Islands (A&NI)

	1980–1981 ^a		1990–1991 ^a		1995–1996 ^b		2000–2001 ^c		2005–2006 ^c	
	Actuals (in lakhs)	GSDP (%)								
Trade, Hotels and Restaurants	425	7.97	528	6.15	6,125	11	6,658	7.17	10,021	8.19

Notes:

^aAt 1980–1981 prices.

^bAt 1993–1994 prices.

^cAt 1999–2000 prices.

Source: Central Statistical Organisation (CSO) Data for the A&NI for different years.

To understand further the link between actual tourist arrivals and their contribution to the GSDP of the islands, we tabulated the per tourist contribution to GSDP. The results, as shown in Table 7.4, indicate that in the early years of this decade the per capita contribution of recorded tourism to GSDP fell from Rs 1,10,541.80 in 1999–2000 to Rs 1,07,770.15 in 2002–2003, in spite of an average increase in tourist arrivals at approximately 5 per cent during the same period. It is further important to note that in 2004–2005, during the tsunami-affected year, tourist arrivals fell by 10.6 per cent, whereas GSDP fell by 4.15. However, in 2005–2006, while total tourist arrivals fell by a significant 37.8 per cent, the GSDP of the islands actually increased by 10.79 per cent over the previous year.

TABLE 7.4 Contribution by Each Tourist to the Gross State Domestic Product (GSDP) of the Andaman & Nicobar Islands

	1999– 2000	2000– 2001	2001– 2002	2002– 2003	2003– 2004	2004– 2005	2005– 2006
GSDP of A&NI (Rs in lakhs) (1)	93,011	92,822	97,454	1,03,510	1,15,200	1,10,418	1,22,330
Growth rate in GSDP (%) (2)		–0.2	5.0	6.2	11.3	–4.15	10.79
Total tourist arrivals (number) (3)	84,141	87,366	92,170	96,047	1,01,031	90,282	56,162
Growth rate in arrivals (%) (4)		3.8	5.5	4.2	5.2	–10.6	–37.8
Per tourist contribution to GSDP (Rs) (5)	1,10,541.8	1,06,244.9	1,05,732.8	1,07,770.15	1,14,024.4	122,303.45	2,17,816.3

Source: 1. CSO Data for the A&NI for different years at 1999–2000 prices. 2. Calculated on the basis of 1. 3. As arrivals data is available for the January–December cycle of the year, these figures have been calculated by computing the monthly average every year and then tabulating 9 months of 1999+3 months of 2000 for 1999–2000 arrivals. 4. Calculated on the basis of 3. 5. Calculated by dividing 1 by 3.

This data and analysis goes to highlight the fact that increase in tourist arrivals cannot be directly correlated to the GSDP of the islands to thereby imply an increased contribution of tourism sector to the GSDP.

7.1.2 Fiscal Position and Revenue Generation

Another set of data required to understand the economic position of the islands and its fiscal state is the revenue and expenditure of the islands. Being a union territory (UT), much of the financing of development activities for the A&NI comes from Central Government funds. Revenues are broadly divided into tax (including income, expenditure, agricultural income, land revenue, property, stamp duties and registration) and non-tax (interest receipts, dividends and profits, and grants-in-aid from the Central Government). Expenditure is broadly divided into Plan (funds for new development projects and programme and capital assets) and Non-Plan (government consumption expenditure, transfer payments and subsidies) expenditure. Table 7.5 provides data for the last ten years on the receipts and expenditure pattern of the islands.

As data indicates, over the last ten years, growth in revenue has been to the tune of 41 per cent from 1998–1999 to 2007–2008, but in the same period, the expenditure has

TABLE 7.5 Receipts and Expenditure of the Andaman & Nicobar Islands (1998–1999 to 2007–2008)

Year	Receipts (Rs in crores)			Expenditure (Rs in crores)			Fiscal Deficit (7)	GSDP (8)	Deficit/GDP ratio (9)
	Tax Revenue (1)	Non-tax revenue (2)	Total (3)	Plan (4)	Non-Plan (5)	Total (6)			
2007–2008	18.82	105.81	124.63	1,154.83	700	1,854.83	-1730.2	NA	—
2006–2007	18.82	103.92	122.74	901.86	911	1,812.86	-1690.12	NA	—
2005–2006	13.62	92.73	110.35	501.21	1119	1,620.21	-1509.86	1,223.30	-1.2
2004–2005	13.87	92.96	106.83	411.69	595	1,006.69	-899.86	1,104.18	-0.8
2003–2004	13.86	81.92	95.78	410	582.23	992.23	-896.45	1,152	-0.77
2002–2003	12.72	75.03	87.75	402.06	483.11	885.17	-797.42	1,035.10	-0.77
2001–2002	11.79	81.07	92.86	370	443	813	-720.14	974.54	-0.73
2000–2001	10.88	82.91	93.79	415.78	393.78	809.56	-715.77	928.22	-0.77
1999–2000	8.66	80.75	89.41	400	355	755	-665.59	930.11	-0.71
1998–1999	8.70	79.66	88.36	257.35	278.25	648.66	-560.3	598.15	-0.93

Note: GSDP Gross State Domestic Product; GDP Gross Domestic Product.

Source: All figures are revised budget estimates except for 2007–2008. Columns 1–3 are compiled from Union Budget, Annual Financial Statement, Statement III – Receipts & Expenditure of Union Territories (UTs) without Legislature, for various years. Columns 4–6 are compiled from Union Budget, Expenditure Budget, Volume 1, Expenditure of UTs without Legislature, for various years. Column 7 = Column 6 – Column 3. Column 8 is from CSO data. Column 9 = Column 7/Column 8.

increased by 185.95 per cent highlighting a growing deficit ratio. On the revenue side, we see that non-tax sources have consistently accounted for higher revenues than tax sources. On the expenditure side, expenditure has always been greater than GDP (in 2005–2006, GDP was Rs 1,223.30 crores and total expenditure, 1,620.21 crores accounting for a difference of approximately Rs 400 crores) and revenues have accounted for approximately 10–12 per cent of GDP.³ Further, data from the Planning Commission reveals that the utilisation of plan outlay by the A&NI during the Tenth Five Year Plan period has been an impressive 102.95 per cent utilisation.⁴

With the share of agriculture and manufacturing industries coming down as per trends in GDP and the fisheries sector not yet developed fully, tourism is being seen as an important factor that can contribute to revenue generation in the islands. However, tourism's record thus far has not been encouraging of this hope. Table 7.6 provides evidence of the fact that the contribution of the tourism sector to revenue generation in the islands is negligible.

TABLE 7.6 Trends in the Share of Tourism in Revenue Receipts of Andaman & Nicobar Islands 2004–2007

	2004–2005	2005–2006	2006–2007
Revenue Receipts from Tourism (Rs in crore)	1.019	0.6524	1.8077
Percentage of Total Revenue Receipts	0.95	0.56	1.47

Source: Demand No 95, Revenue Receipts, A&NI, received from Department of Finance, 2007.

The low share of tourism in revenue generation is largely on account of the absence of state-level taxes (such as luxury tax, entertainment tax) applicable to the sector, which are sources of revenue for other state governments. In addition, the Administration estimates that the revenue expenditure on tourism would be to the tune of 130 lakhs in 2006–2007 and the budget expenditure is estimated to be 150 lakhs in 2007–2008.

The Department of Information, Publicity and Tourism (IP&T) itself believes that a strong reason for promoting tourism in the islands would be to generate much-needed revenue for the Administration.⁵ But it is clear that as this is not the case now, a change in strategy and policy is required to tap tourism's potential for revenue generation.

7.1.2.1 Subsidisation of the A&NI Economy by the Union Government

The extent of subsidisation provided to the A&NI is important to take cognisance of, as most economic activities on the islands, including tourism, have the benefit of subsidies being provided by the Central Government.

While the exact data is not available, it is commonly agreed that subsidies apply to agricultural produce, public distribution system and rural development schemes and are quite high in the transport sector, where freight rates fixed at coastal conference rates have subsidies ranging from 50 per cent to 90 per cent for finished goods going to the mainland, and passenger fares are also subsidised by a substantial amount.⁶

This report is not able to clearly answer the question of whether prices in the islands reflect actual transport costs or whether these are subsidised. In case these are subsidised, which is quite likely, the question of whether an economic activity such as tourism in the islands would remain viable if such indirect subsidies to the tourism industry were withdrawn is valid. This issue is already being debated in terms of the differential cost of boat services (or pricing of exclusive boat services for tourists), if such services were run by the private sector. This argument would go further if such services were not subsidised at all.

7.1.3 Employment and Workforce

The State Development Report of the A&NI observes that in comparison with the national average, the growth rate of employment and productivity of labour are far lower in the A&NI. Data from the 2001 census on the employment patterns of the A&NI is displayed in Table 7.7. According to the Census 2001, work participation rate in the islands is 38.3 per cent (39.2 rural and 36.3 urban). In addition, around 30,780 persons across all age groups were identified as seeking for and available for work but unemployed.

TABLE 7.7 Total Workers (Main and Marginal) and Non-workers in the Andaman & Nicobar Islands as per 2001 Census

	Total	Rural	Urban
Total Population of A&NI	3,56,152	2,39,954	1,16,198
Total Workers	1,36,254	94,052	42,202
<i>Total workers as % of total population</i>	<i>38.25</i>	<i>39.12</i>	<i>36.31</i>
Total Non-workers	2,19,898	1,45,902	73,996
<i>Total non-workers as % of total population</i>	<i>61.74</i>	<i>60.8</i>	<i>63.68</i>
Total Main Workers	1,13,607	73,454	40,153
<i>Total main-workers as % of total workers</i>	<i>83.37</i>	<i>78.1</i>	<i>95.15</i>
Total Marginal Workers	22,647	20,598	2,049
<i>Total marginal-workers as % of total workers</i>	<i>16.62</i>	<i>21.9</i>	<i>4.86</i>

Source: Census of India, 2001.

A further look at the composition of the total workforce is provided in Table 7.8, which indicates that after 1991 the contribution of the primary sector has declined sharply to under 10 per cent of workers while that of the tertiary sector has risen significantly to above 50 per cent. Among the sectors which currently account for high percentage of workers are construction (16.304%), wholesale and retail trade (10.6%) and other services, that is mainly government servants (31.7%). In this we note that the hotels and restaurants sector employs only 1.5 per cent of all workers.

TABLE 7.8 Composition of Workforce in the Andaman & Nicobar Islands Based on National Industrial Classification (NIC) as per 2001 Census

Main activity	Number of persons	% of total
Agricultural and Allied Activities	9,641	8.8
Mining and Quarrying	1,245	1.1
<i>Primary Sector</i>	<i>10,886</i>	<i>9.9</i>
Manufacturing:		
Household industries	7,062	6.4
Non-household industries	9,726	8.9
Electricity, Gas and Water Supply	2,686	2.5
Construction	17,874	16.3
<i>Secondary sector</i>	<i>37,348</i>	<i>34.1</i>
Wholesale and Retail Trade	11,660	10.6
<i>Hotels and Restaurants</i>	<i>1,599 (T)</i>	<i>1.5</i>
<i>T-Total, M-Male, F-Female</i>	<i>1,428 (M)</i>	—
	<i>171 (F)</i>	—
Transport, Storage and Communications	8,368	7.6
Financial Intermediation and Real Estate, Renting and Business Activities	4,903	4.5
Other services	34,860	31.8
<i>Tertiary sector</i>	<i>61,390</i>	<i>56</i>
Total Main Workers	1,09,624	100.0

Source: Census of India, 2001.

However, to understand the nature of employment in recorded tourism (hotels and restaurants), it is important to look at disaggregated data on the division of workforce in tourism between main workers (those workers who had worked for the major part of the reference period, i.e. 6 months or more) and marginal workers (those workers who had not worked for the major part of the reference period, i.e. less than 6 months). As data from Table 7.9 indicates, of total workers in tourism, main workers constitute 92.05 per cent, while marginal workers make up only 7.95 per cent. However, this proportion might change if we consider unrecorded tourism activities that the census figures do not account for. In terms of gender disaggregation, 89.3 per cent of the tourism workforce is male and 10.7 per cent female, showing a predominance of men in the workforce. The data also shows that among main workers, the division between urban and rural areas is not very wide with a slightly higher percentage coming from urban areas (56.2%). However, in the case of marginal workers, nearly 75 per cent of them were recorded in rural areas. Port Blair town being the only urban area in the A&NI as per census classification, this data highlights the fact that the seasonal nature of jobs in tourism is higher in rural areas (areas outside of Port Blair) than in Port Blair town itself.

TABLE 7.9 Composition of Workforce in Hotels and Restaurants in the Andaman & Nicobar Islands as per 2001 Census

		Total Workers (%)	Male	Female
Total Workers		1599	1428 (89.3%)	171 (10.7%)
Main Workers	Total	1472 (92.05%)	1326	146
	Rural	645 (43.8%)	544	101
	Urban	827 (56.2%)	782	45
Marginal workers	Total	127 (7.95%)	102	25
	Rural	94 (74.01%)	72	22
	Urban	33 (25.99%)	30	3

Source: Census of India, 2001

Discussions with local communities, the industry and Administration alike have highlighted that there are high hopes pinned on tourism's potential to create jobs for the youth in the islands. Thus far, at the macro level, this hope has not materialised, as although tourism might have created jobs, our interviews reveal that the expectation of a permanent government job is the priority for youth of the islands. But we must recognise that while government jobs or the odd job opportunities in secondary and tertiary sectors are available to youth in Port Blair, in other islands, tourism does offer opportunities for regular employment. What is more critical is for the Administration to be able to provide alternative job opportunities for the youth and currently unemployed so that if they seek jobs outside of the government, then these opportunities are available in the islands itself. With the Administration keen that tourism will create jobs, it remains a challenge to see how these jobs will be created and whether they will be of a permanent nature or not.

7.2 Economic Impact of Tourism Development in the Islands at the Local Level

This section draws largely from the primary survey conducted with tourists and a section of the tourism industry, which is accommodation establishments. It examines the economic impact that tourism has had on economic parameters that can be linked to the extent of local benefit derived from tourism. For this purpose, the results from the survey with accommodation establishments has been differentiated between those in Port Blair and those in other islands (such as Havelock, Neil, Baratang and Long Island) and locations (such as Diglipur, Rangat) as the analysis varies significantly and it would be important to make this distinction to account for benefit that accrues to the local community. We must state that our ability to make linkages between parameters studied in the accommodation sector and the extent of local benefit derived from it would have been much greater if official data on the ownership pattern, extent of revenues earned, profits and the number of people employed in this sector had been recorded and made available by the A&NI Administration.

7.2.1 Ownership of the Tourism Industry

Examining the ownership pattern of the industry is an important indicator of the involvement of the local community in tourism and the benefit they derive from it.⁷

Within the structure of the tourism industry, the potential for local ownership is highest in the accommodation sector and relatively lower in other segments of the industry such as travel agents and tour operators. This is due to the structure of the industry itself where the potential for local participation or ownership is highest in those activities that are consumed locally, that is at the destination by the tourist which include the accommodation and local tourist guide services. Decisions about tour packages are usually made before the tourist arrives at the destination and therefore it is a sector where local community has little involvement. As part of the primary survey conducted with the accommodation establishments in Port Blair and other islands, Figure 7.2 depicts the pattern of ownership against two parameters.⁸

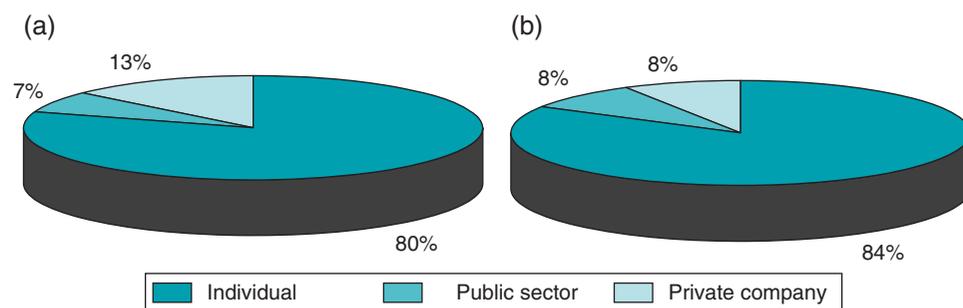


FIGURE 7.2 Ownership Pattern in Accommodation Establishments: Form of Ownership
(a) Establishments in Port Blair (b) Establishments Outside of Port Blair

As indicated in Figures 7.2a and b, a large percentage of accommodation establishments in the Andaman Islands are under individual ownership and this trend is uniform whether we consider establishments in Port Blair or other islands. Individual ownership comprises two kinds of entrepreneurs. The first is the kind seen in Port Blair where businessmen and entrepreneurs who have been active in the islands in other sectors such as trading, construction or fishing have invested in the hospitality sector as well taking note of the rise in demand for hotel rooms in the city. The second kind of individual ownership is as seen in a few islands where local entrepreneurship in tourism has been developing as in the case of Havelock, Neil and Diglipur. Here, individuals from Port Blair or from the respective islands have ventured into the tourism business. Accommodation establishments under public ownership (7% for establishments within Port Blair and 8% for establishments in other Islands, respectively) mainly comprise the government guesthouses and few resorts run by the IP&T and Forest Departments of the Administration as well as hotels run by Andaman and Nicobar Islands Integrated Development Corporation (ANIIDCO). The private ownership accounts for select tourism businesses and companies such as ITC WelcomGroup's Fortune Resort Bay Island Hotel in Port Blair and the Barefoot in Havelock. Naturally, the percentage of this is slightly higher in Port Blair as more such companies have invested in Port Blair. However, it is likely to increase in other islands as well, with the Taj Group now slated to develop the 45-acre property owned by ANIIDCO at Radhanagar beach in Havelock.⁹ The fact that both in establishments in Port Blair and outside individual ownership is high is an indication that the accommodation sector in the islands is not dominated by

large private companies but is mainly comprised of smaller, individually owned units. It also indicates that the initiative of government in venturing into the investing in the accommodation sector is quite low as only 7–8 per cent of the current accommodation units are under their ownership. However, to ascertain the degree of local benefit that accrues from the accommodation sector, it is important to analyse the origin of the owners themselves and see what proportion are from the islands and what proportion are from the mainland.

The results of evaluating ownership on the basis on origin of the owner, on the basis of our survey are presented in Figure 7.3.

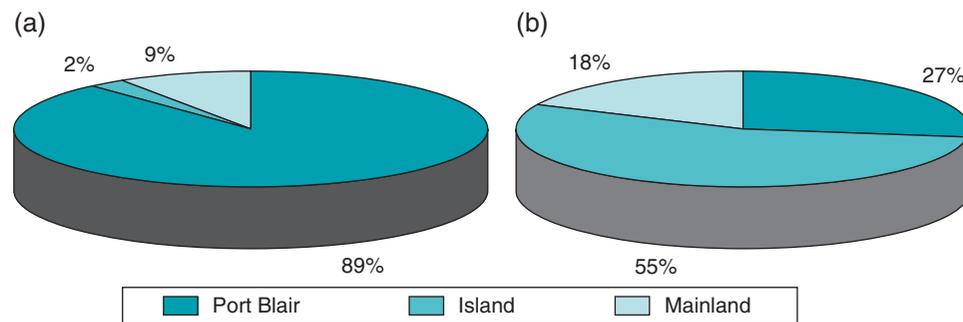


FIGURE 7.3 Ownership Pattern in Accommodation Establishments: Place of Origin of Owner
(a) Establishments in Port Blair Only (b) Establishments in Other Islands

Figure 7.3 shows that in Port Blair establishments, 89 per cent of the owners of accommodation establishments are from within Port Blair and 9 per cent are from the mainland. Few properties like Fortune Resort Bay Island, Sinclairs and Barefoot (partly) having outside ownership account for the latter, but by and large it is the local entrepreneurial community that has entered the hotel business. Not surprisingly, very few people from other islands own establishments in Port Blair. But when we consider the status of ownership of establishments located outside of Port Blair, 55 per cent of establishments interviewed are under the ownership of people who hail from the island where the establishment is located. It is important to note that 27 per cent of the establishments interviewed outside from Port Blair were under the ownership of individuals from Port Blair. The ownership pattern in Havelock for example is that out of 25 tourism establishments, around 7 are under ownership of locals from Havelock, around 7 are leased to developers outside Havelock, that is mainly from Port Blair and the rest are under the ownership of developers from Bangalore and Chennai.¹⁰ Interestingly, the percentage of establishments under the ownership of individuals/companies from the mainland is double in accommodation establishments sector outside of Port Blair than within it. This reveals a rising interest by companies and entrepreneurs to invest in other areas such as Havelock, Neil and Wandoor and not so much in Port Blair town itself.

In summary, it is encouraging to note that with establishments located in Port Blair town, the ownership pattern is dominated by individuals from within Port Blair itself with a minor percentage of establishments being owned by those from the mainland. In accommodation establishments in the other islands, outside of Port Blair,

while 55 per cent are under local ownership, that is individuals hailing from the island where the establishment is located, a substantial percentage (27%) are under the ownership of individuals from Port Blair and 18 per cent are under the ownership of individuals or companies from the mainland. If we work with the hypothesis that the extent of local benefit derived from the accommodation sector is directly proportionate to the extent of local ownership in the accommodation establishment, then this proportion is higher in the case of establishments within Port Blair and less for establishments in other islands.

7.2.2 Employment of Local Community in Tourism

The employment opportunities that tourism brings to members of the local community is a direct indicator of the benefits that the community gets from tourism activities. The absence of any recorded data on the actual employment in the tourism sector is a significant lacuna in estimating the direct benefits that local communities derive from tourism. The primary survey conducted as part of this study also did not address this. However, our survey has enabled us to examine the form of employment that tourism has offered in the islands on the basis of three broad indicators:

1. nature of employment – permanent or temporary
2. place of origin of employees
3. gender analysis of employment

With regard to the first indicator, Table 7.10 indicates that in the range of 1–5 employees, the number of permanent employees in accommodation establishments is higher than the number of temporary employees, that is 37 as against 17. This remains true as the number of employees goes up. So, it can be concluded that the number of permanent employees is greater than the number of temporary employees, which is a positive sign. However, a necessary caveat to be mentioned is that the primary data was collected mainly in the off-season for tourism in the islands (July–October) and the possibility that the number of temporary employees increases in peak season is very high. But a closer look at the number of permanent employees shows that most establishments (42.5%) employ not more than five people permanently.

TABLE 7.10 Number of Permanent and Temporary Employees in Accommodation Establishments

Range of Number of Employees	Permanent Employees		Temporary Employees	
	Number of Establishments with Employees in Each Range	Percentage of Total	Number of Establishments with Employees in Each Range	Percentage of Total
1–5	37	42.5	17	19.5
6–10	22	25.3	5	5.7
10–20	12	13.8	1	1.1
> 20	4	4.6	0	0

Another indicator that can examine the extent to which the local community is employed in tourism is by analysing the place of origin of the employees. Table 7.11 indicates the place of origin of employees in the islands and compares it between temporary and permanent employees.

TABLE 7.11 Place of Origin of Permanent and Temporary Employees in the Accommodation Sector

	Establishments in Port Blair Only		Establishments in Other Islands		
	% of Establishments with Permanent Employees from Each Place of Origin	% of Establishments with Temporary Employees from Each Place of Origin		% of Establishments with Permanent Employees from Each Place of Origin	% of Establishments with Temporary Employees from Each Place of Origin
Port Blair	62.16	50	Outside of the Island Where the Establishment is Located	17.9	0
Outside of Port Blair but with the A&NI	18.9	38.8	Island Where the Establishment Is Located	71.4	7.5
Mainland	18.9	11.1	Mainland	10.7	0

The table indicates that there is notable difference in the place of origin of employees when we compare across establishments located in Port Blair as against those in other islands. Within Port Blair, among permanent employees, the largest percentage (49%) come from Port Blair itself and an equal percentage come from other islands and the mainland (15%). Of these groups, our field interviews reveal that those coming from other islands are largely educated youth who find employment at the front desk or housekeeping services with hotels but those hired from the mainland are brought in for either specialised services such as chefs or high posts such as Heads of Departments or Managers that the industry believes cannot be filled from with the island's human resources. Among temporary employees, again the highest percentage of hotels recruit from within Port Blair. When we consider accommodation establishments in other islands outside of Port Blair such as Havelock, Neil and Baratang, and locations such as Diglipur and so on that have permanent employees, half of the establishments recruit from the island itself and this is encouraging.

In our discussion on the nature of employment provided by the tourism sector to the local community, it is critical to factor in the aspect of seasonality in arrival of foreign tourists to the islands as discussed in Chapter 4. Therefore, we see that those in establishments where the clientele is largely the foreign tourist, the employment of temporary labour rising significantly (some approximate by more than 50%) during peak foreign tourist season as demand for services increases. This is a further indicator that the local labour available on the island is being absorbed only when needed by the industry and rarely on a permanent all-round-the-year basis. Our survey also revealed

that among the different categories, labour from the local island was employed largely in jobs like housekeeping, waiters in the restaurant, cleaners and the occasional tour guides. Jobs requiring slightly more technical expertise (such as accounting or computer skills) or language skills were given more to labour from Port Blair as they were seen as possessing these skills to a better degree than labour from other islands. In addition, in the current employment pattern in the islands, one notes a gender imbalance and stereotype in the jobs offered by tourism establishments in Port Blair and the islands where on average the number of female employees is lesser than the number of male employees (1–2 women in most hotels as against 6–7 men). Also, wherever women are employed, they work either as front desk receptionists or housekeeping staff indicating a possible gender stereotyping of work in the tourism industry.

Our interaction with the local community also revealed that there is a close link between the ownership of the resort (whether under ownership of people from the mainland/Port Blair/the islands) and the number of jobs it provided to the local youth. In Havelock, for example, those establishments that were under the ownership of people from Port Blair or the mainland provided lesser number of jobs to locals relative to those establishments which were under the ownership of locals themselves. In contrast, Neil Island, which has three private resorts all under ownership of youth from the island, employ only local youth for their activities.

The above data indicates the following trends of employment in the accommodation establishments:

1. The accommodation sector employs a larger number of permanent staff than temporary staff on an average. Establishments in Port Blair recruit largely from within the town while those in other islands largely recruit from within the island. In the cases of establishments that cater mainly to foreign tourists, there is a high tendency to increase the number of temporary employees during peak foreign tourist season (mid-October to mid-March) to meet the increase in demand for services in such resorts in the islands.
2. In terms of place of origin of employees, there is a greater tendency to recruit people in jobs where certain skill or expertise is required from Port Blair and recruit people for temporary work of a lower skilled nature from other islands. In terms of both permanent and temporary employees, the percentage of people employed from the mainland is low (although between the two, a higher percentage of permanent employees are recruited from the mainland).
3. Jobs employing local community members from the islands are restricted to housekeeping, gardening, chauffeuring and tour guide services in the event that the establishment is not under local ownership. In case of establishments under ownership of individuals or companies in Port Blair or the mainland, the tendency is to recruit mainlanders for high-end managerial jobs and retain local labour for other jobs.
4. Gender bias and stereotypes in tourism-sector jobs are currently visible and could get entrenched in the system if not adequately worked on consciously by the industry and community.

In summary, we can infer that despite the fact that tourism has created jobs for an economy grappling with an unemployment situation, the nature of jobs being created and who gets them has to be more thoroughly analysed by the A&NI Administration

and the industry. Further, it is crucial for the A&NI Administration and community to account for the factor of seasonality in foreign tourist arrivals, especially in resorts that depend on this clientele, as it will have a bearing on the sustainability and permanence of jobs that can be provided by such establishments.

Apart from the accommodation sector, it is important to capture the employment that tourism has created for local youth indirectly. The growth of tourism in islands such as Havelock, Neil and Baratang has opened up jobs for youth in the transportation sector where local youth ply *autorickshaws* and jeeps or hire out bikes for use by tourists during season. Our field discussions with the community reveal that this activity has become such an important source of temporary employment and income for local youth during four months of peak foreign tourism season that the income earned during this time suffices for the entire year. In Baratang, the local youth and fishermen have found jobs as both *donghie* owners who ferry tourists from the Nilambur jetty to the limestone caves and Parrot Island (Figures 7.4 and 7.5). Apart from the transportation sector, tourist guides and tour operating services on the islands is another area emerging for local employment. In Havelock, for example, resorts such as Dive India and Barefoot have trained local youth (both from within Havelock and from other islands of Andamans) as diving, snorkelling and trekking guides for their tourists. Despite the fact that tourism has opened up jobs in these auxiliary sectors such as transportation, such jobs are of a highly seasonal nature and they mainly cater to foreign tourists whose arrivals peak during the five months of mid-October to mid-March.



FIGURE 7.4 *Donghie* Owners Take Domestic Tourists from Nilambur Jetty to Limestone Caves, Baratang

The industry believes that creation of jobs for the local community is a responsibility that tourism must take up but the problem faced by them is of finding skilled (both technically and in language) labour from the islands. Although the local polytechnic university has a training course in hospitality, out of every batch of 25 students, only 4 or 5 enter the industry. They believe that the problem with the youth in the islands is the mindset of waiting for a government job and anything else is not secure or socially respected enough.¹¹ But even considering this, our interactions with the community



FIGURE 7.5 *Donghie* Owners Take Domestic Tourists from Nilambur Jetty to Limestone Caves, Baratang

have revealed that there is enthusiasm among the youth about venturing into tourism activities. Many members of the youth in various islands we spoke to urged the A&NI Administration to consider providing basic training in English language skills, serving and catering, possibly even developing culinary skills in order for them to be able to find more high-paying jobs in resorts. There were also few, interested in starting resorts or eco-hotels, who requested that the A&NI Administration consider providing soft loans to interested local community members as start-up money for opening a resort, as otherwise they would have to borrow from local moneylender or other rich islanders – both of which, in their view, were infeasible options. Box 7.1 provides some points, based on international experiences, on how tourism entrepreneurs can invest in local capacity building and training. The industry and A&NI Administration could consider the feasibility of these options for the Islands.

BOX 7.1 Tourism Investment in Local Capacity Building and Training

Investing in local education, training and capacity building can be an effective, visible and highly valued way for a tourism operation to contribute to local development. Typically, investment in capacity building covers one or more of four types:

1. Staff training

Approaches to employee sourcing and training vary considerably but often include the following:

- ◆ collecting data on human potential (skills) in the destination
- ◆ instigating local recruitment procedures
- ◆ investing in staff training
- ◆ collaborating with local authorities and institutions to develop training programmes and promote recruitment
- ◆ assisting with guide training and accreditation
- ◆ providing placements or internship and exchanges for locally based business partners

BOX 7.1—cont'd**2. Training local entrepreneurs and tourism businesses**

Activities aimed at capacity building of local business involved directly or indirectly in the tourism industry can include the following:

- ◆ knowledge and technology transfer
- ◆ assistance to small private and community investors with product development
- ◆ assistance with access to markets
- ◆ information on markets, marketing and technology
- ◆ assisting local authorities to develop support mechanisms to small tourism related businesses in the destination
- ◆ sharing relevant computer software and new technology
- ◆ assisting with setting up management systems

3. Support for local schools and education

This is a common form of investment, and is also often supported by tourists adding their own donations. Investment in classrooms and school resources is often a top priority for neighbouring communities. However, there are also issues that need to be explored in achieving a sustainable balance between secure government funding for the teaching and schooling versus reliance on donations.

4. Raising awareness on tourism issues within the local community

Such awareness raising may be simply to increase understanding of – and hence support for – tourism among neighbours. Or it may be in order to engage the local community in consultation and shared decision-making, as in the case of Sua Bali and Nusa Dua, where general awareness raising and participation of the villagers in the development of the product are key ingredients to their tourism development.

The Astra Country Inn – Training for Local Entrepreneurs

Astra Country Inn, Jamaica, has been promoting community tourism since 1978. Astra Country Inn has worked with surrounding communities to develop a wide variety of community-based products including the development of private homes and “bread and breakfast” accommodation, training of local guides, the development of various community-based tour attractions, and the development of local suppliers. The Country Style Institute for Sustainable Tourism offers a four-months basic tourism course that covers such topics as housekeeping, food preparation and interpersonal skills. The programme consists of one month of theory and three months of practical work experience. Partial sponsorship of course fees is offered to those in need of financial assistance. Approximately 2,000 people have received training in the past two years. It is now being expanded throughout Jamaica and the Caribbean with the assistance of international partners Counterpart International and the International Institute for Peace through Tourism.

Jungle Bay Resort and Spa, Dominica – Building Capacity of Local Entrepreneurs from the Start

Jungle Bay Resort is a new hotel that is still under construction. Phase I will consist of 50 rooms. The hotel is being constructed in southern Dominica, a traditional banana growing area

Continued

BOX 7.1 Tourism Investment in Local Capacity Building and Training—cont'd

with little prior experience of tourism. The project developers chose this site not only because of its rich environmental attributes but also because they believed that the tourism industry could make some important contribution to the local economy. The developers have realised that they will need to rely on the local community for this venture to be a success. They also realised that the local community has little experience of tourism or business. The awareness and human resource capacity of the local community would therefore need to be strengthened if both hotel and community were to prosper. Some of the initiatives sponsored by the hotel include the following:

- ♦ Entrepreneur workshop – The hotel sponsored a two-day entrepreneurship course that was attended by 125 people. The course introduced participants to business strategy and planning so they could write business plans. The course also provided an opportunity to interact with four lending officers from the banks, as well as with representatives from the legal and accounting profession.
- ♦ Environment development campaign – The hotel worked with nine local schools in an anti-litter education programme that included a “paint a picture campaign” whereby kids painted trash cans. Each school painted two bins: one they kept, and the other they gave to the hotel for its programme to put bins in public spaces.
- ♦ Hospitality programme – The hotel facilitates a donor-funded hospitality programme. The three-month programme, attended by 100 people, covers topics such as food and beverage, languages, history and culture.
- ♦ The hotel is also working with ten farmers to develop more of a commercial understanding of farming so that they can provide a supply chain system to supply products to the industry.

Sua Bali, Bali, Indonesia – Developed through Community Awareness Raising, Consultation and Local Training

The management team has involved the population of Kemenuh in the planning and gradual realisation of Sua Bali – in numerous individual discussions and in the “Banjar”, the village council. The process involved intensive investment in community awareness raising and consultation. Of key importance was the strengthening of awareness among the local people towards the positive and negative impacts of tourism development in their daily economic, social and cultural life. This was done through, for example, a painting contest in the village school, through discussions with teachers in Sua Bali, through group and individual talks with younger and older members of the village. Discussions have also led to the rejection of ideas that are unpopular with the community, such as the construction of a bungee platform in Kemenuh.

There has also been heavy investment in staff training. Staff are predominantly from Kemenuh or neighbouring villages, as are construction workers and craftsmen who constructed the guest houses in the Balinese style. The resort finances language courses in German or English for employees – mostly after one year in employment. Staff at Sua Bali receive above-average pay and no wage cuts are made for employees during illness or needing to attend religious or social gatherings at the villages base on the belief that employees should not be cut off from their local communities. This creates a feeling of job satisfaction and induces or encourages employees to stay for a relatively long period, from

BOX 7.1—cont'd

between one- and-a-half to three years, which is unusually high in the tourism industry in Bali. Staff have also moved on to managerial positions in “big-name” hotels on the island. The village of Kemenuh reaps the benefits of around seventy or eighty percent of the employment impact and of purchases handled, the rest goes to neighbouring villages.

The community is integrated into the product at Sua Bali. From the cookery course, to introductory courses with wood carvers or painters, the programmes offer discussion rounds with local experts on themes such as architecture, medicine, pedagogy, tourism or rice cultivation.

Source: Business Implementation for Pro-poor Tourism, Case Study Brief No.6, www.odi.org.uk/tourism/resources/briefings/0501_pptpilots_casestudies_6.pdf, data retrieved April 2008.

7.2.3 Income accruing to local community from activities directly and indirectly linked to tourism

The contribution that tourism makes to the income of local communities can be discussed at different levels. The following information is based on interviews:

Employment in the sector – On a direct level, those employed in the sector either in accommodation establishments or as tour guides earn incomes from tourism. The wages for employment in the accommodation sector vary depending on the kind of job and the kind of establishment.¹²

Auxiliary activities in the transportation sector – Owners of taxis or *autorickshaws* earn between Rs 3,000–4,000 a month during peak foreign tourism season but this falls to Rs 200–300 in off-season. The income for *autorickshaw* drivers is proportionately less in absolute terms but the proportionate difference in income between peak and off-seasons remains the same. *Donghie* owners in Baratang make a profit of Rs 3,000 a month on average during peak season, while labourers who assist the *donghie* owner earn around Rs 50–75 a day.

Vegetable and fish vendors – There is a palpable perception among the local community that tourism has contributed substantially to raising the incomes of vegetable and fish vendors in islands such as Havelock and Neil during peak foreign tourist season. Such a rise in prices could be on account of the seasonality in fish catch, seasonality in availability of the vegetables from the mainland and many other factors, but it is important to note that in the eyes of the local community such a price rise is attributed to rising demand for these products by hotels, resorts and tourists themselves during times when the number of tourists in the island increases. Many vegetable, fruit and fish vendors believe that the higher prices they get for their produce during such times has been a welcome change that tourism has brought about. However, here we noted that it is the vendors in the market who are largely benefiting from this increased demand owing to tourism, whereas farmers believed that they did not have a share in these profits. The downside of this trend, however, is that the local community has to bear the brunt of price rise of essential food items, the impact of which is discussed later. The A&NI Administration needs to research more thoroughly about the extent to which increased demand from tourism-related activities is the cause for this price rise.

Shopkeepers and other vendors As there is little other movement of people in these islands, increase in tourist arrivals does account for an increase in activity for shopkeepers and other vendors as well (Figure 7.6). To specifically consider the case of purchases made from the local market by tourists, our primary tourist survey revealed the statistics as mentioned in Table 7.12.



FIGURE 7.6 Tea Stall Owner, Beach No. 3 Bazaar, Havelock Island

TABLE 7.12 Status of Purchases Made by Tourists in the Islands

Status of Purchases	Domestic Tourists (%)	Foreign Tourists (%)
Purchased something	86.28	64.8
Purchased nothing	13.72	35.2

In terms of the purchases made from the local market, the data from the tourist survey reveals (Table 7.12) a discouraging picture as 35 per cent of foreign tourists and 13 per cent of domestic tourists stated that they did not purchase anything from the local market. Of those tourists who did make purchases from the market, the survey and our interviews with community representatives reveal that both foreign and domestic tourists tend to buy handicrafts (e.g. corals, products made of coconut) and clothes. The purchase of packaged food is very high among domestic tourists as compared to foreign tourists and this could be on account of domestic tourist carrying packed food from hotels or purchasing branded food items such as chips, soft drinks and other snacks. Also, a higher percentage of domestic tourists have purchased souvenirs, corals and shells when compared to foreign tourists.¹³

Overall, purchases from local markets do not currently seem to account for high tourist expenditure and an important reason for this is that few options of purchases that are available to tourists currently. However, there are methods and practices that can be put in place to ensure that purchases that tourists do make contribute to the local economy directly. Encouraging purchase of food from the local market, providing financial and marketing support to development of handicrafts or other cottage industries could be measures that the A&NI Administration and industry could work on.

7.2.4 Linkages to the Local Primary Economy

It is extremely important from an economic sustainability and local benefit point of view to examine the linkages that tourism activities have built with other sectors of the economy. Our interviews with establishment owners in and outside Port Blair as well as community representatives reveal that now the supply chain linkage of sourcing primary produce required by tourism is weak. While few establishments in Port Blair and other islands source fruit, vegetables and sea food locally, many do not do this on a sustained basis either due to problems with quality, quantity or the regularity of supply from the local market. There are also many products like cheese, raw meat, specific vegetables and fruit that are not grown locally (like cauliflower, capsicum, carrot, beans, apples) that are sourced regularly from the mainland. There have also been hotel owners in Port Blair who complain about the price at which sea food such as prawns and crab are locally available, as these are much higher than the cost of importing from Chennai, and so many prefer importing. This is an interesting contradiction that part of the sea food catch from certain areas in the islands gets directly exported to the mainland because of demand and better prices but that at the same time hotels within the islands import from Chennai as it is cheaper in comparison to sea food available locally! On being asked to specify the difficulties faced in sourcing primary produce locally, establishment owners state inferior quality, irregular supply and higher prices as the three main problems. These are problems faced by the industry that need the attention of the A&NI Administration if linkages to the local primary economy are to be strengthened. The case study from the Caribbean in Box 7.2 may provide insights regarding this.

BOX 7.2 Tourism–Agricultural Linkages: Boosting Inputs from Local Farmers

Common problems of sourcing products locally are well known – inadequate quality, reliability or volume of produce exacerbated by poor transport and lack of communication and information between supplier and purchaser. The many factors affecting linkages between tourism and agriculture are summarised in Table 7.13. The strategies to overcome them are less familiar and implementation is an on-going challenge. Various initiatives have been undertaken, often by public bodies or non-governmental organisations (NGOs), occasionally by the private sector, entailing a variety of approaches to strengthening supply chain linkages. There are examples of both failed and successful initiatives, as outlined below.

Continued

BOX 7.2 Tourism–Agricultural Linkages: Boosting Inputs from Local Farmers—cont'd**TABLE 7.13** Factors Influencing the Strength and Type of Linkages between Tourism and Agriculture

Demand-Related Factors	Supply Related Factors	Marketing and Intermediary Factors
<ul style="list-style-type: none"> ◆ The Type of Visitor ◆ Accommodation with Respect to Ownership, Size and Class ◆ Tourism Industry Maturity ◆ The Type of Tourist ◆ The Promotion of Local Cuisine 	<ul style="list-style-type: none"> ◆ Physical Limitations ◆ Entrenched Production Patterns (e.g. Plantation Crops for Export) ◆ The Quantity and Quality of Local Production ◆ High Prices of Locally Produced Food ◆ Technological and Processing Limitations 	<ul style="list-style-type: none"> ◆ Marketing and Infrastructure Constraints ◆ Supply Poorly Adjusted to Demand Spatial Patterns of Supply

In order to create and maintain sustainable and beneficial linkages between tourism and agriculture all factors need to be taken into account. A frequent problem in increasing inter-sector linkages is often the mismatch between supply and demand and the lack of intermediary support structures that enable buyers and suppliers to come together. The Farmers Programme initiated and supported by the Sandals Group in the Caribbean is a good example whereby a private sector entity focuses on all three categories by becoming engaged in (a) channelling and creating demand for local products among its staff and customers, (b) supporting the supply side to deliver quality and quantity required and (c) establishing workable communication structures between supply and demand.

Sandals – Success in Sourcing Local Food from Farmers

The Sandals Group is a large all-inclusive resort chain with properties in Jamaica, Bahamas, St Lucia and Antigua. With 6,000 employees, Sandals is one of the largest employers in the Caribbean. Their approach to developing agricultural supply linkages has been quite distinctive, going beyond just increasing their own demand for local products. Sandals' Farmer Programme in Jamaica began in 1996, with the aim of developing good working relationships between farmers and hotels by improving the quality of produce, developing proper pricing arrangements and improving communications between farmers and hotels. Thus, the initiative works across supply, demand and marketing.

Key elements of the approach include the following:

- ◆ a farmer extension officer, funded by Sandals, who works directly with farmers on improving production
- ◆ collaboration with various other organisations, particularly on agricultural support, including the Rural Agricultural Development Authority (RADA) and Continuing Education Program in Agricultural Technology (CEPAT)
- ◆ management teams from the hotels visit farmers, holding and attending workshop days with them to discuss quality and marketing procedures. Farmers visit the hotels to see how their products are being utilised and why Sandals' specifications are important
- ◆ a focus on improving pricing and contractual arrangements concerning volumes to be traded

BOX 7.2—cont'd

Problems have also been encountered. The initial problems for farmers were (a) problems relating to production (e.g. lack of water supply or lack of packing material) and (b) problems relating to sale of the produce (e.g. inconsistent supply orders or lack of communication). RADA is now playing an active part in ensuring that the communication lines are active and the hotels are being informed two weeks before the delivery date as to what crops and volumes are available, thus guaranteeing supplies to the hotels while informing the farmers of demand in due time. In addition, a list of types, volumes and delivery prices of produce was agreed to by individual hotels and the respective farmer groups. This corresponded to a monthly supply order. In spite of initial problems, progress has been made. The project began with 10 farmers supplying two hotels, but now involves 80 farmers across the island. Within three years, sales have risen from US\$60,000 to US\$3.3 million. Farmers' income has increased and is more reliable, while hotels have gained from a wider variety of good quality local produce and cost savings. The programme is now being expanded to St Lucia and Antigua.

Another example of an effective integrated approach to increase the use of local produce in the tourism supply chain is provided by SuperClubs and the “Eat Jamaican” campaign.

SuperClubs and the “Eat Jamaican” campaign

The “Eat Jamaican” campaign was launched in November 2003 by several Jamaican associations and businesses in the productive sector, including the Jamaica Agricultural Society (JAS) and the Jamaica Manufacturers' Association (JMA) to promote locally produced goods to residents, visitors and exporters. Since its launch, the JAS reported an increase in demand (5.6% growth of the agricultural sector in the last quarter of 2003 compared to 4% in 2002) linked to companies such as SuperClubs having made commitments to support the produce of local farmers. SuperClubs is one of the leading all-inclusive tourism companies globally. In addition to buying fresh fruit and vegetables from the JAS' marketing company, and promoting the ‘Eat Jamaican’ campaign in their resorts, SuperClubs is also actively involved in promoting the ideas to tourism-industry members and appealing to colleagues to participate.

In February 2004, SuperClubs signed a Memorandum of Understanding (MoU) with the JAS to promote greater collaboration for the development of the agricultural and tourism sectors by promoting and participating in the “Eat Jamaican” campaign. Under the MoU, the JAS will trade with SuperClubs through the JAS proposed Central Marketing Company. SuperClubs will work with the JAS to provide incentives for local farmers and assist with designing technical assistance programmes for JAS members. The hotel will also provide the government with policy guidelines for initiatives that will benefit both the agricultural and tourism industries. Now SuperClubs purchases just over [US]\$110 million worth of local produce annually, but a key issue for the company has been the maintenance of high-quality produce. Such co-ordinated initiatives build on approaches that have been taken at hotel-level already. One of SuperClubs premier resorts, Hedonism III, started in 2002 with its Jerkfest events showcasing Jamaican cooking. Creating a unique tourist attraction, Hedonism III brings together local culinary delights, music display, and arts and crafts displays to attract tourists for a long weekend under the heading “Celebrate Jamaican Cuisine and Culture”.

Source: Business Implementation for pro-poor tourism, Case Study Brief No.3.
www.odi.org.uk/tourism/resources/briefings/0501_pptpilots_casestudies_3.pdf

7.3 Conclusion

This chapter examined the economic impact of tourism development in the Andaman Islands in the context of the current economic condition of the islands and to what extent current tourism activities are translating into direct benefits for the local community.

At the macro-economic level of the economy of the A&NI as a whole, data indicates that tourism currently does not play a significant role in the economy both in terms of its contribution to GSDP and employment. We further noted that despite a significant increase in tourist arrivals over the last two decades, the extent to which these increased arrivals have contributed to the economy is not clear. This is reflected by the contribution of tourism to the GSDP of the islands that has stagnated at approximately 8 per cent for the last two decades. In fact, for few years when arrivals did increase by around 10 per cent, per capita contribution of recorded tourism to GSDP has actually fallen, corroborating the previous point made. In terms of its contribution to revenue generation, tourism contributes 1.47 per cent to indirect tax collection, which is not significant. This low contribution could be as tourists are not purchasing local produce and as the avenues to tax tourism-related activities are very few. In relation to employment, recorded tourism employs less than 1.5 per cent of the total main workforce of the islands. We recognise that a substantial proportion of the workforce in tourism is of a marginal nature, subject to high degree of seasonality, especially in resorts and areas that are dependent on foreign tourist arrivals. This indicates that a substantial proportion of the existing workforce in tourism in the islands does not receive secured income from this source throughout the year.

At the micro-level, there is evidence of entrepreneurial initiative among the local community in the tourism sector that is reflected by the fact that more than 50 per cent ownership of accommodation units within Port Blair and outside are in local hands. The lack of data on ownership of assets and revenue generated from tourism means that we cannot judge the relative significance of different types of ownership (i.e. within Port Blair, within the island or from the mainland). In terms of employment opportunities for the local community in tourism, there is a case to be made that there is a tendency to employ disproportionately greater people from Port Blair and the mainland on jobs that required a certain level of technical or language skills. Employing from within the island seems to be a feasible option for establishments that need more temporary workers on low-skill jobs during the peak foreign tourism season. There is evidence of gender bias and stereotyping in jobs in the accommodation sector that could be checked. In terms of the purchases made from the local market, the data from the tourist survey reveals a discouraging picture as 35 per cent of foreign tourists and 13 per cent of domestic tourists stated that they did not purchase anything at all while on their holiday in the islands and further, from among those who did make purchase, the percentage who purchased locally made or procured items is even lesser. Overall, purchases from local markets do not currently seem to account for high tourist expenditure and an important reason for this is that few options of purchases are available to tourists now. Lastly, the existing linkages between tourism activities and the local primary economy are weak.

The above analysis points to the need for stakeholders in the tourism sector and primarily to the A&NI Administration to develop a sustainable strategy to improve the

economic impacts of tourism at the macro and micro level. Such a strategy needs to focus on the following:

- ♦ Putting in place a model and strategy of tourism that results in more and beneficial opportunities for the local workforce and supports local entrepreneurship in tourism
- ♦ developing stronger forward and backward linkages between tourism and the local economy

NOTES

- 1 Dhingra (2005), pp. 190–191.
- 2 Refer Section 4.1 of Chapter 4 of this report for a more detailed analysis of tourist arrivals to the islands.
- 3 NIPFP (2006).
- 4 As per the Planning Commission Report, total projected outlay 2,483.00 crores, total approved outlay at constant prices (1993–1994) was 2,583.01 crores and total actual or likely expenditure Rs 2,556.19 crores giving a percentage utilisation of 102.95 per cent. *Financial Performance of States and Union Territories during X Five Year Plan*, Planning Commission of India, <http://planningcommission.gov.in/plans/stateplan/stplsf.htm>, data retrieved November 2007
- 5 As shared by Shri D R Tamta, Special Secretary, Department of Information, Publicity and Tourism (IP&T) in a personal interview on 23 July 2007, Port Blair.
- 6 The Andaman and Nicobar Islands (A&NI) are also beneficiaries of the central Transport Subsidy Scheme launched by the Ministry of Home Affairs and Ministry of Commerce and Industry, in 1971 and periodically extended under which a subsidy ranging between 50 per cent and 90 per cent is admissible on transportation cost incurred by an entrepreneur on the movement of raw materials and finished goods from the designated railhead or ports up to the location of industrial units and vice-versa for a period of five years from the date of commencement of commercial production. The scheme is applicable to all the industrial units (barring plantations, refineries and power generating units) irrespective of their size, both in public and private sector. Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, http://dipp.gov.in/rti/dipp_rti.htm data retrieved May 2008
- 7 This analysis of ownership pattern in the tourism sector does not take into account the size of assets and refers only to the number of enterprises. It also does not reflect the share of these enterprises in revenue generation from tourism as no figures – official or unofficial are available for total revenue generation from tourism in the Islands.
- 8 The number of industry establishments interviewed and on the basis of which this analysis is made is 41 units in Port Blair (that is approximately 65% of the total number of accommodation units) and all the units in all other islands outside of Port Blair but part of the study, which is 100 per cent in Havelock, Neil, Long Island, Mayabunder, Diglipur and Rangat that together comprise “Accommodation establishments in other Islands outside Port Blair”.
- 9 This is as revealed by the A&NI Chamber of Commerce during a consultation with them.
- 10 This is as stated by the *pradhan* of Govind Nagar Panchayat, Havelock Island in a personal interview in July 2007.
- 11 These are notes from the consultation with the Andaman Chamber of Commerce and Industry (CCI).
- 12 This study was not able to capture the wage rates for different tourism-related activities in the islands on account of poor cooperation from the tourism industry.
- 13 It is important to note that the sale of corals is illegal in the islands, while the sale of many shells is legal. Field interactions reveal that many traders bring shells and products made of shells from parts of Tamil Nadu for sale in the islands. It is also possible that while answering the questionnaire, tourists did not differentiate between corals and shells.

8

Environmental Impacts of Tourism in the Andaman Islands

There are more than 130,000 islands in the world, which are inhabited by more than 500 million people. A large proportion of the people depend on island ecosystems for their livelihood. Islands harbour half of the tropical marine biodiversity of the world. There are eighteen centres of marine endemic areas identified by the World Conservation Union (IUCN) of which twelve are in island ecosystems. Further, 7 of 10 coral reef hotspots are in the surrounds of islands. Islands record high terrestrial endemism and are also habitats where the greatest extent of extinction is taking place. Islands are also highly threatened ecosystems.¹ Thus islands are confronted with particular challenges to conserve their natural resources and biodiversity, and thereby adopt sustainable development strategies.

8.1 Origins of Andaman & Nicobar Islands

The archipelago of A&NI are believed to have been formed from geological activity between the Cretaceous period (90 million years) and the Miocene period (15 million years)² and are considered extensions of the Arakan Yomas extending into the Mentawai Island to the south and south-west of Sumatra.³ After getting isolated from the Asian landmass, the islands, with their tropical climate, developed a luxuriant growth of tropical and subtropical forests, and also one of the finest clusters of fringing coral reefs. The isolation also led to occurrence of high endemism. The Andaman & Nicobar Islands Biodiversity Strategy & Action Plan⁴ accounts for the endemism as follows:

Of special note while discussing the ecological profile of these islands is the high level of endemism. Overall, 9% of the fauna is endemic. 40% of the 244 species and subspecies of birds are endemic. In mammals, 60% of the 58 species are endemic. The A & NI supports a significant diversity of reptile and amphibians with a high level of endemism. Currently seven amphibians and 16 reptile species are endemic to the Andamans and two amphibians and 15 reptiles are endemic to the Nicobars [...]Representing 700 genera and belonging to 140 families, about 14% of the angiosperm species are endemic to the islands. Among the non-endemic angiosperms about 40% are not found in mainland India, but have only extra-Indian distribution in South East Asia. [...]. The butterfly diversity and endemism is also very high, of the 214 species and 236 subspecies in 116 genera, over 50% are endemic. [...]

Thus:

considering the size and area of the islands, loss of habitat leading to extinctions will have far greater consequences in terms of the loss of genetic diversity than comparable areas elsewhere. A rough calculation using island biogeography theory indicates that with the area of forest down to 86% of what it used to be, about 4.5% of species may have been lost.

Further:

An analysis of the endemic species shows that there are fewer species in common between the Andamans and the Nicobars than would be expected by chance. This seems to indicate that the faunas of the two island groups have evolved separately from each other, and are isolated from each other.

8.2 Environmental Issues of Andaman Islands

8.2.1 Loss of Forest Cover

The Andaman Islands are faced with many environmental issues. To begin with, official reports have started showing a decline in forest areas due to increase in encroachments and conversion of forest land into agriculture and monoculture plantations. Encroachment is also linked to uncontrolled immigration into the islands. Encroachments lead to forest fragmentation, a reduction in forest cover and its conversion to monocultures leading to loss of biodiversity. Encroachments also lead to degradation of the forests near them. Misuse of non-timber forest produce permits⁵ from domestic to commercial use, especially *ballies* (young trees), is likely to affect regeneration and therefore condition of the future forests.⁶

Extraction of mangroves for commercial purposes was stopped in 1989 in the islands and most of these areas have regenerated to their original form.⁷ However, there are encroachments in mangroves in some of the areas in North, Middle and South Andamans. There is also some degradation due to fuel wood and pole extraction. Recently, there is also a demand to hand over mangrove areas for shrimp farming, a move that will have harmful environmental consequences. There is also a demand for handing over areas for fattening of mud crabs.⁸

8.2.2 Sand Extraction

Sand is extracted in the A&NI solely for construction poses. Sand extraction is a major problem affecting coastal ecosystems in the islands. In A&NI this has led to loss of marine turtle beaches and erosion by sea action. In a number of places the sea has destroyed the belts of vegetation bordering it. *Manilkara* forest has been affected at several sites in North, Middle, South Andaman and Baratang Islands and also in Little Andamans and the Nicobars. The regeneration of *Manilkara* forest has also been badly affected because of goats, cows and spotted deer that graze on the seedlings within these forests.

8.2.3 Threats to Marine Biodiversity

Collection of shells and sea cucumbers for commercial purposes has led to their drastic decline. Coral reefs of the islands are under threat from siltation, sand mining, agricultural runoff and damage due to fishing, tourism and construction activities. Sedimentation from land clearing and sea temperature rise from global climate change are significant causes of coral mortality.⁹

8.2.4 Introduction of Exotic Species

There are 19 endemic bird species found in the islands. Andaman Teal (*Anas albogularis*) is critically endangered, with major habitat loss having occurred all over their range, coupled with massive poaching.¹⁰ All the others are restricted range species, according to the IUCN threat criteria, even though none appears to be endangered at the moment.

The introduction of exotic species into the islands has led to a set of environmental problems. Feral elephants are found on Interview Island. An estimated forty animals were released on Interview Island in 1960, and these have formed a breeding population. A study in 1993 estimated their population at 70;¹¹ a survey done in March 2001 estimates their current population at 35.¹² It was noted that bamboos, rattans and *pandanus*, abundant on the other islands, have become very scarce on Interview Island. The debarking of large trees by elephant has led to opening up of the canopy, and the continued existence of elephants will lead to further degradation of the forests.

A specific problem, which also affects regeneration in forest areas, is because of the presence of spotted deer (*Axis axis*) in these islands. Spotted deer have created similar problems all over the North, Middle and South Andamans including Baratang and other outlying islands. These graze on seedlings and therefore have affected natural regeneration in forests.¹³ The problems of free-ranging cattle and goats damaging forests have been noted in a number of areas of North, Middle, South and Little Andaman Islands, as well as Nancowry and Great Nicobar Islands, including the Jarawa Reserve that is located on South and Middle Andaman Island. Cattle, on the other hand, do not normally graze in rainforest because of the lack of grasses but do so in open coastal forests. Goats have been observed at a number of places inside forest areas, for example near Wandoor.

Feral dogs have been reported digging up nests of sea turtles and killing nesting turtles all over the Andaman and Nicobar Islands.¹⁴ Cats are seen to be a predator of ground lizards, birds and nesting birds. Mynahs and palm squirrels have also been introduced into the islands, but their effects on the local fauna and flora have not been studied. The African Giant Snail is a major pest of vegetable crops all over the Andamans. The latest additions are House Crows, which have been recorded from Port Blair in October 2002.

8.2.5 Agriculture

The Andaman ecosystem is not suitable for agriculture and horticulture. A study, conducted in 1999, shows that productivity of rice has declined from what it was

40 years ago: it has reduced from 5.24 tonnes per hectare to 1.57 tonnes per hectare, suggesting that converted rainforest soils cannot sustain rice farming for long periods.¹⁵ Agriculture uses pesticides and fertilisers and it would have affected the bird populations, freshwater fish, mangrove ecosystems, coral reefs and wetland fauna.

8.2.6 Construction of Jetties

The jetties constructed in the islands very often block the free flow of sand across the beaches. This results in a pile up of sand on one side of the jetty and erosion of sand on the other side. It may be pointed out that computer models exist now to predict the erosion that might occur and to design appropriate structures.

The impact and growth of tourism in the islands needs to be contextualised in the light of these environmental issues.

BOX 8.1

Galapagos Under Siege

The Remote Islands Are Known for a Prehistoric Landscape. Why a Growing Flock of Well-Meaning Ecotourists Is Posing a New Threat.

Puerto Ayora, Galapagos Islands

Most of the wild goats that ravaged this famous archipelago, denuding some islands of their vegetation, have been hunted down. The same goes for the wild pigs that ate turtle eggs and killed small animals. Now comes the biggest problem of all – people like me.

I've just spent two days here in Puerto Ayora, the largest town in the Galapagos, where new cinderblock buildings are radiating in every direction. This was followed by a five-day cruise to see the remarkable wildlife that inspired Charles Darwin's theory of evolution. The new hotels in Puerto Ayora and the large cruise ships – eight of them now carry as many visitors as the 72 smaller vessels that used to represent local tourism – are signs of the times. They're part of the spiraling growth that has tripled the number of annual visitors to 120,000 in 15 years.

Tourism has brought prosperity but it's also creating a new set of problems. Migrants are coming from the impoverished Ecuadorian mainland to work in the travel industry. The residents and tourists must be serviced by an ever-growing fleet of cargo ships and airplanes, which are bringing invasive species as unwanted hitchhikers.

In April, Ecuador's president, Rafael Correa, declared the Galapagos, an island chain 600 miles offshore, in imminent danger. He also raised the possibility of restrictions on tourism. Pointing to unsustainable tourism development, the United Nations Educational, Scientific and Cultural Organization has put the Galapagos on its "World Heritage in Danger" list.

BOX 8.1—cont'd

Fewer than 4% of UNESCO's sites are on this list. They could eventually lose World Heritage designation – and the tourism draw that goes with it – if changes aren't made.

“The big problem is that the Galapagos was a formerly isolated island group that suddenly became part of the whole world scene,” says David Blanton, executive director of the nonprofit International Galapagos Tour Operators Association.

The other-worldliness of the Galapagos – a moonscape inhabited by creatures that exist nowhere else on earth and act like no others – is what gives the islands their fascination. The isolation of the Galapagos made it an ideal laboratory for the theory of evolution. Species arriving by air or ocean currents had to adapt to the unique conditions of the islands, which were formed by volcanoes rising from the sea bed. This inspired Charles Darwin to draw up his theory in the mid-1800s – that only the fittest survive by gradually changing their physical characteristics to adapt to their surroundings.

The flightless cormorants, for instance, a bird native to the Galapagos, exchanged their ability to fly for stronger legs to enhance their swimming and diving prowess. The marine iguanas, the world's only seagoing lizard, developed nasal glands to excrete salt.

Many of these native animals, particularly the large, scaly iguanas, give a prehistoric aura to the landscape. This is made more dramatic by the volcanic craters in the distance, the beds of lava dotted with lakes and interspersed with patches of cacti. The only sounds are those of nature – the calls of birds, the barking of male sea lions establishing dominance, the grunting of giant tortoises.

Although right on the Equator, the cold Humboldt current, which flows by the Galapagos, provides teeming ocean life that supports many of the islands' species. The snorkeling here is distinguished not only by the large variety of fish, but by the chance to swim alongside tame sea lions, penguins and large sea turtles.

The islands' fragile ecosystem can be easily disrupted, particularly as the increasing number of planes and ships landing in the Galapagos bring foreign species. Whether insects, snakes or feral cats and dogs, the invaders can wreak havoc by destroying plants and other food sources, eating eggs or attacking birds or mammals.

Fire ants, for instance, have been discovered aboard ships that come from Ecuador and are small enough to slip through quarantine, says Charlotte Causton, head of the terrestrial invertebrate program for the Charles Darwin Foundation, a nonprofit group devoted to conserving the Galapagos. “They radiate out like an army,” she says of the ants, which wipe out everything in their path including eggs and vegetation.

Increasing quarantine inspections would help combat the problem, but inspections have dropped 20% in the past five years as the government has committed less money, says Ms. Causton.

This isn't the only problem, says Robert Bensted-Smith, a conservationist based in Quito, Ecuador, who for five years headed the Charles Darwin Research Station in the Galapagos. Many new settlers to the islands become commercial fishermen, fishing legally to supply the tourist trade or illegally for shark fins to send to Asia,

Continued

BOX 8.1 Galapagos Under Siege—cont'd

all of which has an adverse impact on the marine ecosystem. Ships contribute to pollution, and their anchors damage the sea bottom. Solid-waste disposal creates dumps that can be breeding grounds for invasive species.

The threat comes despite the fact that Galapagos National Park, which encompasses more than 96% of the land on 19 islands, could serve as a textbook example of environmental consciousness. No tourist can set foot in the park without a guide, and groups are limited to 16 people. The ships that carry 100 passengers, the maximum allowed, have at least six or seven guides. Groups and their guides go ashore in separate inflatable boats, largely being kept out of each other's way on land. On their morning and afternoon excursions, passengers have to stay on designated trails, with no toilet facilities and no smoking or eating allowed.

For tourists, no matter how much they've read about the Galapagos, it is astonishing to see animals, reptiles and birds that have no fear of humans. They will allow you to come right up to them, since they haven't experienced humans as a threat. The guides rigidly enforce the rule of no interaction between visitors and wildlife – no feeding, no petting, no noises to get them to turn around and pose for a picture.

Park authorities are putting restrictions on islands that are being degraded by overuse. On Daphne Island, for instance, only one group of 16 visitors is allowed each month because the few trails erode easily.

Because of the restrictions, there is never a feeling of being overwhelmed by a flood of tourists as, for instance, at Angkor Wat in Cambodia or Notre Dame Cathedral in Paris. The stark volcanic islands, whose rugged trails sometimes require rock-hopping or balancing on slippery surfaces, provide a wilderness experience that isn't marred by being part of a 100-passenger ship.

The ship I sailed on, Galapagos Explorer II, is the largest allowed in the islands and one of the most luxurious. These big cruise ships have come in for criticism from environmentalists for bringing a new type of tourist, more interested in luxury and in going to a trendy place.

But if the Explorer was an accurate indicator, any allegation that the passengers were more interested in cocktails on-deck than in Darwinism didn't hold water. Some of the passengers were fanatics, attending onboard lectures day and night – with topics ranging from saving the oceans to the life of penguins. Armed with high-powered binoculars and guidebooks, the birdwatchers were a particularly hardy breed, sometimes picking out distant birds that the guides had missed.

And while the ship was certainly comfortable, the 6:30 a.m. daily wakeup call, the difficult hikes, and the absence of conventional cruise-ship entertainment like live music or nightclubs were hardly cushy. It presented an opportunity to devote each day to seeing and studying the Galapagos, and the ability to put aside all the usual distractions of daily life proved exhilarating.

Some environmentalists say President Correa's declaration of imminent danger is a positive sign. The Correa government took over in January 2007 and hasn't yet introduced any measures that directly affect tourists. But things are starting to

BOX 8.1—cont'd

change. The new governor of the Galapagos, known as a dedicated environmentalist, headed the national park for eight years.

Environmentalists say that the new Correa government – unlike previous administrations, where politics and corruption frequently stifled efforts to protect the islands – is showing a willingness to enforce existing regulations and consider new ones. “The government took ownership of the problems of the Galapagos, and this is making change possible,” says Mr. Bensted-Smith, the conservationist based in Quito.

Steps are now being taken to tighten quarantine procedures and to keep out illegal migrants, says Mr. Bensted-Smith. The government is discussing subjects that were formerly off limits, such as stopping local boat owners from selling their tourist licenses, which can be worth hundreds of thousands of dollars, to outsiders. The government is also considering doubling the entrance fee for the national park to \$200 a person, which would provide more money for conservation activities.

But the biggest problem so far remains unsolved: what to do about the flood of tourists. “It’s not a simple solution, because to limit tourism will be to limit income,” says Mauricio Castillo, an official for UNESCO in Quito. In addition to restricting the number of visitors, he says that ways to channel more tourist revenue to the local islanders are now being considered, as well as raising the costs of a Galapagos trip, so that higher prices will dampen tourist numbers but still provide enough revenue.

Some of the passengers on the Explorer were facing dilemmas of their own about visiting. Several of them said that they had travelled to the Galapagos this year specifically because of President Correa’s declaration.

“I’ve always wanted to come to the Galapagos,” said a German physician, who asked that his name not be used because he didn’t want to be painted as a villain. “We heard tourism will be restricted in the future, so we came now.”

Source: Stan Sasser, Wall Street Journal, 5 January 2008, p. W1,
http://online.wsj.com/article/SB119948986269168765.html?mod=googlenews_wsj, data retrieved April 2008.

8.3 Guidelines and Regulations with Specific Relevance to Environment and Tourism

In the Andamans, there are guidelines that are provided by the Administration for construction. These are provided under the Port Blair Municipal Council Building Bye-laws and the Coastal Regulation Zone (CRZ) Notification, 1991. The building bye-laws also refer to the CRZ Notification guidelines on construction. These guidelines are progressive and, taken into account, are an attempt to regulate many issues arising out of constructions in coastal areas and their implications.

8.3.1 *The CRZ Notification, 1991*

The CRZ Notification, issued in 1991 under the Environment (Protection) Act, 1986 and the Environment (Protection) Rules, 1986 is the most significant and specialised legislative guidelines regulating anthropogenic activities along the coast. It empowers the Ministry of Environment and Forests (MoEF) with substantial power to take action “for the purpose of protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution”.

The CRZ notification seeks to achieve three significant objectives:

1. *Siting* or location of activities or operations – This is based on the understanding that coasts perform important functions for coastal communities and ecosystems. These coastal habitats also provide sustenance and livelihood opportunities to several coastal communities (both fishing and non-fishing). Rules for siting activities can ensure that the rights of traditional fishing and coastal communities over certain areas are not compromised to meet increasing development requirements such as the demands of the burgeoning tourism industry.
2. Restricting and permitting activities – The CRZ Notification defines the nature of activities that are to be regulated or restricted. It *does not* issue a blanket ban on *all* activities but lists activities that are restricted and those that are permitted.
3. Balancing development and protection needs – The CRZ identifies different ecological sensitivities of areas that need varying levels of protection. Thus, the protection afforded to CRZ-I is designed to be more stringent than that accorded to CRZ-II areas, where more activities are permitted. CRZ-III areas would comprise of areas that do not fall under CRZ-I or CRZ-II, which would be less developed areas or areas with villages and hamlets. The islands of A&NI and Lakshadweep are categorised as CRZ-IV, if they are not designated as CRZ-I, CRZ-II or CRZ-III.¹⁶ However, there are serious issues when actual implementation of the CRZ Notification, 1991 is concerned, as discussed below.

8.3.1.1 Reduction in the No Development Zone (NDZ) for Promotion of Tourism

After being issued in February 1991, the CRZ Notification was first amended in August 1994 on recommendations of the B.B. Vohra Committee constituted in January 1992. The amendment was made because of pressure from the tourism lobby. The NDZ was reduced from 200 m to 50 m. Later the Supreme Court nullified the amendment.

The CRZ Notification has generally been perceived to be an inhibitor of development, especially for tourism. This has been voiced in various documents such as the Ministry of Tourism and Culture, Government of India – United Nations World Tourism Organization (MoTC–UNWTO) master plan for tourism titled “Development Strategy for Environmentally Sustainable Tourism in the Andamans”.

The NDZ was eventually reduced to 50 m in the case of A&N and Lakshadweep Islands for tourism development through amendment S.O.838 (E), dated 24 July 2003, which is against the directives of the Supreme Court in 2002 for Andaman Islands. The relaxation was based on identification of areas in the NDZ by the Integrated Coastal Zone Management Plan (ICZMP) study conducted by the MoEF (details are given in Section 8.3.1.2).

8.3.1.2 Issues Relating to the Lack of Implementation of the CRZ Notification and the Coastal Zone Management Plan (CZMP)

Now tourism plans and project documents of the A&NI Administration are replete with general statements such as “natural resources of Andaman are under exploited” and “over exploitation and competition for resource utilisation in certain regions of the islands are also considered for planning”. According to the Environmentally Sustainable Tourism Plan for the islands prepared by MoTC, GoI and UNWTO, supported by the UNDP in 1997, the environmental legislations and regulations have been considered as constraints for tourism development and therefore the plan suggests removal and substantial relaxation of these restrictions as soon as possible. The plan considers CRZ Notification and prohibition of development within 200 m of High Tide Line (HTL) as a critical constraint, which precludes the effective development of the most important tourism asset of the islands, namely its beaches. The plan recognizes the need to have control measures but not like CRZ which imposes a “draconian, regulatory blanket over a vast area with no regard for exceptions or special circumstance are crude methods of development control”. With an approach that resists any form of regulation, tourism plans such as these would want to see that the CRZ Notification, 1991 and its provisions for tourism developments are diluted so that tourism can have unhindered access to coastal ecosystems.

Present Status of CZMP and the Initiation of ICZMP

There is no fully approved CZMP for the A&NI since the initiation of the CRZ Notification in 1991. All that is available for implementation agencies is a draft CZMP that has been conditionally approved by the MoEF. This conditional approval means that the A&NI Administration was to revise their maps and plans along the conditions specified in the MoEF’s letter dated 27 September 1996 and to submit the final revised documents to the MoEF. It is not clear whether this has taken place, since there is no letter from the MoEF to this effect.

Therefore, for all practical purposes, the CZMP and its current zonation are still not approved until so stated by the MoEF. An additional area of concern is that unless a cut-off date is imposed, more and more areas will come under CRZ-II as the ratio of built-up to buildable area is constantly increasing.

The MoEF initiated a parallel process of drafting an ICZMP. This was initiated for the A&N and Lakshadweep Islands through the Institute of Ocean Management, Anna University, Chennai¹⁷ and Centre of Earth Science Studies, Thiruvananthapuram. Under this project, 20 inhabited islands of the Andaman group have been selected for developing ICZMPs based on the status of the environment, socio-economic conditions and development potential. The ICZMP is yet to be completed, finalised and discussed with various civil society groups that are involved in ecological, social and anthropological research and advocacy. However, without completing these processes, the MoEF amended the CRZ Notification in July 2003¹⁸ to state that based on the findings of the ICZMP, in identified areas of 13 islands which are part of the ICZMP process, the NDZ can be reduced from 200 m to 50 m for tourism development.

The ICZMP report has also not been finalised.¹⁹ The ICZMP considered the constraints to development in the coastal areas of inhabited islands. According to plans,

Cinque, Havelock, Neil, Rutland, North Passage, Long Island, Ross and Smith Islands have been recommended for development through tourism in the ICZMP.

CRZ Violations: Construction and Activities Within the NDZ

The CRZ Notification has not been implemented in the Andamans and is evident from the number of establishments, including tourism, that have come up and that are coming up in the coastal areas. Secondly, the lack of clarity of clearance procedures also makes it difficult for citizens and civil society groups to participate in the decision making or monitoring of the process of clearance and post-clearance functioning of the project.

The Comptroller and Auditor General's report has implicated the MoEF for lack of implementation of CRZ Notification, 1991. It states that despite formation of various committees and the comprehensiveness of their reports to address specific issues, the amendments that MoEF had made to the CRZ Notification reflected a trend to allow commercial and industrial expansion in coastal areas. It states that "The Ministry of Environment and Forests did not enforce the Coastal Regulation Zone notification effectively resulting in extensive destruction in coastal areas due to industrial expansion". That no coastal states have a CZMP has also been taken note of by the Comptroller and Auditor General (CAG).²⁰

8.3.2 Port Blair Municipal Council Building Bye-laws

The Port Blair Municipal Council issued the building bye-laws in the year 1999 vide notification no. 164 dated Wednesday, 13 October. The sections relevant to environmental issues are part III section 4 (health, sanitation and other requirements), section 12 (height limit), section 15 (coastal zone management plan) and section 17 (protection against earthquakes). Refer Annexure 9 for more details. In part III section 4, the bye-laws state that any construction should not cause soil erosion and landslides; trees more than 30 cm girth at breast height (gbh) should not be cut in construction sites; freshwater sources should not be contaminated and rainwater harvesting systems should be installed in all constructions or renovations. The bye-laws reiterate the need to prescribe to the provisions of the CRZ Notification, 1991, and constructions should factor in threats of earthquakes.

While the building bye-laws are progressive, these do not appear to have been implemented. The guidelines make it mandatory for rainwater harvesting in buildings and do not allow construction of new buildings on seaward side of existing roads. But none of this has been implemented as can be seen in new buildings, including tourism establishments, which have come up in areas such as Havelock Island and Port Blair.

8.3.3 Recommendations of the Supreme Court Appointed Shekhar Singh Commission

The Supreme Court appointed Mr Shekhar Singh in 2001 as the one person commission to look at ecological threats in the A&NI, especially at threats from logging and deforestation.²¹In February 2002, the commission submitted its report to the Supreme Court with a large number of recommendations covering a wide range of issues relevant to the islands. The recommendations included those for the closure within three

months of the Andaman Trunk Road (ATR) in those parts where it passes through the Jarawa Tribal Reserve; completely phasing out sand extraction by September 2002; constructing tourism structures only in the form of tented accommodation or temporary wooden or pre-fabricated structures and preparation of eco-friendly tourism plan within one year. (Refer Annexure 10 for details.) The Supreme Court in its order of 7 May 2002 (I.A. No. 502 in W.P.(C) No. 202/1995; T.N. Godavarman Thirumalpad (Petitioner) *vs.* Union of India & Ors. (Respondents) (for Intervention) Date 07/05/2002) accepted the report of Mr Shekhar Singh while making some changes to some of the individual recommendations. This included the following two recommendations among others:

18. *The extraction of sand shall be phased out at 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.*
20. *Specific actions shall be undertaken by the Ministry of Environment & Forests / Andaman & Nicobar Islands Administration; [they] shall file an affidavit within three months, giving details of action taken by them on each of such recommendations.*

However, apart from stopping large-scale logging operations for commercial purposes and regulating to “scientific” extraction for local consumption, many of the other orders of the Supreme Court based on the recommendations of the Shekhar Singh Commission are yet to see the light of day. The ATR continues to operate with no signs of closing down, and it is being widened and repaired in many places. Sand mining too has not been stopped; regulation of sand mining cannot be enforced without stringent monitoring. Directions that have been given by the CRZ Notification, 1991 vide amendment no. Notification S.O.Nil (E) dated 25 January 2005, say that the A&NI Administration shall identify alternate construction materials within the period of one year, that is from 1 January 2005 to 31 December, 2005. In relation to tourism, permanent structures have been allowed to come up and no tourism plan has been drawn up.

Regulations and guidelines to ensure protection of coastal ecosystems have been in existence at least from 1991 when the CRZ Notification was passed. Later the building bye-laws of the Port Blair Municipal Council issued in 1994 followed by the Supreme Court Orders in 2002 would have been important frameworks to check environmental impacts of tourism to a considerable extent. While the regulations are quite clear and explicit, what is of great concern is that establishment of tourism infrastructure continues to be unabated and violated with impunity.

8.4 Current Status of Environmental Impacts of Tourism in the Andamans

Tourism in the Andamans is largely unregulated and unplanned. This is evident from the fairly large number of hotels, resorts, lodges, guest houses and holiday homes that have sprung up all over the Andamans in a way in which there seems to be little coherence or sensitivity to its fragile ecology. The trend seems to be to add more, and tourism establishments are making forays into islands such as Neil Island, Long Island and areas like Diglipur thereby calling for opening up of newer spaces.

The nature and quantum of tourism impact on the environment depend on the intensity of tourism activity as well as the sensitivity of the impacted ecosystems.

Studies done by earlier researchers²² have shown that impacts of tourism on ecosystems arise from infrastructure and building activity it involves and from tourist activities that have been allowed to expand without considering carrying capacity and impact assessments. Four aspects that determine the environmental impacts of tourism are as follows:

1. location and development of tourism areas and projects
2. operation of tourism facilities and related infrastructure
3. tourism activities, including recreational activities
4. indirect impacts from induced or indirect developments

8.4.1 Resources for Tourism and Its Impact on the Environment

8.4.1.1 Land

The location of tourism infrastructure in Andamans can be broadly classified as having come up on revenue land and forest land. Beaches, however, would fall both under revenue land as well as forests, and are presently under the CRZ Notification, 1991.

Tourism infrastructure consisting of hospitality establishments (resorts, hotels, lodges, guest houses, holiday homes, home-stays and camping facilities), restaurants and recreational facilities (parks, changing rooms and shelters) is either located in built-up areas such as Port Blair, Rangat or on beaches as in Havelock Island and Wandoor. In built-up areas, the topography varies from hilly, undulating terrain to flat areas, and it is difficult to ascertain what existed prior to the area being built-up. Beaches where tourism facilities have come up are mostly flat and range between elevations of zero to a few metres above main sea level (MSL). This trend is continuing with more hotels being constructed in proximity to built-up areas of Port Blair Municipal Council limits and surrounding villages, and resorts that are popularly termed as “beach-resorts” are being located, as the name suggests, on beaches. In some places, the beaches are contiguous with forest areas. For example, in Havelock, the famous Radhanagar beach has forests on its northern, western and southern sides. The Sitapur beach on Neil Island also has forest areas adjacent to it. Beaches where tourism infrastructure is located and where tourism activities occur on varying scales are given in Annexure 11.

Tourism development in the islands has largely occurred in contravention of the CRZ Notification, 1991. Tourism establishments that are beyond the prescribed limits of 200 or 500 m from the HTL are almost impossible to find and there are violations galore by tourism-related activities in Port Blair, Wandoor, Havelock Island and Neil Island. All resorts in Havelock Island and on Neil Island, including the Dolphin Resort owned by IP&T, which is a permanent structure, are in violation of the CRZ Notification. In fact, during high tide the sea water comes inside the premises of Dolphin Resort, over the sea wall that has been constructed (Figure 8.1). Dolphin Resort was inaugurated in 1993 by the then Lieutenant Governor Vakkom Purushottam after the CRZ Notification, 1991 was issued. It is quite possible that this has been aggravated by the tsunami. However if the resort had complied with CRZ regulations, it is quite likely that such an extreme situation would not have arisen.

Let us also take the case of Corbyn's Cove south of Port Blair, popular with tourists and local people. To begin with, the Peerless Resort in Corbyn's Cove is located very



FIGURE 8.1 Wall of Dolphin Resort, Beach no. 5, Havelock Island

close to the HTL (Figure 8.2). In addition to this, many permanent structures like a restaurant, washing and changing rooms for tourists have been built. The proximity of the entire setup is so close to the beach that sea sand accumulates on the road and in the premises of the resort, which needs to be cleared periodically. Again, as in the case above, this is about basic non-compliance to CRZ regulations in the first place. A slight subsidence has been recorded in South Andaman Island due to the earthquake of 26 December 2004.²³ Locations such as Corbyn's Cove have also been affected by the subsidence (or rise in sea level). Hence proximity of the resort to the beach has been further increased.



FIGURE 8.2 Peerless Resort, Corbyn's Cove, Port Blair



FIGURE 8.3 New Restaurant being Constructed at Wandoor

The road from Port Blair town to Corbyn's Cove, which is primarily used by tourists, has also been widened and the retaining sea wall has been rebuilt in 2007 to repair damages caused by the earthquake of December 2004. The CRZ allows bunding to facilitate permissible activities [section 2(viii)²⁴] but also states that commercial purposes such as hotels are not permissible. A parking lot has also been constructed in 2007.

In Wandoor, there is a new restaurant that is being constructed just beside the road within a few metres of the HTL (Figure 8.3). There is lot of waste-dumping on new Wandoor beach. The road is being widened and a sea wall is being built in Chidiyatapu where the Department of Environment and Forests is constructing a biological park for tourists and other visitors (Figure 8.4).



FIGURE 8.4 Biodiversity Park, Road being Constructed at Chidiyatapu

8.4.1.2 Forests

Tourism facilities mostly occupy revenue land as it is a tedious process to procure and convert forest land for tourism purposes. In addition, the Forest (Conservation) Act, 1980 renders it almost impossible for non-government entities to procure forest land for tourism purposes. However, the Forest Department does undertake tourism activities in forest areas, including protected areas. Encroachment of forest land by the tourism industry has not been recorded, and neither was it observed in the islands that were covered in the research. The Department of Environment and Forests runs guest houses in places such as the Mount Harriet National Park. The forests used by the forest department for tourism activities are both tropical forests as well as mangroves (see Table 8.1). A listing of the important forest areas and the purposes for which they are used.

Table 8.1 Important Forest Areas Used for Tourism Purposes in the Andamans

Place	Area Used for Tourism	Status (Protected Area or Non-Protected Area)	Usage
Diglipur, North Andaman	Saddle Peak	National Park, Tropical Forest	Trekking on a Nature Trail Is Promoted
	Creeks	Reserve Forests, CRZ Areas, Mangrove Forests	Small Boats Take Tourists into the Creeks
Baratang	Limestone Caves	Reserve Forests, CRZ Areas, Mangrove Forest	An Elevated Walk through the Mangrove Forest A Small Trek to View Limestone Cave Formations Is Organised by the Department of Environment and Forests with a Forest Guard as an Escort or Guide
	Mud volcano	Reserve Forest	A Small Trek through the Forest to Reach the Volcano Site; the Trail Has Been Paved with Wood and Rocks
Mount Harriet, South Andaman		National Park, Tropical Forest	The Department of Environment and Forests Offers Guest House Facilities, Considered as a Picnic Spot, Trekking on a Nature Trail Is Promoted

It has been reported that backpacker tourists have had an adverse impact on the turtle nesting sites of Smith Island.²⁵ Little Andaman has also been reported to have deteriorating natural ecosystems due to tourists.²⁶

8.4.1.3 Protected Areas in Andamans and Impacts of Tourism

The A&NI Administration has made efforts by creating nearly a hundred wildlife sanctuaries and national parks for the sake of protecting forest, coastal and marine ecosystems. Apart from the abovementioned forest areas, Jollybuoy and Red Skin Islands in the Mahatma Gandhi Marine National Park have tropical forests on them and the

beaches of these islands are used by tourists for activities such as swimming and snorkelling. Tourism in protected areas of Andamans has also been better regulated as compared to protected areas on the mainland, but the aforementioned concerns do exist. Among all the protected areas of Andamans, tourism is more prevalent in the Mahatma Gandhi Marine National Park, Wandoor, especially in the islands of Red Skin and Jollybuoy. It has also been reported that the corals, mangroves and forests are threatened by tourism.

The Department of Information, Publicity and Tourism (IP&T) was planning to open the following protected areas to private bidders for the development of environmentally sensitive hotels and beach resorts:²⁷ Cinque, North Passage, Smith, Ross and Interview Islands, all of which are wildlife sanctuaries. However, the department informed us that they have not received permission from the Department of Environment and Forests to open these for tourism purposes.²⁸ Although other protected areas such as Mount Harriet National Park, Saddle Peak, Smith Island and Ross Island in North Andamans also have tourists, they receive them in few numbers.

8.4.2 Resources Required by Tourism Sector for Setup and Operational Needs

8.4.2.1 Raw Materials

The tourism industry uses different kinds of materials for construction, expansion, renovation and repair of its facilities. There is a difference in kinds of materials used in different islands based on the site on which the establishment is located. Most of the hotels, lodges and guest houses in Port Blair, Rangat, Mayabunder and Diglipur have been constructed with brick and cement whereas most of the resorts in Havelock Island and Neil Island were constructed with wood, bamboo, thatch and sometimes tin. The reasons given by the tourism industry for this are generally as follows:

- ♦ low investment costs of beach resorts, although the owners say that maintenance costs are high
- ♦ ease of setting up beach resorts without having to get clearances for construction from the District Commissioner's office
- ♦ low operating costs because of low energy usage, for example no need for air conditioners
- ♦ and most of all the ambience is attractive for the tourists

From the questionnaire survey that was carried out with tourism establishments in Port Blair, it was found that majority of them (83% of the establishments) have been constructed with brick and cement; 6.4 per cent of them have used timber and 4.3 per cent have used timber and brick and cement. Outside of Port Blair, Rangat and Diglipur also use a combination of brick, cement, tin and timber for construction of hotels and lodges. In popular tourism places – Havelock, Neil and Long Islands – the construction is predominantly using bamboo, timber, thatch and tin.

The thatch used is locally known as *silapatti* or *silaipatti* (from *sila*: woven or stitched; *patti*: leaf) and is made from coconut leaves, leaves of a plant found in the forests belonging to the cane family (Figures 8.5 and 8.6) and also a variety of bamboo grass.



FIGURE 8.5 Cane Leaves Used for Roof Thatching

The thatch needs to be repaired once in a year; a well-made thatch can even last for up to two years, sometimes. While the coconut thatch is available in plenty, as many resorts have a few coconut trees in their premises, the thatch from cane variety is expensive but most preferred. According to some industry sources, the leaf costs anywhere between Rs 2 and Rs 3 a unit and a resort would require about 10,000 to 15,000 leaves depending on the size of the establishment. Figure 8.7 gives the details.

Sand that is used for construction in Port Blair is usually mined from beaches such as Shoal Bay and Madhuban in South Andaman. Traditionally, timber was used to build houses, but the trend has now changed to build concrete structures for domestic, commercial or government purposes. That the sand from Andaman beaches is fine, has a high salt content, is generally unsuitable for construction because repairs need to be

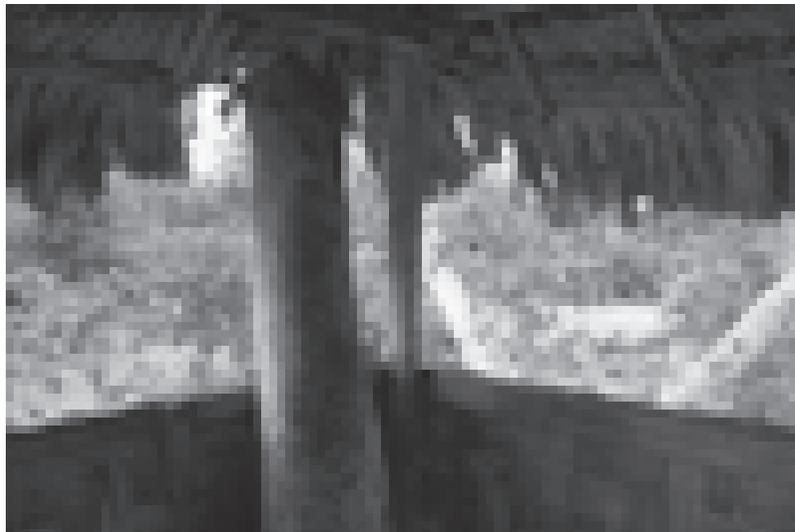


FIGURE 8.6 Cane Leaves Used for Roof Thatching

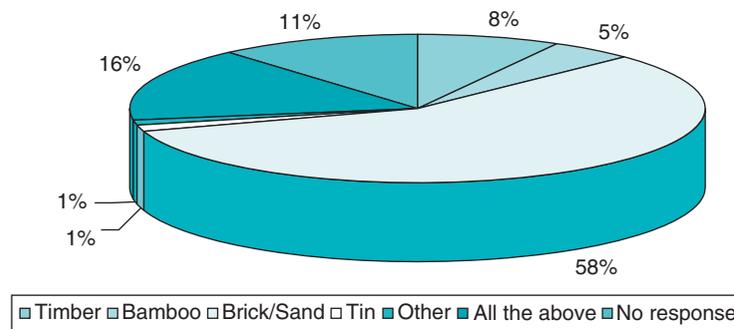


Figure 8.7 Material Used for Construction in Tourism Establishments

effected within a decade for structures constructed from beach sand has not had an impact on the mindsets of local people to look for alternatives. There have been many concerns raised by researchers on the way in which sand was mined and that has led to degradation of beaches and coastal vegetation. The Supreme Court has taken note of this and in 2002, it issued an order vide case Interim Application No. 502 in Writ Petition I No. 202/1995 to phase out extraction of sand at a minimum rate of 20 per cent per year on a reducing balance to bring the sand mining to 35 per cent of present level of mining with a maximum period of five years. In 1995–1996 approximately 70,000–80,000 m³ of sand was mined, and in the year 1997–1998, the volume had gone up to nearly 157,000m³.²⁹ The CRZ Notification, 1991 has also been amended time and again to allow for sand mining to continue in the A&NI. In the latest amendment of 25 January 2005, it has put a cap of 28,226 m³ until 31 December 2005 and has directed the A&NI Administration to find alternate construction materials by this date. Despite these regulations, sand mining continues, and it is not easy to keep a check on all areas or islands where sand is being mined. However, erosion and ingress by the sea is evident on beaches in the proximity of Port Blair such as Corbyn's Cove, Wandoor and Chidiyatapu. These were areas where sand mining was intensive and the locations have changed to further beaches because there is little sand that can be mined here now.

Further, the MoEF has permitted mining of sand in the Andaman and Nicobar Islands for construction purpose after the matter was taken up by the Honourable Lieutenant Governor.³⁰ The total quantity of sand to be mined shall not exceed 22,581 m³ for the period ending 31 December 2008. It further said that the A&NI Administration shall identify alternate construction materials within the period of one year and no further extension or permission to the sand mining in the CRZ will be accorded after 31 December 2008. A monitoring committee shall also be constituted for monitoring the mining activities and the environmental safeguards taken by the union territory administration.

Most of the beaches in A&NI are known to be turtle nesting sites, for example Corbyn's Cove, Wandoor, Chidiyatapu and Shoal Bay.³¹ Today, the beaches of Shoal Bay and Wandoor have seen heavy and incessant mining over a decade and a half. The resultant ecological imbalances are increased sea erosion, falling of large trees and destruction of mangroves. Consequently, turtle nesting in these areas is an event of the past. Apart from this, the destruction of the beaches has led to damage to crops, plantations of rice, coconut and areca, and roads tend to get washed off frequently because of sea ingress. The response to this has been construction of concrete retaining walls

using sand mined from other beaches where a stable coastal ecosystem would have provided the same service free of cost! In short, sand mining has only destabilised integrity of the coastal ecosystems and there has been a high price to pay for it.

Timber that is available on the islands provides opportunities for constructions to switch from concrete and to reduce the undue pressure on fragile coastal ecosystems for sand. There is a perception among various sectors in the islands, including the tourism sector, that the Supreme Court order of 2002 has drastically brought down the availability of timber for commercial purposes and that timber needs to be imported from the mainland.³² On the other hand, the Supreme Court, while suspending felling of trees from forests of Little Andaman, all protected areas and tribal reserves, and other areas, has stated that the working plans of A&NI need to be reworked on the basis of undertaking regeneration of forests undertaken before felling. The Supreme Court has only prohibited felling of timber for commercial purposes of meeting requirements of plywood, veneer, black board, match stick or any other wood-based industry and export of timber from the islands in any form. It has permitted use of timber felled according to the reworked working plans for use by local purposes. Therefore, it is possible for the tourism industry to procure timber for construction provided it does not affect domestic needs of local people. This will help in doing away with the need for concrete based constructions and the consequent undue pressure on coastal ecosystems for sand that has led to various problems discussed above.

Construction of tourism establishments with locally available materials such as bamboo, thatch and timber rather than concrete, steel and brick is advantageous for the islands. These are semi-permanent or temporary in their construction. Apart from the saving on initial investments, the structures would bring down the operational costs. The natural ventilation would help bring down costs on electricity usage and thus lessen energy usage. Moreover, because electricity in Andamans is generated by burning diesel, reduced energy consumption means reduction in diesel burnt and consequently lesser carbon dioxide emitted in the atmosphere. Since the islands are prone to natural phenomenon like storms, earthquakes or a tsunami, the semi-permanent or temporary structures would in certain cases pose a far lesser harm to human life in comparison with concretised structures. In the event of earthquakes, these structures would pose a lesser degree of danger from falling debris. But most important, these kinds of structures create a certain ambience that is appreciated by tourists, especially foreigners, and the more adventurous amongst the domestic tourists. These can also be made to accommodate families.

8.4.2.2 Water

Freshwater is a precious commodity in the whole of Andamans, in spite of the islands receiving rainfall of an average of about 3,000 mm per year.³³ The availability of freshwater from rainfall decreases in the summer months of March and April; otherwise, there is rainfall throughout the year. The geology of the islands does not permit groundwater storage because the Andaman Islands are made of solid rocks called igneous rocks that do not allow water to penetrate into the ground and hence the availability of surface water is crucial. Vegetation cover facilitates this availability and hence it becomes an important factor for the availability of freshwater. However, a study undertaken by the Central Ground Water Board (CGWB) quotes that while borewells need to be drilled up to a depth of 60 m to access water, recent drilling of many borewells has

significantly brought down the availability of groundwater. The high amount of surface runoff, which can be as high as 90 per cent sometimes, has also been attributed to steep hill slopes and nature of the soil and hence there are no perennial streams or any substantial underground storage.³⁴

The Andaman Public Works Department (APWD) makes arrangements to supply freshwater through pipes on various islands. The water is supplied from creeks, streams or *nallahs*, or from natural freshwater lakes and also, sometimes, by constructing check-dams. In islands where tourism occurs and where it is being proposed to be developed, the status of water supply is as given in Table 8.2.

TABLE 8.2 Status of Water Supply in Andaman Islands by the Andaman Public Works Department (APWD)

Sub-division	Island	Status of Piped Water Supply (Number of Villages)
North Andaman		42
	Diglipur	Yes
	Smith and Ross Islands	No
	Interview	No
	Avis	No
Middle Andaman		146
	Mayabunder	Yes
	Rangat	Yes
	Long Island	No
	North Passage	No
	Baratang	No
	Peel	No
South Andaman		149
	Neil	No
	Havelock	Yes (7)
	Rutland	No
	Port Blair and surrounds	Yes
	Corbyn's Cove	
	Chidiyatapu	
	Wandoor	
Little Andaman	Cinque	No
		11

Source: Directorate of Economics and Statistics, 2006.

Port Blair and Havelock Island are at a serious risk in terms of availability of water. This was ascertained during discussions with *Panchayats* and community representatives in the various islands. The worst affected is Port Blair and hence this needs a more detailed scrutiny. Members of Vijaynagar *Panchayat* were of the opinion that the situation in Havelock Island is worsening as more tourism establishments are either coming up or present ones are expanding. The situation worsens in the dry months. Therefore, both *Panchayats* of Havelock – Govindnagar and Vijaynagar – have put up reverse osmosis plants for treating ground water, which has a high content of calcium, to try and meet the increasing demand for freshwater. However, both the reverse osmosis plants, one in each *Panchayat*, were not found in working condition on Havelock Island. Rainwater harvesting has not been implemented or sustained with a degree of

seriousness in these islands. There have been examples of rooftop rainwater harvesting and construction of *diggies* or ground-level dugouts for collecting rainwater. In fact, some good examples of conserving rainwater dating to the Second World War days and built by the Japanese during their occupation of the islands still exist. However, it seems that the islands do not want to improvise or build on experiences that are part of their own history.

Status of Freshwater Availability in Port Blair

Port Blair has a population of 1.5 lakhs (150,000) and a floating population comprising visitors from other islands, domestic and foreign tourists, business people from mainland and visiting government officials of at least 30,000 people each month. The city requires about 65,00,000 gallons (approximately 29,575,000 L at 1 gallon = 4.55 L) of water per day.³⁵ Water is supplied once every fourth day to all connections provided by the APWD in Port Blair. While this seems to be norm, there is also disparity in frequency of water supplied, as some areas seem to get water daily and some do not for more than four days. Further, when the freshwater sources are full, water is supplied more frequently than once every fourth day. Contrary to media reports, the position of the Chairperson of the Municipal Council was that there is no rationing on quantity of water but the supply is only on every fourth day.³⁶ The official figures of the Council however put the per person usage of water at 120 L/day; the water being supplied to a total of 20,074 connections.³⁷ The demand for freshwater is expected to grow to 375 lakhs (37,500,000 or 37.5 million) litres per day by the year 2025, owing largely to the growing population.³⁸

The present urban water supply demand is met by the Dhanikhari dam and water is also sourced from reservoirs of Jawahar Sarovar, Dilthaman Tank, Lambaline Diggi and Chakragaon, and in times of scarcity, freshwater is also drawn from Buniyadabad reservoir. Dhanikhari currently has a capacity to meet water requirements for eight months.³⁹

To meet the growing demands for freshwater, the Municipal Council is considering sources from other places, and proposals have also been prepared for sourcing water from the sea. Some of these are as follows:

1. Desalination plant – the Municipal Council is developing its own 14 mLd (million litres per day) desalination plant at Brukshabad. The proposal bearing project no. 11-69/2007-IA.III has been approved by the MoEF on 17 September 2007;⁴⁰
2. Conversion of submerged agricultural land at Sippighat into freshwater lake;
3. Conversion of part of the sea at Flat Bay into freshwater lake – a feasibility study needs to be undertaken for this and approval sought from the MoEF. The Port Management Board plans to dam the inner reaches of the Port Blair harbour with an 8 m high 1 km long wall to block the sea. The sea water will then be pumped out and fresh water from surface run-offs will be trapped to create a freshwater lake.⁴¹

Some of the schemes for sourcing water from freshwater sources are as follows:

1. Raising the height of Dhanikhari Dam by 5 m in order to double its capacity. This water retention structure on Dhanikhari River was constructed during 1970–1973 for supply of water to Port Blair town. The dam is a 132 m long and 32.23 m high straight gravity concrete structure with a central gated spillway having a capacity of

26,000 cusec. The reservoir extends to an area of 0.49 x 10 sq miles and the storage capacity is of the order of 9,000 lakh litres;⁴²

2. Revival of Dilthaman tank – the tank located in Port Blair had a capacity of 15 million gallons and provided water to the town in pre-Independence days. It has now been converted into an amusement park and renamed Mahatma Gandhi Park;⁴³
3. Nayagaon–Chakragaon Diggi project;
4. Chouldhari scheme is a water supply scheme for a 19 m high and 95 m long earthen dam structure with a 10 m wide and 80.58 m long left bank ungated RCC chute spillway.⁴⁴ The estimated availability is about 8 lakh gallons (or 36,32,000 L) a day;⁴⁵
5. Artificial ground water recharge schemes recommended by the CGWB;
6. Indira Nullah project at Maymyo village for an estimated 4 lakh gallon (or 18,16,000 L) a day;⁴⁶
7. Tapping of water from Rutland – the CGWB has recommended that 180 lakh litres (18,000,000 or 18 million litres) of spring water per day which flows into the sea may be piped directly to Port Blair by laying a pipe across the sea.⁴⁷ The project bearing file no. 5-AIB027/2007-BHU titled “Construction of 3 no. of CC Weirs, Laying of Pipeline, Construction of Sump and Pumphouse Etc. From Rutland to Dhanikhari Dam”, spread over an area of 1.1615 hectares has been submitted to the MoEF for clearance on 4 October 2007 and has then been pending with the A&NI Administration since 31 October 2007.⁴⁸

All these schemes are infrastructure heavy and expensive. It would be important for the A&NI Administration to undertake a serious cost–benefit analysis of these schemes and also consider the relative advantage of options such as rainwater harvesting.

Water Consumption of the Hospitality Sector in Port Blair

The hospitality sector of Andamans has been implicated as the single largest sector that is competing with Port Blair residents in the demand for freshwater. Numerous media reports have highlighted the unequal demands on a scarce resource between the hospitality sector and the domestic sector.

From the questionnaire survey with tourist establishments in Andamans it was found that maximum number of them depend on municipal water supply for their needs of freshwater (refer Figure 8.8 for details). The next source was ground water from borewells.

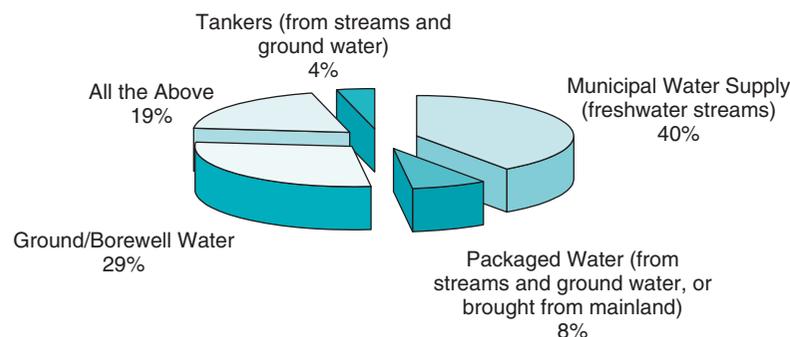


FIGURE 8.8 Source of Freshwater in Tourism Establishments

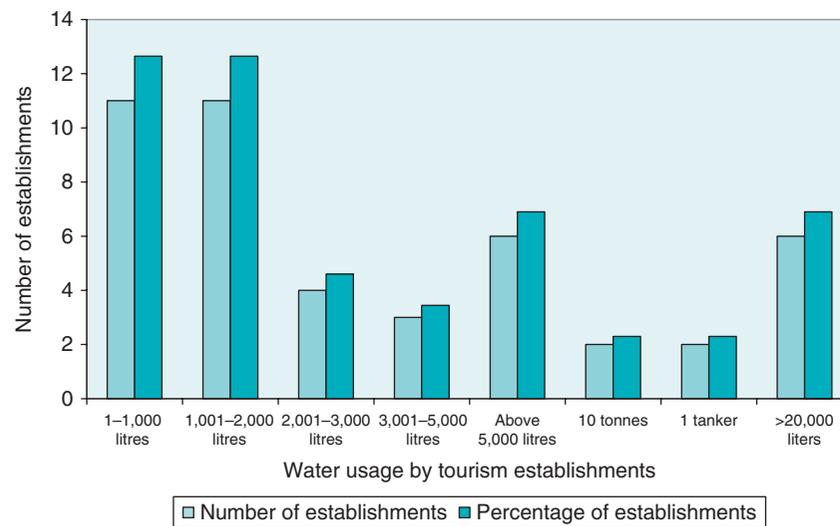


FIGURE 8.9 Daily Water Usage by Tourism Establishments

Figure 8.9 gives the approximate daily consumption of freshwater in the tourism establishments of Andamans. It must be stated that more than half the tourism establishments either did not respond to the question on approximate daily consumption of freshwater; it could not be ascertained whether they did not respond or they did not have the information with them. The break up of approximate daily consumption of water by tourism establishments in Port Blair and out of Port Blair is given in Table 8.3.

TABLE 8.3 Approximate Daily Consumption of Water in Tourism Establishments

Quantity	Port Blair Only (%)	Outside Port Blair (%)
1-1,000 L	8.5	17.5
1,001-2,000 L	8.5	17.5
2,001-3,000 L	4.3	5.0
3,001-5,000 L	4.3	2.5
Above 5,000 L	10.6	2.5
10,000 L	4.3	0.0
1 tanker	4.3	0.0
>20,000 L	8.5	5.0
Total	53.2	50.0
Missing	46.8	50.0
Total	100.0	100.0

The tourism sector is a substantial consumer of available freshwater, and this volume is only bound to increase with the increasing number of tourism establishments in Port Blair and other Andaman Islands. In Port Blair alone, based on the responses given by the tourism industry, 25 hotels consume approximately 146,000 L of water per day. The figure for 47 hotels can be extrapolated to approximately 275,000 L per day, which, on a conservative estimate, is double the domestic consumption.

When water is supplied to the tourism establishments through tankers it implies that water is being drawn from both surface water bodies and open wells and tube wells elsewhere, which may be creating a deficit in the overall availability of surface water of the area, as in this case – Port Blair. Moreover, tourism establishments also draw water from wells – open and tube – which also contributes to the water shortage. The local companies that provide treated water in large cans and bottles draw water from available freshwater sources, which is another contributor to the shortage. Moreover, bottled water, in the absence of any kind of collection and disposal mechanisms, is creating a serious problem of solid waste disposal.

Amusement Areas in Port Blair

In Gandhi Park, Port Blair city, a 7-acre water theme park is being planned at a cost of Rs 400 crore. It is awaiting approval at the central level. It is to have a monorail, ropeway and water games. The project is being promoted as an asset for islanders and as a tourist attraction. The municipality also wants to develop Corbyn's Cove as an "undisturbed sand beach". It will ensure there is no sand lifting. Also planned here are seating, lighting and fountain.⁴⁹

Water theme parks in other locations in the country have led to depletion of freshwater sources and have led to conflicts with the local community dependent on these sources for their needs. One such case was recorded from Kunnathunadu Panchayat in Kerala where the Veegaland amusement park is located. According to management sources, the park uses approximately 8–10 lakh litres of water per day for various purposes. They use three huge water tanks with a capacity of 10 lakh litres each for storing the water. They have the facility for treating water, but do not reuse the water because of quality concerns. The park uses treated water only for gardening.

Water theme parks are thus activities that require large quantities of freshwater for their daily operations. In a region such as the Andamans where there is scarcity of freshwater, even while it receives fairly good amount of rainfall, the need for such water theme parks need to be questioned. What also needs to be seriously questioned is the nature of tourism that is being sought to be promoted in a place of rare natural beauty and ecological significance and fragility such as these islands. Why an infrastructure and energy intensive theme park is at all being considered whether water based or other theme based is a moot question.

8.4.3 Pollution and Problems of Wastes

Wastes, both solid and liquid, are a serious environmental threat to the ecosystems of A&NI because they bring about undesirable changes described below in ecosystems. Direct, untreated discharge of sewage in to the sea is the only method that is adopted. With uncontrolled proliferation and use of non-biodegradable objects such as polythene bags, PET plastic bottles, covers and wrappers, carelessly discarded on literally every open space on land and sea, the islands are a pathetic sight. The beauty of the islands is being disfigured by such rampant dumping.

8.4.3.1 Solid Wastes

The consequence of improper, or almost non-existent, solid waste disposal systems in the Andaman Islands is that solid wastes proliferate in both terrestrial and aquatic ecosystems.

This research study focuses on tourism and is concerned with the issue of municipal solid waste (MSW) only; industrial and bio-medical solid wastes have not been taken into consideration while discussing the impacts of solid wastes. The solid wastes generated in the islands can be broadly classified as follows:

Solid wastes				
Degradable		Non-degradable		Domestic hazardous waste
Recyclable e.g. paper	Non-recyclable (also biodegradable) e.g. organic matter like food and kitchen waste, green waste, discarded food- stuff, cloth and wood	Recyclable e.g. glass, metals and certain plastics	Non-recyclable e.g. construction and demolition waste, dirt, rocks, debris and sand	Also called “household hazardous waste” & toxic waste e.g. medications, paints, chemicals, light bulbs, fluorescent tubes, spray cans, fertilizer and pesticide containers, batteries and shoe polish, and so on

Port Blair generates about 76 tonnes of solid wastes per day and also enjoys the distinction of having the highest per capita waste generation rate of 0.76 kg per capita each day in the country. Of this quantity, 48.25 per cent is compostable waste and 27.66 per cent is recyclable.⁵⁰ The remaining may be presumed to be composed of non-degradable waste, which is about 24 per cent of the waste generated, and amounting to about 18.25 tonnes.

Solid wastes comprise both biodegradable and non-biodegradable materials. Whatever waste is collected and disposed, it is done without any sorting. It is either dumped in open areas or is burnt by individual establishments; much of it also finds its way into various sewage canals and water streams. Surface runoff only adds to the problem of scattering the wastes far and wide. Studies to quantify wastes have not been undertaken so that strategies to minimise, recycle and dispose waste could be worked out.

BOX 8.2

Impacts of Solid Wastes in Island Ecosystems

The impacts of degradable and non-degradable wastes or pollutants on both terrestrial and aquatic ecosystems are discussed separately; domestic hazardous wastes being largely non-degradable, the impacts of these are included along with non-degradable wastes. The common impacts are associated with improper disposal methods, some of which are described below.

Impact of Degradable and Non-degradable Wastes on Land

This type of waste being entirely organic in nature, it poses a threat to human beings and other living organisms. The decomposition of organic wastes creates an environment conducive to the spread of disease-causing pathogens. It also becomes the breeding ground of vectors through whom the pathogens are carried to more distant locations. In such a condition, outbreak of an epidemic would be catastrophic in its impact on human beings and

BOX 8.2 Impacts of Solid Wastes in Island Ecosystems—cont'd

other living organisms. The by-products of the decomposition process such as gases, e.g. methane, would raise a stink and cause irritation to the populations living in proximity to the disposal site, and may sometimes result in diseases of the respiratory tract.

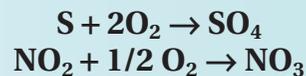
Impact of Degradable and Non-degradable Wastes on Marine Organisms**Degradable Wastes**

Organic wastes entering marine ecosystems create biochemical and chemical oxygen demands because they would require oxygen in order to decompose. The organic wastes use up dissolved oxygen present in the water and reduce the availability of dissolved oxygen to other aquatic organisms such as fish, thereby causing stress on various organisms dependent on dissolved oxygen for their respiratory needs.

Any oxidizable material present in a natural waterway or in an industrial wastewater will be oxidized both by biochemical (bacterial) or chemical processes. The result is that the oxygen content of the water will be decreased. Basically, the reaction for biochemical oxidation may be written as follows:



Oxygen consumption by reducing chemicals such as sulfides and nitrites is typified as follows:



Since all natural waterways contain bacteria and nutrient, almost any waste compounds introduced into such waterways will initiate biochemical reactions (such as shown above). Those biochemical reactions create what is measured in the laboratory as the Biochemical Oxygen Demand (BOD).

Oxidizable chemicals (such as reducing chemicals) introduced into a natural water will similarly initiate chemical reactions (such as shown above). Those chemical reactions create what is measured in the laboratory as the Chemical Oxygen Demand (COD).

Both the BOD and COD tests are a measure of the relative oxygen-depletion effect of a waste contaminant. Both have been widely adopted as a measure of pollution effect. The BOD test measures the oxygen demand of biodegradable pollutants whereas the COD test measures the oxygen demand of biodegradable pollutants plus the oxygen demand of non-biodegradable oxidizable pollutants.

Source: Wikipedia, http://en.wikipedia.org/wiki/Wastewater_quality_indicators, data retrieved April 2008

Non-degradable Wastes

This type of wastes is commonly known as marine litter. UNEP (2005)⁵¹ defines it thus:

Marine litter is any persistent, manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environment.

BOX 8.2—cont'd

Marine litter consists of items that have been made or used by people and deliberately discarded into the sea or rivers or on beaches; brought indirectly to the sea with rivers, sewage, storm water or winds; accidentally lost, including material lost at sea in bad weather (fishing gear, cargo); or deliberately left by people on beaches and shores.

The sources of marine litter are both land and sea based. The common land-based sources in Andamans are tourism, sewage and run-offs from municipal landfills, whereas the sea-based sources are boats and ships that are used for transport from mainland, inter-island transport, tourist boats, fishing vessels and probably those used by the Coast Guard and Indian Navy. Marine litter can be further classified as floating, seafloor litter and shoreline litter.

The main impacts of marine litter are as follows:

1. Physical injury and death – Research studies done by Greenpeace and the United Nations Environment Programme (UNEP) have shown that marine litter has caused many marine species like whales, dolphins, sea birds and turtles to get entangled causing physical injuries such as scars and even loss of fins or flippers. Death by drowning, suffocation or strangulation, starvation through reduced feeding efficiency, and injuries have also been recorded.
2. Deaths caused by ingestion – Marine litter is frequently mistaken by marine organisms as prey or food and ingested, for example sea turtles mistake plastic bags for jellyfish. Death is caused by blockage of the digestive system or filling up the stomach leading to reduced intake, ingestion, malnutrition and eventual death of the organism.
3. Spread of alien and invasive species – Greenpeace reports that marine litter, especially plastics, are ideal for organisms to travel from one place to another. Since plastics float and can go long distances, there is every possibility of organisms travelling to far off places. In addition, the slow travel would provide the time for the organism to adapt to different environmental conditions. Alien and invasive species would thus pose a threat to local species if they get established.
4. Damage to human well-being and property – Marine litter can cause physical injuries and diseases to coastal communities where it could act as a breeding ground for pathogens. It can also damage fishing equipment and propellers of fishing boats thereby causing safety risks especially on the deep seas. Contamination of beaches, jetties and harbours would entail additional cleaning costs.

The impacts of improper disposal of solid wastes are as follows:

1. Loss of important resources – The manner in which wastes are disposed without segregation causes the loss of many recyclable resources such as metals, glass, good quality plastics and paper. Unsegregated wastes also complicate waste management and proper disposal, recycling by the sheer increase in quantity, which otherwise would be easy to handle, manage and dispose.
2. Landfills – These are large pits where wastes are dumped. These pits may sometimes be lined with plastic sheets or with concrete to prevent leaching of chemicals into the ground. Once filled up, the landfills are sometimes covered with dirt. Landfills are not advisable due to the slow rate of decomposition in the absence of

BOX 8.2 Impacts of Solid Wastes in Island Ecosystems—cont'd

light and air. The “leachate” or the liquid that generates in landfills is usually toxic and is known to contaminate soil and groundwater. Landfills may also become breeding grounds for pathogens and vectors of diseases.

3. Clogging of drains – Wastes have a propensity to find their way into sewage pipes, sewers and storm water drains. While escalating cleaning and maintenance costs, wastes can also block water and sewage thereby causing flooding of low-lying areas. The pools thus formed are ideal breeding ground for pathogens and insects such as mosquitoes.
4. Open burning and incinerating – By these methods, recyclable resources that could be retrieved from the wastes are lost. Further burning, especially burning of plastics, releases heavy metals and carcinogenic substances such as dioxins and furans. Incinerators are not viable options because they merely trap all the pollutants and concentrate them into flyash that is toxic. The flyash would then have to be disposed most probably in landfills, which would mean introducing toxic chemicals into the ecosystem.

The main areas where tourism occurs are the worst affected. Large-scale proliferation of non-biodegradable wastes was observed in all islands and locations where tourists visit. In many cases such as Red Skin, Jollybuoy, Ross and North Bay, the situation is “tackled” by burning off all the wastes but in several places such as Havelock Island, Wandoor, Chidiyatapu and Corbyn’s Cove large amounts of wastes can be seen openly dumped (Figures 8.10 and 8. 11).

In all these areas, the *panchayats* have informed that the responsibility of cleaning up wastes eventually fell on them. They have provided dustbins, which overflow, and the wastes then spill over and accumulate; in Wandoor the Humfreygunj *panchayat* has provided wheelbarrows and bins. The waste is collected in the wheelbarrows and bins and then dumped in one place just behind the beach, a few metres away from where the bins have been put up!

The problem of throwing wastes such as plastic bags, wrappers of all shapes and sizes (of consumables such as wafers, chocolates and chewing tobacco) and plastic bottles is also seen from boats that ply in between the islands. The boats have dustbins installed but nobody seems to ever use any of those. The boats that take tourists to locations such as North Bay, Ross, Red Skin and so on also do not restrain tourists from throwing

BOX 8.3**Time taken for objects to dissolve at sea**

Paper bus ticket	2–4 weeks
Cotton cloth	1–5 months
Rope	3–14 months
Woollen cloth	1 year
Painted wood	13 years
Tin can	100 years
Aluminium can	200–500 years
Plastic bottle	450 years

Source: Hellenic Marine Environment Protection Association (HELMEPA), http://www.imo.org/Environment/mainframe.asp?topic_id=297, data retrieved April 2008



FIGURE 8.10 Disposal of Solid Wastes in Havelock

wastes overboard. Many people we spoke to in the course of our interviews were of the opinion that foreign tourists were more disciplined than domestic tourists in disposing wastes; they almost always use dustbins for the purpose.

Almost every stakeholder is aware of this problem, as is evident from various stakeholder consultations and the inter-school, college essay writing and debate competitions that were organised as part of the research, and from interviews with representatives of various government departments, but nothing serious has been done so far to tackle the problem particularly of non-biodegradable wastes (Figure 8.12).



FIGURE 8.11 Disposal of Solid Wastes in Havelock



FIGURE 8.12 Dumping of Wastes on Beaches in Andamans is a Common Sight, this is from Corbyn's Cove

In tourism establishments, the methods adopted for disposal of solid wastes vary from open dumping, landfill, open burning and handing over wastes to municipal treatment facility, which again is either open dumping or disposal in landfills. A break up of disposal methods is given in Figure 8.13. In islands such as Neil, the people informed that waste is collected in pits, sometimes in forests, and burnt during the dry season. Details of solid waste disposal methods in tourism establishments in Port Blair and out of Port Blair are given in Table 8.4.

One of the municipal treatment facilities of Port Blair is a landfill near Corbyn's Cove stone quarry where waste is dumped (Figure 8.14). Section 2 (vi) of the CRZ Notification, 1991 not only prohibits dumping of city or town wastes in landfills or otherwise but also directs that all existing practices should be phased out within a reasonable time not exceeding three years from the date of issue of the Notification (i.e. 1991). However, the practice is continuing in Corbyn's Cove.

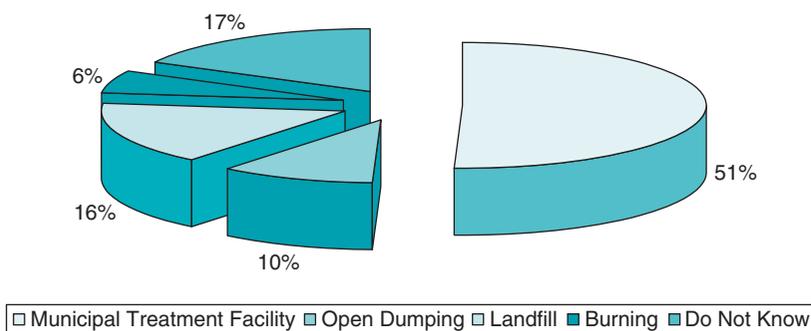


FIGURE 8.13 Disposal of Solid Wastes Generated by Tourism Establishments

TABLE 8.4 Methods of Disposal of Solid Wastes in Tourism Establishments in the Andamans

Method	Port Blair Only (%)	Outside Port Blair (%)
Municipal Treatment Facility	80.9	15.0
Open Dumping	2.1	20.0
Landfill	10.6	22.5
Open Burning	0.0	12.5
Total	93.6	70.0
Missing	6.4	30.0
Total	100.0	100.0

**FIGURE 8.14** Landfill Near Corbyn's Cove, where Garbage from Port Blair is Dumped

8.4.3.2 Sewage

The next problem after solid wastes is the disposal of sewage. Again, the quantity of sewage generated in places such as Port Blair, Rangat and Diglipur that require sewage treatment facilities by virtue of their current population and its growth has not been undertaken or at least the data was not available during the study period. “[T]here are neither underground drainage systems nor sewage treatment plants; flooding (of canals) is reported during heavy rains and high tide”.⁵²

Tourism establishments adopt the methods as detailed in Table 8.5 and Figure 8.15. The municipal treatment facility would mean the sewage canals that ultimately open into the sea and dump all the sewage into it! Some establishments have their sewage canals open directly into the sea. “Other” methods would be soak pits or septic tanks.

Table 8.5 Sewage Disposal by Tourism Establishments

Method	Port Blair Only (%)	Outside Port Blair (%)
Municipal Treatment Facility	74.5	17.5
Directly into the Sea	2.1	15.0
Others, Soak Pits, Septic Tanks	14.9	35.0
Total	91.5	67.5
No response	8.5	32.5
Total	100.0	100.0

8.4.3.3 Air pollution

Electricity

Electricity in Andaman Islands is generated by burning diesel (refer Annexure 12). The tourism sector is also dependent on municipal power supply for their needs, and some establishments also have diesel-run generators as an alternative source in the event of power failure. The primary survey undertaken with tourism establishments shows that more than half of total tourism establishments (53%) spend between Rs 2,000 and Rs 5,000 per month on electricity bills. From the rest of them, about 17 per cent spend between Rs 5,001 and Rs 10,000, 12 per cent spend between Rs 10,001 and Rs 20,000, 11 per cent, between Rs 20,001 and Rs 50,000, and 7 per cent spend more than Rs 50,000 per month.

Impacts of Diesel Usage as a Source for Producing Electricity

Emissions from diesel combustion produce particulate matter that may produce haze and reduce visibility, which is vital for both air transport and transport by water. Other substances such as nitrogen oxides (NO_x), particulate matter and hydrocarbons are known to cause ground and surface water contamination. Some of the substances are also identified as toxic and sometimes lead to lung cancer and other respiratory disorders in humans and animals.

Diesel storage and distribution have adverse environmental consequences. Hydrocarbons are released from wells, refineries, storage tanks and pipelines into the atmosphere, ground and ground water. Runoff from leaks and spills enter surface water and ground water causing contamination.

Concerns about tourism's polluting effects cover all aspects of a tourist's activity. The primary issue concerning climate change factors relates to the generation of greenhouse gas (GHG) emissions through travellers' consumption of transport services (notably air and road transport) and energy consumption in tourism establishments (like heating, air conditioning and lighting in hotels). In addition, the energy efficiency of buildings is often poor.

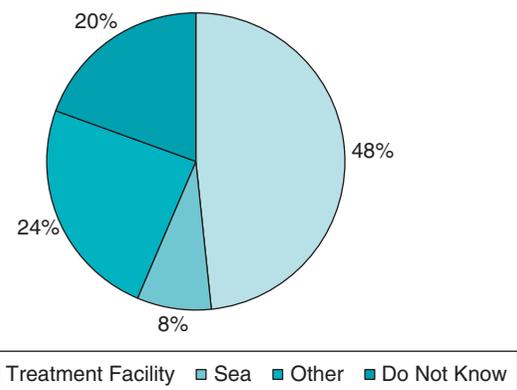


FIGURE 8.15 Disposal of Sewage by Tourism Establishments

8.4.4 Mode of Arrival of Tourists in Andamans: Climate Change and Its Impacts

Air connectivity in the Andamans has increased from 4 flights to 11 incoming flights daily over the last two years. The number of ships has more or less remained constant with four vessels plying two trips a month.⁵³ Tourists prefer the air-route because they save time and many of them are not accustomed to sea-travel. Both air and ship travel are contributors to air pollution and climate change impacts (refer Box 8.4 for details).

Many air routes have been initiated and are sustained by the demands of growing business and leisure markets. Conversely, other air routes, notably those with charter and low-cost carrier operations, have created new tourism streams. Developing countries, in particular, rely on aviation-led tourism. The best available estimates currently are that in 2005 domestic and international tourism contributed approximately 5 per cent of carbon dioxide to global emissions. This was generated through consumption of transport services by travellers, which accounted for about 75 per cent of tourism contribution, and through energy consumption in tourism establishments such as air conditioning, heating and lighting in hotels. Air transport is estimated to contribute about 40 per cent of carbon dioxide emissions from tourism sector including the domestic segment, which is much larger than international. Unlike other industries and transport modes, there was no practical alternative to kerosene-based (fossil) fuels for commercial jet aircraft for the next several decades. Thus, by 2050 the carbon dioxide contribution from air transport could rise three-fold.⁵⁴

BOX 8.4

Impact of Ship and Aircraft Emissions

It has been reported that exhaust emissions from ships are a significant source of air pollution. “Seagoing vessels are responsible for an estimated 14 percent of emissions of nitrogen from fossil fuels and 16 percent of the emissions of sulphur from petroleum uses into the atmosphere [...]”. E.g. in Europe ships make up a large percentage of sources of sulphur in the air, “...as much sulphur as all the cars, lorries and factories in Europe put together [...]”. “By 2010, up to 40% of air pollution over land could come from ships.”

Aircrafts burn aviation fuel, which is made up of hydrocarbons (mostly octane), other additives to reduce freezing or explosion due to external climatic conditions, and metal deactivators. The combustion of aviation fuel releases carbon dioxide, which is the principal greenhouse gas; other emissions include nitric oxide, oxides of nitrogen, oxides of sulphur, carbon monoxide (which bonds with oxygen to become CO₂ immediately upon release) and incompletely-burned hydrocarbons. The aviation industry also contributes greenhouse gas emissions from ground airport vehicles and those used by passengers and staff to access airports, as well as through emissions generated by the production of energy used in airport buildings.

Source: Wikipedia, “Ship Pollution” http://en.wikipedia.org/wiki/Ship_pollution and “Aviation and the Environment” http://en.wikipedia.org/wiki/Aviation_and_the_environment data retrieved April 2008.

In India, liberalisation of aviation policy has significantly impacted to spread the accessibility of tourism destinations. According to the economic survey 2006–2007, there has been a phenomenal overall growth of 35.5 per cent in the civil aviation passenger section from April 2006 to September 2006 over the same period in the previous year on account of 44.6 per cent increase in the number of domestic travellers and 15.8 per cent foreign travellers.⁵⁵

Experiences around the world have shown that small islands tend to get overly dependent on air as the key means of connectivity. This increases their vulnerability in the event of airlines and other players in the air travel sector shifting, reducing or stopping operations for a wide range of reasons. Political instability, disasters, epidemics and economic factors such as strikes, viability and increase in fuel prices are some of these externalities that impact air travel. These have a direct consequence on tourist receiving destinations. In various tourism development plans for the Andamans, the need to improve air connectivity to the islands has been a repeated theme. Furthermore, promoting increase in connectivity with no heed to the attendant climate change impacts on these islands is a short-sighted strategy.

8.4.5 Tourist Activities and Their Impacts

The main tourism activities in the Andamans is visiting places of historical, cultural importance or utilisation of beaches for various activities such as relaxing on the beaches and swimming, snorkelling and diving. These tourism activities will have an adverse impact on the ecosystem components of Andaman Islands if the number of tourists is not regulated and the activities not monitored.

8.4.5.1 Boats

The boats that ferry tourists to various tourist locations in the Andamans invariably end up spilling oil and diesel into the sea. This is especially noticed near jetties where the boats are docked. While the problem may not be very serious today, increased number of boats would have an adverse impact on the marine ecosystems mainly from leakage of oil, grease and dumping of sewage. Since oil and diesel tend to float, they form a thin coating on the water surface, which may interfere with percolation of sunlight to the seabed and also with the exchange of gases, especially oxygen, between the air and the sea. This will interfere with the productivity cycle of the marine ecosystems. The boats also dump sewage and ballast water (water from engine room) directly into the sea. The sewage uses up dissolved oxygen in water and thus makes less of it available to the marine organisms. The ballast water also has lot of oil and grease which will affect the ecosystems as mentioned above.

Another impact of boats is the damage to coral reefs by dropping of anchors. In shallow areas breakage and abrasion of corals also occur when either propellers or hulls of boats or both come into physical contact with the corals. This problem has been written about by various researchers who have worked on the coral reef systems of Andamans (see Sections 8.4.5.2 and 8.4.5.3 for details).

BOX 8.5**The International Convention for the Prevention of Pollution from Ships (MARPOL)**

The MARPOL convention is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. It was adopted on 2 November 1973 at the United States International Maritime Organization (IMO). The parent convention of MARPOL was the International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL), 1954 that primarily addressed pollution resulting from routine tanker operations and from the discharge of oily wastes from machinery spaces. However, subsequent amendments to OILPOL included application to ships of a lower tonnage as well. Finally, an international conference in 1973 adopted the International Convention for the Prevention of Pollution from Ships. While it was recognized that accidental pollution was spectacular, the conference considered that operational pollution was still the bigger threat. Consequently, the 1973 convention incorporated much of OILPOL, 1954. Annexes of MARPOL that address environmental impacts of ships are as follows:

Annex IV – Prevention of pollution by sewage from ships, which came into force on 27 September 2003, contains requirements to control pollution of the sea by sewage. A revised annex was adopted on 1 April 2004 that came into force on 1 August 2005. The revised annex applies to new ships engaged in international voyages, of 400 gross tonnage and above or ones that are certified to carry more than 15 persons. Existing ships will be required to comply with the provisions of the revised Annex IV five years after the date of its entry into force. The annex requires ships to be equipped with either a sewage treatment plant or a sewage comminuting and disinfecting system or a sewage holding tank. The discharge of sewage into the sea will be prohibited, except when the ship has in operation an approved sewage treatment plant or is discharging comminuted and disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest land, or is discharging sewage which is not comminuted or disinfected at a distance of more than 12 nautical miles from the nearest land.

Annex V – Prevention of pollution by garbage from ships came into force on 31 December 1988. This deals with different types of garbage and specifies the distances from land and the manner in which they may be disposed of. The requirements are much stricter in a number of “special areas” but perhaps the most important feature of the annex is the complete ban imposed on the dumping into the sea of all forms of plastic.

Annex VI – Prevention of Air Pollution from Ships was adopted in September 1997 and came into force on 19 May 2005. The regulations in this annex set limits on sulphur oxide and nitrogen oxide emissions from ship exhausts and prohibit deliberate emissions of ozone depleting substances.

BOX 8.6**Clean Ship Demonstrates Sustainable Waterborne Transport for the Future**

The low-emission, fuel efficient and environmentally friendly barge *MV Victoria* was moored in the Port of Brussels illustrating how clean shipping technology is revolutionizing the way goods are transported in Europe.

BP and the EU-financed research project “Creating” have worked together to develop environmentally efficient inland navigation. According to Commissioner Janez Potočnik, the 1300 ton *MV Victoria* is an essential objective of European transport research. Inland navigation provides a particularly relevant, environmentally friendly and cost effective alternative to other forms of transport of heavy goods in Europe. “EU-funded projects continue to deliver innovative results in such fields as more efficient and cleaner alternative propulsion systems, cleaner fuel, optimized routing, as well as improved hull forms – all of these are directly usable today by the EU shipping industry”. “But we must also look further ahead, and support European leadership in ship engine production, as well as developing long term solutions using fuel cell technology for cleaner, greener and safer shipping”. To improve fuel efficiency, reduce energy use and lower emissions, the ship uses innovative technologies for speed control, low sulphur fuel use, selective catalytic reduction, and particulate matter filters. The Creating project is a unique partnership which brings together 27 companies and research organizations from nine European countries, including Wärtsilä, MAN Diesel, and BP which provides the working lube oil barge *Victoria* as a demonstration vessel. In addition to the “World’s Cleanest Ship”, other EU-funded projects delivering radical advances in clean waterborne transport include METHAPU – methanol fuel cell technology for maritime applications – and HERCULES – innovative marine engine technologies to reduce fuel consumption and emissions for sea-going vessels.

Source: http://www.energy-enviro.fi/index.php?PAGE=1543&NODE_ID=1543&LANG=1, data retrieved
More information: www.cleanestship.eu, data retrieved April 2008

8.4.5.2 Use of Beaches

The impact of tourists on beaches is directly proportional to a combination of factors of the number of people, the time that they spend and the activities that they do. The main impacts would comprise of compaction of sand, trampling of beach vegetation and dislodging and removing of integral components of the beach ecosystem such as shells and corals. Tourists generally have a tendency to collect pieces of corals and shells that wash ashore on the beach. About 38 per cent of foreign tourists admitted to have collected shells and corals and 13.5 per cent of domestic tourists said the same, though the numbers for domestic tourists could be higher as the research team had observed collection in almost all beaches most of the time. All species of corals and some varieties of shells have been banned under the Wild Life (Protection) Act, 1972 to be removed from beaches due to their rarity and threatened status. But tourists seldom

make the distinction. Pictures or charts depicting the banned species are put up only in few places and hence it makes it difficult for the tourists to differentiate. The restriction on collecting shells and corals is implemented more strictly in marine protected areas but not in the majority of the beaches where it is difficult to keep watch. Sometimes tourists take them away even from the protected areas.

In addition to collection from the beaches, tourists also purchase shells and corals from the many shops that sell these in Port Blair. A total of 17 per cent of foreign tourists bought shells and nearly 3 per cent of them purchased corals, whereas 46 per cent of domestic tourists bought shells and 28 per cent of them purchased corals. It is likely that some of the respondents did not also differentiate between shells and corals and lumped them into the same category, when responding to the survey – which could be one of the explanations for the high percentage who say they purchased corals.

For legal sale of shells, the system of licenses of shops and checks seem to be in place. It was learnt through discussions with shop owners that licenses are issued to shops selling shells and shell products by the Department of Environment and Forests for collecting a regulated number of shells from selected areas of the Andamans. The tourists who buy these shells are issued a bill that also bears the license number under which the shells were collected and sold.

It has also been reported that use of beaches by tourists for camping and camp fires has resulted in disturbances to turtle nesting sites, sometimes even preventing their nesting, for example on Ross and Smith Islands and on Little Andaman Island⁵⁶ and Chidiyatapu, New Wandoor and on Havelock Island.⁵⁷

8.4.5.3 Changing and Resting Facilities, and Camping

The facilities provided for tourists are located on beach areas. The facilities are made of local material like bamboo, thatch and so on and do not consist of any permanent building materials. In places such as North Bay, they are very close to the high tide line and are large when compared to other places. These facilities are also designed to cater to large crowds of tourists and hence in places like North Bay their impacts are more pronounced.

The construction of such facilities may have the similar kinds of impacts as any other construction projects, which could be soil erosion and changes in water runoffs. The location of such facilities may also be followed by demands to “improve” the beach by providing more public amenities like a jetty, bus stop or a parking lot, or washing, bathing and changing facilities and so on. In such a scenario, the usually narrow area of coastal ecosystems is broken up into smaller and smaller fragments until the entire ecosystem itself is modified beyond restoration.

Coastal ecosystems are affected by trampling of vegetation by tourists leading to onset of soil erosion and disturbance to wildlife, sometimes displacing coastal floral and faunal species.

In Radhanagar, Havelock, the IP&T has provided flat concrete beds for pitching tents. These also fragment the habitat and compact the soil of the forest area. Moreover, these were not found to be in use as most of the tourists who visit Radhanagar are either visitors who come by day or who prefer to stay in accommodation facilities on the other side of Havelock (Figures 8.16 and 8.17).



FIGURE 8.16 Tents Provided by IP&T at Radhanagar Beach, Havelock Island



FIGURE 8.17 Tents Provided by IP&T at Radhanagar Beach, Havelock Island

8.4.5.4 Snorkelling and Diving

Andaman Islands hold an attraction, due to their condition and the diversity of marine life that they harbour, to some tourists who visit solely for the purpose of diving to see the coral reefs. That is because

[t]he Andaman and Nicobar Islands consist of 530 islands with extensive fringing reefs which are mostly in good condition (...) In the Andaman and Nicobar

Islands, there are 203 hard coral species with Porites spp. Being dominant in the northern and southern Andaman Islands, while Acropora spp. Dominate the middle Andaman and the Nicobar Islands. Currently live coral cover averages 65% and about 1,200 fish species have been recorded.⁵⁸

The popular sites of snorkelling are North Bay, Red Skin, Jollybuoy in South Andaman where tourists are taken in boats operated by the Andaman Boat Operators Association. Before the tsunami, they were also taken to Chidiyatapu. Boat owners, especially *donghi* owners also search and pick out new areas to take tourists for snorkelling as in the case of Mahuadera in South Andaman or tourists themselves find other places as in the case of Elephant Bay in Havelock Island. The fishermen who take tourists to Mahuadera from Wandoor were of the opinion that, given the large number of tourists being taken daily to Mahuadera, the coral reefs will probably last for about two more years before they degrade due to the human factor.

The dive sites in Andaman Islands⁵⁹ that have been identified by the IP&T are as follows:

1. Cinque Island
2. North Point, Southeast Reef
3. Fish Rock near Passage Island
4. Bala Reef – on the western side of little Andaman (this area is under tribal reserve)
5. Snake Island off Corbyn's Cove beach
6. Corruption Rock between Chidiyatapu and Rutland Island
7. Rutland Island
8. Havelock Island – dive sites near to the Havelock Island – Mac Point, Aquarium, Barracuda City, Turtle Bay, Seduction Point, Lighthouse, The Wall, Pilot Reef, Minerva ledge
9. Campbell Shoal off North Button Island
10. Mahatma Gandhi Marine National Park, Wandoor

The concerns about impact of tourism on the corals have been raised over the last two decades: "Corals are one of the important ecosystems of these Islands but these are constantly disturbed due to human intervention, including tourists".⁶⁰

Many researchers have also pointed out the problems created by tourists:

Shell and coral collection by traders and tourists has caused heavy damage to coral reefs in the Islands. Some of the islands in the National Park area at Wandoor, where there was once a luxuriant growth of coral in the inter-tidal area, have their formations very badly damaged, mainly due to increased tourist activity like trampling, littering, overturning of coral blocks, scuba and snorkel diving etc.... Almost all diving results in minor unintentional damage to coral reef biota at sites frequently used for diving. This damage can become significant and can lead to local loss of rare and vulnerable species. Periodic closure to allow recuperation of dive area may be needed, specially in overburdened reef zones.⁶¹

and

Corals at Jolly Buoy have been damaged by boat anchors and snorkellers.... Several measures can be taken to minimise damage caused to reefs by boat anchors, snorkellers and divers. Strategic placement of anchor buoys is essential,

*and concerted efforts can be made to educate visitors to the park about the need to be careful when exploring reefs.*⁶²

It has also been reported that the coral reefs are under various degrees of threats from different sources of which tourism is one of them.⁶³ Tourists step on corals causing damages. Impact on corals from tourist activity has been recorded in Jollybuoy and Red Skin Islands in the Mahatma Gandhi Marine National Park (MGNP).⁶⁴

BOX 8.7

Marine Tourism Impacts and Their Management on the Great Barrier Reef

Tourism has been identified as a critical issue in the management of the Great Barrier Reef Marine Park (GBRMP). About 1.6 million tourists visit the Great Barrier Reef (GBR) region each year and generate an income of over \$1 billion per year in direct value. A further estimated one million visitor nights per year are spent in accommodation on island resorts within the boundaries of the GBRMP. The rapid increase in numbers of tourists and development of tourism infrastructure development on the GBR which caused great concern in the 1980s has stabilised since 1995. Recreational use of the GBR region by coastal residents is also high, and in many circumstances, the impacts of recreational users can be impossible to separate from those of commercial tourism activities.

Tourism on the GBR is geographically concentrated, with 85% of tourist visitation taking place in the Cairns and Whitsundays Areas, which cover about 7% of the area of the Marine Park and are the focus for tourism management. As a result, impacts of tourism are low and diffuse over the remaining Park area. Advances in transport technology may result in greater access by mass tourism operations to currently inaccessible regions of the reef and could affect the distribution and management of tourism impacts in the future.

Impacts of marine tourism can be broadly categorised as ecological, social and cultural. The major types of marine tourism impacts include:

- ◆ coastal tourism development (population pressures, construction activities)
- ◆ island-based tourism infrastructure (marinas, sewage discharge, construction)
- ◆ marine-based tourism infrastructure (pontoons, moorings, fish feeding)
- ◆ boat-induced damage (anchoring, ship grounding, litter, waste discharge)
- ◆ water based activities (diving, snorkelling, reef walking, fishing)
- ◆ wildlife interactions (seabirds, turtle-watching, whale-watching)

Activities associated with construction activity and structures are regulated under permit requirements. Planning should take into account cumulative impacts but these can be difficult to assess and management tools to contain such impacts can be contentious and difficult to implement. Legislation requires monitoring of waste water discharges, and tertiary treatment is required of any sewage effluent released into the GBRMP.

The best studied of tourism impacts are those associated with pontoons, anchoring and diving. A series of extensive impact assessments has found that impacts of pontoons on the surrounding reef areas are minimal, apart from the “footprint” under the pontoon and its moorings. Anchoring of both tourist and recreational boats is a significant issue in heavily visited sites in the Marine Park. Anchors and anchor chains are capable of breaking multiple

BOX 8.7—cont'd

coral colonies at each drop. Management of anchoring impacts includes installation of both private and public moorings, “no-anchor” areas in heavily used places such as some of the Whitsunday Islands, and an education program for boaters, promoting codes-of-practice.

The impacts of diving and snorkelling have been well studied both in Australia and overseas. Most divers do not break corals, but a small percentage of divers who swim too close to the coral may break many coral branches on each dive. Fragile branching corals are the most susceptible to breakage. Internationally, the carrying capacity of coral reefs has been determined to be about 5,000 divers per site per year. Above this level of dive intensity, environmental deterioration has been noted. Because of the large choice of dive sites available, no GBR sites currently appear to approach this level of diving activity. Some studies of snorkellers have detected larger numbers of broken corals in active snorkel areas, including snorkel trails, but the level of breakage levelled off quickly and did not increase over time. Recommendations for reducing diver and snorkeller impacts, such as dive briefings and careful selection of sites have been taken up by the diving industry.

Because tourism is an important commercial activity on the GBR and involves millions of visitors each year, it requires careful management by the Great Barrier Reef Marine Park Authority (GBRMPA) and Queensland Parks and Wildlife Service (QPWS). Tourism is managed on the GBR by a combination of zoning plans, plans of management of intensively used sites, codes-of-practice, and permits. Changes in the volume and profile of tourism on the GBR in the last 20 years mean that tourism management is presently under revision. The new approach being considered is based on a reef-wide strategic framework that promotes mandatory performance standards rather than proscriptive permits. Education and training remains an important component of tourism management. An Environmental Management Charge, introduced in 1993, is collected for each reef visitor and contributes to the funding of research, education and Marine Park management.

Surveys of tourists and the east Australian community have reported a perception that tourism activity is one of the three greatest threats to the GBR. Of the people surveyed, 53% perceived that tourism activities and tourism infrastructure had a large or very large impact on the GBR. In comparison, reports from scientists and conservationists on threats to the GBR rate inshore water quality, overfishing, predation by crown of thorns starfish and coral bleaching as of greatest concern. It may be necessary to provide the community and tourists with better information about the GBR and its management to ensure public perception of threats to the GBR is based on the best available information.

Source: Harriott, V.J. (2002), “Marine Tourism Impacts and Their Management on the Great Barrier Reef”, CRC Reef Research Centre Technical Report No 46, CRC Reef Research Centre, Townsville.

8.5 Conclusion

It must be recognised that tourism is prevalent in the coastal and marine areas and therefore its impacts are more evident in these ecosystems as compared to the tropical forest ecology of the Islands.

Absence of a coherent strategy, despite numerous plans, which would protect the ecosystems and at the same time allow for soft-impact tourism, continues to add to the



FIGURE 8.18 Advertisement for Snorkelling at Mahuadera, Wandoor Beach

ever-increasing environmental woes of Andamans. Complemented by lack of vision and thinking on bringing in an appropriate kind of tourism and tourist activity that would be beneficial for the island ecology only complicate matters further. Even the ICZMP seems to have the sole objective of opening up more islands for tourism.

The tour operators hard sell the beaches, corals and marine life of Andamans (Figure 8.18). While there is some kind of regulation for locations in Protected Areas, various other places such as North Bay and Mahuadera, which see increase tourist visitation, would soon be affected as there is regulation of tourist numbers and their activities here, which may lead to undesirable impacts. There are no trained guides or escorts who could keep an eye on the tourists to ensure that their activities are not impacting the components of the ecosystems like breaking of corals or littering. As has been seen in other tourism locations, once a location gets degraded and loses its charm, tourism moves to another location. The same phenomenon may repeat itself in many areas of Andamans.

There are a few positive steps that the A&NI Administration has taken to try and build some level of awareness among the tourists. The Department of Environment and Forests has put up signages at popular locations such as Chidiyatapu, Wandoor, Jollybuoy, Baratang and Red Skin (Figures 8.19 and 8.20) in an attempt to minimise tourist impacts such as littering, noise levels and removing shells and corals. The department has also put up charts that show the pictures and names of shells and corals that are prohibited to be removed from the beaches. But compared to the volumes of tourists and their not taking notice of this information, the attempt is a feeble one and it needs to be made stronger and more explicit with production and wide dissemination of more brochures, pamphlets and booklets. There is a need for very comprehensive education and awareness programmes for the islands. There is also a need for better interpretation material for educating tourists.

The issue of inadequate implementation of the CRZ Notification is a major cause for concern. The A&NI Administration, specifically the Coastal Zone Management



FIGURE 8.19 Signages Installed by the Department of Environment & Forests at Baratang

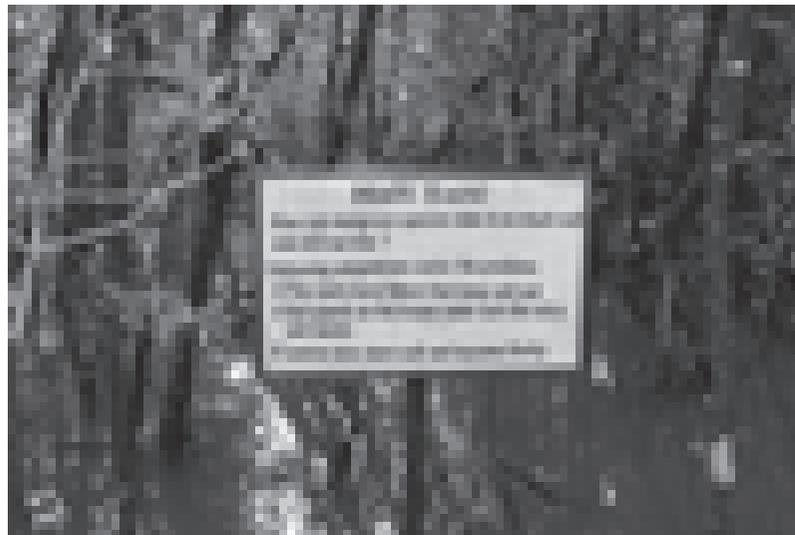


FIGURE 8.20 Signages Installed by the Department of Environment & Forests at Baratang

Authority, has not done enough to regulate tourism establishments in coastal areas of Havelock, Neil and other Islands. Nor is it addressing the springing up of such establishments in other areas such as Neil Island. While these establishments cannot be regularised, the Coastal Zone Management Authority has not acted while these structures were coming up.

Oceanic islands will be most affected due to climate change impacts. As both the aviation and shipping sectors contribute to global GHG emissions leading to climate change, the viability of being increased to bring more tourists needs to be carefully thought through. These need to be strongly linked to the tourism carrying capacity of Andamans and infrastructure.

BOX 8.8**Business and Environment: The Case of Welcomgroup Fortune Bay Island Resort, Port Blair by Niranjana Khatri**

The objective of the hotel was to create a new, “green model” to operate the hotel in an eco-responsible manner, which could be replicated by the Welcomgroup chain and by the entire industry in different locations. The model concentrated on four distinct areas – or the four “R’s”: Reduce, Reuse, Recycle and Rethink systems, procedures and policies. The unit addressed the resource/environmental issues by adopting an internal and external strategy.

Internal Strategies

The hotel had to encounter problems pertaining to water, soil, waste, paper and so on. This led to the problems being creatively addressed as they came along.

Water management – We had a major water crisis in Port Blair in 1991 when our filtered water supplies were cut down from 8 kilolitres to 2 kilolitres per day. In order to run our business we had to break our entire pipeline system of galvanised iron and replace it with plastic pipelines (to avoid corrosion) so that the clean salt water from the sea could be used for flushing toilets, thereby reducing the demand on filtered water supplied by the municipality.

A well was dug in the hotel, knowing fully well that we would not get underground water. However, the intention was to harvest rainwater, which was utilised in the summer season for gardening. The same example could be extended to our cities which are short of water today. Such harvested water could be used for washing cars, watering the garden or any other such use to reduce pressure on the supply of precious municipal filtered water. It must be remembered that “WATER SAVED IS ALSO ENERGY SAVED”. Such sumps/wells dug in houses could be used for breeding fish which would be a natural predator for mosquito larvae, which could otherwise breed in the stored water.

Soil management – Our hotel was located on a hill slope and we had a problem of soil erosion. In order to combat this problem with cost effectiveness, we used coconut coir, which was lying on the island as garbage, in those areas where the problem of erosion existed. This had two advantages. Coir is biodegradable and therefore environment friendly. It was also finance friendly, as garbage in the form of coconut coir was used for solving the problem in hand.

Waste management – Our objective was to look at reducing waste at the top and bottom ends of the pipe.

1. Tourists went for sightseeing trips to the other islands in Port Blair with packed lunches in cardboard boxes. These boxes were invariably left behind on the islands, thereby creating a garbage problem – a veritable visual assault. We stopped the usage of cardboard boxes and started giving the guests packed lunches in steel boxes. These boxes had to be brought back failing which a token fine was levied. In the bargain recurring costs were wiped off and the garbage level was reduced.
2. Used cooking oil was usually thrown into the drain and this enhanced the effluent level. At the hotel, we converted this cooking oil into soap, which was used for washing the utensils, thereby reducing the effluence and also creating a cost advantage as we did not have to purchase washing powder anymore.

BOX 8.8—cont'd

Paper conservation – All old documents of the accounts department were segregated into benign and confidential lots. The confidential lot was shredded, mixed with wet garbage and converted into manure for use in the hotel garden. The other documents were converted into rough pads for internal use. The paper caps used by chefs were replaced with cloth caps. The brown paper used as a lining in the drawers of writing desks in every room was replaced with velvet. The whole objective was to reduce the usage of paper pulp in order to lessen deforestation which is taking place at the rate of “an acre a second”. Today the world has only 8 per cent forest cover. In India alone, forest extraction is to the tune of Rs 30,000 crores per annum and only Rs 800 crores (approximately) is spent on afforestation. According to C.S.Silver in his book *One Earth One Future*, as per current estimates 496 million hectares of denuded land needs to be afforested worldwide.

In order to create this awareness our hotel unit started an afforestation programme in Port Blair by planting 1,500 saplings in the airport complex. Since the task was very large and the awareness of the issue very low, we put up hoardings with the message that planting trees was every individual’s and organisation’s responsibility.

Telecommunication – Our unit had a severe crisis on the communication front, which is as follows:

1. For three months we could not call up the local taxi stand for our guests needs.
2. We needed extra lines for our telephone exchange but could not get the same because of a large backlog. This is also true for the country as whole, which led to a study in this area and the author of this article wrote a letter to the Ministry of Telecommunication, the essence of which is reproduced here.

The density of telephones per capita has a co-relation with the Gross Domestic Product (GDP). Our country requires approximately Rs 20,000 crores to clear the backlog of applications for telephone lines. The Government could follow the idea of Cable TV networks wherein the output from 2 or 3 VCRs is passed through signal boosters and then transmitted through cables to numerous houses in a locality, thereby providing audio-visual entertainment to hundreds of home viewers. In a similar manner, 10 or 15 telephone lines with 50–60 extensions could be given on a priority basis to unemployed youth or ex-servicemen to start mini ‘retail telephone service’ in thousands of pockets all over the country. The mechanism would be very similar to an EPABX system in an office which has 10 hunting lines but numerous extensions at various desks, with the only limitation being that of wiring up houses within technically and economically acceptable distances from the mother unit. Through this strategy, the movement of people in cities and towns, currently without phones in their houses, would be drastically reduced because a lot of daily chores could then be conducted through the retail phone connection at home. This would consequently reduce the public vehicle occupancy density and the private vehicle traffic density to a large extent. So there would be fewer people to board our buses, which would mean that we could reduce the number of buses plying on our roads. Similarly, there would be less private cars plying on the roads, and all this would mean less air and noise pollution in our lives.

BOX 8.8 Business and Environment—cont'd

Pollution and poverty – Human beings and poverty are the biggest polluters and the large growing numbers negates any positive action. Welcomgroup Fortune Bay Island (WGBI) therefore, created a model in these two areas.

Population – The hotel created a policy whereby a cash incentive was offered to all employees who got married but postponed starting a family for two years by design. The concept of “One Family One Child” was also adequately rewarded.

Employees were however given a lesser amount on the birth of their second child.

Poverty – WGBI adopted one of the poorest orphanages on the islands and helped them with educational material. The services of the hotel carpenters, plumbers and electricians were provided free of charge. Children in the age group of 14 to 16 years were given vocational training in the hotel for two hours so that they would have “job market value” when they left the orphanage.

The thought process behind these models was that if the entire industry accepted this model, then a lot could be done as a contribution of the industry which, when dovetailed with the government effort in this area, would lead to national advantage.

The external strategy was spearheaded by the author through the formation of the Andaman and Nicobar Tourism Guild (ANTG) to address the problems facing the hotel and tourism industry which were as follows:

1. Foreigners could not stay in the island for more than five days. They could not visit all the islands.
2. Liquor could not be served in the bar. Hotels were not permitted to sell foreign liquor.
3. Charter flights were not allowed to come to the islands.
4. Cooking gas was not available to the hotels for commercial use.
5. Subsidies which were due to the hotels were not paid for years.
6. The shortage of telephones and the solution given was finally implemented by the Government of India (GoI) in 1995.

The objectives of the Guild were as follows:

- a. to accept responsibility for a larger canvas by identifying the issues which were hampering tourism in the islands industry and taking it up with the local government through a common platform
- b. to create a sustainable eco-tourism model which would be acceptable to all arms of the tourism trade – hotels, travel agencies and boat operators
- c. to advise the government on infrastructure problems through a feasible economic solution experienced in the micro environment of the hotel.

The Guild was formed in March 1990 with a sum of Rs 30,000 which was contributed by 11 members. Beyond this amount, the Guild raised Rs 60,000 through advertisements in a souvenir. In short, the resources were extremely limited. The Guild was run by the President (Niranjan Khatri) aided by a treasurer Mr. A. K. Das, General Manager of Hotel Asiana. Meetings were held once a month by rotation at different member locations.

BOX 8.8—cont'd**Activity initiated through the ANTG**

ANTG put up pictorial hoardings in the following areas in Port Blair:

<i>Airport arrival lounge</i>	–	<i>importance of tropical forest</i>
<i>Airport departure lounge</i>	–	<i>value of a tree</i>
<i>Airport taxi stand</i>	–	<i>importance of coral as a primary food chain</i>
<i>Airport open space</i>	–	<i>“planting trees is every individual and organisation’s responsibility”</i>
<i>Near Jollybuoy Island</i>	–	<i>take the minimum from Mother Earth</i>
<i>Jollybuoy Island</i>	–	<i>please do not litter the islands</i>
<i>Every hotel</i>	–	<i>“Do’s and Don’ts” at the beach</i>

Employees of every hotel and travel agency were educated to prevent tourists from taking corals.

The prime mover into initiating every eco-related activity was the author of this article supported by the Chief Engineer and other members of the hotel team.

We were sensitive to the fact that our actions should be translated without compromising on quality and with the direct intention of influencing guest behaviour by sharing the problem and solutions in all our communications in the hotel and in the islands through creative hoardings.

In administering the activity, the problems were first identified and solutions defined, and thereafter, depending on the cost, each activity was completed through the concerned departmental head. Most of the problems were solved by the substitution process except water segmentation. Here it took six months for the unit to complete the task.

The hotel was a loss-making property and had very poor revenue because of lack of awareness of the islands and the limited number of flights to Port Blair. The average occupancy of the hotel was 30 per cent. Limited funds were allocated to each department. These funds alone were used for R&D purpose in a very rudimentary manner. The “enthusiasm to cash ratio” was tilted heavily in favour of the former through application of innovation and reuse of a lot of waste material in the hotel engineering department.

Results

The activities of the hotel were shared with our competitors and the local administration in the islands and hotel guests, which led to a cascading effect in terms of “echoing” of our practices.

Environment Museum

Towards the end of my tenure in WGBI we made a small environment museum (see attached detailed concept note) with Rs 25,000, which was a drastic dilution of my dream. The original concept would have cost Rs 100 crore (Rs 1000 million). The essence of this museum was

BOX 8.8 Business and Environment—cont'd

to educate and trigger people's minds into thinking of the environment and to emulate our hotel's simple but effective strategy. The three key objectives of this museum were as follows:

1. to educate people about environmental degradation
2. to learn from people of other walks of life on how to improve our museum
3. to hope that somebody would improve on and make a better museum than ours.

Two months later, at Port Blair, the same was replicated by the navy on a better scale – my objective was thus attained on a small scale but with the hope that in future a good one would be made in Delhi, Kolkata, Mumbai and Chennai

The Action and Results of Our Activity

The result of our activities led to cost, image and operational advantage in the hotel and within the chain. Welcomgroup chain decided to become the first eco-responsible chain in the country.

The local administration decided to accept the concept of “eco-tourism” conceptualised by our association, the ANTG, the founder president being the author himself.

NOTES

- 1 IUCN (2006).
- 2 Dhingra (2005), pp. 3.
- 3 ANET (2003), pp. 6.
- 4 Ibid.
- 5 All bona fide agriculturists in possession of agricultural land residing outside municipal area are issued non-timber forest produce (NTFP), viz. two cords of firewood, 500 bamboos, 100 ballies, 20 posts, 2000 thatching leaves and 200 canes per year on collection of a permit fee of Rs 5. This is free of royalty but only for personal use.
- 6 ANET (2003), pp. 32.
- 7 Andrews (2000c).
- 8 ANET (2003), pp. 40.
- 9 Ibid.
- 10 Sankaran (1995); Andrews (2000b, c); Andrews and Sanakaran (2002).
- 11 Sivaganesan and Kumar (1995).
- 12 Ali (2001).
- 13 ANET (2003), pp. 33.
- 14 Bhaskar (1979), (1984), (1993); Andrews (2000), (2001); Andrews *et al.* (2001)
- 15 Ali (2000).
- 16 The MoEF is proposing to replace the existing CRZ Notification, 1991 with a Coastal Management Zone Notification. While the categorisation of areas has been retained, the nomenclature has been changed from coastal regulation zones to coastal management zones.
- 17 Integrated Coastal Zone Management Plan (ICZMP) of Andaman and Nicobar Islands (A&NI). (This was commissioned by the Ministry of Environment and Forests (MoEF), Government of India (GOI). Period of the study was 2002–2004 and cost involved was Rs 83 lakhs).
- 18 S.O 838 (E) dated 24 July 2003, vide Gazette of India (Extra) No. 654.
- 19 Personal communication with Samir Mehta, Bombay Environment Action Group, December 2005.

- 20 Comptroller & Auditor General (CAG), Report No. 20 of 2006.
- 21 Sekhsaria, 2003, pp 78-79, 84-86
- 22 Society for Andaman & Nicobar Ecology, Andaman & Nicobar Islands Environmental Team, Madras Crocodile Bank, Shekhar Singh Commission, INTACH, Kalpavriksh.
- 23 Andrews and Mundoli (2005).
- 24 Section 2 (viii), pertaining to land reclamation, bunding or disturbing the natural course of sea water except those required for conservation or modernisation or expansion of ports, harbours, jetties, wharves, quays, slipways, bridges and sea-links and for other facilities that are essential for activities permissible under the notification or for control of coastal erosion and maintenance or clearing of waterways, channels and ports or for prevention of sandbars or for tidal regulators, storm water drains or for structures for prevention of salinity ingress and sweet water recharge, provides that reclamation for commercial purposes such as shopping and housing complexes, hotels and entertainment activities shall not be permissible
- 25 ANET (2003), pp. 52.
- 26 Ellis *et al.* (1997).
- 27 <http://www.expresshospitality.com/20060615/market01.shtml> data retrieved April 2008.
- 28 Interview with Mr Vinod Kumar, Deputy Director, Department of IP&T on 19 September 2007 at Directorate of Information, Publicity & Tourism, Port Blair.
- 29 Sekhsaria (2000).
- 30 A&NI Administration Press Release, 13 March 2008, <http://www.and.nic.in/press/ptuesday.htm>, data retrieved April 2008.
- 31 Bhaskar (1993a)
- 32 Consultation with the Andaman Chamber of Commerce and Industry (ACCI), Port Blair, October 2007.
- 33 DES (2006c), "Meteorological Statistics 2006", A&NI Administration, <http://www.and.nic.in/ecostat2007/Meteorological%20Statistics%202006/rainfall.pdf>, data retrieved November 2007.
- 34 Dhingra (2005), pp. 11.
- 35 The State Development Report for A&NI puts the daily demand to 150 lakh (15,000,000 or 15 million) litres per day.
- 36 Interview with Mr Sher Singh, Chairperson, Port Blair Municipal Corporation on 23 July 2007 at Port Blair Municipal Council office, Port Blair.
- 37 DES (2006a), "Andaman and Nicobar Islands at a Glance, 2006", A&NI Administration, Port Blair.
- 38 NIPFP (2006).
- 39 Interview with Mr Sher Singh, Chairperson, Port Blair Municipal Corporation on 23 July 2007 at Port Blair Municipal Council office, Port Blair.
- 40 MoEF (2007).
- 41 Dhingra (2005), p. 268.
- 42 Geological Survey of India (2005).
- 43 Dhingra (2005), p. 12.
- 44 Geological Survey of India (2005).
- 45 Dhingra (2005), p. 268.
- 46 Ibid.
- 47 Central Ground Water Board (n.d.) "Andaman & Nicobar at a Glance", <http://www.cgwber.nic.in/andaman.htm>, data retrieved November 2007.
- 48 MoEF (2007).
- 49 Interview with Mr Sher Singh, Chairperson, Port Blair Municipal Corporation on 23 July 2007 at Port Blair Municipal Council office, Port Blair.
- 50 Central Pollution Control Board (2005).
- 51 United Nations Environment Programme (UNEP) (2005) "Marine Litter: An analytical overview".
- 52 Interview with Mr Sher Singh, Chairperson, Port Blair Municipal Corporation on 23 July 2007 at Port Blair Municipal Council office, Port Blair.
- 53 NIPFP (2006).
- 54 UNWTO (2007).
- 55 *The Tribune*, February 2007.
- 56 Andrews, *et al.* (2001).
- 57 ANET (2003), pp. 46.
- 58 Wilkinson (2004).

- 59 Department of Information, Publicity & Tourism (IP&T), A&NI Administration, <http://tourism.andaman.nic.in/diving.htm>, data retrieved November 2007.
- 60 Andaman Science Association (1987).
- 61 Bagla and Menon (1989).
- 62 Wood (1989).
- 63 ANET (2003), p. 39.
- 64 Kulkarni (2000); Singh *et al.* (2001).

9

Tourism and Lack of Institutional Coordination in the Andamans

Tourism in Andamans is implemented by the A&NI Administration through the Department of Information, Publicity & Tourism (IP&T).¹ The impetus for tourism development comes from the Ministry of Tourism–Government of India (MoTC–GoI). Apart from the IP&T, the Department of Environment and Forests, and Andaman and Nicobar Islands Integrated Development Corporation (ANIIDCO) are the two other major government departments involved in tourism development in Andamans. However, there is a lack of dialogue and coordination between various departments on two fronts.

Firstly, the various departments that are directly implementing tourism projects do not consult, coordinate or jointly implement. For instance, the Department of Fisheries has a proposal to develop game fishing on high seas as a lucrative option but the IP&T is not even aware of such a proposal. Secondly, the needs of tourism are met by *panchayats* and various other departments such as public works, shipping, civil aviation and so on. Hence the IP&T makes demands from these various departments on its needs and seeks compliance. *Panchayats* and other departments do not get separate funds that are linked to tourism issues, for example solid waste management. With increasing tourist numbers and consequent increase in waste being generated and dumped in various locations, *panchayats* and the Port Blair Municipal Council (PBMC) have brought the matter to the notice of IP&T. They felt that since the number of tourists is increasing, the IP&T should extend support in dealing with the issues of solid wastes by making additional funds available.

Further, departments like social welfare and tribal welfare are concerned that tourism will have an effect on constituencies such as women, children and the indigenous community. But the IP&T or any other tourism promoting agency do not discuss problems or issues of mutual concern and do not arrive at appropriate policy or actions based on mutual agreement. In fact it is said:

[t]here is very little coordination between the Department of Tribal Welfare and Tourism – by and large very little coordination between various Departments of the A&NI Administration and this is one of the major problems. We do put across our point of view once in a way but there is little institutionalised interaction and different points of view within the A&NI Administration.²

The current direction and pace of tourism in the islands is largely determined by the Central Government and routed through the Department of Information, Publicity & Tourism (IP&T). Because of this process, the local governing bodies in Andamans have been left out of the decision making process and involvement in subsequent phases of tourism development in the Andamans.

9.1 Democratic Deficit in Decision making in Relation to Tourism

There appears to be no space in the present institutional structure for discussing issues such as tourism between the *panchayats* and bureaucracy, including various departments of the A&NI Administration. There seems to have no attempt that has been made so far to create such a space. Tourism, being a cross-cutting issue that touches upon the social, economic, environmental, cultural and institutional aspects, is complex and hence sharing of information and a space for dialogue is required. With discussions around statehood gathering momentum, there is a hope among many members of the local community that tourism would be discussed in political spaces such as a state assembly.

Through interactions with the local community, we found out that people have opinions on or aspirations from tourism but these are not being sought by the A&NI Administration. Wherever people had problems or concerns with the current tourism scenario, they are at least trying to raise them with the *gram panchayats*. However, with regard to tourism, the *panchayats* are of the opinion that they are not being heard by the A&NI Administration.

In every *panchayat* visited as part of this study, the office bearers said that they are not consulted when tourism projects or plans are prepared by the IP&T or by any other party. They get to know about the project only after all clearances are given by various other departments, and when the party or parties seek a token No Objection Certificate from the *panchayat* to go ahead with construction. At this stage, the *panchayats* feel they cannot refuse because clearances have already been given by other departments. After that they pay only the building tax to the *panchayats*, which again is a very small amount. This depends on the size of the building and the tax rates are fixed by the *panchayats* accordingly, with the tax amount ranging from Rs 150 to Rs 600 per building, depending on the floor area of the building.

Decisions on tourism projects, opening up of new tourism spots or relaxation of regulations are taken largely by the A&NI Administration or central government without consulting local governing bodies. The local people and *panchayati raj* institutions were unaware about earlier tourism strategy reports and master plans that were prepared by external agencies and that were being sought to be implemented by the A&NI Administration. Therefore, there is an absolute deficit of information and consultation that would be critical for democratic decision making on all aspects of tourism development in the Andamans. It must be recognised that the scope for *panchayat* members to take the initiative on these matters has also not been utilised effectively by them.

BOX 9.1

Local Participation in Decision Making – A Word of Caution

The words “local” and “participation” are used regularly to emphasise the need to include and involve local people as they have very often been left out of the decision making, planning and operational phases of tourism projects. Participation of local people seems to have become an essential condition of sustainability and development of any new tourism scheme. Apart from tourism, it is now difficult to find a development project that does not claim to adopt participatory and bottom-up planning approaches. Survival International notes that “it has become fashionable for conservationists to talk about ‘consulting’ local people. While this looks good on paper, it is hardly a substitute for land ownership rights and self determination”. This type of participation has been criticised and attempts made to

BOX 9.1—Cont'd

understand the sanctity in which participation is held. Participation must be subjected to a critique, being aware that it has the potential for an unjustified exercise of power. While participation is a fundamental means of interaction and “development” it is not always a panacea and does not automatically change the underlying power structures.

The principle of local participation is easy to promote but complex to practice. Pretty’s typology of participation may be helpful to understand factors that affect local communities in tourism schemes (Table 9.1). Local circumstances, unequal power distribution between local and interest groups, and differing interpretations of meaning of participation are some factors that are in play in a participatory process.

TABLE 9.1 Pretty’s Typology of Participation

	Typology	Characteristics of Each Type
1	Passive Participation	People participate by being told what has been decided or has already happened. Information being shared belongs only to external professionals
2	Participation by Consultation	People participate by being consulted or by answering questions. Process does not concede any share in decision making, and professionals are under no obligation to take on board people’s views
3	Bought Participation	People participate in return for food, cash or other material incentives. Local people have no stake in prolonging technologies or practices when the incentives end
4	Functional Participation	Participation seen by external agencies as a means to achieve their goals, especially reduced costs. People participate by forming groups to meet predetermined objectives
5	Interactive Participation	People participate in joint analysis, development of action plans and formation or strengthening of local groups or institutions. Learning methodologies used to seek multiple perspectives and groups determine how available resources are used
6	Self-mobilisation and Connectedness	People participate by taking initiatives independently of external institutions to change systems. They develop contacts with external institutions for resources and technical advice they need, but retain control over resource use

Source: from Pretty and Hine (1999) in Mowforth and Hunt (2003) p. 215

The six types of participation range from *passive participation*, wherein all power and control over development lies with people outside the local community, to *self-mobilisation*, in which power and control over all aspects of development rest with the local community. The latter type does not necessarily omit involvement of external bodies or consultants. However, they are present as enablers rather than directors or controllers. The range of types allows varying degrees of external involvement and local control. It reflects the power relationships between them. For local people, involvement in decision making is a feature of only *interactive participation* and *self-mobilisation* types. While in *functional participation*, decisions are already made before taking them to the local community. The only forms of local participation that are likely to break the existing power patterns and unequal development are those that originate from within local communities themselves.

Source: Mowforth and Hunt (2003).³

9.2 Pressure on Local Governing Bodies without Commensurate Gains

To begin with, the Andaman & Nicobar Islands (Panchayat) Regulation Act, 1994 has by definition devolved powers to the *panchayats*, but has not been implemented in letter and spirit. The PBMC has also been reduced (and perhaps also allowed themselves to be reduced) to a licensing authority for all new constructions, tourism or otherwise, that are built.

Many elected representatives – members and office bearers – at all the three levels of *panchayati raj* institutions in the Andamans were of the opinion that there is currently not much role for *panchayats* in tourism development – decisions are largely taken in Port Blair. There is also a proposed provision that “[P]RI’s have to levy tax on outsiders but so far we have been too scared to operationalise the system”.⁴ Many *panchayats* were also of the opinion that they were tied down by the elaborate, and sometimes complex, systems and procedures laid down by the A&NI Administration and they did not have any say in matters that sometimes directly affect them. The need for elected representatives to acquaint themselves with laws, rules and entitlements is also a critical factor.

Specifically, the areas in which the PBMC and the *panchayats* are impacted are the following. We give here examples of those areas that have a direct connection with tourism:

Land – Conversion of land from agriculture to non-agriculture purposes and allotment of land is solely at the discretion of the District Collector. The view of local governing bodies is not considered at all in these matters.

Wastes, especially solid wastes – This was an issue that was highlighted by all the *panchayats*. They were forced to clean up the mess caused by tourists. Repeated requests to the IP&T to either take care of or provide additional funds to the *panchayats* to execute collection and disposal actions has not elicited any kind of response from them. All the *panchayats* have complained about lack of adequate funds to deal with this issue.

Safety and security of tourists – Some *panchayats* like Havelock and Wandoor have also requested for dedicated tourism police to address concerns of tourists that may arise from the legal perspective, for example safety, eve-teasing, checking licenses of tourists who use two-wheelers and so on. But there has been no response to such requests from the Administration.

Amenities – All rural schemes are implemented by the *panchayats*. The *panchayats* are also responsible to establish amenities for the use of the public. While there is no separate budgetary provision for tourism per se, the amenities put up by the *panchayats* are also used by tourists. Sometimes the *panchayats* are also pressurised to put up amenities like public toilets to cater to demands of increasing tourist numbers.

Most of the *panchayats* want to have tourism. The Nilambur *panchayat* in Baratang has specifically requested for more tourism development as there is a high number of domestic tourists that visit this place. The *panchayats* also have the authority to regulate or even say no to tourism in their areas of jurisdiction. Although no *panchayat* has said no to tourism so far, they are aware of the problems that unplanned and unregulated tourism will bring in. They would thus want to have a level of tourism that will be acceptable to all.

Panchayats like Diglipur and Little Andaman have had a history of tourism. While Diglipur currently receives tourists, Little Andaman has stopped getting tourists since

the earthquake and tsunami of December 2004. Hence they would like to have tourism in these places. In the consultation with *panchayati raj* institutions that was organised, the *panchayati raj* institution members, representing the *gram panchayats*, *samiti* and *zilla parishad*, had the following perspectives for tourism development in Andamans:

- ◆ the Panchayati Raj Institutions (PRIs) want pollution free tourism development
- ◆ registration of all tourism players needs to be done with the *panchayats* including players who are not from the island/location so that the *panchayats* can collect taxes from them
- ◆ every island should have master plan for tourism development
- ◆ the *panchayats* would run an information centre that would cater to the needs of information requirements of all tourists
- ◆ the *gram panchayats* need to have knowledge of all rooms and hotels
- ◆ if land has to be sold, it has to be done with the full knowledge of the *panchayats*
- ◆ with knowledge of tourist movement in the island/location, security can then become the responsibility of the *panchayats* because the tourists, once they enter the *panchayat*, are like guests and the *panchayats* felt they are responsible for the safety of the guests
- ◆ the PRIs could get separate funds for tourism development, like that for water and roads

They also had very specific demands regarding strengthening the role of local governing institutions on tourism issues:

- a. Demands on IP&T – Decentralisation of powers from IP&T to local self-government bodies needs to happen. If this cannot happen directly, then a committee with local self government body representatives could be constituted and powers could be delegated to this committee.
- b. Financial resources – More funds need to be allocated to *panchayats* while variations across *panchayats* need to be taken into consideration. To begin with, the amount could be between Rs 15 lakhs and Rs 20 lakhs annually.
- c. Political power – The Assembly is an aspiration and there could be a tourism minister with whom matters pertaining to control of PRIs over tourism could be taken up.

These are interesting insights many of which could input into the tourism planning processes by the A&NI Administration.

In addition, the Member of Parliament (Lok Sabha), Manoranjan Bhakta, who went on an indefinite hunger strike from 19 February 2008 to 23 February 2008, made 105 demands to the GOI, of which the demands directly related to tourism are as follows:

1. (no. 13) drinking water projects/schemes should be implemented on top priority basis and steps may be taken to increase the height of Dhanikhari Dam and transportation of water from Rutland to Port Blair city
2. (no. 22) regular passenger ship and flight service from Port Blair to Vishakapatnam
3. (no. 29) opening of tourist information centre at Mumbai
4. (no. 39) continue the subsidy scheme for tourism sector development of Tenth Five Year Plan to the Eleventh Five Year Plan too

5. (no. 42) urgent acquisition of four numbers mainland–island bound ships and four numbers inter-island passenger vessels from foreign markets
6. (no. 48) introduction of international air service from Kolkata, Phuket and Bangkok
7. (no. 54) revival of Andaman & Nicobar Forests and Plantation Development Corporation (ANIFPDL) without any break [this agency was earlier responsible for tourism in Little Andaman]
8. (no. 65) construction of mini airport at Rangat, Little Andaman and Kamorta
9. (no. 70) providing more helicopter services in inter-islands
10. (no. 79) regular shipping service between Mayabunder and mainland
11. (no. 80) separate high speed tourist vessels to be augmented for tourist services between Port Blair and Havelock under [Merchant Shipping Act, 1958]MS Act with a vessel capacity of 600 passengers
12. (no. 84) establishment of international standard environmental university at Campbell Bay and international standard ecotourism institute at Diglipur

The demands indirectly linked or having implication for tourism are as follows:

1. (1) constitution of legislative assembly for the union territory of A&NI
2. (2) constitution of an autonomous tribal council in accordance with the provisions available
3. (38) government should approach the Supreme Court to get orders for relaxation of various conditions for collection of sea sand and forest produce
4. (47) construction of bridge from Uttara to Gandhighat and Baratang to Middle Strait
5. (52) grant of additional Rs 50 crores to PRIs for proper implementation of various schemes
6. (73) PRIs should be provided with power as per the constitution amendment, such as function, functionaries and fund
7. (99) construction of seashore road from Lamiya Bay to Ram Nagar under Diglipur Tehsil
8. construction of modern shopping complex in the style of multiplex

The set of demands clearly pitches for growth of tourism without adequate checks and balances to deal with negative impacts.

9.3 Conclusion

There appears to be no space in the present institutional structure for discussing tourism between the *panchayats*, bureaucracy and executive, including various departments of the A&NI Administration, and analysing its links to development. There seems to have no attempt that has been made so far to create such a space. Tourism being a cross-cutting issue that touches upon the social, economic, environmental, cultural and institutional aspects is complex and hence sharing of information and space for consultation and dialogue is required.

A basis for a consultative approach in tourism development is the 73rd and 74th Amendment to the Constitution of India. Under this Amendment, local governing bodies of both rural and urban areas are accorded rights to bring a wide range of matters,

or subjects, pertaining to land, water, infrastructure, planning for social and economic development, electrification, waste management and sanitation, health, cultural activities, urban and social forestry, protection of environment, welfare of weaker sections of society such as dalits or adivasis, women and children, markets and fairs, labour and maintenance of community assets under their jurisdiction. Tourism invariably is either directly or indirectly related to all these subjects. Therefore the involvement of local self-government bodies in all stages of tourism development is an imperative. This includes their involvement in the stages of conceptualisation, decision making, planning and scoping, implementation, development and marketing, and economic sustainability. The wider discourse on sustainable tourism has recognised the key role and necessity of involving local government bodies in evaluation, impact assessments, monitoring, research, regulation and equitable sharing of benefits accruing from tourism. However, instances of involving local governing bodies in the various stages of tourism development, leave alone decision making, have been very few and the Andamans sadly do not figure in this list of instances where local governing bodies have been involved in tourism.

BOX 9.2

Sustainable Tourism in Kumarakom – The Peoples Charter

Background

Kumarakom is situated on the banks of the Vembanad *kayal* (backwater), 10 km west of the Kottayam district headquarters in Kerala. It has an area of 51.67 km² of which 24.13 km² is Vembanad *kayal*, 15.04 km² is land and 12.50 km² is paddy fields. Kumarakom has a bird sanctuary, home to 91 species of local and 50 species of migratory birds. Kumarakom also has a number of mangrove species, of which three are reported only from Kumarakom. The mangrove forests are also the feeding and breeding grounds for numerous species of fish.

Tourism development in Kumarakom started with the lease of Kerala Tourism Development Corporation's land in the bird sanctuary area to Taj Kerala Resorts Limited in 1989. Tourism has developed rapidly in the area. Kumarakom *panchayat* at present has 8 large resorts, contributing to 580 beds and creating direct employment opportunities for 740 people and indirect employment opportunities for 324 others. There are 7 small resorts and more than 20 lodges and home-stay facilities contributing to another 100 beds. The *panchayat* is earning Rs 20 lakhs per year as tax from the industry and it claims that tourism industry's revenue comes to around Rs 30 crores per year in this small destination (*Tourism Janakeeya Badal*, Kerala Shastra Sahitya Parishad, January 2003).

The arrival of tourism industry was well received by the local people initially with the land value increasing many folds in the potential areas for tourism ventures. Local farmers offered their agricultural lands and paddy fields for tourism construction at exorbitant prices. Although the conversion of land reduced the agricultural yield and employment, the temporary employment opportunities in the construction sector and relatively higher wages earned made the local workers happy. But all was not well in the years to come.

The employment opportunity in the tourism sector was not favourable to the local community with 80 per cent of the regular employees in big hotels appointed from outside Kumarakom.

Continued

BOX 9.2 Sustainable Tourism in Kumarakom – The Peoples Charter—cont'd

A study conducted by EQUATIONS in 2000, “Women’s Participation in Tourism Development” revealed that most of the labourers lost their traditional occupations. Women and agricultural labourers displaced from the lands converted for tourism could not be compensated with alternative jobs. The contract labourers appointed by the tourism industry did not have job security and were terminated at any time without assigning any reason. Although these workers are eligible for minimum wages, they are paid at much lower rates.

The clustering of the resorts on the banks of Vembanad *kayal* denied access to local people involved in fishing and shell collection to the *kayal*. The increased number of speedboats, motor boats and house boats plying as part of the tourism development has resulted in the damage of fishing nets of the community.

Tourist resorts have even gone to the extent of privatising and appropriation of *kayal* and use it to promote their business without due regard to the regulations placed by the *panchayat*. The natural banks of *kayal*, once covered with thick mangrove forests are now replaced by granite walls to get an uninterrupted vision of *kayal* from their property. The felling of mangrove forests has completely destroyed the breeding grounds of fish resulting in the diminishing of number in fish. The fish species – “Half beak (Hemir amphus)” – that were abundant in the lake have now reduced substantially threatening the livelihood of fishermen dependent on this catch.

Hotel Waterscapes of the Kerala Tourism Development Corporation (KTDC) is situated very near the bird sanctuary and mangrove forests. The two mangrove swamps on the north-west corner of the KTDC complex were the only breeding ground for Night Herons in Kerala in the 1980s. The clearance of trees in the entrance area of the complex has ensured the vanishing of one-third of bird population in the last decade. The attack on the mangroves by KTDC still continues as the mangroves at the bird sanctuary have been drastically cut in February 2004 for easy visibility of birds for tourists. The Taj Group had placed bright lights in the hotel to avoid birds coming to their property. The flocks of migrant ducks and teals that came in thousands to the lakes have disappeared with the tourists enjoying their flight by chasing them in speedboats. The bird census conducted in the area periodically has clearly shown the impact of tourism development on bird population. The survey conducted in 10 selected areas of Kumarakom featured 36,498 birds in 1993, 22,195 birds in 2001 and 13,274 birds in 2002 (*Development Report 2002*, Kumarakom Grama Panchayat, October 2002).

The waste from hotels including human excreta from houseboats is dumped into the lake. The total coliform count in the lake is much higher than the maximum prescribed value. The number of coliform in 100 ml of lake water is 1,500 to the permissible limit of 500 maximum/100 ml for ecologically sensitive and contact water sports.

The irony is that tourism has contributed nothing in improving the infrastructure development or the development of service and productive sectors in Kumarakom. In a socio-economic survey conducted by EQUATIONS in 2000⁵ among 139 households of the village, 62 responded that tourism has had no contribution in improving road/transport, 87 responded “NO” to the availability of water, 90 responded “NO” to the availability of electricity, 80 responded “NO” to the availability of Sewerage & Drainage and 99 responded “NO” to the availability of employment for the question – “Has tourism contributed in improving of the following?”.

The local groups and other civil society organisations raised concerns on the impact of tourism through an innovative approach *kudumba yogam* (family meetings) with the discussions at the level on individuals in the community. The *panchayat* felt the increasing adverse

BOX 9.2—cont'd

effects of burgeoning tourism in their area and have decided to conduct periodic surveys and planned for a tourism development plan for Kumarakom in 1997.

GIS Mapping of Kumarakom was done in 2000. As part of this project, a detailed database was prepared on the biophysical and socio-economic status of the *panchayat*. In addition, information related to the existing tourism infrastructure in the *panchayat*, perception and attitude of the people working in the traditional sector and details on tourism industry were collected and compiled. Attitude towards the present trend of tourism development in the region and how far this has fostered development of the region was also analysed. Also, an enquiry was done among those working in the tourism industry to know their opinion towards the way the tourism development is taking place in the region. As an outcome of the study, a status report on Kumarakom and maps on administrative boundary, land use pattern, assets/infrastructure, house distribution, settlement cluster, water resource, tourism infrastructure and facilities in the bird sanctuary of Kumarakom *panchayat* were prepared in July 2002. The maps effectively presented the clustering of resorts along the banks of Vembanad *Kayal*.

Since the *panchayat* came across so many issues with the unplanned tourism development in the region, the *panchayat* felt the need for capping as well as regulating tourism development within the *panchayat*. A technical session on the powers and functions of the *panchayat* devolved as per the Kerala Panchayat Raj Act under the broad mandate of the 73rd Amendment of the Constitution that can be used for the proper regulation of tourism was conducted for the *panchayat* members on 29 August 2002. Motivated by the knowledge on the powers and functions of the *panchayat*, the members came up with a People's Charter and Guidelines on Sustainable Tourism for Kumarakom (refer Annexure 13).

The People's Charter and Draft Guidelines has demanded the preparation of a Master Plan for tourism development within the *panchayat* and has put up regulations on new constructions, tourism activities and utilisation of common resources. The Charter also insists the tourism industry to ensure direct and indirect employment opportunities for the local people and to contribute to the projects of priority for the well-being of the community and conservation of the environment in the backdrop of overall socio-economic development of the region. A thrust has been given to the concepts of social obligations of tourism industry and its corporate accountability. The Charter also demands the creation of an expert committee to look into the conceptualisation, planning, implementation and monitoring of tourism development within the Kumarakom *panchayat*.

Developmental and conservation goals are the anchoring principles for the enforcement of Charter by all stakeholders concerned. On 23 April 2003, the *panchayat* called for a meeting of the tourism industry and others concerned with tourism to initiate discussion on the People's Charter and Draft Guidelines to make the process more democratic. The representatives of the tourism industry, who attended the meeting, generally consented to the contents of the Charter.

To engage in tourism development with a monitoring role and set a broad development paradigm for the future, the *panchayat* created a Functional Committee on Tourism as per Section 163 (1) of the Kerala Panchayat Raj Act, which allows the *panchayat* to form functional committees on different subjects. The Act also allows the *panchayat* to nominate expert members from different field who are interested in the public welfare.

The Kumarakom Grama Panchayat formulated the Functional Committee on Tourism in the subsequent meeting of the *panchayat* committee held on 22 April 2004. The Chairperson

Continued

BOX 9.2 Sustainable Tourism in Kumarakom – The Peoples Charter—cont'd

and Secretary of the Committee would be the President and Secretary of the Kumarakom Grama Panchayat, respectively. The other members of the Committee include all *panchayat* members, tourism expert, the district town planning officer, environmentalist, economist, local NGOs and representatives from the tourism industry. This committee would look into the implementation of Peoples Charter and community-based tourism initiatives.

The first meeting of the Functional Committee approved the Peoples Charter and had discussions on the preparations of Master Plan on land use for tourism purpose, the conservation of bird sanctuary, plastic waste disposal in *kayal* by the tourists. The Committee also decided to function as a monitoring cell on tourism. The Functional Committee got dissolved with the new *panchayat* assuming office and the new committee is yet to be reconstituted.

The most important development after that was the creation of a sustainable tourism forum outside the Functional Committee framework to monitor and engage with issues on tourism development. This forum protested against the *panchayat's* move to reclaim the backwaters for creating parking space for the tourist vehicles. The *panchayat* had to finally withdraw from its decision. The forum also took initiative to hold meetings with the forest department to declare the bird sanctuary area as a community conserve. The local *panchayats* have passed resolution on this and have sent the copies to the forest department for their consideration. There has been a notable change in the bird count in the Kumarakom region in the last two years. The surveys conducted in the 10 selected areas featured 24,326 birds in 2004 and 21,688 in 2003, compared to 13,274 birds in 2002. The forum could also mobilise the political parties by proactively raising the concerns on tourism with them. The *grama panchayat* issued stop memo to the resort group which violated the building rules norms and constructed a building a few inches from the backwater.

NOTES

- 1 Its locus standi to develop tourism in Nicobars is questionable because tourist movement to Nicobars is not permitted and special permission in the form of Inner Line Permit (ILP) for domestic and Restricted Area Permit (RAP) for foreign tourists needs to be obtained from the A&NI Administration to go to Nicobars. Moreover, the Nicobarese and Shompens, who enjoy autonomous status, have rejected the introduction of tourism in their islands. But the IP&T has been publicising Nicobars, as is evident from their promotional material, through photographs and write-ups.
- 2 Interview with Special Secretary cum Director, SKP Sodhi, on 17 July 2007 at Directorate of Social Welfare, Port Blair.
- 3 Mowforth and Hunt (2003).
- 4 Personal communication Adhyaksh, Zilla Parishad, Port Blair, July 2007.
- 5 "Sustainable Tourism Management Plan for Kumarakom Panchayat" – Status Report 2001, EQUATIONS, May 2001.

10

Perspectives on Development of Tourism in the Islands

“To a host population, tourism is often a mixed blessing: the tourist industry creates jobs and increases cash flow but the tourists themselves can become a physical as well as a social burden, especially as their numbers increase.”

Smith, 1989.

The quote symbolises the predominant sentiment among different sections of the community in the Andaman Islands on the growth of tourism. There are a number of ways of understanding the complexity of the relationship that come to be established between “hosts” and “guests” in any society as John Urry lists in his insightful book *The Tourist Gaze*.¹ These determinants include the following:

- ♦ the *number* of tourists visiting a place in relationship to the size of the host population
- ♦ the *predominant object* of the tourist gaze – whether it is a landscape, a townscape, an ethnic group, a lifestyle, historical artefacts or simply sun, sand and sea
- ♦ the *character* of the gaze involved and the resulting spatial and temporal “packing” of visitors
- ♦ the organisation of the *industry* that develops to service the mass gaze – whether it is private or publicly owned and financed, whether it is locally owned or involves significant overseas interests, whether the capital involved is predominantly small scale or large scale and whether there are conflicts between the local population and the emergent tourism industry
- ♦ the effects of tourism upon the *pre-existing agricultural and industrial activities*
- ♦ the economic and social *differences* between the visitors and the majority of the hosts
- ♦ the degree to which the mass of visitors demand *particular standards of accommodation and service*
- ♦ the degree to which the *state* in a given country actively seeks to promote tourism developments or alternatively endeavours to protect them
- ♦ the extent to which *tourists can be identified and blamed* for supposedly undesirable economic and social developments

Our survey of tourism in the Andaman Islands has indicated that impacts are a result of the interplay of all of the above factors. In this chapter, we present the perspectives of various stakeholders on tourism development in the Andaman and Nicobar Islands (A&NI). We hear from representatives of the community in different islands, specific segments of the community such as women and youth, tourists, shop owners, boat and *donghie* owners, and other representatives of the industry on what their thoughts, hopes and vision for tourism development in the islands are.

10.1 Communities Speak ...

The Administration has identified agriculture, fisheries and tourism as major areas for livelihood after the earthquake and tsunami. The Kitply factory in Long Island was closed making a number of people jobless. It is seen that tourism is increasing in our Islands. Long Island has the potential to become a high value eco-tourist destination of the country. The local residents would like to gain employment from the tourism projects and activities in the Long Island in future.

The above are lines from a written submission by the residents of Long Island to their *zilla parishad* member as well as several bodies within the A&NI Administration reflecting their aspirations linked to tourism development in their island. It clearly reflects the possible “Catch 22” situation which the local community is currently faced with, regarding the growth of tourism in the islands. Communities wish to benefit from tourism and encourage it but at the same time realise the strain it is putting on the natural resources available to them. Two critical views expressed by the local community are in relation to their feeling marginalised as a result of the growing attention on tourists and their sense of unease with the attire of tourists. The extent of feeling marginalised varies from person to person. While many are of the opinion that everyday requirements of the residents have become less accessible because of tourism, others feel that the purchase of land by outsiders is soon going to alienate locals from their spaces.

Bimal and Shipra Samandar, farmers at Havelock Island say:

Local autos hike their prices which is a problem for us. They also prefer to ferry foreign tourists making it difficult for residents to commute. Getting tickets on the boat after tourism has picked up is a big problem. Tickets are sold at Rs 18/Rs 23 for islanders and Rs 150 and Rs 200 for tourists. During the tourist season, tickets are reserved for tourists and even sold in black.

Fishermen like Krishna and Dasarath Das believe that the non-availability of fish for local consumption during the tourist season is also a matter of concern. Before tourism picked up, the price of fish was not very high. With tourism picking up, fish is selling for higher prices. Binod Kumar Thakur, a teacher at the Havelock school thinks that tourism has greatly increased the land prices on the island. “This rise in price of the land has attracted a lot of locals to sell their lands to the outsiders. People who came as refugees will become refugees once again”, he says. The other serious concern is with regard to the attire of foreigners at beaches which has been reported by many residents to their *panchayats*. Narayan Dutta is one of the oldest residents of Havelock Island. He is one of the members of those 40 families who were settled in the island from Kolkata in 1955 by the Government of India (GoI). According to him, “Tourism is not a problem in Havelock but it is affecting the culture of the place. The scantily clad foreign tourists affect the sensibilities of the people”.

Other key points raised by the communities are in relation to lack of tourism infrastructure and the limited employment opportunities that tourism provides to local community members. Havelock Island residents believe that lack of adequate infrastructure acts as a bottleneck for the development of tourism in the islands. For instance, there are just two boats connecting Havelock Island with Port Blair and this is not enough even for the residents to commute. With tourist arrivals the situation has become much more difficult. Hamid, who owns a small grocery shop, and Joy

Fernandez, who is a tour operator with the Austin Tours and Travels at Havelock Island, make good income during the tourist season. Both of them believe travel to and from Havelock Island should be made easier. They complain, “Since May 2007 the Administration has stopped the ship with the large capacity and instead has been running boats with a capacity of 70–80 persons. Tourists have reduced in numbers since the large boat was stopped”. Hamid and Joy realise that because of tourism the pressure on resources (land and water) are increasing, but they still welcome the tourists, as for them it is a question of livelihood. Many residents of Havelock Island want more facilities for the tourists so as to attract larger numbers.

The residents of the Havelock Island want more tourist activities at the island so that the tourists could be lured to stay longer. The youth on the island have found new employment opportunities in their hometown by running *autorickshaws* and taxis to ply tourists from the jetty to their resorts. But many think that tourism is diverting the younger generation from education and agricultural activities, as they find easy money in tourism. They are being lured into becoming guides or drivers and prefer to take tourists around rather than going to school or college. There are those like Binod Kumar Thakur, who worry “The students have started running autos and cars after 3 pm to earn money. While there might be some monetary benefits from tourism, especially for unemployed youth, it has made the practice of drinking and drugs popular among them. Tourism is bringing in easy money and the youth are susceptible”, he says. But while it has created jobs, Sudhir Biswas, a resident of Havelock says, “Local youth are not being employed in Havelock and other places. Outsiders are employed mainly. The locals should form a society to protect their interests”.

Neil Island has not started receiving tourists in the same numbers as Havelock Island and Port Blair. The problems of water scarcity or rise in prices of essential goods are not yet serious issues in Neil Island. But residents feel if tourism is promoted in a big way, then Neil Island could face severe water scarcity problems. Mahesh, a farmer, is of the opinion that there should be measures taken by the islanders to issue “do’s and do not’s” for the visitors at the island in the initial stage of tourism development. “Tourism is a good option but it needs to be done in a regulated and sustainable fashion”, says Mahesh. The people of Neil Island demand that the *panchayat* should come up with important infrastructural facilities before inviting more visitors to the island.

There are many residents who believe that the quality of tourism in the Andamans is very poor. Tourists who are currently coming in spend very little and are creating pressure on the resources. “We need high-income tourists like those visiting Mauritius and Maldives”, says Manoj, a resident of Baratang. A few of the local people are of the opinion that if the islands get the status of a state, then conditions will improve. They feel that the powers will then rest in the hands of the elected members who will be one among them rather than in the hands of bureaucrats from the mainland.

10.2 Women Speak ...

Tourism has greatly affected the lives of the women in the Islands, whether they are associated with it directly or not. One success story is of three women – Rajni Ika, Pandiamma and Kanti Tirku – who got together as members of a self-help group to start an eatery in Havelock Island in December 2006. Their eatery caters to a maximum of 100 people in a day. They are in contact with the guides in Port Blair who get them their clients.

They make a profit of Rs 12,000 a month which is shared between the three of them. However, they are also facing the usual problems of the island, such as acute shortage of water and rising prices of vegetables. But in spite of these problems they are happy with the changes in their lives.

However, the tale is not all good for all women on Havelock Island. Nirmala Rao is a widow who works as a daily wage worker. For her, tourism is an added burden to her daily problems. Because of increased tourism activity she finds the prices of travelling by *autorickshaw* have risen tremendously. There is no availability of tickets during the peak season to travel by boat to Port Blair. Even the electricity bills have gone up. “Our electricity bill has increased drastically from Rs 100 to Rs 400–Rs 600. We got the meter checked but the electricity bill still remains high”, says Rao.

Similar concerns are voiced by women about rising land prices and the disillusionment of the youth. Arathi Roy, a housewife of Havelock says, “The government has brought us here. Now they are allowing foreigners to get land here. In the future the government may sell out on us”. She also fears that children and youth will imitate foreigners in behaviour and mode of dress. “The level of education of the youth tends to be low. Tourism is the only sector that increases opportunities. It opens up jobs like taxi driving, guides”. She also raises an alarm by drawing the attention towards the increasing habit of drinking alcohol, with easy availability amongst the islanders. “Prostitution could be a serious problem in the future”, she fears.

10.3 Youth Speak ...

As part of this project, to capture the perspectives of the student community, several interactive sessions were held with the students through essay writing and debate competitions held at schools and colleges.

The issues of environment concerns were raised by most of the students. Almost all the students were in favour of tourism development in the islands, provided it is done in a sustainable manner. They were quite aware of the various environmental issues coming up because of increased tourist activity. A few students mentioned issues such as Coastal Regulation Zone (CRZ) and problems related to the tsunami. Many students discussed eco-tourism and sustainability in their essays. Students were eager to find solutions to maximise the positive impacts and minimise the negatives of tourism in the islands.

They view tourism as a new source of employment in their hometowns. They even suggested several measures to regularise the influx of tourists. They suggested “Increasing the prices of flights to the Andamans for the tourists and not for the locals” and that “taxes should be imposed to enter the Island for discouraging large numbers of tourists” in order to curb the entry of tourists. They opine, “there is a need to promote ‘high value low volume’ tourism i.e. promoting such tourism that attracts a small number of high end tourists which enables greater income generation and lesser negative impacts”. However, most of them believe that there is a need to create awareness among the tourists regarding the vulnerable ecology of the islands. The authorities should issue “do’s and do not’s” list for tourists. Most students expressed the need to improve infrastructure such as accommodation and transport to encourage tourism. A student wrote, “There is need for the government to reduce LTC compensation as there is widespread discontent against LTC tourists in the Andamans”.

10.4 Tourists Speak ...

The ecological significance of these Islands is supreme. The Andamans have to be protected, nurtured and respected as one of the earth's last natural treasures. The Islands, which are now suitable to tourism, need to become sustainable.

These are the words of Christopher Gray, a therapist from the United States visiting the Andamans on holiday in October 2007. This section captures one set of views of tourists on their holiday satisfaction and experience in the islands, their suggestions on improving tourism in the islands as well as their willingness to contribute towards developing sustainable tourism in the islands. Figure 10.1 presents responses from domestic and foreign tourists to the question asking them to rank their holiday experience in the Andamans on a scale of 1–5 (1 being the lowest and 5 being the highest) across different parameters. These graphs indicate that the parameters of “natural beauty” and “relaxation” are the most highly ranked by maximum number of both domestic and foreign tourists. However, it is “local hospitality”, “infrastructure” and “connectivity” that have been accorded the lowest ranking. Connectivity and infrastructure have specifically got low ranking by foreign tourists. This indicates that while its natural beauty and atmosphere for relaxation are the unique selling proposition (USP) of the islands, a lot more is expected by tourists to improve their holiday experience.

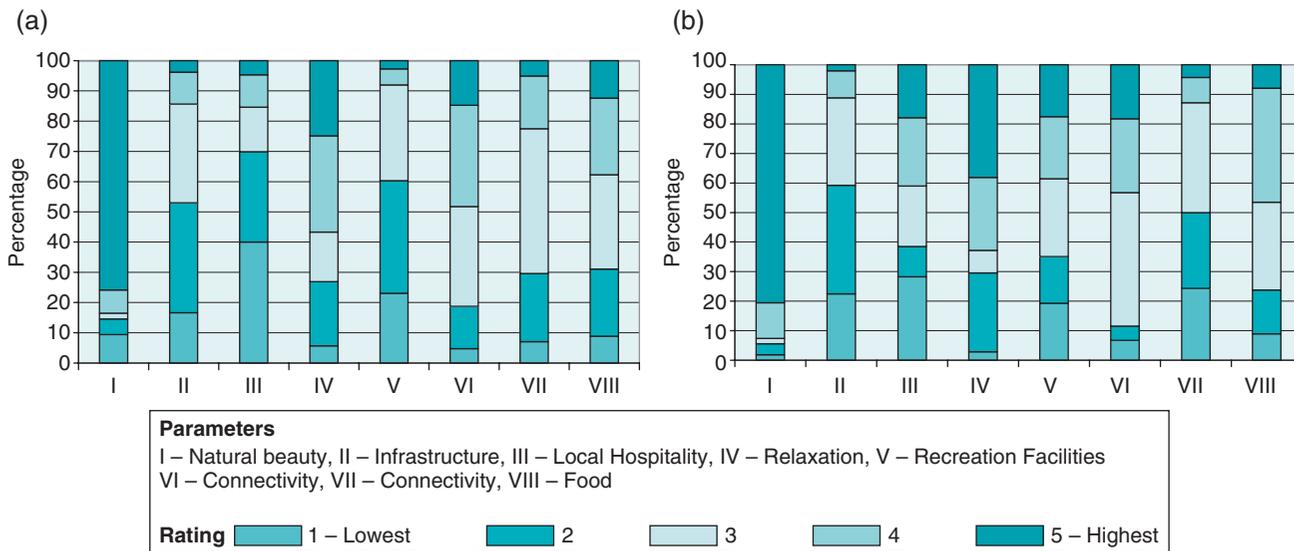


FIGURE 10.1 Rating of Holiday Experience across Various Parameters by Domestic Tourists. (a) Domestic Tourists; (b) Foreign Tourists

Responses from tourists to the question on how they would like their holiday experience to be improved are in Figure 10.2. Many have said they would like more information on the coastal and marine ecology of the region. Iris, a German therapist holidaying in the Andamans, says “these Islands seem to be some of the last unspoiled islands of the world and deserve to stay like this. Please don’t advertise too much and don’t over-develop this beautiful spot!” The demand seems to be also for improved accommodation, food

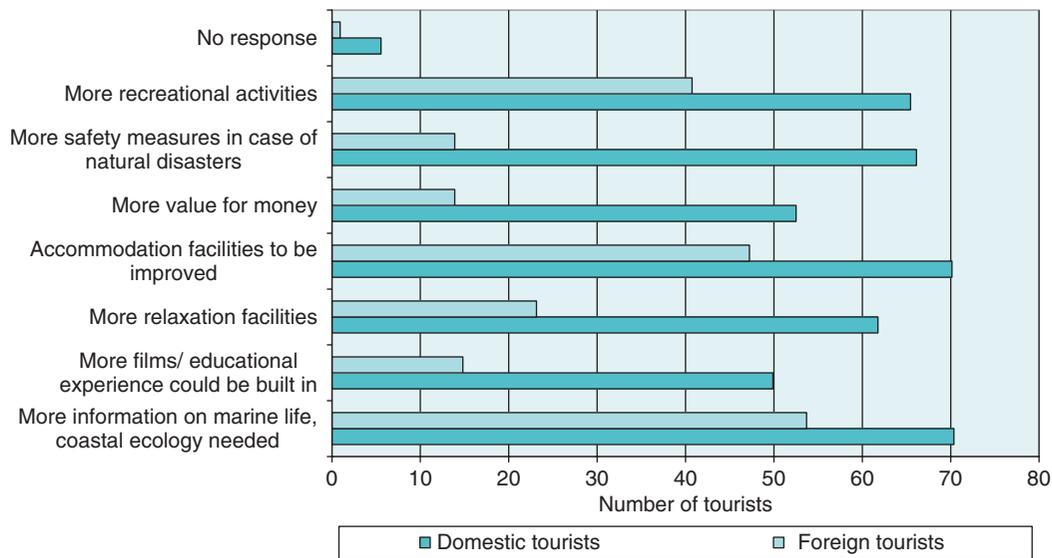


FIGURE 10.2 Tourists' Perceptions on how their Holiday Experience in the Islands can be Improved

and recreation facilities. Highlighting the need for improved availability and standard of food in the islands, Elina Rasanen, an art historian from Finland touring India says "Indian food is so good when well done. I would hope high-class accommodation would have an excellent cook. But the food in Havelock is pricey and very average although the place is otherwise excellent". In terms of value for money, both domestic and foreign tourists seem to rate the destination high on this parameter.

The study also sought to gauge the willingness of tourists towards participating in practices that would make tourism more sustainable in the islands. Tourists were asked to select from out of five options that they would agree to on their holiday:

1. not to litter the beach;
2. use eco-friendly accommodation;
3. save energy;
4. purchase goods from the local market;
5. contribute to activities that benefit the local community.

As Figure 10.3 indicates, it is very encouraging to note that a significant percentage of both domestic (33%) and foreign (32%) tourists agreed to all five options listed above. Furthermore, only

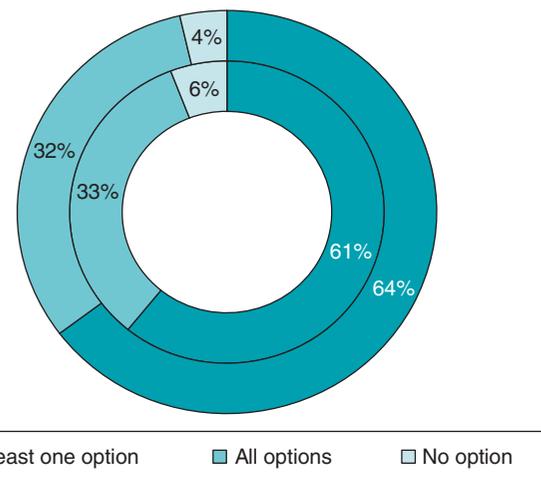


FIGURE 10.3 Overall Willingness to Contribute Towards Sustainable Tourism Practices

Note: Inner circle denotes domestic tourists and outer circle denotes foreign tourists.

6 per cent of domestic and 4 per cent of foreign tourists did not agree to even one of the options.

The relative distribution and willingness to contribute towards each of the five options are presented in Figure 10.4.

As the figure indicates, 25 per cent of domestic tourists and 33 per cent of foreign tourists are willing to not litter the beach. Authorities must take full advantage of this consciousness and put in place regulations. Further, foreign tourists are more willing to use eco-friendly accommodation (36% as against 11%), while it is domestic tourists who are more willing to purchase goods from the local market (27% as against 10%). Altogether, it seems the tourist is happy to be at the Andamans and willing to be a more responsible tourist but certainly expects improved facilities and infrastructure to make the experience better. Many tourists also provide suggestions on how the A&NI Administration could ensure that tourism does not disturb the ecological balance of the region. Julia Uebel, a student of Anthropology from Germany advises:

I would like to see more ecological awareness among tourists. The government should ensure that there is no burning of plastic bottles in the forest and there is a refill system put in place. They must explore the use of solar and wind energy and a public water filtration system should be installed so that tourists can be discouraged from buying plastic water bottles.

Reflecting the strong sentiment of the nature-loving tourist visiting the islands are the words of Jamie Lalonde, a 23-year old student from Canada who says, “I like the fact that there are not too many tourists on the Islands. With more tourists, the charm of the Andamans would disappear”.

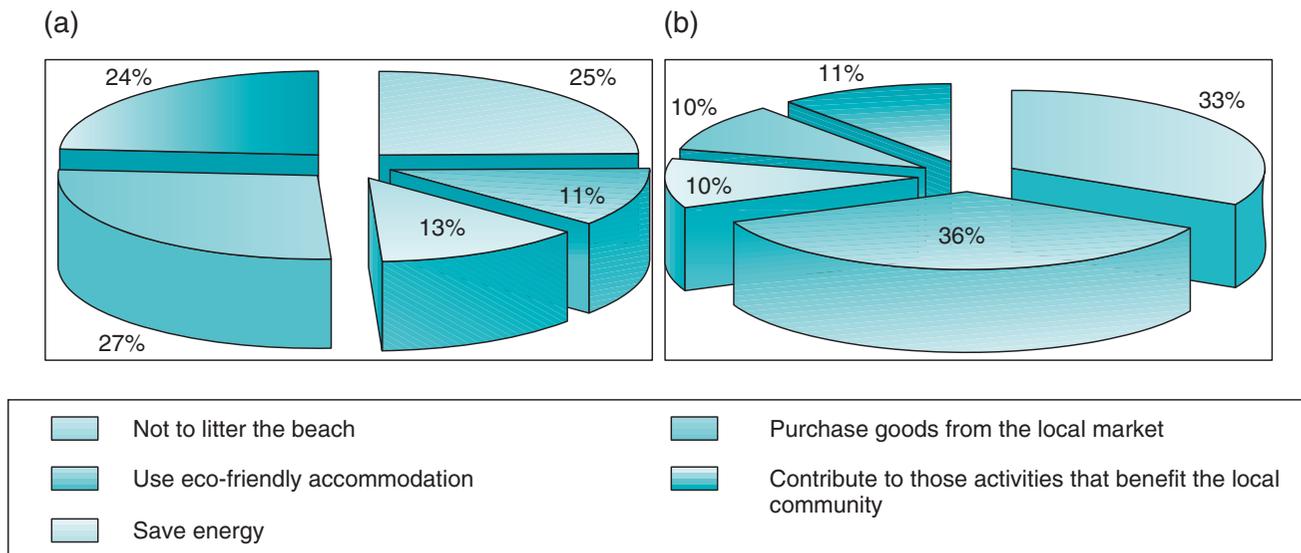


FIGURE 10.4 Domestic and Foreign Tourists Willing to Contribute Towards Sustainable Development in the Islands.

(a) Domestic Tourists; (b) Foreign Tourists

10.5 Shop Owners and Hotel Owners Speak...

Hotel owners are a segment of the community that is benefiting from the growth of tourism and increased tourist arrivals. Since tourism is a source of their livelihood, they want measures to be taken up to attract more tourists to the islands. They are of the opinion that the A&NI Administration has not done enough to promote tourism in smaller islands. The hotel owners' community in Andaman is getting more and more disillusioned with the functioning of the government. Ashok Ram Sathyalayam, General Manager of Sun Sea Resort at Port Blair, states, "I feel statehood will make a huge difference and will be a positive thing for the Islands. The positive aspects of statehood are that the system will become more streamlined and efficient – right now all power is in the hands of the bureaucracy – the Deputy Commissioner. But there will be greater accountability if there is an elected representative". There is also great dissatisfaction among the hotel owners against the Leave Travel Concession (LTC) travellers to the islands. D.P. Singh, owner of Hotel Shompen in Port Blair says, "The government should not promote LTC travellers during the peak foreign tourist season. They should be encouraged to travel in the off season". He also emphasises that the shortage of water in the islands becomes acute in the five months of summer and at that time the people of Andaman do not want tourists. He stresses, "The arrival of visitors should be controlled in the Islands".

Roy George, a shop owner in Baratang also raises the matter of water problem accelerating because of tourism. During the dry season, there is acute shortage of water and then water has to be transported from the nearby pond. Most shops and hotels have to pay for water transported from a nearby pond.

Tea stall owners such as Janaki, Tamil Selvi and C.K. Raju in Havelock Island have admitted that tourism has helped increase their income levels. But the profit margins of these small establishments are reducing as tourists are now eating in homes where eateries have been opened. Seasonality in foreign tourist arrivals also affects these small shopkeepers the most. One such shopkeeper in Neil Island complains, "Our income is adversely affected during the off season, and we have to move to Port Blair for job opportunities". There are also complaints by the small shop owners that in the Andamans only the rich become richer because of tourism. They say the people who were already rich have ventured into the hotel business and are making good money.

10.6 Boat and Donghie Owners Speak...

Tourism has been a source of increased income and a major economic activity for most boat owners. To commute from one island to another, the tourists are dependent on the boats. As the boat and *donghie* owners are few in number there is not much competition amongst them. In Baratang there are 52 *donghies* and 4 fibre boats that ply tourists to the limestone cave. During peak season around 1,000 tourists visit the limestone cave in a single day, and during off-season around 450 people visit the cave each day. But this may be jeopardised now with the A&NI Administration replacing *donghies* with mechanised boats stating safety reasons.

The three brothers Murugan, Sasikumar and Ramakrishna from Baratang owned three boats and used them for fishing. In 1994, they started a hotel on the jetty. They are

aware of the increasing water scarcity problem and are even impacted by it. Sasikumar informed, “For 3–4 months in summer, 7 water tankers have to be bought. Each water tanker has the capacity of 200 L of water and costs 70 rupees per tanker”. To increase their earnings from tourism they now use two of their fishing boats to ferry tourists to the limestone caves and have also bought a jeep for trips to the mud volcano. Danish is a *dongie* owner whose father migrated from Andhra Pradesh and settled in Baratang in 1962. He started running a tourist boat in 2001. He says “Just fishing is not adequate for the family. They largely depend on tourists for their income”. Danish like many other boat and *donghie* owners – G. Madhav, G. Narsimha Rao and Simhachalam – believes that tourism is a major source of livelihood and income option for the islands.

10.7 The Andaman Chamber of Commerce and Industry (ACCI) Speaks...

There is a common grievance among the members of ACCI that the policies formulated by the Central Government are not properly implemented in the islands. They say there is a distinct lack of communication between the Centre and the A&NI Administration in the Andamans on tourism-related issues. They point out that “in 2005, under the 10th Five Year Plan, a rural capital subsidy scheme was announced. But it was not advertised adequately, no industry person knew about it and it was withdrawn within 5–6 months as the plan period was over. If industry had known, they definitely would have availed of the scheme”. They feel that the problem with the A&NI Administration is not one of resource shortage but of improper utilisation and translation into development works.

The dissatisfaction among the members of the ACCI regarding the functioning of the IP&T is evident in their criticism of the non-transparent way of functioning of the IP&T. They say – “A total of Rs 76 crores was allocated to the Islands especially for tourism promotion after tsunami but there is no explanation regarding the expenditure of that grant”. The IP&T, they allege, does not bother to seek the opinions of industry players. Further, the short tenure of officers-in-charge and lack of quality experts who understand tourism development are, in their opinion, severe restraining factors for the effective functioning of the IP&T.

The ACCI is very categorical that tourism should not harm the ecology and environment of the Islands. They state: “we are extremely committed to these Islands and are not willing to sacrifice environment for development. Ultimately the attraction of the Andamans is its environment and we need to protect this”. They also suggest awarding special incentives for industry investing in eco-friendly schemes.

The CCI’s vision for tourism is that it becomes one of the major pillars of the islands’ economy. One of the members says, “Although currently the Nicobars are not open, we have had interactions with the local tribesmen who are quite open to the idea of tourism. So, can it be developed there where the culture of the Nicobars can also be showcased. This might add a portfolio to the whole package”. Their 2020 Vision for tourism in the A&NI includes the following:

- ♦ flights every hour into the islands from various destinations
- ♦ a round-the-clock functioning international airport
- ♦ a million tourists visiting the islands of which a large percentage are high-value tourists

- ♦ substantial number of 5-star, 3-star and 2-star hotels
- ♦ good quality life for tourists who will spend their time here
- ♦ an absolutely different branding of the islands as a destination that is different from that of the mainland
- ♦ a niche clientele with people of varied interests such as bird watching, game fishing, diving and visiting the islands

Their foremost demand from the government is to bring out a holistic tourism policy in consultation with the industry. They say: “We would first like the IP&T to have a policy in place and then keep communication open with the industry to develop it further”.

10.8 Local Elected Representatives Speak...

Local elected representatives in the islands are aware of the benefits and negative effects of the tourism industry in their constituency. But, in their opinion, the authority and wherewithal given to them is too little to execute any developmental measure in their respective areas. Many Panchayati Raj Institutions (PRIs) are keen on promoting tourism in their islands but feel that the marketing strategy of the government favours Havelock and Neil Islands. They highlight the issue of employment generation through tourism in the islands. Industry, in their opinion, has failed to produce good jobs for the educated youth. It is their major concern that “the main owners of the hotels are outsiders and not the local people”. Besides employment, the other problems they raised are of the increasing pressure on the infrastructure and on natural resources, especially on water due to rising tourist arrivals.

Deepali Das, a former *Zilla Parishad* member from Havelock, says that local *autorickshaws* and taxis cater to the tourists first as they are able to charge more money from the tourists. On the boat also, during the tourist season, tickets are taken by the tourists in large numbers leaving very few for local people. Deepali suggests that seats for local people be reserved on ships or that separate boats be introduced for the locals and separate ones for the tourists. Khokon Mondal, *Zilla Parishad* member of Havelock Island also highlights the same problem, “It is difficult for locals to get tickets on the boats”. He says that if residents face continued problems with tickets they will have to rethink about tourism development.

The development of infrastructure has become a problem for the residents of Mayabunder. Although the arrival of visitors is very limited to this island, the construction of the Austin Bridge has transferred the tourist traffic to the connecting island. Chaudhary Raja Rao, the *Pradhan* of Mayabundar Gram Panchayat, says that although the island lacks infrastructure facilities such as lodges and restaurants as well as good connectivity, the bridge has adversely affected the arrivals of the visitors at the island, who otherwise used to halt at Mayabunder while travelling to Diglipur from Port Blair.

Many elected representatives are pinning the hopes and aspirations of their people on tourism. Tarun Roy, *Pradhan* at the Shivpur Panchayat in Diglipur, says the availability of water from the Kalpong River in the constituency will be an added advantage for the development of the area into popular tourist destinations such as Havelock and Neil Islands. “Once the airport comes up tourism in Diglipur will pick up like in Havelock”, says Roy. Areas that are not currently receiving tourists want to attract more tourists to their islands. Long Island is one such place which owing to the promotional

efforts of the government post-tsunami has started receiving tourists. Pradhan Vijay Kumar Topono of this island says infrastructure facilities are needed to develop tourism. “If tourism picks up here the unemployed will get jobs. People here could work as guides. It, however, could also create water scarcity”, he feels.

Anjali Mandal, a *Panchayat* member in Havelock Island, says “as tourism increases so will the demand for water but so will the income to address the shortage”. She also wants to “allocate separate beaches for foreigners to preserve the local culture”. Sheikh Khaleel from the Baratang, a *Pradhan* at Nilambur Panchayat, feels: “Tourism is growing on a large scale and is unregulated”. The *Pradhan*, however plans to organise a group of 10–15 people associated with tourism. He believes “proper training in guiding will also make the younger generation aware of their ecosystem and more responsible”.

Ram Krishna Bishwas, *Pradhan* of Neil Island, wants tourism to be developed on the island but not in the way it has developed in Havelock Island. He emphasises that he is not looking at large-scale tourism and does not want cement construction and very big resorts coming into Neil Island. He says the *Panchayat* needs to be careful that their land is not sold out to industrialists from outside. He also highlights the helplessness of the *Panchayat* regarding plans to develop tourism in the island. “There are not enough funds to maintain cleanliness on the beaches. The Administration has to provide the funds or take over maintenance”.

10.9 Chapter Summary

These perspectives shared by different stakeholder groups indicate that their responses to tourism in the islands are a combination of aspiration and apprehension. Key issues that emerge are as follows:

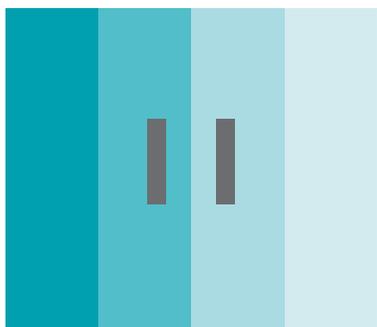
- ♦ Local people welcome the growth of tourism in their islands. They want more facilities to be provided to the islands so that they can cater to more tourists. They believe tourism brings them economic gains and prosperity to their lives.
- ♦ The problem of rising prices of goods of daily consumption, especially fruit, vegetables and fish, was a matter of concern. Several people raised the issue of increasing land prices and selling of land by the local people to the outsiders.
- ♦ The shortage of water and growth in tourism, resulting in making this problem even more acute, was uniformly voiced.
- ♦ The current limited employment opportunities that tourism has provided local people and the hope that it will in future provide opportunities for economic betterment were expressed.
- ♦ Issue of intra connectivity within the various islands as well as boat facilities not being sufficient was prominent. Most of the community, establishment owners and the elected members felt this was a bottleneck in the development of tourism in the area. Local people were resentful of the fact that during peak tourist months, a shortage of boat tickets, especially between Port Blair and Havelock Island, resulted in tickets being sold for higher prices to tourists in the black market, thus leaving them stranded.
- ♦ Elected members were of the opinion that they do not have enough powers to implement charters and policies for the betterment of the island. They said that

even their funds were not sufficient. They wanted to develop plans so that *panchayats* could have some extra income from tourism.

- ♦ Tourists visiting the islands are a happy lot – satisfied with the natural beauty and relaxation offered by the islands. However, they found the prices of food and accommodation high and would like improvement in infrastructure and connectivity to the islands. But, it is encouraging that the tourist is willing to contribute towards the sustainable tourism in the islands.
- ♦ The industry believes that tourism is the way ahead for the islands, makes a strong push for even greater connectivity by air and urges the Administration to get its act together and work effectively and in consultation with them industry towards this.
- ♦ Elected representatives feel that tourism has certainly benefited the islands but that the A&NI Administration needs to start promoting tourism in certain new locations (other than Havelock and Neil Islands and Port Blair) where potential exists and the local community is keen to have tourism in. They raise concerns about *panchayats* currently not having the wherewithal to execute local aspirations linked to tourism. They too, like many other stakeholders, pin their hopes on the possibility that the formation of a Legislative Assembly in the union territory (UT) will make tourism development more consultative and democratic in the islands.

NOTES

- 1 Urry (2002), pp. 50–53



Recommendations

This chapter focuses on the recommendations that emerge from the research findings (in terms of concerns and perspectives) and also takes into account the context and opportunities that present themselves in terms of tourism development. We have chosen to present them in detail and not merely list action points, as we believe that this study can only point to the broader context and contours of such recommendations. While the recommendations focus on tourism, its development and benefits, the larger question of whether tourism is necessarily the best option in term of development in the islands is a more fundamental one and would need a window much wider than that provided by this research.

Our recommendations fall into three broad categories:

Section A: Developing a clear vision and strategies for tourism – ensuring policy reflects elements of sustainability, responsibility in tourism, people-centeredness and equity in the way tourism is envisioned, policy and plans that reflect this vision and strategies that will ensure its implementation, governance and coordination, strengthening role of local elected governing bodies in tourism, building capacities and skills of people to participate and to engage in tourism.

Section B: Destination competitiveness – positioning tourism in the islands, building appropriate products and brands, ensuring a reliable base of information on which tourism plans are made and implemented, tourism-linked infrastructure and connectivity.

Section C: Destination sustainability – managing and minimising negative impacts (socio-cultural, economic and environmental), tourist local community interface, sustainable tourism practices, regulations and guidelines, innovative practices and processes, and awareness building.

11.1 Section A: Developing a Clear Vision for Tourism

Tourism development in the Andamans lacks a coherent and inspiring vision and direction. It has grown in an uncontrolled and unregulated manner. If not checked in time, there will be irreversible implications on the fragile ecology of the islands and its social fabric along with its various components, including the indigenous and local communities.

In the context of developing countries, national policy makers, international aid agencies and international bodies like the World Bank or United Nations World Tourism Organization (UNWTO) often position and promote tourism as a tool for development.

However, studies and research the world over have shown that unless sensitively designed, tourism often fails to deliver, or at best underperforms on this front. It is no different in the case of the Andaman Islands and here the additional factors of the ecological fragility, geopolitical location as well as the future of the indigenous tribes must be taken into account. It is critical that tourism is seen as part of the larger agenda of sustainable development in the islands and it cannot be designed or pursued as a standalone option or intervention.

The Central Government and the Andaman & Nicobar Islands (A&NI) Administration need to develop a sustainable development strategy for the islands as a whole within which sustainable tourism is a part. This way, the role that tourism can play and its limitations in terms of contributing to sustainable development can be understood. Tourism is not the panacea for all development challenges and by developing a strategy for the islands as a whole, alternatives that may be more in consonance with the realities, opportunities, aspirations and impacts may be thought of. This will in some ways ease the pressure of a push for tourism growth without the attendant evidence of it contributing to sustainable development. Tourism's susceptibility to natural disasters, political, health and safety-related crises, and so on also contribute to its vulnerability and effectiveness as a development tool. The problems associated with overdependence of small and particularly island economies on tourism has been well researched and the Andaman Islands' plans must take these lessons into account in developing the vision for its own future.

The present tourism vision or perspective document prepared by the Department of Information, Publicity and Tourism (IP&T) lacks the sensitivity towards these aspects and reads more like an expansion plan. It is focussed only on an unbridled growth of tourism and tourism infrastructure and increasing tourist numbers without ensuring that tourism is sustainable, securing local community benefits without too many negative impacts or taking into serious consideration the ecological fragility of the island.

The Ministry of Tourism (MoTC) has played a significant role (and is likely to continue to do so) on the direction and form of tourism that develops in the islands, particularly in terms of how tourism is promoted and what range of tourism activities and developments are financially supported by the Central Government. One of the key activities of the MoTC on policy and planning for tourism in the islands has been the commissioning of a series of tourism development strategies and master plans for the islands, many of these along with the island administration. However, all these plans have largely failed in being grounded in realities of how tourism operates in the islands, are based much more on marketing projections of what is desirable (largely from the perspective of the upper end of the industry and with a strong focus on high-value, low-volume foreign tourists) and mostly advocate trickle-down benefits to local communities. The role of local governments is sidelined to ensure that locals buy in to the plans and these plans subordinate environmental and other regulation to the needs of unhindered promotion of tourism. The process of developing the vision needs to be less on the basis of commissioned consultancies and designed as a participatory bottom-up process. Such an "investment" by the A&NI Administration and supported by the MoTC would contribute to evolving a clear long-term vision and evolving short-term, medium-term and long-term strategies for tourism in the islands.

11.1.1 *Visioning and Strategic Planning Exercise Leading to Tourism Policy and Plans*

1. We recommend that the A&NI Administration and MoTC support a detailed and participatory visioning and strategising exercise that takes into account the perspectives and needs of different stakeholders and allows varying and even conflicting interests to come into play. The policy-making process requires inclusion of and meaningful dialogue between all stakeholders for participatory and people-centred tourism development. All stakeholders in tourism development, such as local governing bodies, the departments of social welfare, environment and forests, commerce and industry, women and children, and civil society groups (e.g. environmental groups, those working with children and women etc.), which have a role to play in bringing about a change in the way in which tourism happens in the Andamans, need to be involved.
2. To supplement such strategic exercises, detailed technical studies need to be undertaken on carrying capacity, tourism penetration index, impact assessments and limits of acceptable change. These cannot just be commissioned studies (focussing only on a promotion and growth agenda) but need to be designed to take into account the whole range of needs, capacities, opportunities, constraints and aspirations of all stakeholders.
3. A comprehensive tourism vision document and a tourism policy should be the final outcome of this process.
4. This comprehensive visioning and strategic planning exercise should be prioritised and privileged as a critical step prior to announcing or approving any further policy or scheme, given that the adverse impacts of unplanned and unregulated tourism on the islands are evident.

11.1.2 *Governance and Coordination*

In the current set-up as a union territory (UT), the Central Government plays a key role in development matters in the islands. In tourism, the scene is not very different. Discussion or coordination between departments hardly happens, with IP&T taking most decisions without much consultation. The local self-governments do not seem to be in the loop. There needs to be improved coordination among various departments of the A&NI Administration, which will help in developing a more collective, holistic perspective on tourism.

The A&NI Administration must ensure a regulatory role in addition to being a facilitator of tourism. Aspects of regulation must include the following:

1. assessment of the number of tourists into the islands. Concepts such as carrying capacity and tourism penetration indices are often used to understand these “limits”.
2. apart from a regulation in terms of numbers, the development of tools to assess tourism impacts is an important aspect of developing a regulatory framework.
3. the opening up of more areas within the islands for tourism is an aspect that calls for regulation. This has close links with the notions of limits and impacts. It is evident from the research that current forms of tourism in the islands have not

proven adequately strong links between increase in tourist numbers and sustainable local benefits. Opening up for more tourists without ensuring that such links are clearly established and negative impacts are reigned in, is critical.

4. another important regulatory role is balancing between local residents' needs and the needs of tourism – particularly with regard to access to resources, services and facilities. Lack of foresight and sensitivity towards this can lead to tensions, conflicts and antagonism.

11.1.3 Strengthening Role of Local Elected Governing Bodies in Tourism

1. When local authorities and institutions of local self-government in the Andamans engage in and influence the policy formulation and future direction for tourism it is more likely to be rooted in local realities and aspirations. Often there is an automatic assumption that elected representatives are able to reflect the range of interests and agendas of local communities faithfully. The ability of local communities (*the gram sabhas*) to engage with the representatives and wield influence and negotiate (even broker) power structures and dynamics is a crucial factor for an intervention like tourism to be more reflective of the aspirations of diverse sections and interests of local communities and take cognisance of their rights and responsibilities. Their capacities for the same also need to be built.
2. In our discussions and consultations it was clear that *panchayats* are to some extent aware of the benefits and pitfalls of tourism. They need to engage in its design and implementation more directly. In turn this would mean being more aware of the pluses and minuses in the context of the Andamans and being based on data and ground realities and not just rhetoric or promises. This will allow a more effective role in advising community members or in taking proactive decisions about the pace, direction and extent of tourism.
3. The demand from all levels of local elected governing bodies in the Andamans is for the strengthening of their roles in regulating, authorising, monitoring and promoting tourism in areas within their jurisdiction. The A&NI Administration needs to work with this demand and factor this into their approach to tourism by engaging with these bodies and providing them with institutional and financial support and capacity building to play this role. Effective space and involvement of local governments will result in a more people-centred form of tourism. *Panchayats* should also consider revenue generation through levy of taxes to support facilities, services and infrastructure that they provide relating to tourism.

11.1.4 People's Participation: Building Capacities and Skills to Engage in Tourism

The employment of local community in tourism establishments is generally low. Employing personnel from Port Blair and the mainland seems to be the preferred option. Employing from within the island itself seems to be a feasible option for establishments that need more number of temporary workers on low-skill jobs during the peak foreign tourist season.

1. Areas where capacity building of local community could be enhanced are in the management of tourism enterprises, tourist–community interface, business and entrepreneurial skills, handicrafts and running micro enterprises.
2. Capacity building and training opportunities, including language training, need to be provided to the local community, especially youth and women, so that their skill sets improve and they are able to work efficiently in all jobs required by tourism businesses in the islands. The A&NI Administration and tourism industry could invest in capacity building of the local community; the industry has expressed its willing to provide such opportunities as it is also in their interest to ensure the availability of skilled personnel.

11.2 Section B: Destination Competitiveness

11.2.1 *Positioning Tourism in the Islands*

The building of a brand and the positioning of a destination take time and a consistent strategy. The lack of any connection between the current tourism policy and marketing strategies, and the reality on the ground is evident. This has resulted in an uncoordinated and weak positioning of the tourism product in the Andamans resulting in haphazard development, a relentless push for numbers and promotion aimed at “making hay while the sun shines”. The MoTC along with the IP&T needs clarity and agreement on the strategies for promotion, which would derive from the vision for tourism, positioning of the tourism product and tourist profiles.

The MoTC–A&NI Administration commissioned “Development Strategy for Environmentally Sustainable Tourism in the Andamans” (a WTO–UNDP project) in April 1997 made a strong pitch for high-end foreign tourists, marine sports and beach resorts as the key attraction, and 2 and 3 star international standard accommodation as the way forward for the Andamans. The source markets were projected to be Europe, the United States and Southeast Asia, and the ratio of foreign to domestic tourists was recommended as 40:60. The rationale for such projections seemed to be largely modelled on Mauritius and the Maldives. While the number of tourists visiting the islands today is not too far from the 1,20,000 mark (in 2005) projected by the report, almost all other projections have not been realised, particularly the high-end foreign tourist based positioning. As Chapter 4 of our report indicates, domestic short-stay tourists availing Leave Travel Concession (LTC) and backpacker foreign tourists dominate the arrivals to the Andamans. One of the reasons perhaps is that neither the MoTC nor the A&NI administration adapted a clear plan or strategy. Given that the UNWTO in its report could not provide an assurance of significant local benefits if their recommendations were followed, the fact that their recommendations and strategies were not eagerly adopted and implemented may also be a blessing in disguise.

In the aftermath of the tsunami there was a knee-jerk reaction to the fall in tourist numbers leading to the step of promoting more travellers on LTC. In hindsight, it seems as if (refer to our case study within Box 4.2) the “unintended consequences” of such a step were not considered. Tourism’s capriciousness and vulnerability to disasters both natural and man made should be taken into account in its planning. A short-term gain such as promoting travel on LTC that does not significantly contribute to local benefits

in terms of economic recovery from the tsunami of 2004 and that in fact boomeranged in terms of pressures on local resources needs to be avoided.

What seems evident from perspectives of various stakeholders including tourists is that tourism should be ecologically and culturally sensitive and contribute much more to the local economy. Our study indicates that 49 per cent of domestic tourists who responded to our questionnaires and 82 per cent of foreign tourists believe that the islands are already well publicised.

1. The MoTC needs to study its own return on investment on promotion through its Incredible India campaign by considering the fact that 85 per cent of foreign tourists have learnt of the islands from the Internet, whereas among domestic tourists, television (74%), newspapers (57%) and magazines (48%) have been the main sources of relevant information. Some foreign tourists even felt that “over promotion” could in fact be counterproductive to sustainability and attraction of tourism in the islands.
2. Tourism promotion in the Andamans should target both domestic and foreign tourists who meet the criteria of being sensitive to the ecological fragility of the Andamans and who are willing to contribute to the local economy such that those coming to visit realise that they are privileged to be visitors. Tourism infrastructure and policies need to consistently align to such a positioning. The manner in which the islands are promoted and the strategy for increasing visitor awareness must be geared to wean out tourists who do not appreciate these core aspects of the islands.

11.2.2 Ensuring a Reliable Base of Information on which Tourism Plans are made and Implemented

There is a considerable information gap on tourism linked information base with the A&NI Administration. Every tourism establishment has not been registered and every tourist entering Andamans is not counted. Tour operators are mushrooming by the day and “home stays” of various types are on the rise. While the Restricted Area Permit (RAP) system allows ascertaining the origin and numbers of foreign tourists, domestic tourist figures are dependent on data submitted by registered tourism establishments to the Department of IP&T, thereby resulting in inaccurate figures. In such a scenario, tourism policy making, planning and marketing is based on a shaky foundation. Lack of such data severely constrains the ability to fully understand the current impacts of tourism in the islands as well as the ability to plan and strategise for the future direction of tourism in the Andamans and also make an assessment of its potential benefits.

1. A reliable system for regular collection, publishing and analysis of accurate tourism statistics needs to be put in place on a priority basis. This should include several critical indicators such as revenues from tourism, number of people directly and indirectly employed in tourism activities, occupancy rates in accommodation establishments and profits of tourist businesses.
2. Registration of establishments and collection of data from tourism establishments to corroborate official data are some of the basic steps that need to be taken.

The A&NI Administration has passed the Andaman & Nicobar Islands Registration of Tourism Trade Regulations, 2007 in this regard, which will provide useful inputs.

3. The process of generating statistics of tourist arrivals needs to be overhauled, especially for domestic tourists. While the statistics of foreign tourist arrivals is fairly accurate, there are discrepancies in the way even this is tabulated. This needs to be rectified. However, a meticulous process of collecting accurate domestic tourist arrivals needs to be put in place.
4. The A&NI Administration needs to use data from ongoing assessments of tourism impacts in specific locations that currently witness a large influx of tourists and tourism activity. Port Blair, Havelock Island, Neil Island and Baratang Island are obvious choices to run pilot projects for such an exercise. The report of the Planning Commission's Working Group on Tourism for the XI Five Year Plan has recommended that all state governments should work on such assessments. As explained in our recommendations relating to regulation and sustainability, this is a critical factor in realistic tourism planning.

11.2.3 Tourism Infrastructure

The present tourism infrastructure development trend is inappropriate for the long-term sustainability of the Andamans. The drive is to build concrete buildings that lay an unnecessary demand on resources such as sand, which are expensive to maintain, which consume huge amounts of energy and are extremely inappropriate in a seismically sensitive and active region such as the islands.

1. Tourism infrastructure, particularly accommodation, should be encouraged to be non-permanent and eco-friendly with careful use of locally available materials. Incentives to tourism establishments to use locally available material for construction purposes and to avoid concrete structures need to be given. While the use of locally available material needs to be encouraged, it must be monitored and regulated to ensure that these are not being consumed unsustainably. Use of sand or concrete by tourism industry needs to be strongly discouraged.
2. The industry should voluntarily adhere to creation of non-permanent infrastructure using minimum amount of locally available materials and avoid energy-intensive, high ecological- footprint material such as concrete structures. When awareness building and voluntary schemes are seen to have little impact, the prospect of stringent regulation should be resorted to.
3. The plans of making the islands a part of a cruise tourism circuit in the country need to be reconsidered from economic, environmental and social aspects. Experiences from the world's most popular cruise destinations such as the Caribbean Islands point to the paltry gains that cruise tourism brings to local communities as all expenditure is made on board and there is little "trickling down" to them. In addition, cruise ships bring large numbers of tourists for a short duration, which will have implications on the carrying capacity of the location. The MoTC's study on cruise tourism focuses on the market potential of cruises and does not evaluate its benefits to the local economy (at the cruise destinations) or its massive costs to the environment.

4. Tourism infrastructure such as large water sport complexes, amusement parks and golf courses should be most definitely avoided.

11.2.4 Connectivity to the Islands and Inter-Island Connectivity

Air connectivity is certainly a determining factor in the number of tourist arrivals into the islands. But as the islands' own experience has shown, mere numbers of tourists are no guarantee of gains that tourism will bring to the local economy. The increased links between climate change, the vulnerability of small islands and unrestrained growth in air traffic has been highlighted even by organisations such as the UNWTO.

The Port Blair airport has been upgraded, even if only in the designation, to an international airport. There are 11 flights now flying to Port Blair every day. The push is for one more international airport. Through the twinning agreement of 2005 between Port Blair and Phuket municipalities, it is reported that charter flights are also expected to restart.

Travel by boat is the preferred mode of travel inter-island and is likely to continue to be so. This should also be encouraged as it is cheaper, more efficient and relevant in an island system. There are clearly tensions between the access of local people to timely, affordable and available boat services that cater to their day-to-day needs vis-à-vis catering to tourists. This is particularly visible in the Port Blair–Havelock sector where there is a high degree of tourist traffic. The current shipping services are already under stress and run on highly subsidised rates.

1. The issue of *enhancing air connectivity* to the islands needs to be addressed with caution. It would be prudent for the MoTC and Ministry of Civil Aviation to adopt a long-term view of these linkages and not just push for short-term gains. In this light, an unrestricted growth in the number of flights from within the country and opening up the airport for international arrivals might be more detrimental than advantageous to the sustainability of tourism in the islands.
2. Inter-island air travel through helicopters needs to be retained at the minimal level and prioritised for emergency needs of local population.
3. Till such time the visioning and strategising exercise, policy and carrying capacity studies are undertaken, expansion of the airport in terms of allowing more flights to operate need to be put on hold. This moratorium should include the proposal to open the landing strip in Diglipur for commercial operations.
4. The proposal to separate facilities and ration facilities between local people and tourists needs to be given serious consideration. Dual pricing policy of charging differential rates for tourists and islanders needs to be retained and extended to all islands apart from Havelock Island as is now being done. The proposed opening up of the inter-island shipping sector to private players needs further thought and debate with necessary stakeholders. While in the short-term it would certainly ease the pressure off the Shipping Directorate and provide for more quality and efficient inter-island ship facilities for tourists, the long-term implications of having the island waters overrun by boats and ships plying tourists need also to be considered. The role of the A&NI Administration and the Ministry of Shipping in regulating the

possible number of ships and boats that are given permission to operate in these waters would be critical in this regard.

5. It has been learnt from media sources that the A&NI Administration has recently closed the Andaman Trunk Road (ATR) for tourists and is planning to develop a sea route connecting South Andaman and Baratang, North Andaman. This is a welcome step and will help to mitigate the interaction between indigenous tribes and tourists that had increased in recent times on account of increased tourist traffic on the ATR coupled with a distinct curiosity in the tourist mind to see these tribes.

11.3 Section C: Destination Sustainability

An understanding of tourism and its impacts does not seem to be the basis on which tourism policy and plans are made. A case in point is the air-conditioned bullet proof dome tents that the IP&T has put up on the beautiful Radhanagar beach at Havelock Island for the President's visit in December 2007. Considerable expense seems have been incurred for setting up these tents. The location of these tents is in violation of the Coastal Regulation Zone Notification. They are completely incongruous as they look more appropriate for a lunar landscape than an island beach. Examples of such tourism development projects or scheme pushed without much thought on the sense and sustainability of such schemes abound.

For long term sustainability of tourism in Andamans, the A&NI Administration and tourism industry will have to focus on small-scale ecologically sensitive, nature-based, low-volume tourism and say no to infrastructure-heavy, high-volume tourism. Increased airports, cruise ships, more roads, more boats, helicopters, amusement parks, permanent constructions and large capacity hotels are the kind of trends that the islands must clearly refrain from. Current infrastructure requirements of the tourism sector need to be accurately ascertained and future requirements outlaid based on considerations of their impacts rather than mere allocations of infrastructure projects and schemes.

Tourism impact assessments are not a one-time activity. Rather impacts of tourism need to be monitored, measured and a system of reporting of tourism impacts needs to be put in place to make course corrections in tourism development process and to reverse decisions if necessary. An awareness of biodiversity and eco-fragility of the islands is critical in planning. Instruments such as carrying capacity, limits of acceptable change, rapid biodiversity assessment surveys and tourism penetration index may be applied on a regular basis through a coordinated approach of relevant departments.

If we correlate the tourist arrival figures with the population of the A&NI, we see that for every 100 persons in the Islands there are 3 tourists at all times of the year. Further, considering the fact that all tourists have to go through Port Blair town, for every 100 residents of Port Blair town there are 10 tourists! These figures are an indication of the additional pressure that the islands face on account of increasing tourists. There is no planning for additional civic services – water, drainage, transportation and waste management. This fundamental omission has serious implications for management of an island eco-system and the economic development model pursued.

11.3.1 *Managing and Minimising Negative Impacts (Socio-cultural, Economic and Environmental)*

11.3.1.1 Socio-cultural impacts

Socio-cultural impacts usually take a longer time to be tangibly perceived as compared to economic or environmental impacts. While less evident in the Andamans today, there are possibilities that the kind of socio-cultural impacts observed in other tourism destinations may affect the Andamans, unless proper checks and balances are put in place. The local community, although wanting tourism, is concerned about and has sometimes registered strong resentment to behaviour of certain kinds of tourists, who are not sensitive to cultural norms (particularly in the case of scanty dressing, near nudity on the beaches and sexually explicit behaviour).

1. Regulation and monitoring of tourist activities on beaches needs to be done and punitive action taken against both tourists and locals who are engaged in drug abuse or sexual exploitation.
2. While this study has not found serious incidence of child labour in the tourism sector in the Andamans, the present conditions do not rule this out. With increase in migrant labour especially engaged in construction, the vulnerability of these children to child labour is a distinct possibility. With the expansion in the hotel and restaurant sector, especially in Port Blair, unless authorities are vigilant, the incidence of child labour might increase.
3. Tour operators need, in particular, to make special efforts to increase public awareness on not to look out for or interact with Primitive Tribal Groups (PTGs). This should also ensure that there is no promotion of Jarawa tourism even covertly. Our survey reveals that 68.4 per cent of domestic tourists travelled on the ATR with the hope that they would view “naked tribes”. Tour operators must stop generating a voyeuristic curiosity about this in the tourist mind. The A&NI Administration should step in to firmly rein in tour operators who continue publicising Jarawa tourism.
4. The A&NI Administration, local self-government authorities and the industry should take efforts to help tourists understand that their dress, activities, behaviour need to be sensitive to the local cultural norms and ethos. “Do’s” and “Do not’s” should not merely be a written document or something for display, but tourists should be helped to understand why these are important.

11.3.1.2 Economic impacts

At the macro level, tourism does not play a significant role in the economy of the Andamans. Economic benefits arising out of tourism development are not clear. At the micro level, there is local community enterprise. However, the tendency to employ personnel from Port Blair and the mainland is high in the skilled worker category of tourism establishments. There is also evidence of gender bias and stereotyping of jobs. There is relatively low tourist spending, and linkages of tourism activities to local primary economy are weak. There is a need to improve direct benefits from tourism to local communities. There are high levels of aspirations or expectations that local communities have from tourism. The tourism model adopted by the islands as well as its policies, plans and financial resource allocations must be geared to meet these aspirations.

1. As our research has indicated, the degree of local benefit derived from tourism activities in the region has strong links to the ownership pattern within the tourism industry wherein local ownership increases the opportunities and scope for direct local benefits from tourism. Considering this, it would be important for the Administration and Central Government to consciously take steps to improve local entrepreneurship and ownership in tourism and ensure that benefits are not reaped only by the big players in the industry. One such important measure would be to ensure speedy access to soft loans and credit facilities for those members of the local community who are keen on venturing into the tourism business but do not have sufficient credit or collateral to be able to secure loans from private banks.
2. Another important measure for the A&NI Administration to consider would be the creative use of information technology like website and the Internet to ensure that small operations get visibility and are able to attract tourists. Interpretation centres and facilities for online booking would help smaller community-owned tourism establishments to run tourism business more effectively.
3. Tourism development should be such that it strengthens the backward and forward linkages to others sectors of the economy such as agriculture and fisheries. To ensure that these linkages are built, the A&NI Administration, in consultation with institutions of local self-governance, could identify those raw materials (vegetables, fruits, sea food and fibre) that are available locally in sufficient measure, over and above the regular requirements of the local islander community, and encourage their use by tourism businesses such as resorts and hotels. Efforts should be taken to sensitise tourists to not make unreasonable demands for non-local food, even while a certain degree of import of raw material is unavoidable, as there would be essential items that are not available locally in sufficient quantity or quality to satisfy the tourist demand. Tourism units must be encouraged (the A&NI Administration and *Panchayats* could consider making local sourcing of some raw material mandatory as well) to source locally. Also, in order to ensure that such local sourcing has maximum benefits for local farmers and fishermen, *Panchayats* may also consider steps to regulate the control of trade by non-locals.
4. There are many stakeholders and sections of the A&NI Administration who hope that tourism will become the pillar of the islands' economy. Firstly, a more sound economic analysis of the current and likely economic impact of tourism is necessary before such views are nurtured. Secondly, taking cognisance of the high degrees of vulnerability to internal and external factors associated with tourism in general and the additional ecological and geological vulnerability of the islands, such dependence is inadvisable. Tourism's claims to employment generation and local benefits are not commensurate with the evidence on the ground and with the limited data that is available.
5. Efforts need to be taken to strengthen the other sectors such as fisheries in a sustainable manner. Other industries that can tap into the islands' high literacy levels and technological adaptability and that might still not be making huge infrastructure demands such as information technology and business process outsourcing could also be explored.
6. While we bear caution that tourism does not become the sole economic mainstay of the islands, considering its associated vulnerabilities, it is equally a responsibility of the A&NI Administration to ensure that benefits that are accruing from growth in tourism are equitably distributed in the islands. Such a distribution of economic

benefits and revenue gains from tourism needs to be equitable in ensuring both balance in regional development across islands as well as in bridging income inequalities that exist or might arise on account of growth in tourism. It is here that the role of taxes as an instrument that can serve to enable the A&NI Administration perform this function of distributing the benefits of tourism need to be given serious thought.

11.3.1.3 Environmental impacts

The Andamans are already confronting many environmental problems and tourism is compounding them. Where the natural beauty is its unique selling proposition (USP), current tourism practices and plans do not ensure protection of this natural heritage for long-term sustainable use. Tourism development strategies, such as the UNWTO report in 1997, make a strong case for the removal of regulations to allow for the construction of tourism infrastructure in violation of CRZ regulations as this will “appeal to foreign tourists”.

Barring a few examples where individuals and the Department of Environment of Forests have taken initiative to tackle environmental problems, issues such as solid waste management, water resource augmentation, land use regulations and building regulations rarely seem to have been addressed. With its dismal record on enforcement of regulations such as the CRZ Notification, the plans of the A&NI Administration to open up more areas for tourism seems particularly ill advised. The need for an integrated approach to the sustainable management of anthropogenic activities and the protection of the island ecosystems is imperative. Various “vision documents” for the islands’ development need to mainstream environmental concerns and incorporate coastal protection measures while addressing people’s needs.

1. A strategy for water conservation and water management systems needs to be prepared. With the tourism industry consuming nearly double the amount of freshwater compared to local population in Port Blair alone and Havelock Island beginning to feel the pinch in the dry months, a careful strategy for the tourism sector to rationalise its use and sources needs to be worked out. While regulating the growing number of tourism establishments, subsidies to small and medium enterprises in tourism may be considered on investments in environmental management systems such as harnessing solar energy, water harvesting, sewage and solid waste management. Similarly, waste management concerns need to be prioritised on an urgent basis.
2. Land acquisition for tourism resorts needs to be studied and monitored in the Andamans. This is more so for revenue land where most tourism occurs. It is important that *panchayats* also have a say in allotment of revenue land for tourism purposes. If the A&NI Administration is serious about long-term sustainability of tourism in the Andamans, it could consider processes like imposing a moratorium on further expansion of tourism till such time when the vision, strategies and policy-making steps are taken, as has been already recommended.
3. The tourism industry in the Andamans needs to move towards sound environmental practices. Limiting use of air-conditioners, care in use of water, use of compact fluorescent lamps (CFL) for lighting, sensible water management practices and waste management and recycling need to be high on the agenda, as the preservation of the Andaman ecology is in the industry’s interest.

4. The shortage of water for local needs and tourism's greed for water are the roots of a growing crisis. Given the abundance of rainfall in the islands, rainwater harvesting as an option seems to be hardly explored or implemented. In accordance with building bye-laws, rainwater harvesting should be ensured for all establishments especially tourism establishments. Rainwater harvesting should also be used to recharge tanks and provide a source of water for domestic purposes.
5. Reverse osmosis plants (that convert hardwater to potable water) need to be repaired and put into use where they have already been installed, for example on Havelock Island. In other islands, feasibility studies need to be undertaken to assess availability and quality of groundwater to install reverse osmosis plants.
6. Other technologies such as the low temperature thermal desalination plant like that at Kavaratti, Lakshadweep could be explored for feasibility in the Andamans context. (Set up by the National Institute of Ocean Technology, it makes 1.2 lakh of pure water a day by boiling sea water in vacuum at high temperature and then cooling the vapours using low temperature water).
7. Water-based amusement theme parks, which are water guzzlers, should be simply prohibited. Infrastructure such as theme parks, water based or otherwise, also need to be questioned in the context of availability of resources – land and raw material for construction – and most importantly the ecological and geological sensitivities of Andamans. Furthermore, they need to be questioned on the basis of this being an appropriate tourism product for a destination such as the Andamans in the first place!
8. A waste management and garbage disposal strategy for the entire islands needs to be worked out. The United Nations Environment Programme (UNEP) has brought out “A Directory of Environmentally Sound Technologies for the Integrated Management of Solid, Liquid and Hazardous Waste for Small Island Developing States (SIDS) in the Pacific Region”, which could be referred to and suitable technologies adopted to deal with all kinds of wastes.
9. Segregation of wastes and recycling locally as far as possible are important options. The zero-waste concept (refer Annexure 14) may also be adopted in all tourism locations. The ban on polythene bags which is yet to be notified should be effected immediately.
10. Extended producer responsibility for all kinds of consumables, especially bottled water, aerated soft drinks, wafers, chocolates and all companies selling their products in the Andamans should be considered as an option particularly for products linked to tourism.
11. The current state of affairs on sewage treatment by direct dumping of untreated sewage into the sea must be stopped. Treatment of sewage must be made mandatory for all establishments – tourism and others. Tourism establishments must be encouraged to use recycled water for flushing toilets or watering plants.
12. Dependency on generation of electricity through burning of diesel needs to be reduced in a phased manner. Renewable and non-polluting sources of energy generation such as solar, wind, tidal need to be explored and tapped.
13. Boat anchors should not be dropped on the sea-bed but dedicated anchor-buoys like in the Mahatma Gandhi Marine National Park need to be set up and used. Guidelines provided by UNEP may be adapted in this regard (refer Annexure 15). The environmental impacts need to be also considered as boats use diesel and the polluting impacts are quite significant. Discharge of sewage from boats directly

into the sea should be checked. The use of bio-toilets on boats should be considered. All plastics on boats should be collected and brought back to Port Blair for proper disposal.

14. Turtle nesting beaches should be avoided for intensive tourism development.
15. Coral reefs are an important ecological heritage of the islands and these should not be destroyed by tourism. Guidelines giving by organisations such as Coral Reef Alliance (refer Annexure 16), Project AWARE (refer Annexure 17) and UNEP (refer Annexure 18) could be adopted. The A&NI Administration should consider taking steps such as closing certain over-visited areas such as North Bay to allow corals to rejuvenate, and regular monitoring and checking repeatedly for signs of damage such as those at Elephant Bay, Mahuadera (South Andaman) and Smith and Ross Islands (North Andamans). Training of guides to ensure compliance by them and tourists is important. Educating tourists on collection of shells and corals, and stringent checks at airports and harbour for returning tourists needs to be done.

11.3.2 Regulations and Guidelines

The CRZ Notification, 1991 has been poorly implemented in the Andamans, as is the case in other coastal states of India. Tourism establishments continue to violate provisions of the CRZ Notification. Basic processes of the CRZ Notification like demarcation of the High Tide Line (HTL), preparation of Coastal Zone Management Plans (CZMPs) and maps have not been done. To top it all, the no development zone (NDZ) has been reduced from 200 m to 50 m for tourism in the Andamans. Even this has been violated with impunity. Environmental impact assessments have not been done for any tourism project.

1. We recommend that the CRZ Notification, 1991 is implemented with all seriousness in the islands and therefore all related steps be undertaken with no further delay. The National Coastal Zone Management Authority (NCZMA) and the Andaman & Nicobar Islands Coastal Zone Management Authority (A&NCZMA) need to evolve detailed project clearance guidelines for all projects, including tourism projects. Demarcation of the HTL needs to be done at the earliest. This lapse on the part of the authorities is inexcusable. The new maps and plans should also be widely distributed and made available at important offices for public examination at all times and also posted on the official websites.
2. The dilution of the CRZ Notification by the Ministry of Environment and Forests (MoEF) through its notification (S.O.838 (E) dated 24 July 2003) based on recommendations of the Integrated Coastal Zone Management Plan (ICZMP) for the islands that allows only tourism projects from 50 m onwards of HTL is a retrograde step. This should be revoked by the MoEF.
3. Rampant CRZ violations such as constructions and activities, even within the controversial 50 m NDZ for tourism, should be dealt with sternly and decisively.
4. The Environmental Impact Assessment (EIA) Notification, 1994 had three criteria for tourism projects that required mandatory EIA clearance – projects within 200 m of the HTL or located above 1000 m main sea level (MSL) or above 5 crores initial investment. The new EIA Notification of 2006 did away with this requirement for tourism projects. This move for excluding tourism projects all over the country

from requiring EIA clearance is being challenged by civil society organisations. Given the particular ecological vulnerability of the islands, the need to make EIA clearance mandatory with more stringent criteria for all tourism establishments is critical.

5. The MoEF has approved “Environment Guidelines for Tourism Projects in the Andaman Islands” vide letter no. 15-1/2006-IA-III dated 20 April 2006 that provide useful environmental guidance for individual tourism projects. These are progressive and the A&NI Administration needs to ensure that these are adhered to stringently during the course of tourism projects (details given in Annexure 19).
6. The Andaman & Nicobar Islands Registration of Tourism Trade Regulations, 2007 is also a progressive instrument that should be implemented strictly to ensure quality of the tourism brand. Subsequent to the brand building and positioning exercise recommended earlier, the regulation may be considered for amendment if required to synchronise with the tourism policy.

11.3.3 Innovative Practices and Processes

The context of Andamans is unique, and facing the challenges posed requires creative, out-of-the-box thinking for finding solutions. Models and practices of development that are adopted in other parts of India or the world cannot be directly applied to the islands. An understanding of and engagement with current tourism impacts is not mainstreamed in the operations of the tourism industry today. The case of ITC-Welcomgroup’s Fortune Bay Island Resort Hotel given in the chapter on environmental impacts could be cited as a good example of innovation and out-of-the-box thinking. Innovative approaches and practices need to be adopted in every aspect of tourism development in Andamans.

Environmental constraints and challenges present numerous opportunities for developing innovative practices that would ensure optimum utilisation of available resources, for example water through rainwater harvesting and harnessing solar energy. The tourism industry could be encouraged to adopt such innovative practices and incentives given for innovations. Over a period of time, the A&NI Administration could consider making such innovative practices mandatory. These innovations will also help in building a sustainable tourism brand, which could be its USP that will attract those tourists who are serious about experiencing the natural and cultural heritage. The tourism industry will thus stand to benefit in the long term.

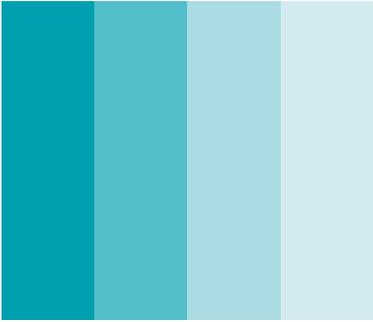
Visitors to the Andamans are not usually sensitised to the fact that they are visiting ecologically fragile islands (86% of domestic and 74% of foreign tourists admitted to not knowing this). Our primary survey with tourists has indicated that 70 per cent of domestic and 54 per cent of foreign tourists believed their holiday experience would be improved with more information on ecology and culture of the islands.

1. Several national and international guidelines could be referred to wherein attempts by communities to arrive at vision and principles of tourism development are reflected in the form of charters and codes. There are inspiring examples of people’s charters on tourism from other states in India.
2. Tourists need to be sensitised about the fact that they are visiting islands whose ecosystems are already under stress and hence expecting similar facilities as other

tourism destinations would only increase their ecological footprint. Clear guidelines in the form of “Do’s” and “Don’ts” through all possible means and media (aircrafts, ships, tourist information centres, immigration counters, jetties, boats, ticket counters, hotels and tourism establishments, and at tourist attractions) should be made available to the tourists.

3. The tourism industry needs to be encouraged to recognise that they stand to benefit from long-term economic sustainability if it minimises the negative impacts and maximises positive impact of tourism. In this regard, there is a need to hold awareness and sensitisation campaigns with various organs of the tourism and hospitality industry in Andamans. The Tourism Guild, which was formed earlier, may take on the role of being the platform on which such campaigns could be undertaken.
4. Personnel who are presently engaged as guides need to be specially trained on the sensitive aspects of Andamans’ ecology, indigenous peoples, local communities and also the rich historical heritage of the Andamans. They need to be encouraged to take on the role of standard bearers of protecting the natural and cultural heritage of Andamans and check irresponsible behaviour of tourists and negative impacts of tourism.
5. The print and electronic media – both local and from the mainland – needs to exercise caution and discretion in the way in which Andamans are portrayed.
6. Education of both the local population and tourists about the fragility of the islands, and compliance on aspects such as waste disposal is also important.
7. The Department of Environment and Forests has set up an interpretation centre at Wandoor. It has published many different kinds of information booklets on the terrestrial and marine flora and fauna of A&NI, which are very informative. There is also a proposal pending with the MoEF to upgrade the existing interpretation centre at Wandoor, which will be a useful initiative.
8. The interpretation centre needs to be made an integral part of the tourism activity in Andamans with tourists encouraged to make it as part of their tourist itinerary. Innovative aspects such as audio-visual documentaries, three-dimensional models and simulation of adverse impacts because of human activities in the islands, including tourism, may be considered. There is a need to produce better quality, more innovative and more creative educational material for tourists.
9. The Department of Environment and Forests may also consider organising nature camps and awareness campaigns for various groups ranging from school and college students to local communities, tourists and others.

The Andaman & Nicobar Islands are the earth’s natural and cultural heritage. Unplanned, thoughtless and unregulated tourism development in the Andamans is threatening to put this heritage at serious risk. It is time that the A&NI Administration, the inhabitants of this beautiful archipelago of Islands, and the MoTC took bold and decisive steps and demonstrated leadership to prevent this from happening. It is time to rethink tourism in the Andamans.



Bibliography

- Actionaid International–India (2006) “Tsunami and Beyond”, Port Blair, Andaman & Nicobar Islands (A&NI), India.
- Ali, R. (2000) “A Socio-Economic Study of the Villages Bordering Saddle Peak National Park, North Andaman”, Andaman and Nicobar Islands Environment Team (ANET) Technical Report, Wandoor, A&N Islands
- Ali, R. (2001) “Elephants and Their Impact on Interview Island”, Andaman and Nicobar Islands Environment Team (ANET), Madras Crocodile Bank Trust, Mamallapuram, India.
- Andaman Science Association (1987) “Symposium on Management of Coastal Ecosystems and Oceanic Resources of Andamans: Proceedings and Recommendations”, July.
- Andrews, H.V. (2000a) “Current Marine Turtle Situation in the Andaman and Nicobar Archipelago – An Urgent Need for Conservation Action”, *Kachhapa*, Issue No.3, pp. 19–23.
- Andrews, H.V. (2000b) “Impact Assessment of the Little-known Little Andaman Island, Andamans, India”, *Newsletter of the Irula Tribal Women’s Welfare Society*, Vol. 12, No. 2, pp. 52–83.
- Andrews, H.V. (2000c) “Status of Saltwater Crocodile in the Andaman Archipelago”, *Sanctuary Asia*, Vol. 20, No. 2, p. 25.
- Andrews, H.V. (2001) “Threatened Herpetofauna of the Andaman and Nicobar Islands”, in C.N.B. Bambaradeniya and V.N. Samarasekara (eds), *An Overview of the Threatened Herpetofauna of South Asia*, IUCN, Sri Lanka and Asia Regional Biodiversity Programme, Colombo, Sri Lanka, pp. 39–47.
- Andrews, H.V. and Sankaran, V. (eds) (2002) “Sustainable Management of Protected Areas in the Andaman & Nicobar Islands”, Andaman and Nicobar Islands Environment Team (ANET), Indian Institute of Public Administration, New Delhi and Flora and Fauna International
- Andrews, H.V., Krishnan S. and Biswas, P. (2002) “Leatherback Nesting in the Andaman and Nicobar Islands”, *Kachhapa*, Vol. 6, March, 13–16.
- ANET (Andaman and Nicobar Islands Environment Team) (2003) “Andaman and Nicobar Islands Union Territory - Biodiversity Strategy and Action Plan”, National Biodiversity Strategy and Action Plan – New Delhi, India. Government of India–United Nations Development Programme (GoI–UNDP).
- Archer, B.H. (1978) “Domestic Tourism as a Development Factor”, *Annals of Tourism Research*, Vol. 5
- Bagla, P. and Menon, S. (eds) (1989) “Ravaged Forests and Soiled Seas: Ecological Issues in the Tropics with Special Reference to Andaman and Nicobar Islands”, Kalpavriksh, Pune, India.
- Basu, D.D. (1998) *Introduction to the Constitution of India*, 18th edn, Prentice Hall, New Delhi, India.
- Bhaskar, S. (1979) “Sea Turtles in the South Andaman Islands”, *Hamadryad*, Vol. 4, No. 1, pp. 3–6.
- Bhaskar, S. (1984) “Sea Turtles in North Andaman and Other Andaman Islands”, Report to the World Wildlife Fund, India.
- Bhaskar, S. (1993) “The Status and Ecology of Sea Turtles in the Andaman and Nicobar Islands”, ST. 1/93, Centre for Herpetology/Madras Crocodile Bank Trust., Mamallapuram, India.
- Bjorklund, E.M. and Philbrick, A.K. (1972) “Spatial Configuration of Mental Processes”, unpublished paper, Department of Geography, University of Western Ontario, London, Ontario.
- Boden Kloss, C. (1971) *The Narrative of a Cruise in the Schooner “Terrapin” with Notices of the Island, Their Fauna, Ethnology*, place unknown
- Bruehl, A.M. (1998) “Purva Vida? A Case of Drugs and Tourism in Quentos and Manuel Antonio, Costa Rica”, <http://www4.ncsu.edu/~twallace/Bruehl.PDF>, data retrieved March 2008.
- Butler, R.W. (2001) “Seasonality in Tourism: Issues and Implications”, in Tom Baum and Svend Lundtrop (eds), *Seasonality in Tourism*, pp. 5–23, Elsevier, Oxford.

- Butler, R.W. (2006) "The Concept of a Tourism Area Cycle of Evolution: Implications for Management of Resources", in Richard W. Butler (ed.), *The Tourism Area Life Cycle: Applications and Modifications*, Vol. 1, Channel View, Clevedon, pp 3–12.
- Central Ground Water Board (n.d.) "Andaman and Nicobar at a Glance", <http://www.cgwber.nic.in/andaman.htm>, data retrieved November 2007.
- Central Pollution Control Board (2005) "Municipal Solid Waste – Waste Generation and Composition", Ministry of Environment and Forests (MoEF), New Delhi, India, http://www.cpcb.nic.in/Municipal%20Solid%20Waste/Waste_generation_and_Composition.html, data retrieved February 2008.
- Chainaani, S., (n.d.) "Coastal Zone Management Plan Report", Andaman and Nicobar Islands, Bombay Environmental Action Group, Mumbai.
- Comptroller & Auditor General (2006) Report 20 of 2006, Ministry of Home Affairs, Government of India (GoI), New Delhi, India.
- Cooper C. and Wanhill, S. (eds) (1997) *Tourism Development – Environmental and Community Issues*, Wiley Publishers, New Jersey.
- Cooper, Z. (1990) "The Andamanese, Origins and Cultural Traditions", *The India Magazine of Her People and Culture*, May, pp. 30–43..
- CPR Environment Education Centre (1997) "Environmental Education Needs of the Andaman and Nicobar Islands – Proceedings of the Conference Held at Port Blair on March 5–6", Chennai, India.
- Dahles H. and Bras, K. (eds) (1999) "Tourism and Small Entrepreneurs, Development, National Policy and Entrepreneurial Culture: Indonesian Cases", Cognizant Communication Corporation
- De Kadt, E. (1979) "Tourism – Passport to Development? – Perspectives on the Social and Cultural Effects of Tourism in Developing Countries", Published for the World Bank and UNESCO by Oxford University Press, Washington.
- Department of Applied Mechanics & Hydraulics (n.d.) "Manual on Coastal Erosion, Coastal Engineering Research Group", Surathkal, India.
- Department of Environment and Forests (2003a) "Working Plan of Middle Andaman Forest Division (for the period from 2003 to 2013)", Andaman & Nicobar Islands (A&NI) Administration, Port Blair, India.
- Department of Environment and Forests (2003b) "Working Plan of South Andaman Division (for the period from 2003 to 2013)", Andaman & Nicobar Islands (A&NI) Administration, Port Blair, India.
- Department of Environment and Forests (2005) "Forest Statistics – Andaman and Nicobar Islands", Andaman & Nicobar Islands (A&NI) Administration, Port Blair, India.
- Department of Environment and Forests (2007) "Annual Plan 2007–08 – Detailed Programme (U-72), Sub Sector: Forestry and Wildlife, Scheme No 15, Eco-Tourism Scheme", Andaman & Nicobar Islands (A&NI) Administration, Port Blair, India.
- Dhingra, K. (2005) *The Andaman and Nicobar Islands in the Twentieth Century – A Gazetteer*, Oxford University Press, New Delhi, India.
- DES (Directorate of Economics and Statistics) (2005) "Island-wise Statistical Outline", Andaman & Nicobar Islands (A&NI) Administration, Port Blair, India.
- DES (Directorate of Economics and Statistics) (2006a) "Andaman and Nicobar Islands at a Glance, 2006", Andaman & Nicobar Islands (A&NI) Administration, Port Blair, India.
- DES (Directorate of Economics and Statistics) (2006b) "Meteorological Statistics 2006", Andaman & Nicobar Islands (A&NI) Administration, <http://www.and.nic.in/Know%20Andaman/ecostat2007/Meteorolical%20Statistics%202006/rainfall.pdf>, data retrieved April 2008.
- Directorate of Fisheries (n.d.) "Draft Fisheries Policy – Andaman and Nicobar Islands", Andaman & Nicobar Islands (A&NI) Administration, Port Blair, India.
- Doxey, G.V. (1975) "A Causation Theory of Visitor–Resident Irritants: Methodology and Research Inferences", Proceedings of the Travel Research Association, Sixth Annual Conference, San Diego, California, 195-198.
- Ellis, J. L., Yoganarsimhan, S.N., Gurudeva, M.R. and Ramanujam, P. (1997) "Prioritisation of Biodiversity Rich Sites of Conservation Significance in the Andaman and Nicobar Islands", Karnataka Association for the Advancement of Science, Bangalore, India.
- EQUATIONS (2006) "Coastal Area Assessment – A Post Tsunami Study on Coastal Conservation and Regulation in Andaman and Nicobar Islands", Bangalore, India.
- FICCI (2002) "Andamans and Nicobar an Emerging World Class Tourist Destination for the New Millennium".

- Geological Survey of India (2005), "A Preliminary Report on Investigation of Effects of the Sumatra–Andaman Earthquake of 26 December 2004 in Andaman and Nicobar Islands", Government of India (GoI), New Delhi.
- Ghosh, G.K. (1998) *Tourism Perspective in Andaman and Nicobar Islands*, APH Publishing, New Delhi, India.
- Gupta, I.P. (2000) *Status of Panchayati Raj in the States and Union Territories of India*, Institute of Social Sciences, Concept Publishing, New Delhi, India.
- Holloway, C.J. (1998) *The Business of Tourism*, 5th edn, Addison-Wesley Longman, New York.
- Housing and Land Rights Network and Habitat International Coalition (2006) "Battered Islands – Report of a Fact Finding Mission to Tsunami Affected Areas of the Andaman and Nicobar Islands", New Delhi, India.
- HRLN (Human Rights Law Network) (2005) "Report on the First Phase Assessment Post Tsunami (May–June 2005), Port Blair, Andaman and Nicobar Islands
- Hvenegaard, G.T. (2002) "Using Tourism Typologies for Ecotourism Research", *Journal of Ecotourism*, Vol. 1, No. 1, <http://www.multilingual-matters.net/jet/001/0007/jet0010007.pdf>, data retrieved March 2008.
- IMO (United Nations International Maritime Organization) (The International Convention for the Prevention of Pollution from Ships [MARPOL])
http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258, data retrieved April 2008.
- ICAR (Indian Council for Agricultural Research) (2005) "Roadmap for the Development of Fisheries in ANI", Fisheries Division, New Delhi, India.
- Indian Institute of Technology (2005) "Indian Ocean Tsunami of December 26, 2004", Kanpur, India.
- IUCN (International Union for Conservation of Nature) (2006) "Information Paper: Key Issues in the Island Biodiversity Programme of Work", Eighth Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP8), Curitiba, Brazil.
- Kannan, P. (2006) "Andaman and Nicobar Rides the Eco Wave: Opens 15 islands to Bidders to Set Up Environmentally Sensitive Hotels", *Express Hospitality*, 1–5 June 2006, <http://www.expresshospitality.com/20060615/market01.shtml>, data retrieved April 2008.
- Kazi S. and Nairy, K.S. (2003) "Resource-use Patterns in the Tourism Accommodation Sector in Coastal Tourism", in Ligia Noronha, Nelson Lourenco, Joao Paulo Lobo-Ferreira, Anna Lleopart, Enrico Feoli, Kalidas Sawkar and A.G. Chachadi (eds), *Coastal Tourism, Environment and Sustainable Local Development*, The Energy and Resources Institute, Panaji, India.
- Kerala Shastra Sahitya Parishad (2003) "*Tourism Janakeeya Badal*", Kerala.
- Kulkarni, S. (2000) "Ecological Assessment of Coral Reefs in Mahatma Gandhi Marine National Park, Wandoor, and Andaman and Nicobar Islands: Conservation Implications", Technical Report, Wildlife Institute of India, Dehradun..
- Kulkarni, S. (2005) "Tsunami Impact Assessment of Coral Reefs in Andaman and Nicobar Islands", Reef Watch Marine Conservation, Mumbai, India.
- Kumar, B.G., Pramanik, S.C. and Nawaz, S. (2004) "Economics of Production and Marketing of Vegetables in Andaman and Nicobar Islands", *Journal of Agriculture Marketing*, Vol.18, No. 2,.
- Lin, V.L. and Loeb, P.D. (1977) "Tourism and Crime in Mexico: Some Comments", *Social Science Quarterly*, Vol. 58, June, pp. 164–167.
- Mathieson, A. and Wall, G. (1982) *Tourism: Economic, Physical and Social Impacts*, 1st edn, Longman, New York.
- McLaren, D. (1998) *Rethinking Tourism and Ecotravel – The Paving of Paradise and What you Can Do to Stop It*, Kumarian Press, West Hartford, Connecticut.
- MoEF (Ministry of Environment and Forests) (2003) "Integrated Coastal Zone Management (ICZMP) Plan Preparation for Selected Islands of Andaman", Executive Summary (Draft) prepared by Institute of Ocean Management, Anna University, Chennai, India, October.
- MoEF (Ministry of Environment and Forests) (2007a) "Approved Project Infrastructure and Miscellaneous Projects As Per 1994 Notification", http://164.100.194.13:8080/allied_envclr/displayApprovedProject1994.do, data retrieved February 2008.
- MoEF (Ministry of Environment and Forests) (2007b), "Approved Project Infrastructure and Miscellaneous Projects As Per 1994 Notification", http://164.100.194.13:8080/allied_forclr/pendingwithsgreport.do, data retrieved February 2008.

- Ministry of Home Affairs (2007) Annual Report 2006–2007, Government of India (GoI), Chapter VI, p. 65, <http://mha.nic.in/pdfs/ar0607-Eng.pdf> data retrieved February 2008.
- Ministry of Tourism and Culture (2005) “Cruise Tourism Potential and Strategy Study: Final Report”, CRISIL Limited for Government of India (GoI), December.
- Ministry of Tourism and Culture (2002) “Perspective Plan for Tourism Development in Andaman and Nicobar Islands”, A.F. Ferguson and Company, Management Consultancy Division and Government of India (GoI), New Delhi.
- Ministry of Civil Aviation and Tourism, Department of Tourism; Andaman and Nicobar Islands Administration, Department of Information, Publicity and Tourism; World Tourism Organisation and United Nations Development Programme (1997), “Development Strategy for Environmentally Sustainable Tourism in the Andamans” (UNDP/WTO project IND/93/032), Final Report – Volumes I, II and III
- Mowforth M. and Hunt, I. (2003) *Tourism and Sustainability – Development and New Tourism in the Third World*, 2nd edn, Routledge, New York.
- Mukherjee, M. (2003) *The Land of the Naked People – Encounters with Stone Age Tribals*, Penguin Books, New Delhi, India.
- NEERI (National Environmental Engineering Research Institute) (2000) “Carrying Capacity Based Development Planning for Implementation of Master Tourism Plan in Andaman Islands”, Nagpur, India.
- NIPFP (National Institute of Public Finance & Policy) (2006) “State Development Report of Andaman & Nicobar Islands”, New Delhi, India, June, <http://www.and.nic.in/state%20development.htm>, data retrieved November 2007.
- Noronha, L., Lourenco, N., Lobo-Ferreira, J.P., Lleoart, A., Feoli, F., Sawkar, K. and Chachadi, A.G. (2003) *Coastal Tourism, Environment and Sustainable Local Development*, TERI, Panaji, India.
- Parliamentary Standing Committee on Home Affairs (2005) “Background Note on Developmental Activities in A&NI”, Vol. I–III, New Delhi, India.
- Perry, A. (2004) “Best Beaches You Can Get To – Beaches No 5 and No 7, Havelock Island, Andaman Sea, India”, TIME Asia, Vol. 164, No. 20, 22 November.
- Planning Commission (1986) “An Integrated Environmentally Sound Development Strategy for the Andaman and Nicobar Islands”, Government of India (GoI), New Delhi.
- Planning Commission (2003) “Induction Material 2003: Notes on the Functioning of Various Divisions”, Government of India (GoI), New Delhi.
- Rajavel, N. (1998) *Tourism in Andaman and Nicobar Islands*, Manas, New Delhi, India.
- Shekar, R.R. (2000) “The Last of the Jarawas”, *Housecalls*, Vol. 1, No. 6,.
- Rawal, V., Desai, R. and Jadeja, D. (2006) “Assessing Post-Tsunami Housing Reconstruction in Andaman and Nicobar Islands – A Peoples Perspective”, Society for Andaman and Nicobar Ecology, ActionAid, Housing and Land Rights Network, and Tsunami Rehabilitation Information Network (TRINet), <http://www.hic-sarp.org/documents/TSUNAMI%20RECONSTRUCTION.pdf>, data retrieved December 2007
- Andamans Science Association (1987) “Report of the Symposium on Management of Coastal Ecosystems and Oceanic Resources of Andamans”, Central Agricultural Institute, Port Blair, 17–18 July.
- Saldanha, C.J. (1989) *Andaman, Nicobar and Lakshadweep – An Environmental Impact Assessment*, Oxford and India Book House, New Delhi.
- SANE (2003) “Island Development Authority (IDA) Meeting: A Retrospect”, February, http://www.andaman.org/BOOK/Sane/Newsletter_2003-02/news_2003-02.htm, data retrieved November 2007.
- Sankaran, R. (1995) “The Nicobar Megapode and Other Endemic Avifauna of the Nicobar Islands”, SACONH Technical Report No. 2, Salim Ali Centre for Ornithology and Natural History (SACONH), Coimbatore, India.
- Satish Chandra, N. (1992) “Rapid Rural Appraisal for Evaluating the Socio-Economic Feasibility of the Integrated Village Development Project”, Central Agricultural Institute, Port Blair, Andaman and Nicobar Islands (A&NI), India.
- Sekhsaria, P. (2000) “Turtle Tales”, *Frontline*, 26 May, reproduced in “Troubled Islands: Writings on the Indigenous Peoples and Environment of the Andaman & Nicobar Islands”, Kalpavriksh & LEAD India, 2003, p. 52.
- Sekhsaria, P. (2001) “Deforestation in Andaman and Nicobar – Its Impact on the Onge”, *Economic and Political Weekly*, Vol. 36, No. 38, 22 September.

- Sekhsaria, P. (2003) "Troubled Islands: Writings on the Indigenous Peoples and Environment of the Andaman and Nicobar Islands", Kalpavriksh, Pune and LEAD India, pp 78–79, 84–86.
- Sen, S. (1999) "Policing the Savage: Segregation, Labour and State Medicine in the Andamans", *Journal of Asian Studies*, Vol. 58, No. 3.
- Singh, A., Biswas, P. and Ali, R. (2001) "Socio-economic Monitoring around the Mahatma Gandhi Marine National Park, South Andaman Island", Andaman and Nicobar Islands Environment Team (ANET) Technical Report, Centre for Herpetology/Madras Crocodile Bank Trust, Mamallapuram, India.
- Sirur, H.S. (1999) "A Rapid Assessment of Threats to the Coastal Environment and Their Root Causes in the Andaman and Nicobar Islands", a component of IND/95/G4, unpublished report, United Nations Development Programme (UNDP), New Delhi, India.
- Sivaganesan, N. and Kumar, A. (1995) "Status of Feral Elephants in Andamans", in J.C. Daniel and H.S. Datye (eds), "A Week with Elephants: Proceedings of the International Seminar on the Conservation of Asian Elephant", Oxford University Press, Oxford.
- Smith, V.L. (ed.) (1989) *Hosts and Guests: The Anthropology of Tourism*, 2nd edn, University of Pennsylvania Press, Pennsylvania.
- Society for Andaman and Nicobar Ecology (2003) "Island Development Authority (IDA) Meeting: A Retrospect", Port Blair, Andaman & Nicobar Islands (A&NI), India.
- Tribal Welfare Department (n.d.) "Tribal Welfare Activities in Andaman and Nicobar Island", Andaman and Nicobar Islands (A&NI) Administration, Port Blair.
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (1994) "Island Agenda: An Overview of UNESCO's Work on Island Environments, Territories and Societies".
- UNWTO (United Nations World Tourism Organization) (2005) "Tourism Relief for the Tourism Sector: Phuket Action Plan", February.
- UNWTO (United Nations World Tourism Organization) (2007), "Tourism, Air Transport and Climate Change – A World Tourism Organization Discussion Paper", September, http://www.unwto.org/climate/support/en/pdf/docu_tourism_air.pdf, data retrieved December 2007. Urry, John (2002) *The Tourist Gaze*, 2nd edn, Sage, London.
- Vidya, V., Subramaniam Y.V., Jayabalu R. and Jyothi Kumar, N. (n.d.) "Environmental Management Plan for Mega Beach Resorts in A&N Island", National Environmental Engineering Research Institute (NEERI), Nagpur, India.
- Reddy, R.M.V., Shaw G. and Williams, A. (2005), "Impact of the Tsunami on the Tourism Industry and Ecosystem of the Andaman and Nicobar Islands, India", Department of Geography, University of Exeter, United Kingdom.
- Whitaker, R. (1985) "Managing Tropical Moist Forests – Endangered Andamans", Environmental Services Group, Worldwide Fund for Nature (WWF) – India, and Man and Biosphere Programme (MAB) – India, Department of Environment, Government of India (GoI), New Delhi.
- Whitaker, R. (1986) "Background Paper on the Onge Tribe of Little Andaman", *mimeo*.
- Wilkinson, C. (ed.) (2004) "Status of Coral Reefs of the World: 2004", Global Coral Reef Monitoring Network, Australian Institute of Marine Science, Vol. 1, pp. 213–233, <http://www.aims.gov.au/pages/research/coral-bleaching/scr2004/pdf/scr2004v1-all.pdf>, data retrieved February 2008.
- Wood, E. (1989) "Coral Mortality on Reefs in the Wandoor Marine National Park, Andaman Islands", Report to Indian Natural Trust for Art and Cultural Heritage (INTACH) and the Andaman and Nicobar Forest Department, September.

Official Documents of the Andaman & Nicobar Islands (A&NI) Administration

- The Andaman and Nicobar Islands (Panchayats) Regulation, 1994, Andaman and Nicobar Extraordinary Gazette, 8 December 1994.
- Andaman and Nicobar Islands (Restriction on Entry and Residence) Regulation 2004.
- Annual General Administration Report, 1984–1985.
- Budget Receipts, Department of Finance and Planning.
- Chart Showing Foreign Tourist Arrived by Flights/Ships/Yachts/Luxury Liners/Non-Schedule Flight from 2000 to 2007 up to 30 September 2007.
- Draft Resolution on LTC Tourism Submitted by Chamber of Commerce to Chief Secretary.

- Ecotourism Plan 2007–2008 Detailed Programme, Forestry and Wildlife, Department of Environment and Forests.
- Foreign Cruise Liners That Docked in Port Blair during 2006–2007, Director General Shipping Services, Andaman and Nicobar Islands (A&NI).
- Minutes of the Meeting of the Committee on Categorisation of CRZ-II Areas held in the Chamber of Chief Secretary, Andaman & Nicobar Islands (A&NI) on 5 November 1998.
- Minutes of the Meeting of the Committee on Categorisation of CRZ-II Areas held in the Chamber of Chief Secretary, Andaman & Nicobar Islands (A&NI) (chairman) on 2 September 1998.
- Minutes of the 11th Meeting of the Island Development Authority (IDA) on 15 June 2007.
- Port Blair Municipal Council Building Bye-laws, 1999.
- Proposals of Department of Information, Publicity and Tourism (IP&T).
- Requirements for Upgradation of Tourism in the Andaman & Nicobar Islands (A&NI).
- Restricted Area Permit, Office of the Foreigners Registration Officer, Andaman and Nicobar Islands A&NI, Port Blair, India.
- Roadmap for Achieving Goals, Information, Publicity and Tourism (IP&T) Department.
- Summary Record of Meeting Convened by Secretary to the Prime Minister on 19 June 1987 on Andaman & Nicobar Islands (A&NI).
- Tourist Arrival Data According to Nationality for the Year 2007, Information, Publicity and Tourism (IP&T) Department.
- Tourist Arrival in the Andaman and Nicobar Islands, Information, Publicity and Tourism (IP&T) Department.
- Tribal Welfare Activities in Andaman and Nicobar Islands, Tribal Welfare Department, Andaman and Nicobar Islands (A&NI) Administration.
- Use of Helicopter Services by Tourists from 1 April 2006 to 31 March 2007, Office of Director (Operations) Civil Aviation.
- Joint Resolution for Andaman and Nicobar Islands, NO. N-12012/1/06/P&J, Government of India, Ministry of Panchayati Raj, 16 March 2007

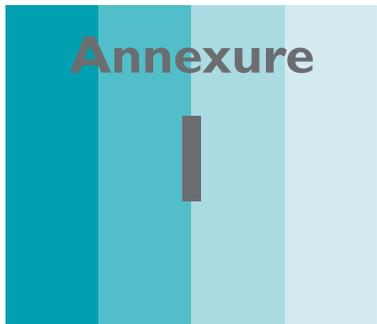
Websites

- Lonely Islands, The Andamanese and other Negrito People and the Out of Africa Story of the Human Race, <http://www.andaman.org/BOOK/text-group-BodyChapters.htm>, data retrieved April 2008
- Andaman Island District Administration – History, <http://andamandt.nic.in/history.htm>, data retrieved April 2008
- History of the Andaman Trunk Road, SANE newsletter, http://www.andaman.org/BOOK/Sane/Newsletter_2003-04-05/news_2003-04-05.htm, data retrieved April 2008
- Official Website of the Andaman and Nicobar Islands (A&NI) Administration, <http://www.and.nic.in>, data retrieved April 2008
- <http://www.cleanestship.eu>, data retrieved April 2008
- http://earthquake.usgs.gov/regional/world/historical_country.php#indian_ocean, data retrieved April 2008
- http://www.energy-enviro.fi/index.php?PAGE=1543&NODE_ID=1543&LANG=1, data retrieved April 2008
- India Not So 'Incredible' for Foreign Women*, 24 January 2008, http://in.news.yahoo.com/indiabroadcast/20080124/r_t_ibn_nl_general/tnl-india-not-so-incredible-for-foreign-3a4f8c1_1.html, data retrieved April 2008
- Financial Performance of States and Union Territories during X Five Year Plan*, Planning Commission of India, <http://planningcommission.gov.in/plans/stateplan/stplsf.htm>, data retrieved April 2008
- The 121st Report of the Department-related Parliamentary Standing Committee on Home Affairs on Administration of Union Territories (A&NI, Pondicherry and Chandigarh) Presented to Rajya Sabha on 2 August 2006, http://rajyasabha.nic.in/book2/reports/home_aff/121streport.htm, data retrieved April 2008
- Government Committee to determine future of Jarawa tribe, <http://www.survival-international.org/news/149>, data retrieved April 2008
- India's Andaman Islands, 28 March 2004, <http://www.thingsasian.com/stories-photos/2922>, data retrieved April 2008

<http://www.timeanddate.com/worldclock/distances.html?n=1037>, data retrieved April 2008
 Cruise Tourism Potential and Strategy Study, CRISIL, <http://www.tourism.nic.in/>, data retrieved
<http://tourism.andaman.nic.in/diving.htm>, data retrieved April 2008
 Introduction to the Andaman Islands, <http://www.wildorchidandaman.com/index.php?p=andamans>,
 data retrieved April 2008
www.odi.org.uk/tourism data retrieved April 2008
 Department of Information, Publicity and Tourism (n.d.) Andaman & Nicobar Islands (A&NI)
 Administration, <http://tourism.andaman.nic.in/diving.htm>, data retrieved April 2008.

Newspapers and Media Articles

Samir Acharya, "Tourism Alternatives: Food for Thought", *The Light of Andamans*, 15 October 2007.
 "Administration to Distribute Only 20 Litres of Water per Head per Day from June 6", *Andaman Express*,
 Port Blair, 30 May 2007.
 "ANIFDCL Gets Rs 10.49 Crore from Ministry", *The Daily Telegrams*, 24 February 2007.
 "ATR Closed for Tourists?", *The Light of the Andamans*, Vol. 33, No. 6, 28 February 2008.
 "Beware the Dangers of Goa: A Murder in the Indian Resort Underlines the Threat to Hosts and Tourists
 Alike", *The UK Times*, 12 March 2008, [http://www.timesonline.co.uk/tol/comment/leading_article/
 article3533402.ece](http://www.timesonline.co.uk/tol/comment/leading_article/article3533402.ece), data retrieved April 2008
 Andrew Buncombe, "Britons in Goa: Death, Drugs and Extortion: The Ashes of a Paradise Lost: Once a
 Backpacker's Dream, Goa Has Become the Stuff of Nightmares", *The Independent*, Sunday, 9 March
 2008, [http://www.independent.co.uk/news/world/asia/britons-in-go-a-death-drugs-and-extortion-
 the-ashes-of-a-paradise-lost-793356.html](http://www.independent.co.uk/news/world/asia/britons-in-go-a-death-drugs-and-extortion-the-ashes-of-a-paradise-lost-793356.html), data retrieved April 2008
 "Bid to Project Isles as the Best Tourism Destination", *The Daily Telegrams*, 26 August 2007.
 "Cruise Ship Calls at Port Blair", A&NI Press Release, 19 May 2006, [http://www.and.nic.in/cruise_ship.
 htm](http://www.and.nic.in/cruise_ship.htm), data retrieved April 2008
 Aarthi Dhar, "Andaman Tribals Want Mainlanders to Leave", *The Hindu*, 17 February 2005.
 "Drug Peddler from Havelock Arrested", *The Daily Telegrams*, 19 March 2007.
 "Expert Committee Recommends Immediate Ban on Population Influx and Construction of Roads in the
 Interior of the Island", *The Daily Telegrams*, 28 May 2007.
 "First HCC Built Permanent House Ready at Bambooflat", *The Daily Telegrams*, 15 February 2008.
 "Formation of A&N Shipping Corporation Suggested", *The Daily Telegrams*, 21 February 2007.
 "In the Aftermath of the Tsunami", Press Reports from the Andaman and Nicobar Islands, 27 December
 2004 to 2 January 2005.
 "Kolkata Port Invites EOI's for Cruise Tourism", *The Hindu*, 23 August 2006, [http://www.blonnet.com/
 2006/08/23/stories/2006082303330700.htm](http://www.blonnet.com/2006/08/23/stories/2006082303330700.htm), data retrieved
 "Legislative Assembly for A&N Islands: PM Appoints Sub-committee To Finalise Modalities", *The Daily
 Telegrams*, 15 February 2007.
 "Leher Kala, Port of Good Times", *Indian Express*, 1 October 2006.
 "Mangrove Canopy Walk Comes Up at Baratang", *The Daily Telegrams*, 13 April 2007.
 "MoT Offers Capacity Building Training in Travel and Tourism", *The Daily Telegrams*, 26 February 2007.
 "Non-forest Activity in Forest Areas Banned", *The Daily Telegrams*, 19 December 1996.
 Prachi Pinglay (2007) "Andaman and Nicobar Islands - Dangerous Tourism", Survey of the Environment",
The Hindu,
 "Police Arrest Resort Proprietor at Havelock with Drugs", *The Daily Telegrams*, 15 February 2007.
 George Rich, "Survival at Stake: How to Ensure that Jarawas Are Not Wiped Out", *Times of India*,
 14 February 2007.
 Stan Sasser, Wall Street Journal, 5 January 2008, p. W1, [http://online.wsj.com/article/
 SB119948986269168765.html?mod=googlenews_wsj](http://online.wsj.com/article/SB119948986269168765.html?mod=googlenews_wsj), date retrieved April 2008
 Pankaj Sekhsaria, "Andaman & Nicobar: New Vulnerabilities", *The Hindu*, 23 December 2007,
<http://www.hindu.com/mag/2007/12/23/stories/2007122350110400.htm>, data retrieved April 2008
 "Survey by CCI Soon to Promote Craftsmanship in Southern Isles", *The Daily Telegrams*, 27 February
 2007.
 "Tourism Development at Manjeri Urged", *The Daily Telegrams*, 20 March 2007.
 "Vision 2050", *The Light of Andamans*, Vol. 32, No. 9-10, 10 March 2007.



Interview and Questionnaire Schedule for Tourist Accommodation Establishments

(To be administered with tourist resorts, hotels, lodges, guest houses, holiday homes and home-stays in Andaman Islands)

I. BASIC INFORMATION ABOUT THE ESTABLISHMENT:

Background and Disclaimer: This information is being sought as part of primary data collection for the project Building a base for Advocating Sustainable Tourism in the Andamans. The objective of the project is to research the state of tourism development in the Andaman Islands and analyse existing and potential impacts from a sustainable development perspective. The project is a joint effort of six organisations working on tourism and related issues in the Islands (EQUATIONS, INTACH, Kalpavriksh, Society for Andaman and Nicobar Ecology, Tata Institute of Social Sciences and Action-Aid International) and is supported by the Andaman and Nicobar Islands Administration. The project organisations assure the confidentiality of the information provided and would appreciate your cooperation and time in providing it.

Name of the Establishment:

Location and Address:

.....

.....

Telephone, Fax nos:

Email address:

Website address:

Type (resort/hotel/lodge/guest house/holiday home/home-stay)

Category (5*, 4*, 3*, 2*, budget ...)

Year of establishment:

Registered / unregistered

Tax registration no., if any

I. Room details:

Type of rooms	No of rooms	Season	Off season	Comments/Remarks
A/C		Tariff	Tariff	
Suite Double				
Suite Single				
Double				
Single				
Non A/C				
Double				
Single				
Tented accommodation				

2. Facilities/services offered: (please tick the facilities/services offered by your hotel)

- Restaurant
 Bar
 Swimming pool
 Conference Room
 Banquet Hall
 Gymnasium
 Beauty Parlour
 Massage centre
 Arts/Souvenir shop
 Vehicle hire

Any other facilities offered (please list)

Services offered: (please tick the facilities/services offered by your hotel)

- Laundry
 Valet parking
 Tour guides
 Taxi Hire
 Package tour services
 Currency exchange
 Doctor on call
 Baby sitting
 Internet services

Any other services offered (please list)

Accepted modes of payment:

- Cash only
 Cash and Credit Card
 Foreign Currency/Travellers cheques

3. Room services: (please tick which of the facilities below are available in the hotel rooms)

- Air Conditioning Television Telephone Mini Bar
 Shower Bath Tub

4. Measures taken to ensure safety of tourists

- a. Proximity of health services like hospitals, PHC:
- b. First aid for common ailments:
- c. Measures to safeguard against physical mishaps like drowning
 Life guards employed:
- First aid and time within which it could be availed:
- d. Protection against epidemics, e.g. malaria:
- e. Ensuring physical protection of tourists, especially single female tourists:
-
-

5. Recreation facilities (please tick recreation facilities provided by you and price charged (Rs/\$))

- | | | |
|---------------------|--------------------------|-------------|
| Scuba diving | <input type="checkbox"/> | Price |
| Boating | <input type="checkbox"/> | Price |
| Snorkelling | <input type="checkbox"/> | Price |
| Canoeing / Kayaking | <input type="checkbox"/> | Price |
| Fishing | <input type="checkbox"/> | Price |

6. Restaurant details:

- a. What is the cuisine available at the restaurant?
 Indian Local Chinese Continental
 Any other
- b. Do most of the guests eat in the in-house restaurants? (Y/N)
- c. Do your guests have the option of cooking food themselves? (Y/N)
- d. Do you have speciality restaurants? (If yes, detail)

e. Do you serve liquor? (Please tick the types of liquor you serve and of whether imported/local)

Wine	<input type="checkbox"/>	Imported	<input type="checkbox"/>	Local	<input type="checkbox"/>	Remarks:
Beer	<input type="checkbox"/>	Imported	<input type="checkbox"/>	Local	<input type="checkbox"/>	Remarks:
Vodka	<input type="checkbox"/>	Imported	<input type="checkbox"/>	Local	<input type="checkbox"/>	Remarks:
Gin	<input type="checkbox"/>	Imported	<input type="checkbox"/>	Local	<input type="checkbox"/>	Remarks:
Brandy	<input type="checkbox"/>	Imported	<input type="checkbox"/>	Local	<input type="checkbox"/>	Remarks:
Rum	<input type="checkbox"/>	Imported	<input type="checkbox"/>	Local	<input type="checkbox"/>	Remarks:
Champagne	<input type="checkbox"/>	Imported	<input type="checkbox"/>	Local	<input type="checkbox"/>	Remarks:
Whisky	<input type="checkbox"/>	Imported	<input type="checkbox"/>	Local	<input type="checkbox"/>	Remarks:

7. Occupancy Rates (record average occupancy rates in peak and off season for the last five years of the establishment)

Year	Occupancy (peak season) in %	Occupancy (off season) in %	Comments
2006			
2005			
2004			
2003			
2002			
2001			

8. Details of Guests (for one year in percentage terms or absolute numbers – refer register book)

Kind of tourists/year	Season		Off season	
	No of tourists	Length of stay	No of tourists	Length of stay
Domestic				
2006				
2005				
2004				
2003				
2002				
2001				
Foreign				
2006				
2005				
2004				
2003				
2002				
2001				

a. Nationality of foreign tourists (please fill the nationalities of foreign tourists who have stayed in your hotels and the numbers)

Nationality	Number of guests					
	2006	2005	2004	2003	2002	2001
1. Germany						
2. United Kingdom (English)						
3. Italy						
4. France						
5. United States (USA)						
6. Israel						
7. Australia/New Zealand						
8. Africans						
9. Chinese						
10. Japanese						
11. Any other						
12. Any other						

b. Domestic Tourists

State/Region	Number of guests					
	2006	2005	2004	2003	2002	2001
1. West Bengal						
2. Andhra Pradesh						
3. Karnataka						
4. Kerala						
5. Tamil Nadu						
6. Maharashtra						
7. Delhi						
8. Any other						
9. Any other						

c. Purpose of visit of tourists (please indicate in % terms)

Purpose of visit	Domestic (in %)	Foreign (in %)	Remarks
Leisure/Holiday			
Business/Trade/official/conferences			
LTC			
Government			
Any other			
Any other			

d. How are most of your bookings/reservations done:

- Telephone Internet On arrival Through local contacts
- Through tour operators/travel agencies

9. Is the establishment linked with any travel agency/tour operator?

Travel agencies/ Tour Operators linked with:

Percentage of guests received from this link:

Commission paid to the travel agency:

Any problems faced with travel agencies/tour operators:

II. ECONOMIC PARAMETERS

I. Initial investment and growth of the establishment

a. What was the initial investment of the establishment?

.....

b. Was the start-up money personal or did you receive any bank assistance? If yes, give details of loan and bank.

.....

.....

c. Were there any problems receiving support from the banks?

.....

.....

d. Has there been any expansion of the hotel/resort so far? Are you planning to add any rooms/facilities? Detail

.....

.....

2. Taxation/Subsidies/Incentives

a. What are the taxes that the establishment currently pays and at what rates:

- Luxury Tax
- Entertainment Tax
- Bar License
- Any other

b. Do you/did you receive any tax holidays/subsidies from Andaman & Nicobar Islands Administration? Detail

.....

.....

.....

3. Ownership Details and patterns:

a. The facility is under the ownership of?

- Individual (private) Public sector Private company

b. The owner's origin?

- Port Blair Island, specify Mainland, specify

c. Is the owner, the manager of the establishment? If no, where does the manager come from?

.....

.....

d. What was the occupation of the owner before venturing into the establishment/tourism business?

.....

.....

e. Does the group/entrepreneur have a secondary source of income in addition to this establishment?

.....

.....

f. If there is a secondary source, what is the % of income from tourism i.e. running this hotel?

.....

.....

Type	Permanent		Temporary (contract)		Trainee		Place of origin (please tick)				Average monthly salary
	M	F	M	F	M	F	Island	Port Blair	Mainland	Total	
F& B service											
Kitchen											
Office staff											
Last grade											
Others											
Total											

M- Male, F- Female

- a. Do you employ any children?
- b. What are the working hours of your staff?
.....
- c. Do you provide the staff with any training? (like English language skills, catering, house-keeping, any other)
.....
.....
- d. Are you aware if the staff / employees are organised into unions?
.....
.....
- e. Have you employed students from any hospitality institute?
From the Islands
- From the Mainland
- f. Do you face any problems related to staffing for the hotel?
.....

6. Sourcing of materials for the hotel/establishment

- a. Please tick the relevant boxes in the table below indicating the sourcing of materials used in the establishment

Nature of item	Procurement area				
	Within Port Blair	Within Island of location	Other Islands	Mainland	Outside India
Vegetables					
Fruits					
Chicken					
Mutton					
Beef					
Pork					
Fish					
Prawns					
Lobsters					
Crabs					
Squids					
Shrimps					
Other sea food					
Milk					
Butter					
Cheese					
Eggs					
Spices					
Desserts					
For housekeeping					

b. Are there any difficulties you face in sourcing the above material from local market? Tick the relevant option:

- Inadequate supply (quantity) Inferior quality Not competitive pricing
- Poor periodicity/regularity All of above

7. Promotion and Publicity

a. How you advertise/market/promote your establishment?

.....

b. What is the annual expenditure on promotion/advertisement/ of your facility?

.....

- c. The maximum promotion is done through (please tick):
 Tour operators Adverts in magazines/travel books Websites
 Travel marts Word of mouth Any other
- d. How do you position yourself? To attract:
 International Tourists Domestic Tourists Any tourists Business tourists
 Back packers Adventure tourists Eco-tourists Any other

III. ENVIRONMENT PARAMETERS

I. Water

- a. Where is the drinking water used in the establishment sourced from? Please tick.
 Municipal water supply Packaged water Groundwater
 Bore well Tankers Any other
- b. Where is the water used for maintenance sourced from? Please tick
 Municipal water supply Groundwater River/sea Rain water harvesting
 Recycled Any other
- c. What is the approximate daily requirement (litres) of for the establishment?
- d. During shortage in the summer how much water is supplied by tankers?

2. Sewage treatment and solid waste management

- a. Where is the sewage generated released?
 Municipal treatment facility Sea
 Any other outlet
- b. Estimate of sewage generated (litres per day)?
- c. How is solid waste disposed?
 Municipal treatment facility Open dumping Landfills Burning

3. Land

- a. The land on which the facility came up was earlier:
 Farm land Barren Land/Waste land Residential/ houses
 Forest land Beach Any other
- b. Have the CRZ rules relaxation from 500 / 200 to 50 metres made it easier for you to get clearance?
 Yes No Does not apply
- c. The choice of the location for the establishment was made keeping in mind:
 Beach/ forest/ location Proximity to other tourist sites
 Easy availability of land Subsidies on land given by government
 Infrastructure available Any other

4. Power consumption

- a. The total electricity charges in a month range between?
- b. Monthly power consumption is:
- c. Total number of air conditioners in your facility:

5. Construction material used

- a. What is the material used for construction of the accommodation/ other structures?
- Timber Bamboo Sand Tin
- Thatch Silapatti (leaves) Any other
- b. What are the clearances to be obtained pertaining to safety?
-
-
- c. What are the contingency arrangements made in case of earthquake / tsunami?
-
-

IV. INTERACTION WITH LOCAL COMMUNITY

- a. Are local artists involved in entertainment to guests at the hotel or are their craft products sold in your souvenir shops?
-
-
-
- b. Have there been complaints from the locals regarding your establishment with regard to:
- Competing access to water Rights of access to beach / forests
- Disposal of sewage Damage of coastline, coral reefs
- Dwindling fish catch Acquiring of land
- Employment of locals Noise pollution
- Any other:
- c. Any instances of local women / children being harassed, abused by tourists in this tourism stretch? How was this dealt with?
-
-
-

d. Have there been any instances of conflicts between staff of your establishment and tourists? How was this situation dealt with?

.....
.....
.....
.....

V. PROBLEMS FACED BY YOU AS AN OWNER/OPERATOR:

Please spend sometime to explain any problems that you have faced/are facing as a hotel/resort operator in the Islands.

a. During establishment phase (related to red tape, licences, finance, land, water/power permits)

.....
.....
.....
.....

b. During operation phase related to:

● Infrastructure

.....
.....
.....

● Taxation

.....
.....
.....

● Local municipality

.....
.....
.....

● Islands Administration

.....
.....
.....

- Tour Operators/Travel Agencies

.....

.....

- Any other problems:

.....

.....

c. What would be the level of difficulty with permits if you wanted to add rooms or expand?

.....

.....

d. Are there building bylaws or coastal regulation laws that conflict with tourism interest in the islands?

.....

.....

e. Are you aware of any master plans/ policies that the A&NI Administration has come out with for tourism development in the Islands?

.....

.....

VI. YOUR EXPERIENCES/VIEWS ON THE ISSUES BELOW LINKED TO TOURISM DEVELOPMENT ON THE ISLANDS:

Give us your experience views about the following trends in the tourism business in the Islands:

a. Growth in the tourism business (benefits of tourism, impacts of tourism to industry, to local communities)

.....

.....

.....

b. Attitude/approach of the Islands Administration towards tourism industry

.....
.....
.....
.....

c. Ownership of the tourism industry (more players from Island or mainland)

.....
.....
.....
.....

d. Scale of the tourism industry (big players, hotel chains, luxury resorts, role/space for small entrepreneurs)

.....
.....
.....
.....

e. Infrastructure needed for tourism development in the Islands

.....
.....
.....
.....

f. Opening up of 50 sites on the Islands for tourism

.....
.....
.....
.....

VII. ANY OTHER COMMENTS/REMARKS

.....
.....
.....
.....
.....

Date of interview:

INTERVIEWER:

NAME:

SIGNATURE:

INTERVIEWEE:

NAME:

SIGNATURE:

Date of back check:

Back check done by:

NAME:

SIGNATURE:

Respondent:

NAME:

SIGNATURE:

4. What, in your opinion, makes the Islands different from other beach/island destinations?

- | | | | | | |
|--------------------|--------------------------|---|--------------------------|------------|--------------------------|
| Beaches | <input type="checkbox"/> | Cost of holiday | <input type="checkbox"/> | Remoteness | <input type="checkbox"/> |
| Adventure | <input type="checkbox"/> | Untouched/pristine natural beauty | <input type="checkbox"/> | | <input type="checkbox"/> |
| Sparsely populated | <input type="checkbox"/> | Less intensity of buildings/ infrastructure | <input type="checkbox"/> | | <input type="checkbox"/> |
| Any other | | | | | |

5. Within the Andamans, which are the Islands you are planning to visit/have visited?

Port Blair and surrounding Islands

- | | |
|------------|--------------------------|
| Neil | <input type="checkbox"/> |
| Havelock | <input type="checkbox"/> |
| Chidyatapu | <input type="checkbox"/> |
| Wandoor | <input type="checkbox"/> |

Middle Andaman

- | | |
|--------------|--------------------------|
| Smith Island | <input type="checkbox"/> |
| Ross Island | <input type="checkbox"/> |
| Mt Harriet | <input type="checkbox"/> |
| Kalighat | <input type="checkbox"/> |
| Diglipur | <input type="checkbox"/> |

Middle Andaman

- | | |
|---------------|--------------------------|
| Interview | <input type="checkbox"/> |
| Avis | <input type="checkbox"/> |
| Mayabunder | <input type="checkbox"/> |
| Long Island | <input type="checkbox"/> |
| Barren Island | <input type="checkbox"/> |
| Baratang | <input type="checkbox"/> |
| Kadamtala | <input type="checkbox"/> |
| Rangat | <input type="checkbox"/> |

South Andaman

- | | |
|-------------|--------------------------|
| Redskin | <input type="checkbox"/> |
| Jolly Buoy | <input type="checkbox"/> |
| Rutland | <input type="checkbox"/> |
| Cinque | <input type="checkbox"/> |
| Passage | <input type="checkbox"/> |
| Ross Island | <input type="checkbox"/> |

6. Within Port Blair, which are the tourist attractions you will visit / have visited?

- | | | | |
|------------------------------|--------------------------|---------------------|--------------------------|
| Aberdeen Bazaar | <input type="checkbox"/> | Fisheries museum | <input type="checkbox"/> |
| Andaman Water Sports Complex | <input type="checkbox"/> | Forest museum | <input type="checkbox"/> |
| Anthropological museum | <input type="checkbox"/> | Government emporium | <input type="checkbox"/> |
| Cellular Jail | <input type="checkbox"/> | Mini Zoo | <input type="checkbox"/> |
| Chatham saw mill | <input type="checkbox"/> | Samudrika museum | <input type="checkbox"/> |
| Corbyn's Cove | <input type="checkbox"/> | Science Centre | <input type="checkbox"/> |
| Any Others | | | |

IV. CONNECTIVITY TO AND FROM THE ANDAMAN ISLANDS:

I. Air Travel

a. Did you fly? If yes, indicate which airline you used to get to the Islands.

- | | | | | | | | | | |
|------------|--------------------------|-----------------|--------------------------|-------------|--------------------------|----------|--------------------------|------------|--------------------------|
| Air Deccan | <input type="checkbox"/> | Indian Airlines | <input type="checkbox"/> | Jet Airways | <input type="checkbox"/> | Spicejet | <input type="checkbox"/> | Kingfisher | <input type="checkbox"/> |
|------------|--------------------------|-----------------|--------------------------|-------------|--------------------------|----------|--------------------------|------------|--------------------------|

b. Which class did you travel? Economy Business

- c. Did you have trouble getting tickets? Yes No
- d. Did you find the timings of the flight convenient? Yes No
- e. How would you like the air connectivity to the Islands to improve?
- More airlines More daily flights From/to more cities in India
- To more Islands From/to direct international destinations

2. Ship Travel

- a. Did you arrive by ship to the Islands? If yes, name the ship.
- b. Which class did you travel? first class second class bunker Any other
- c. How did you get the tickets?
- d. Did you have trouble getting tickets? Yes No
- e. Did you find the timings of the ships convenient? Yes No
- f. Did you find the amenities on the ship convenient? Yes No
- g. How would you like the ship connectivity from mainland/other countries India to the Islands to improve?
- More ships Better timings Better facilities More daily frequency
- Faster Larger capacity of people
- h. Have you travelled by ship between the Islands in the Andamans? Yes No

3. Travel by Road in the Islands

- a. Have you travelled by Road between islands? Yes No Between &
- b. Have you been on Andaman Trunk Road (ATR)? Yes No
- c. Have you had any interaction with the tribal/indigenous communities? Yes No
- Where:
- d. Were you told/made to believe that you will interact/ view tribal groups while travelling on this Road?
- Yes No
- e. Did you ever hire a taxi for your travel between the Islands? Yes No
- f. The taxi was hired from to
- g. How much was paid for the taxi
-

V. ACCOMMODATION AND FOOD ON THE ISLANDS

I. Details of Accommodation

a. Please indicate where you stayed at each of your stops on the Islands.

SI No	Name of place/Island	Name of Hotel/Lodge	Nature of booking (please tick)	
			Pre-reserved	On arrival

b. What do you generally look for in your place of stay?

Cleanliness Good view Centrally located

Recommended by friends/ travel writing Safety of location

Affordable (indicate acceptable range per day)

c. How did you hear of/find your place of stay on the Island?

Lonely Planet Internet Travel Agent

Word of mouth Indicate who:

Tourist Information Centre Any other

d. How would you categorise your place of stay?

Eco-hotel Budget hotel High-end

Shack Home-stay/ PG Tented accommodation

Budget hotel with good facilities Value for money

Accommodation with good view and great location

e. Were/Are you satisfied with your place of stay as per the following parameters?

Room facilities: Y N Tariff: Y N

Location: Y N Recreation/adventure options: Y N

Safety: Y N Package tours/guide services: Y N

f. Are you willing to pay more for staying at the same place? Yes No

2. Details of Food and Beverages consumed on the Island

a. Where did you usually dine?

Hotel/Resort in-house restaurant

Outside restaurants Name:

Anyplace nearby Name:

b. Which of the cuisines below were easily available on the Islands?

Indian Continental Chinese Local

c. Did you get food of your choice? Vegetarian: Yes No

Non vegetarian: Yes No

d. Which were the cuisines you sought that were not available on the Island? Specify.

e. Did you get liquor in the hotel? Yes No Not in the hotel but was available in the island

f. Tick the options below where you think restaurants on the Island need to improve:

hygiene ambience service

variety pricing of food

VI. IMAGE OF THE ISLANDS AND TOURISM PROMOTION ON THE ISLANDS

1. Have you seen any advertisements or campaigns of visiting the Andamans? If yes, then tick from the options below of where you saw these:

Magazines Newspapers Television Internet

Any other:

2. According to you, are the Andamans adequately publicised as a tourist destination?

Yes No

3. What are the two most famous beaches you heard about from tourism information?

.....

4. Was there any information you specifically sought as a tourist to the Islands that you did not receive? Please detail.

.....

.....

.....

VII. ENVIRONMENT IN AND AROUND THE ISLANDS

1. a. What is the ecological significance of these Islands? Please state:

.....

Don't know

b. Have you seen any coral reefs on the Islands? Yes No

c. Have you seen any turtles nesting on the beaches? Yes No

d. Have you witnessed sand mining in the beaches? Yes No

e. Have you collected any pieces of shells or coral reefs from the beaches? Yes No

f. Did you find the beaches too littered/full of rubbish? Yes No

If yes, which places?

What needs to be done?

g. Did you used packaged water/bottled water during your stay on the Island? Yes No

h. As a conscientious traveller, please tick the options below which you would agree to:

Not to litter the beach

Stay in accommodation with naturally made construction material

Save energy by avoiding use of electronic gadgets

Ensure purchase of food/souvenirs from local market

In general contribute to those activities that improve local community benefit from your visit

VIII. INTERACTION WITH LOCALS WHO LIVE ON THE ISLANDS

1. Have you heard or read of tourist clashes/fights with locals? Yes No

If yes, specify details

2. a. Do you find nudity among tourists on beaches you have visited? Yes No

b. Have you noticed locals being annoyed by this?

3. Have you or any of your friends been: Yes No Have read/heard about it

attacked

molested

eve teased

4. Do you feel your travel has given you a sense of the people and culture of the Andamans?

Yes No

If yes specify how:

IX. OVERALL QUESTIONS ON YOUR VISIT AND SATISFACTION INDEX:

1. What did you spend the most time on during your holiday
 Relaxing on the beach Swimming Sight Seeing
 Shopping Any other
2. What have you spent the most money on for your travel to Andamans? Rank (on a scale of 1-6) in order from highest amount spent to lowest amount spent.
 Travel _____ Accommodation _____
 Food _____ Shopping _____
 Adventure activities _____ Sight-seeing _____
 Any other _____
3. Have you purchased any of the following from the Islands and if yes, from whom?
 Souvenirs What kind? Specify
 Handicrafts Adventure Gear
 Clothes Packaged Food
 Shells Coral
4. Do you feel that places in the Islands are safe for tourists? Yes No
 Generally yes, but prefer to be in a group
5. Are the islands safe for women? Yes No
6. Rate the following items below (on a scale of 1-5: 1 being lowest, 5 being highest) based on your experience of the Islands
 Natural Beauty Relaxation Accommodation Food
 Infrastructure support on the Islands Connectivity to the Islands
 Local Hospitality Recreation
7. What activity disappointed you in these islands?
 Diving specify
 Snorkelling specify
 Scuba diving specify
 Souvenir shopping specify
8. If you came as part of a tour, rate your tour operators on the following parameters: (tick)

Information shared on place	Very good		Good		Average		Poor		Very Poor
Responsiveness to your needs	Very good		Good		Average		Poor		Very Poor
Cost / Value for money	Very good		Good		Average		Poor		Very Poor
Places you were shown/taken	Very good		Good		Average		Poor		Very Poor
Quality of facilities provided	Very good		Good		Average		Poor		Very Poor
Overall organisation of tour	Very good		Good		Average		Poor		Very Poor

9. How would you improve your experience in the island? (Tick where applicable, elaborate if needed)

- More information on marine life, coastal ecology needed:
- More films educational experience could be built in:
- More relaxation facilities: hot water; deck chairs, hammock
- Accommodation facilities could be improved
- More value for money
- More safety measures in case of natural disasters
- More water sport activities, more regularity of these activities

10. Any specific experiences you would like to highlight/ share:

.....

.....

.....

Date of interview:

INTERVIEWER:

NAME:

SIGNATURE:

INTERVIEWEE:

NAME:

SIGNATURE:

This interview was conducted as part of a project Building a base for Advocating Sustainable Tourism in the Andamans. The project is a joint effort of five organisations working on tourism and related issues in the Islands (EQUATIONS, Kalpavriksh, Society for Andaman and Nicobar Ecology, Tata Institute of Social Sciences and Action-Aid International) and is supported by the Andaman and Nicobar Islands Administration. The project organisations assure the confidentiality of the information provided and appreciate your cooperation and time in providing it.

If you wish to, you could contact us at:

Project office	Permanent office in Bangalore
G-15, Block VI Island Niwas Delanipur Port Blair – 744102 Tel: 9434288425	EQUATIONS # 415, 2 C Cross, 4 th main OMBR Layout, Banaswadi Bangalore-560 043 Ph: 080-25457607/25457659 Fax: 080-25457665 Email: info@equitabletourism.org Website: www.equitabletourism.org

Annexure

3

List of Government Officials Interviewed in Port Blair

Date	Name of Official	Place of Interview
17 July 2007	Smt. SKP Sodhi, Special Secretary – cum – Director, Departments of Social Welfare and Tribal Welfare	Directorate of Social Welfare
18 July 2007	Shri. C Uday Kumar, General Manager, ANIIDCO	ANIIDCO
	Shri. Mohammed Parvez, Deputy General Manager, ANIIDCO	ANIIDCO
	Shri. N. Ravichandran, Officer In-Charge (Operations), Directorate of Civil Aviation	Directorate of Civil Aviation
	Shri. Nishit Saxena, Deputy Conservator of Forests, Department of Environment and Forests	Van Sadan, Haddoo
	Dr. Alok Saxena, IFS, Conservator of Forests (Wildlife), Department of Environment and Forests	Van Sadan, Haddoo
19 July 2007	Shri. Vinod Kumar, Deputy Director, IP&T	IP&T
23 July 2007	Shri. D. R. Tamta, Special Secretary – cum – Director, IP&T	IP&T
	Shri. Sher Singh, Chairman, Port Blair Municipal Corporation	Port Blair Municipal Corporation
	Commander Rajendra Kumar, Director, Shipping Services	Directorate of Shipping Services
25 July 2007	Shri. R Chidambaram, Adhyaksh, Zilla Parishad, Andaman and Nicobar Islands and Chairman, District Planning Committee	Zilla Parishad
26 July 2007	Shri. Gyan Badgaiyan, Secretary (Planning and Finance)	Secretariat
15 October 2007	Shri. B. Saigal, Deputy Superintendent of Police (Immigration)	DSP / CID Office
26 October 2007	Lt. Gen. (Retd.) Bhopinder Singh, PVSM AVSM, Lt. Governor	Raj Niwas

Annexure

4

Focus Group Discussions held in Port Blair

1. Consultation with Andaman and Nicobar Chamber of Commerce
27th October 2007, 11:00 a.m. – 1:00 p.m.
Chamber of Commerce building, Port Blair

Members present:

- ♦ Mohammad Jadwet, President, Andaman Chamber of Commerce
- ♦ G Bhaskar, General Secretary
- ♦ G Dinakaran, Vice President
- ♦ Murlidharan, Member (Fortune Bay Island Resort)
- ♦ N C Ghosh, Executive Secretary
- ♦ Girish Arora, Hotel Committee of ACCI
- ♦ M Vinod, Committee Member
- ♦ Sanjay Chowdhary, President, Hotel Association
- ♦ Deepak Govind (Barefoot Group), Invitee

**Consultation on Tourism issues in Andamans at Port Blair, Monday,
29th October 2007**

1. Abala Sammadar, Panchayat Samiti Member, Havelock
2. Abraham Toppo, Panchayat Samiti Member, Brindavan
3. Appalanarasimhan, Pradhan, Guptapara
4. Arati Das, Zilla Parishad Member, Neil Island
5. Ashim Mirbahar, Pradhan, Netaji Nagar
6. Bernadet Soreng, Zilla Parishad Member, Baratang
7. Budhwa Kachhap, Pradhan, Urmilapur, Bakultala
8. C. Palaniswamy, Pradhan, Hut Bay
9. Ciciliya Kujur, Zilla Parishad Member, Ferrargunj
10. Debashish Halder, Pradhan, Kaushalya Nagar
11. Deepa Baul, Pradhan, Ramakrishnapur, Hut Bay
12. Deepali Das, Ex-Zilla Parishad Member, Havelock
13. Gangavara Laxmi, Panchayat Samiti Member, Mayabunder
14. I. Ravi, Panchayat Samiti Member, Guptapara
15. Indrajit M., Pradhan, Chouldhari
16. K. Govindam, Panchayat Samiti Member, Chouldhari
17. Kajal Halder, Pramukh, Rangat

18. Khokan Mondal, Zilla Parishad Member, Havelock
19. Mohammad Shafiq, Pradhan, Mithakhari
20. N. M. Basheer, Panchayat Samiti Member, Ograbruj
21. Nabakumar Adhikari, Sarpanch, Madhupur
22. Nagen Halder, Pramukh, Diglipur
23. Rajesh Pal, Pradhan, Garacharma
24. RK Sharma, Zilla Parishad Member, Urmilapur, Bakultala
25. Silbanus Kero, Panchayat Samiti Member, Urmilapur
26. Silmanti Kujur, Up-Pramukh, Mayabunder
27. Sudhir Biswas, Zilla Parishad Member, Hut Bay
28. Sukurmani, Zilla Parishad Member, Long Island
29. Swapna Bala, Zilla Parishad Member, Kadamtala

Annexure

5

Finalists of Inter-school and Inter-college Essay Writing and Debate Competition

PARTICIPANT	SCHOOL	Position
Lokhi Rani Das (XII – Arts)	Government Senior Secondary School, Manglutan	Second prize
Ritu Shah (XII G)	Government Model Senior Secondary School, Port Blair	
Farheen Aslam (IX)	Ummat Public Senior Secondary School, Port Blair	Second prize
Trishir Coomar (XI)	Kendriva Vidyalay I, Port Blair	
Dhanapakkiyam (XI A)	Government Senior Secondary School, Bathu Basti, Port Blair	
Kakolee Mondal (XII C)	Government Senior Secondary School, Rangat	
Jothirmoy Biswas (XII – BM)	Government Senior Secondary School, Havelock	First prize
COLLEGE		
Agneleena Saint Romaine	Jawaharlal Nehru Rashtriya Mahavidyalaya, Port Blair	First prize
J Ramakrishna	Jawaharlal Nehru Rashtriya Mahavidyalaya, Port Blair	
Jita Geroge	Dr B.R. Ambedkar Polytechnic, Port Blair	Second prize
Biplab Sarkar	Dr B.R. Ambedkar Polytechnic, Port Blair	
A Sangeetha	Tagore Government College of Education, Port Blair	
T Geetha	Dr S Radhakrishnan District Institute of Education & Training, Port Blair	
Mary Arbuda	Mahatma Gandhi Rashtriya Mahavidyalay, Mayabunder	

Annexure

6

UNWTO's Standard International Classification of Tourism Activities (SICTA)

The SICTA is an economic classification of tourist activities seen from the supply point of view and based on the ISIC Rev. 3 and CPC. It breaks down those fourth-level ISIC (International Standard Industrial Classification) classes which are linked to tourist activities.

Tabulation fields description

Field 1 Division – ISIC tabulation category and division

Field 2 Group - ISIC Group

Field 3 Class - ISIC Class

Field 4 Subclass - SICTA-defined class category

Field 5 T/P - SICTA tourism designation “T” for subclasses dedicated to tourism; “P” for part involvement in tourism

Field 6 Name - name of category

1	2	3	4	5	6
Division	Group	Class Main-sub		P/T	Name
A					AGRICULTURE
B					FISHING
C					MINING AND QUARRYING
D					MANUFACTURING
E					ELECTRICITY, GAS AND WATER SUPPLY
F					CONSTRUCTION
45					CONSTRUCTION
		4500-1		T	COMMERCIAL FACILITIES-HOTELS, RETAIL, ETC.
		4500-2		T	RECREATIONAL FACILITIES-SKI AREAS, GOLF COURSES
		4500-3		T	CIVIL WORKS-TRANSPORTATION FACILITIES, TERMINALS, DAMS
		4500-4		T	RESORT RESIDENCES-SECOND HOMES, WEEK-END HOMES
G					WHOLESALE AND RETAIL
50					SALE MAINTENANCE OF MOTOR VEHICLES AND FUELS
	501	5010		P	MOTOR VEHICLES SALES

1	2	3	4	5	6
Division	Group	Class Main-sub		P/T	Name
	502	5020		P	MOTOR VEHICLE MAINTENANCE AND REPAIR
	503	5030		P	SALE OF MOTOR VEHICLE PARTS AND ACCESORIES
	504	5040		P	SALE, MAINTENANCE AND REPAIR OF MOTORCYCLES
	505	5050		P	RETAIL SALE OF MOTOR VEHICLES FUELS
	521				NON-SPECIALIZED RETAIL TRADE
		5211		P	RETAIL FOOD SALES
		5219		P	OTHER NON-SPECIALIZED RETAIL TRADE
	522				RETAIL SPECIALIZED FOOD SALES
		5220		P	RETAIL FOOD SALES
	523				OTHER RETAIL, SPECIALIZED
		5231		P	RETAIL SALES, PHARMACEUTICALS
		5232		P	RETAIL SALE OF TEXTILES, CLOTHING, FOOTWARE AND LEATHER GOODS
		5232-1		P	RETAIL SALE OF TRAVEL ACCESORIES, TEXTILES
		5232-2		P	RETAIL SALE OF TRAVEL ACCESORIES, CLOTHING
		5232-3		P	RETAIL SALE OF TRAVEL ACCESORIES, FOOTWARE AND LEATHER GOODS
		5232-4		T	RETAIL SALE OF TRAVEL ACCESORIES, LUGGAGE
		5232-5		T	OTHER RETAIL SALE OF TRAVEL ACCESORIES IN SPECIALIZED STORES
		5239		P	OTHER RETAIL SALES IN SPECIALIZED STORES
		5239-1		T	RETAIL SALES, SKIN-DIVING AND SCUBA EQUIPMENT
		5239-2		T	RETAIL SALES, SKY EQUIPMENT
		5239-3		T	RETAIL SALES, CAMPING AND HIKING EQUIPMENT
		5239-4		P	RETAIL SALES, HUNTING AND FISHING EQUIPMENT
		5239-5		P	PHOTOGRAPHIC SALES AND SERVICES
		5239-6		T	RETAIL SALES, GIFT AND SOUVENIR SHOPS
		5239-7		P	RETAIL SALES OF OTHER TRANSPORT VEHICLES
	524	5240		P	RETAIL SALES OF SECOND-HAND GOODS
		5240-1		P	RETAIL SALES, ANTIQUES
	525				RETAIL SALES NOT IN SHOPS
		5252		P	RETAIL SALES IN STALLS AND MARKETS
H					HOTELS AND RESTAURANTS
55					HOTELS AND RESTAURANTS
	551	5510		T	HOTELS, CAMPING SITES AND OTHER COMMERCIAL ACCOMMODATIONS

Continued

I	2	3	4	5	6
Division	Group	Class Main-sub		P/T	Name
		5510-1		T	HOTELS AND MOTELS WITH RESTAURANTS
		5510-2		T	HOTELS AND MOTELS WITHOUT RESTAURANTS
		5510-3		T	HOSTELS AND REFUGES
		5510-4		T	CAMPING SITES, INCLUDING CARAVAN SITES
		5510-5		T	HEALTH-ORIENTED ACCOMMODATION
		5510-9		T	OTHER PROVISIONS OF LODGING, N.E.C.
	552	5520		P	RESTAURANTS, BARS AND CANTEENS
		5520-1		P	BARS AND OTHER DRINKING PLACES
		5520-2		P	FULL-SERVICE RESTAURANTS
		5520-3		P	FAST FOOD RESTAURANTS AND CAFETERIAS
		5520-4		P	INSTITUTIONAL FOOD SERVICES, CATERERS
		5520-5		P	FOOD KIOSKS, VENDORS, REFRESHMENT STANDS
		5520-6		P	NIGHT CLUBS AND DINNER THEATERS
I					TRANSPORT, STORAGE AND COMMUNICATIONS
60					LAND TRANSPORT, TRANSPORT VIA PIPELINES
	601	6010		P	TRANSPORT VIA RAILWAYS
		6010-1		T	INTERURBAN RAIL PSGR SERVICES
		6010-2		T	SPECIAL RAIL TOUR SERVICES
	602				OTHER LAND TRANSPORT
		6021		P	OTHER SCHEDULED PSGR LAND SERVICE
		6021-1		T	SCHEDULED INTERURBAN BUSES
		6021-2		T	LONG DISTANCE TOUR BUSES
		6021-3		P	SCHEDULED LOCAL AND METROPOLITAN TRANSIT SERVICES
		6021-4		P	SPECIALIZED SCHEDULED VEHICLES
		6022		P	OTHER NON-SCHEDULED PSGR LAND TRANSPORT
		6022-1		P	TAXIS
		6022-2		P	CHAUFFEURED VEHICLES
		6022-3		T	LOCAL TOUR VEHICLES
		6022-4		P	CHARTER BUSES, EXCURSIONS (SAME-DAY VISITS)
		6022-5		P	MAN OR ANIMAL-DRAWN VEHICLES
61					WATER TRANSPORT
	611	6110		P	SEA AND COASTAL WATER TRANSPORT
		6110-1		T	CRUISE SHIPS
		6110-2		T	SHIP RENTAL W/CREW

I	2	3	4	5	6
Division	Group	Class Main-sub		P/T	Name
	612	6120		P	INLAND WATER TRANSPORT
		6120-1		T	INLAND WATER PSGR TRANSPORT W/ACCOMMODATION
		6120-2		T	INLAND WATER LOCAL TOURS
		6120-3		P	INLAND WATER TAXIS, FERRIES
62					AIR TRANSPORT
	621	6210		T	SCHEDULED AIR TRANSPORT
		6210-1		T	SCHEDULED AIR PSGR TRANSPORT
	622	6220		T	NON-SCHEDULED AIR TRANSPORT
		6220-1		T	NON.SCHEDULED AIR PSGR TRANSPORT
		622-2		T	AIRCRAFT RENTAL CREW
63					SUPPORTING AND AUXILIARY TRANSPORT ACTIVITIES
		6303		P	OTHER SUPPORTING TRANSPORT ACTIVITIES
		6303-1		T	OTHER SUPPORTING LAND TRANSPORT ACTIVITIES
		6303-2		T	OTHER SUPPORTING WATER TRANSPORT ACTIVITIES
		6303-3		T	OTHER SUPPORTING AIR TRANSPORT ACTIVITIES
		6304		T	TRAVEL AGENTS, TOUR OPERATORS AND GUIDES
		6304-1		T	TRAVEL AGENTS
		6304-2		T	TOUR OPERATORS, PACKAGERS AND WHOLESALERS
		6304-3		T	TICKET OFFICES NOT A PART OF TRANSPORT COMPANIES
		6304-4		T	GUIDES
J					FINANCIAL INTERMEDATION
65					FINANCIAL INTERMEDATION NOT INSURANCE/PENSIONS
	651				MONETARY INTERMEDIATION
		6519		P	OTHER MONETARY INTERMEDIATION
		6519-1		P	EXCHANGE OF CURRENCIES
	659				OTHER FINANCIAL INTERMEDIATION
		6592		P	OTHER CREDIT GRANTING
	660				INSURANCE AND PENSION FUNDING
		6601		P	LIFE INSURANCE
		6601-1		T	TRAVEL INSURANCE
		6603		P	NON-LIFE INSURANCE
K					REAL ESTATE, RENTING AND BUSINESS ACTIVITIES
70					REAL ESTATE ACTIVITIES
	701				REAL ESTATE ACTIVITIES WITH OWN OR LEASED PROPERTIES

Continued

1	2	3	4	5	6
Division	Group	Class Main-sub		P/T	Name
		7010		P	BUYING OR SELLING OF OWN OR LEASED PROPERTY
		7010-1		T	BUYING OR SELLING OF OWN OR LEASED TOURISM PROPERTY
	702				REAL ESTATE ACTIVITIES ON A FEE OR CONTRACT BASIS
		7020		P	LETTING OF OWN OR LEASED PROPERTY
		7020-1		T	LETTING OF OWN OR LEASED TOURISM PROPERTY
	703				REAL ESTATE AGENCIES
		7030		P	REAL ESTATE AGENCIES
		7030-1		T	REAL ESTATE AGENCIES FOR TOURISM PROPERTIES
		7030-2		T	TOURISM PROPERTY MANAGEMENT
71					RENTING OF MACHINERY AND EQUIPMENT W/O OPERATORS
	711				RENTING OF TRANSPORT EQUIPMENT
		7111		P	RENTING OF LAND TRANSPORT EQUIPMENT
		7111-1		T	AUTOMOBILE RENTAL
		7111-2		T	MOTORCYCLE RENTAL
		711-3		T	RECREATIONAL VEHICLE, CAMPER CARAVAN REAL
		7113		P	RENTING OF AIR TRANSPORT EQUIPMENT
		7113-1		T	RENTING OF AIR TRANSPORT EQUIPMENT FOR PERSONAL USE
	713	7130		P	RENTING OF PERSONAL AND HOUSEHOLD GOODS
		7130-1		T	RENTAL OF WATER CRAFT AND RELATED FACILITIES
		7130-2		P	RENTAL OF HORSES
		7130-3		T	RENTAL OF BICYCLES
		7130-4		T	RENTAL OF SKI EQUIPMENT
		7130-5		T	RENTAL OF TOURIST-RELATED GOODS, NOT ELSEWHERE CLASSIFIED
73					RESEARCH AND DEVELOPMENT
	732	7320		P	R&D IN SOCIAL SCIENCES
		7320-1		T	TOURISM RESEARCH
74					OTHER BUSINESS ACTIVITIES
	741				LEGAL, ACCOUNTING, BOOK-KEEPING & AUDITING, TAX CONSULTANCY, MARKET RESEARCH POLLING, BUSINESS & MANAGEMENT CONSULTANCY
		7413		P	MARKET RESEARCH AND POLLING
		7413-1		T	TOURISM MARKET RESEARCH
		7414		P	BUSINESS AND MANAGEMENT CONSULTANCY ACTIVITIES
		7414-1		T	TOURISM BUSINESS AND MANAGEMENT CONSULTANCY SERVICES

I	2	3	4	5	6
Division	Group	Class Main-sub		P/T	Name
	742				ARCHITECTURAL, ENGRING & OTH TECHNICAL ACTIVITIES
		7421		P	ARCHITECTURE AND ENGINEERING
		7421-1		T	TOURISM ARCHITECTURE AND ENGINEERING
	743	7430		P	ADVERTISING
		7430-1		T	TOURISM ADVERTISING
	749				BUSINESS ACTIVITIES, N.E.C.
		7494		P	PHOTOGRAPHIC ACTIVITIES
		7494-1		T	PASSPORT PHOTOGRAPHERS
		7499		P	OTHER BUSINESS ACTIVITIES, N.E.C.
		7499		P	TRANSLATION SERVICES
L					PUBLIC ADMINISTRATION
75					PUBLIC ADMINISTRATION & DEFENCE; COMPULSORY SOCIAL SECURITY
	751				ADMINISTRATION OF THE STATE
		7511		P	GENERAL PUBLIC PUBLIC [a1]SERVICE ACTIVITIES
		7511-1		P	CUSTOMS ADMINISTRATION
		7511-2		P	TAXATION, FEES, FINES, TARIFFS
		7511-3		T	INFORMATION BUREAUS
		7512		P	ACTIVITIES OF SERVICE AGENCIES
		7512-1		P	PROVISION OF TRANSPORT-RELATED FUNCTIONS
		7512-2		P	PROVISION OF CULTURAL, RECREATIONAL SERVICES
		7513		P	BUSINESS REGULATION
		7513-1		T	TOURISM ADMINISTRATION
		7513-2		T	REGULATION OF PRIVATE TRANSPORT ACTIVITIES
		7513-3		P	FISHING, HUNTING REGULATION
		7513-4		P	REGIONAL AND ECONOMIC DEVELOPMENT ADMINISTRATION
		7513-5		P	PROVISION OF TRANSPORT INFRASTRUCTURE
	752				PROVISION OF SERVICES TO THE COMMUNITY
		7521		P	FOREIGN AFFAIRS
		7521-1		T	VISA ISSUANCE, CONSULAR AFFAIS
		7523		P	PUBLIC ORDER AND SAFETY
		7523-1		T	SPECIAL POLICE, BORDER GUARDS, AIRPORT SECURITY
M					EDUCATION
80					EDUCATION

Continued

1	2	3	4	5	6
Division	Group	Class Main-sub		P/T	Name
	803	8030		P	HIGHER EDUCATION
		8030-1		T	HOTEL SCHOOLS
		8030-2		T	TOURISM EDUCATION PROGRAMMES
		8030-3		T	RECREATION AND PARK SCHOOLS
		8030-4		T	TOURISM-RELATED EDUCATION, N.E.C.
	809	8090		P	ADULT EDUCATION
		8090-1		P	DRIVING INSTRUCTION
		8090-2		T	SKI INSTRUCTION
		8090-3		P	SWIMMING, SCUBA INSTRUCTION
		8090-4		P	FLYING INSTRUCTION
		8090-5		P	BOATING INSTRUCTION
		8090-9		T	TOURIST INSTRUCTION, N.E.C.
N					HEALTH AND SOCIAL SERVICES
O					OTHER COMMUNITY, SOCIAL AND PERSONAL SERVICES
91					ACTIVITIES OF MEMBERSHIP ORGANIZATIONS N.E.C.
	911				ACTIVITIES OF BUSINESS, EMPLOYERS, AND PROFESSIONAL ORGANIZATIONS
		9111		P	ACTIVITIES OF BUSINESS AND EMPLOYER ORGS
		9111-1		T	VISITOR AND CONVENTION BUREAUS
		9112		P	ACTIVITIES OF PROFESSIONAL ORGANIZATIONS
		9112-1		T	ACTIVITIES OF TOURISM-RELATED PROFESSIONAL ORGANIZATIONS
	912	9120		P	ACTIVITIES OF TRADE UNIONS
		9120-1		T	ACTIVITIES OF TOURISM INDUSTRY-RELATED TRADE UNIONS
	919				ACTIVITIES OF OTHER MEMBERSHIP ORGANIZATIONS
		9199		P	ACTIVITIES OF OTHER MEMBERSHIP ORGANIZATIONS
		9199-1		T	TRAVEL CLUBS
		9199-2		T	TRAVELERS AID SOCIETIES
92					RECREATIONAL, CULTURAL AND SPORTING ACTIVITIES
	921				MOTION PICTURES, RADIO, TV AND OTHER ENTERTAINMENT
		9212		P	MOTION PICTURE PROJECTION
		9213		P	RADIO AND TELEVISION ACTIVITIES
		9214		P	DRAMATIC ARTS, MUSIC AND OTHER ART ACTIVITIES
		9215		P	OPERATION OF TICKET AGENCIES

I	2	3	4	5	6
Division	Group	Class Main-sub		P/T	Name
		9219		P	OTHER ENTERTAINMENT ACTIVITIES, N.E.C.
		9219-1		P	AMUSEMENT PARKS
		9219-2		P	OTHER ENTERTAINMENT ACTIVITIES, N.E.C.
	923				LIBRARIES, ARCHIVES, MUSEUMS AND OTHER CULTURAL ACTIVITIES
		9231		P	LIBRARY AND ARCHIVE ACTIVITIES
		9232		P	MUSEUM ACTIVITIES AND PRESERVATION OF HISTORIC SITES AND BUILDINGS
		9232-1		P	MUSEUMS OF ALL KINDS AND SUBJECTS
		9232-2		P	HISTORICAL SITES AND BUILDINGS
		9233		P	BOTANICAL AND ZOOLOGICAL GARDENS AND NATURE RESERVE ACTIVITIES
		9233-1		P	BOTANICAL AND ZOOLOGICAL GARDENS
		9233-2		P	NATURE AND WILDLIFE PRESERVES
	924				SPORTING AND OTHER RECREATIONAL ACTIVITIES
		9241		P	SPORTING ACTIVITIES
		9241-1		P	PHYSICAL FITNESS FACILITIES
		9241-2		P	OPERATION OF SPORTING FACILITIES
		9241-3		P	ACTIVITIES RELATED TO RECREATIONAL HUNTING
		9241-4		P	OTHER SPORTING ACTIVITIES, N.E.C.
		9249		P	OTHER RECREATIONAL ACTIVITIES
		9249-1		P	OPERATIONS OF RECREATION PARKS AND BEACHES
		9249-2		P	ACTIVITIES RELATED TO RECREATIONAL FISHING
		9249-3		P	GAMBLING AND BETTING OPERATIONS, CASINOS
		9249-4		P	OPERATION OF RECREATIONAL FAIRS AND SHOWS
		9249-5		P	OPERATION OF SKI LIFTS
93	930				OTHER SERVICE ACTIVITIES
		9309		P	OTHER SERVICE ACTIVITIES, N.E.C.
		9309-1		P	PORTERS, VALET PARKING SERVICES, DOORMEN
P					PRIVATE HOUSEHOLDS WITH EMPLOYED PERSONS
Q					EXTRA-TERRITORIAL ORGANIZATIONS AND BODIES
99	990	9900		P	EXTRA-TERRITORIAL ORGANIZATIONS AND BODIES
		9901-1		T	INTERNATIONAL TOURISM BODIES

Second Schedule of the Andaman & Nicobar Islands (Panchayats) Regulation, 1994

Matters in respect of which Gram Panchayat will have the authority so as to enable it to function as an institution of self government in respect of the preparation of plans for economic and social justice.

1. In the sphere of sanitation and health –
 - a. supply of water for domestic use and for cattle;
 - b. construction and cleaning of public roads, drains, ponds, tanks and wells and other than tanks, wells used for irrigation purpose and other public places;
 - c. sanitation, conservancy, the prevention and abatement of nuisance;
 - d. preservation and improvement of public health, establishing and maintaining public hospitals and dispensaries providing public relief;
 - e. regulation by licensing or otherwise of tea, coffee and milk shops;
 - f. provision, maintenance and regulation of burning;
 - g. ensuring systematic disposal of carcasses, provision of definite places for the purpose and other means for the disposal of unclaimed corpses and carcasses;
 - h. construction and maintenance of public latrines;
 - i. taking of measures to prevent the outbreak, spread and occurrence of any infectious disease;
 - j. reclaiming of unhealthy localities;
 - k. removal of rubbish heaps, jungle growth, the filling in of disused wells in sanitary ponds, pools, ditches, pits or hollows, the prevention of water logging in irrigated areas and other improvements of sanitary conditions;
 - l. maternity and child welfare;
 - m. the encouragement of human and animal vaccination;
 - n. the provision and maintenance of compost pits;
 - o. regulating the keeping of cattle and taking necessary steps against stray cattle and dogs;
 - p. regulating, checking and abating of offensive of dangerous trade and practices;
 - q. watering public streets and places;
 - r. cleaning public streets, places and sewers, and all spaces not being private property, which are open to the enjoyment of the public, whether such places

- are vested in the panchayat or not; removing the noxious vegetation and abating all public nuisances;
- s. extinguishing fires, and protecting life and property when fires occur;
 - t. removing obstruction and projections in public streets or places and in spaces not being private property, which are open to the enjoyment of the public, whether such spaces are vested in the panchayat or belong to the government;
 - u. securing or removing dangerous buildings or places;
 - v. constructing, altering and maintaining public streets, culverts, panchayat boundary marks, markets, slaughter houses, privates, urinals, drains, sewers, drainage works, sewerage works, baths, washing places, drinking fountains, tanks, wells, dams and the like;
 - w. obtaining a supply of an additional supply of water, proper and sufficient for preventing danger to the health of the inhabitants from the insufficiency or unwholesomeness of the existing supply when such supply or additional supply can be obtained at a reasonable cost;
 - x. paying the salary and the contingent expenditure account of such police or guards as may be required by the panchayats for the purposes of this Act or for the protection of any panchayat property;
 - y. giving relief and establishing and maintaining relief works in the time of famine or scarcity to or for destitute persons within the limits of the panchayat.
2. In the sphere of public works –
- a. removing of obstructions and projections in public streets or places and in sites not being private property, which are open to the public whether such sites are vested in the panchayat or belong to government;
 - b. construction, maintenance and repair of public roads, drains, bunds and bridges; provided that if the roads, drains, bunds and bridges vest in any other public authority, such works shall not be undertaken without the consent of that authority;
 - c. maintenance and regulation of the use of buildings handed over to the panchayat or of government buildings under the control of the panchayat, grazing lands, and tanks and wells (other than tanks and wells for irrigation);
 - d. lightning of the village
 - e. control of fairs, bazaars, tonga-stands and car stands;
 - f. construction and maintenance or control of slaughter houses;
 - g. planting of trees in market places and other public places and their maintenance or preservation;
 - h. construction and maintenance of Dharmashalas;
 - i. management and control of bathing and washing ghats which are not managed by any authority;
 - j. establishment and maintenance of markets;
 - k. construction and maintenance of houses or conservancy staff and village functionaries of the panchayat;
 - l. establishment, control and management of cattle ponds;
 - m. establishment and maintenance of works for the provision of employment particularly in times of scarcity;
 - n. extension of village sites and the regulation of building and housing schemes in accordance with such principles as may be prescribed;

- o. construction and maintenance of buildings for warehouses, shops, purchasing centres and such others;
- p. construction and maintenance of buildings for common use and of buildings necessary for development activities;
- 3. In the sphere of education and culture –
 - a. visit to educational institutions;
 - b. check on attendance and other registers to enquire and report to concerned authorities on educational deficiencies in the village;
 - c. submission of recommendations on the annual of budget of schools, adult and non-formal centres, and pre-primary and early childhood care and educational centres;
 - d. construction and repair work of educational institutions entrusted in the gram panchayat;
 - e. submission of reports on regularity of students, teachers attendance and school functioning;
 - f. framing of the school calendar under the guidance of the Zilla Parishad.
- 4. in the sphere of self-defence and village defence –
 - a. watch and ward of the village and crops therein and raising volunteer organisation or organisations of any other kind, encouraging and assisting such organisations;
 - b. providing for training facilities to the youth of the gram for the purpose of self-defence and village defence and assisting such training that may be organised by the government;
 - c. preventing of fires, rendering assistance in extinguishing fires and protecting life and property when fire occurs.
- 5. in the sphere of planning and administration –
 - a. the preparation of plans for the development of the village;
 - b. assisting the implementation of soil improvement projects of the State Government;
 - c. economic survey of the gram accompanied by the provision of employment to the unemployed or under employed resident thereof;
 - d. preparation of budget, collection and maintenance of accounts, custody and utilisation of funds, assessment and collection taxes and maintenance of an account code;
 - e. use of assistance given by the Central or State Government for any purpose of the village;
 - f. making independent surveys of the gram or assisting such survey undertaken by the Central or State Government;
 - g. recruitment, training and management of staff to be employed by panchayat;
 - h. control of cattle-stands, thrashing floors, grazing grounds and community lands;
 - i. establishment, maintenance and regulation of fairs, pilgrimages and festivals;
 - j. reporting to proper authorities complaints which are not removable by the panchayat;
 - k. preparation, maintenance and up-keep of the panchayat records;
 - l. registration of births, deaths and marriages in such manner and in such form as may be laid down by the State Government general and special order in this behalf;
 - m. numbering of premises.

6. in the sphere of Community Development –
 - a. relief of the crippled, destitute and the sick;
 - b. assistance to the residents when any natural calamity occurs;
 - c. organising, encouraging and assisting co-operative activities in the economic and social fields;
 - d. propagation of family planning;
 - e. organising voluntary labour for community works and works for the upliftment of the village;
 - f. opening fair price shops.
7. in the sphere of agriculture, preservation of forests and pasture lands –
 - a. planned improvement of agriculture
 - b. securing minimum standards of cultivation in the gram with a view to increasing agricultural production;
 - c. ensuring conservation of manorial resources, preparing composts and sale of manure;
 - d. production of improved seeds, the establishing of nurseries or improved seeds and promoting the use of improved seeds;
 - e. promotion the use of improved agricultural implements and making such implements easily available;
 - f. the promotion of co-operative farming;
 - g. crop-protection and crop-experiments;
 - h. minor irrigation, construction and maintenance of filled channels and distribution of water; treatment of drainage lines by dugouts with vegetative drains, loose boulder dams filter steps and other measure for improving water conservation and preventing soil erosion;
 - i. raising, preservation and improvement of village forests, pastures and orchards;
 - j. taking steps against harmful animals with a view to protection of crops.
8. in the sphere of animal husbandry –
 - a. improvement of cattle and cattle breeding;
 - b. the general care of livestock;
 - c. providing and maintaining stud bulls for purposes of cattle breeding;
 - d. promotion of dairy farming.
9. in the sphere of village industries –
 - a. surveying and harnessing tiny and village industrial and other employment potential of the gram;
 - b. providing necessary raw materials for cottage industries and arts and crafts;
 - c. making efforts for the production by the village craftsmen of modern and improved tools for cottage industries and making such tools easily available to them;
 - d. encouraging and assisting artisans for training in cottage industries and handicrafts;
 - e. providing for the organisation, management and development of cottage industries on a cooperative basis.
10. Subject to the conditions of section 35 maintenance of records relating to land revenues in such manner and in such form as may be prescribed from time to time by or under any law relating to land revenue.

Annexure

8

Fifth and Sixth Schedule of the Andaman & Nicobar Islands (Panchayats) Regulation, 1994

Matter Intrespect of which a Panchyat Samiti will have Authority so as to Enable it to Function as an Institution of Self Government

1. In the sphere of sanitation and health:
 - a. Controlling epidemics and expansion and maintenance of health service:
 - b. Family planning
 - c. Providing facilities for pure drinking water
 - d. Maintenance and supervision of stores of drugs, dispensaries pharmacies maternity homes and primary health centres
 - e. Cultivating public opinion on following methods for the preservation of health and sanitation:-
 - i. nourishment;
 - ii. maternity and child welfare;
 - iii. control and eradication of contagious disease
 - f. providing for help and protection to the people against epidemics
2. In the sphere of communication:
 - a. Obstruction and maintenance of village link roads,
 - b. Providing necessary assistance for construction and maintenance of village approach roads
3. In the sphere of education and culture –
 - a. recruitment of staff for adult education, Non-formal Education Early childhood care & Education programmes.
 - b. appointment of staff in schools from approved panels;
 - c. transfer of teachers within their jurisdiction subject to guidelines;
 - d. academic supervision of all institution upto upper primary levels:
 - e. delegation of powers of supervision over composite upper primary school to the Gram Panchayat of purpose of continuity.
 - f. Preparation of budget and sanction of plans and expenditure from the panchayat samiti education budget.
 - g. disbursement of funds to aided institution under supervision of Zilla parishad.

- h. levying of development fees and other fees to raise resources
 - i. raising of public contributions and donations
4. In the sphere of social education
To cultivate a new outlook among the people to make them self-reliant industrious and co-operation minded and specially
- a. establishing and maintaining information centres, community education centres and recreation centres:
 - b. establishing institutions for rendering social services such as youth clubs women's clubs and farmers association and encouraging any such institutions if already established
 - c. establishing a village defence crops
 - d. encouraging physical and cultural activities
 - e. establishing voluntary health association
 - f. training gram-sevaks and utilizing their service
 - g. training gram-sevak and utilizing their service
 - h. promoting children's activities
5. In the sphere of community development-
- a. Planning for increased employment and production as well as for co-ordination of village institutions.
 - b. Training in self-help and self-sufficiency among the village community on the principle of mutual co-operation;
 - c. Utilizing the surplus energy resources and time of the village for benefit of the community
 - d. Providing for the implementation of development programmes entrusted to it by the state government
6. In the sphere of agriculture and irrigation –
- a. Planning for agriculture improvement in the block
 - b. use of land and water resources and propagation of improved agricultural methods according to the latest researches
 - c. construction and maintenance of irrigation works in the block;
 - d. reclamation and conservation of agricultural land in the block;
 - e. maintenance of seed multiplication farms, assisting registered seed producers and distribution of seeds in the block;
 - f. raising the production of fruits and vegetables;
 - g. conservation of manual resources, preparing compost manure, organic manure, and mixture and to arrange for making them easily available
 - h. Promoting the use of improved agricultural implements and arranging to make them easily available
 - i. the protection of crops, fruits trees and plants against disease;
 - j. providing credit and other facilities for irrigation and agricultural development
 - k. increasing the area of land under irrigation by construction and repair of walls, digging and repairs of private ponds by undertaking minor irrigation works and by supervision of field channels.
 - l. Providing for the timely and equitable distribution and full use of water available under irrigation schemes.

7. In the sphere of animal husbandry –
 - a. Improving cattle breed by introduction of stud bulls, by castration of stray bullocks and establishment and maintaining artificial insemination centres.
 - b. introducing improved breeds of cattle, sheep poultry etc., giving grants therefore and maintenance of small breeding centres;
 - c. controlling and checking infectious diseases;
 - d. introducing improved grass and cattle feeds and providing for their storage.
 - e. starting and maintaining first-aid centres and veterinary dispensaries;
 - f. providing for milk supply
 - g. solving the problem of stray cattle.

8. In the sphere of village and small-scale Industries – To Promote, cottage village and small-scale industries with a view to providing increase employment and raising peoples standard of living and especially –
 - a. to establish and maintain production and training centres;
 - b. to improve the skills to artisan;
 - c. to popularize improved implements;
 - d. to ensure the implantation of scheme for cottage, village and small-scale industries run by the khadi and village industries board and other All India Association.

9. In the sphere of co-operation –

To promote the idea of co-operation in different field of life and to organize and encourage co-operative institution in the economic and social fields and especially –

 - a. to establish and promote the development of multipurpose co-operative societies for credit sale, industry, irrigation and agriculture;
 - b. promoting saving through thrift, small savings and insurance schemes.

10. In the sphere of women's welfare –

Implementing of schemes for women's and children's welfare and maintaining women's and children's welfare centres, education centres, crafts centres and tailoring centres.

11. In the sphere of social welfare –
 - a. implementing schemes of rural housing;
 - b. maintaining decrepit beggars;
 - c. sponsoring voluntary institution of social welfare and co-ordinating and assisting their activities;
 - d. propaganda for prohibition and against drug addiction

12. In the sphere of relief –

Providing immediate relief in case of floods, fires epidemic and other natural calamities on a small or large scale;

13. In the sphere of collection of statistics –

Collecting and coordinating statistics and may be required by the village panchayats, taluka panchayats or district panchayats or by the state government.

14. In the sphere of trusts –
Managing trusts in furtherance of the objects of any programme that may be carried out with the taluka fund.
15. In the sphere of rural housing-
Development of village sites with the co-operation of the village population and planning of rural housing.
16. In the sphere of information –
 - a. community radio listening programme
 - b. arranging exhibition;
 - c. publications

THE SIXTH SCHEDULE

[See Section 163 (1)]

Matters in Respect of which the Zilla Parishad will have the Authority so as to enable it to Function as an Institution of Self Government.

1. In the sphere of sanitation and health –
 - a. establishment and maintenance of dispensaries;
 - b. provision and maintenance of drinking water supply
 - c. taking necessary action or steps of for improvement in public health and public amenities
 - d. establishment and maintenance of primary health centre;
 - e. assisting family-planning
 - f. supply of milk to children and nursing mothers in families in the low income group
 - g. providing for training to mid-wives
 - h. giving protection against diphtherias; whooping cough and tetanus;
 - i. establishment and maintenance of ayurvedic and homoeopathic dispensaries
 - j. provision of medical relief through ayurvedic and homoeopathic centre.
 - k. assisting recognized medical relief-centre;
 - l. providing for training of nurse
2. In the sphere of public works –
 - a. Construction and maintenances of roads;
 - b. the planting and rearing of trees on both sides of the road;
 - c. execution of works entrusted to it by the State Government;
 - d. supervision, repairs and preservation of building vested in the district panchayat.
 - e. Construction and maintenance of building required for the activities of the district panchayat.
3. In the sphere of education and other cultural activities –
 - a. establishment and maintenance of schools upto secondary level including recruitment, appointment and transfer of staff payment of salaries and exercise of control over the staff subject to government guidelines;

- b. exercise of control and academic supervision of all schools including aided and private schools up to secondary level subject to government guidelines.
 - c. laying down of academic and administrative norms for better functioning of educational institutions.
 - d. disbursements of grants to aided school subject to government guidelines.
 - e. supervision of the education committees at block and village level.
 - f. preparation and sanction of educational budget.
 - g. administration of district educational fund;
 - h. preparation of perspective plan for the district
 - i. proposal of measures including levy of cess, surcharge and taxes for mobilizing additional resources for education to Zilla parishad
 - j. Inspection of primary schools managed by the panchayat samitis and conduct to their examination if any;
 - k. accepting and managing educational funds
 - l. assisting encouraging and guiding all educational activities in the district
 - m. organizing camps, conferences and gathering of members of village panchayats block panchayat block panchayats and district panchayat in the district
4. In the sphere of administration –
- a. collecting of necessary stores and materials;
 - b. publication of statistical and other information relating to activities of panchayat
 - c. co-ordination and use of statistics and other information required for the activities of the village panchayat, block panchayats and district panchayats.
 - d. periodical supervision and evaluation of the projects and programmes entrusted to the different panchayats in the districts.
 - e. accepting donations in the furtherance of the purpose for which fund might have been raised
5. In the sphere of community development –
- a. co-ordination and integration of the development scheme of all blocks in the district and preparing a plan therefore for the whole district.
 - b. preparation of projects plans and schemes conferencing two or more block in the district
 - c.
 - i. promoting the establishment and development of panchayats
 - ii. inspection, regulation and control of the block panchayat samities in the district
 - iii. performance of all such function as are assigned it under any law or as may be entrusted by the Administrator from time to time.
 - d. implementation of any development programme that may be entrusted by the Administration.
 - e. distribution and co-ordination of work among village panchayats block panchayat and districts panchayats.
6. In the sphere of agriculture –
- a. undertaking intensive pioneering scheme relating to paddy vegetables pulses oilseeds, plantation crops and horticulture.
 - b. construction and maintenance of building for seeds distribution centres

- c. implementation of schemes of manure
 - d. arranging for the purchase and sale of necessary equipment for the protection of plants
 - e. arranging for the purchase and sale of insecticides
 - f. establishment and maintenance of model agricultural forms
 - g. procuring and distributing improved seeds
 - h. implementing scheme relating to agricultural production and agricultural development.
 - i. arranging exhibition and competition and development programmes in connection with agricultural development and cattle breeding.
7. In the sphere of animal husbandry –
- a. establishment and maintain supply centre for cattle breeding
 - b. giving encouragement and assistance to cattle breeding centres run by recognized institution.
 - c. provision for the rearing of stud calves
 - d. the development of fodder-hands;
 - e. encouraging and assisting schemes for the storage of grass;
 - f. implementing schemes of poultry farming
 - g. the implantation of the schemes of cattle breeding
 - h. establishment and maintaining veterinary hospitals and dispensaries.
8. In the sphere of village and small scale industries
- a. examining the possibilities of village industries and small scale industries in the district preparation and execution of plans for their revival organization and development.
 - b. providing for necessary assistance and encouragement of technical training to village industries and small scale industries relating to their crafts.
 - c. establishing maintaining expanding and aiding secondary technical and industrial schools
9. In the sphere of social welfare
- a. providing necessary assistance and encouragement to the work of institutions of social service.
 - b. conducting necessary social welfare activities in the district.
10. In the sphere of relief –
Establishment and management of relief centres in time of natural calamities such as famine and scarcity floods fire and earth quake.
11. In the sphere of minor irrigation projects:
- a. digging new ponds and wells and repairing old pond wells for irrigation.
 - b. giving assistance for the purchase of pumping sets and machinery.
 - c. provision and propaganda for improved kits
 - d. encouraging and assisting irrigation schemes on a co-operation basis.

Annexure

9

Port Blair Municipal Council Building Bye-laws

The Port Blair Municipal Council issued the building bye-laws in the year 1999 vide notification no. 164 dated Wednesday, 13th October. The sections relevant to environmental issues are accounted below.

Part III, Section 4. HEALTH, SANITATION AND OTHER REQUIREMENTS

- 4.5 No site shall be approved for construction of building unless provision of suitable measure for checking the erosion of soil and sliding due to excavation are made to the satisfaction of authority.
- 4.6 Preservation of existing trees: Every person, who constructs, reconstructs, alters or adds a building shall carry out such measures, as far as possible to conserve and protect all existing trees with a diameter of 30cm and more within his site provided that all dangerous trees which are likely to cause damage to his own or adjoining properties shall be caused to be removed. The Municipal Board shall consult the Town Planning branch of the AOWD/Directorate of town planning in giving permission for removal.
- 4.7 Preservation of Contamination to Fresh Water Source: Every person who constructs, reconstructs, alters or adds to a building shall wherever the site is within 15m of any tank, reservoir water-course, river fresh water channel or well, carry out such measures as may be necessary or as the authority may direct for the purpose of preventing any contamination of or any risk of the drainage of the building passing into such tank, reservoir, water- course, river, freshwater channel or well.
- 4.8 Rain water harvesting: Every person who constructs, re-constructs, adds to a building or alters it shall provide a proper spout/ tank for collection of rain water which shall be utilised for various domestic purposes other than drinking.

Section 12. HEIGHT LIMIT

Maximum height of

- 12.1** The maximum height of a building shall be 10 meters construction (measured upto the bottom of the beam or the wall plate) unless otherwise specially permitted by the Authority.
- 12.2** Unless otherwise specially permitted by the authority, the coverage and floor area ratio for the construction of building in a site shall be as follows:

Plot area in sq m	Plot coverage	Minimum Set back				
		Front	Rear	Side	Side	F.A.R
Upto 50	75%	1	1.5	1	2	150
above 50 upto 100	66.66%	1	1.5	0.75	0.75	150
above 100 upto 200	60%	1	2	1	1	150
above 200	50%	1	3	1	1	150

Explanation: For working out the Floor Area Ratio (FAR) the area occupied by the mezzanine floor shall also be included.

Section 15. (B) COASTAL ZONE MANAGEMENT PLAN

The port Blair Municipal area has been re-grouped as CRZ-(ii) and existing local Town and Country planning Regulations are applicable to this area as per clause-2 (v) lead with CRZ-(ii) (1) of the Govt. of India's Notification dated 19/02/1991. Hence all construction within the Municipal limits shall conform to the CRZ Notification of 1991.

- (i) Buildings shall be permitted neither on the seaward of the existing road (or roads proposed in the approved Coastal Zone Management Plan of the area) nor on seaward side of existing authorised structures. Buildings permitted on the landward side of the existing and proposed roads existing authorised structures shall be subject to the existing local Town and Country planning Regulations including the existing norms of FSI/FAR.
- (ii) Reconstruction of the authorised buildings to be permitted subject to the existing FSI/FAR norms and without change in the existing use.
- (iii) The designs and construction of buildings shall be consistent with the surrounding landscape and local architectural style.

Section 17. PROTECTION AGAINST EARTHQUAKES

Every person, who constructs, reconstructs adds to or alters a building shall cause the design of the structure made safe for the components of earthquake vibrations as per requirements of seismic Zone V classified by National Building Code.

Recommendations of the Supreme Court appointed Shekhar Singh Commission

The Supreme Court appointed Sri. Shekhar Singh as the one person Commission and *Amicus Curiae* for looking at ecological threats in the Andaman & Nicobar Islands, especially logging and deforestation. The Commission recommended the following which have direct implications on tourism development in the Andaman Islands.ⁱ

D. Road through the Jarawa Tribal Reserve

26. The Andaman Trunk Road should be closed to all vehicular traffic from Miletalak 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 Prolobjig 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.

I. Mining of Sand

38. The extraction of sand should be phased out and no further extension should be granted after the current extension is over on September 30, 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 earthquake. Stone dust should be utilised where use of concrete is essential.

i Pankaj Sekhsaria, "Troubled Islands: Writings on the Indigenous Peoples and Environment of the Andaman & Nicobar Islands", Kalpavriksh & LEAD India, 2003, pp. 78–79, 84–86.

J. Inappropriate Tourism

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/ pre-fabricated structures that can be dismantled easily and move 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 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 various segments of the local society and generate local employment.
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.

Annexure

Beaches where Tourism Occurs and Status

Place	Area used for tourism	Status (protected area or non-protected area)	Usage
Diglipur, North Andaman	i) Ramnagar beach	Turtle nesting site (Dec–Feb)	Low with comparatively few tourists
	ii) Kalipur beach		Low with comparatively few tourists
	iii) Lamiya Bay beach	Turtle nesting site	Low with comparatively few tourists
	iv) Smith Island	Adjacent to Ross Island, which is a wildlife sanctuary, eastern side is a turtle nesting site	Moderately high with comparatively more tourists than other beaches in Diglipur
Mayabunder, Middle Andaman	v) Karmatang beach	Turtle nesting site (Dec–Feb)	Low with comparatively few tourists
	vi) Avis Island		Low with comparatively few tourists
	vii) Cuthbert Bay beach	Turtle nesting site (Dec–Feb)	Low with comparatively few tourists
Rangat, Middle Andaman	viii) Amkunj beach		Low with comparatively few tourists
	ix) Panchavati beach		Low with comparatively few tourists
	x) Kadamtala beach		Low with comparatively few tourists
Long Island, Middle Andaman	xi) Lalaji Bay beach turtle nesting sites	Northeastern and southeastern sides are	Low with comparatively few tourists
Baratang Island	xii) Baludera beach	East coast is turtle nesting site	Low with comparatively few tourists

Havelock island, Ritchie's Archipelago	xiii) Radhanagar beach	Southeastern side is turtle nesting sites	Most frequented, high usage
	xiv) Elephant Bay beach		Recently brought into use, mostly for snorkelling
Neil Island, Ritchie's Archipelago	xv) Sitapur beach	Northwestern side is turtle nesting site	Low with comparatively few tourists
	xvi) Laxmanpur beach		Low with comparatively few tourists
South Andaman Island and surrounds	xvii) North Bay beach		Very high number of tourists
	xviii) Corbyn's Cove beach turtle nesting site	Southeastern side is	Very high number of tourists
	xix) Wandoor beach		Very high number of tourists
	xx) Red Skin Island	Protected area Mahatma Gandhi Marine National Park	Very high number of tourists
	xxi) Jollybuoy Island	Protected area Mahatma Gandhi Marine National Park	Very high number of tourists
	xxii) Chidiyatapu beach		Swimming stopped after tsunami of Dec 2004, continues to be a picnic spot; a mini zoo is being constructed by the DoEF
	xxiii) Cinque Islands, North & South	Western sides of both islands are turtle nesting sites	SCUBA diving, swimming, fishing and camping ⁱ
Little Andaman	xxiv) Harminder Bay	Adjacent to Nicobari settlement, tribal reserve	Stopped after tsunami of Dec 2004
	xxv) Butler Bay beach	East coast is turtle nesting site	
	xxvi) Netaji Nagar beach		

Source: Table compiled from information provided by IP&T, DoEF in print and electronic media (internet), and Shanker & Choudhury, 2006ⁱⁱ

- i. Department of Information, Publicity & Tourism, Andaman & Nicobar Islands Administration, <http://tourism.andaman.nic.in/islands.htm> data retrieved November 2007.
- ii. Andrews, H.V., S. Krishnan & P. Biswas. 2006. Distribution and status of marine turtles in the Andaman and Nicobar Islands, in *Marine Turtles of the Indian Subcontinent*, K. Shanker & B.C. Choudhury (eds.), pp. 33–57. Universities Press, Hyderabad. India.

Annexure

12

Data on Use of Diesel for Electricity Generation in the Islands

HSD Oil Consumption as on 31-3-2008

S.No.	Name of Station	Generation (Ltrs.)	Maintenance (Ltrs.)	Total (Ltrs.)
1	Chatham	3096139	Nil	3096139
2	Phoenix Bay	1729208	1830	1731038
3	Rajniwas	26500	3295	29795
4	Neil Island	310155	1960	312115
5	Havelock	524704	4640	529344
6	Strait Island	NA	N.A	N.A
7	Lang Island	133225	520	133745
8	Baratang	360863	1075	361938
9	Rangat Bay	4178996	375	4179371
10	Mohanpur	39769	497	40266
11	Hanspuri	4639	53	4692
12	Jagannath Dera	13468	300	13768
13	Sita Nagar	N.R	N.R	N.R
13	Paschim Saga	20659	1425	22084
14	Smith Island	16914	367	17281
15	Little Andaman	1161229	2812	1164041
16	Dugong Creek	N.R	N.R	N.R
17	South Bay	N.A	N.A	N.A
18	CarNicober	649052	3740	652792
19	Karnorta	399555	2140	401695
20	Pilpilow	6504	17	6521
21	kakana	7240	26	7266
22	Tapong	2512	19	2531
23	Champin	29426	73	29499
24	Katchai	32614	55	32669
25	Chowra	719	0	719
26	Teressa	12467	10	12477
25	Pilomilow			
26	Chambell mBay	903307	3523	906830
27	Kondul			
28	Pilopanja			
29	Pilobhabi			

S.No.	Name of Station	Generation (Ltrs.)	Maintenance (Ltrs.)	Total (Ltrs.)
30	Shompen Hut			
31	Chukmachi	5335	0	5335
32	Upper katchai	2828	170	2998
33	Bengali	45316	0	45316
34	Kalasi	4871	0	4871
35	Miniyuk	5932	0	5932
36	Mildera	50106	668	50774
37	Kapanga	77685	2230	79915
	Total	13851937	31820	13883757

Source: Electricity Board, A&NI Administration, Port Blair

Peoples Charter and Guidelines on Sustainable Tourism for Kumarakom 2002

We, the people of Kumarakom and members of Grama Sabha of Kumarakom Panchayat, the first government of the state on this day of 29th August 2002

Recognising that tourism in Kumarakom is nature based and protection of nature and biodiversity is fundamental to sustainable tourism development,

Also acknowledging the visions and practices put forward by the world forums like the Convention on Biological Diversity (CBD), Commission on Sustainable Development (CSD) and the operational principles of ecotourism,

Having noted that these international forums in which India is a signatory and participant, unequivocally calls for conservation of natural resources, participation of local communities and sharing of benefits of tourism for sustainable development,

Keeping also in mind that a trade agreement like the World Trade Organisations General Agreement on Trade in Services (GATS) would greatly impact upon these pronouncements, challenge and contradict the very basis of sustainability, participatory processes, conservation efforts, welfare of people and lead to uneven development,

Taking into account, the fragile ecosystems of Kumarakom and in the absence of adequate regulatory mechanisms in tourism development

Reaffirming that the Panchayat having been vested with constitutional mandates under the 73rd Amendment to conserve its environment, manage resources and the well-being of people hereby bring in control and regulatory mechanisms for sustainable tourism development through the following guidelines.

1. Any change in land use for tourism purposes shall be subjected to living space, current settlement as well as inter-generational needs – social, economic and recreational, retaining environmental and ecological balance of the region. All future tourism related land use shall be strictly in accordance with the management plan prepared by the Panchayat.
2. While exercising the powers and functions specified under the Kerala Municipality Buildings Rule 1999, all tourism related construction shall be in accordance with the specifications framed by the Panchayat – ecological, aesthetical and regional specific, without infringing upon the easement rights being enjoyed by the people.

3. Any road to be proposed shall not obstruct existing natural streams, ecologically sensitive areas, cultivable lands and settlements and should be scientifically made with proper footpath and storm water drainage facility.
4. Any destruction or obstruction caused to Kayal through bunding, creation and diversion of inlets and privatisation of water bodies shall not be allowed.
5. Use of water for commercial purposes from common resources shall be based on consent from appropriate authorities upon applications routed through the Panchayat.
6. The Panchayat is seeking concerned authorities to provide legal status to the bird sanctuary and until such notification is effected, Panchayat shall keep strict vigil against any activity that could negatively affect the sanctuary.
7. The Panchayat shall seek mangrove regeneration programmes with support from tourism industry, keeping in view of the long-term conservation of the Kayal banks.
8. In the absence of Coastal Regulation Zone (CRZ) regulations of stipulated no development zone along Kayal banks, Panchayat would bring in construction regulation and all further constructions shall be in accordance with that.
9. Keeping in view of the fishing activities of the local people, plying of boats shall be regulated/banned after 6 pm.
10. Panchayat shall also notify breeding and spawning grounds of fish, feeding areas of birds, where tourist's boating and water sports shall be banned.
11. Discharge of human excreta and disposal of other wastes from house boats is not in the interest of tourism activity. Private house boat providers shall bring in appropriate technology to stop this menace.
12. Electrification and maintenance of street lights on the approach roads to resorts shall be borne by the respective owners. Overhead lines shall be replaced with underground cables.
13. Indecent representation of women in tourism promotion materials shall be avoided and no tourism provider shall act as a conduit for anti-social activities like women and child prostitution.
14. *Direct and indirect employment opportunities for local people by the tourism industry are mandatory, keeping in view of tourism industry's social obligations.
 1. 30 % of direct employment keeping in view of
 - a. requirement of tourism industry (Ratio between locals and outsiders)
 - b. availability of qualified personnel within the Panchayat
 - c. provision for adequate training
 2. Maintenance of labour standards in the formal sector
 3. Informal sector
 - a. Book binding
 - b. Washing
 - c. Tourist guides
15. *Considering the overall socio economic development of the region, tourism industry should agree to contribute to the projects of priority for well being of the community and conservation of the environment. (Urgent common needs like hospitals, schools, avenue trees etc.)

* to be finalised after discussions with the tourism industry

Maintenance and utilisation of funds shall be open for public scrutiny including tourism industry.

16. Tourism industry shall strictly be subjected to the norms and conditionalities stipulated by the appropriate regulatory bodies such as the Pollution Control Board and Panchayat. Investment and maintenance for a common effluent treatment plant and solid waste management as per the management plan prepared will be borne by the industry and jointly managed by the Panchayat and the industry. Committee to be constituted under the Panchayat Act for monitoring and punitive measures.
17. Disposable Plastic materials are banned inside the Panchayat.
18. Tourism industry should bring in self-regulatory mechanisms in consensus with the Tourism Code of Ethics formulated by the WTO.
19. Conceptualisation, Planning and Implementation of tourism is highly complex. An expert committee of neutral persons consisting of relevant disciplines will look into specialised outputs and critical appraisal (Environmentalists, Sociologists, Economists, Gender Specialist, Town Planner, Architect)
20. Panchayat and Tourism industry shall bring collectively an annual report about the status of tourism in Kumarakom.

Annexure

14

Zero Waste Concept

Zero Waste is a new planning approach that seeks to redesign the way that resources and materials flow through society, taking a 'whole system' approach. It is both a 'back end' solution that maximizes recycling and minimizes waste, and a design principle that ensures that products are made to be reused, repaired or recycled back into nature or the marketplace. Zero Waste embodies approaches that enable rapid waste reduction outcomes, breakthrough strategies rather than incremental change.

Hence while elsewhere waste goes up in smoke in expensive incinerators or goes down the leachate drain in mega land fills, the same pile of trash throws up a range of raw materials for new products, exciting financial opportunities, and better jobs.

Zero waste re-channelises the flow of resources through societies with marked and substantial environmental, social and economic benefits.

Clean production, environmental friendly designs and products eliminate creation of waste. At the end of the pipe, so to say, zero waste lines up facilities like resource recovery, composting, and waste to wealth ideas to tackle the waste generated.

Other zero waste gains include saving on water, energy, resources and landfill space making it an optimum environmental and sustainable option. Zero waste presupposes the involvement of the local community in its day-to-day processes. Hence it directly leads to the creation of employment opportunities. Thus the zero waste approach shows how this far reaching environmental progress will be achieved by just impacting change at one single point: where and how we empty our bins.

Source: http://www.zerowastekovalam.org/what_zero.htm

Annexure

15

Tips for Safe Navigation

Before you set out, take time to study the recommendations on safe navigation, as well as the basic information on protecting the environment. When you cruise into the island paradise of your dreams, remember that it is coral that makes your dreams a reality, so spare a thought for coral reefs and take steps to protect them ... It's really easy.

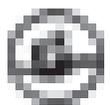
First, identify the sensitive sites, the prohibited and authorised anchoring areas, and the facilities for collecting waste, sewage and spent oil.



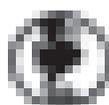
Anchoring is prohibited: this symbol indicates a protected area of natural interest and risk for animals living on the seabed.



This sign indicates the presence of a container for spent oil from boats.



Mooring buoys for visitors. You will find them in places where anchorage is prohibited.



You are in a marine protected area. Increased vigilance is required: minimal pollution, anchoring precautions, etc.



Watch out for divers! Steer clear of boats flying this flag and be on the lookout for bubbles on the surface in order to avoid injuring divers.

You too can help to protect the coral reefs.

All you have to do is remember a few simple guidelines...

- ♦ Avoid damage caused by careless anchoring: this is not difficult!
 - ♦ Make sure that you have an anchor of appropriate size and a sufficiently long chain.
 - ♦ Anchor only in sandy areas. Never drop anchor on a coral reef or a bed of seagrass, or moor your boat to mangrove trees.
 - ♦ Do not drag your anchor over a poor holding ground.

- ♦ Mooring regulations and fees may vary from one place to another. Make enquiries...
- ♦ For reasons of safety, always run a check when you tie up to a mooring point (a buoy). Give yourself more room for manoeuvre by passing a mooring rope about half the length of your boat through the eye of the buoy and secure both ends to a cleat on the deck.
- ♦ All marinas provide waste containers. Remember to use them! Make sure that nobody on board throws any waste into the sea. Get rid of superfluous packaging before you set out, and buy goods in bulk. Crush empty cans before throwing them away. This will reduce the volume of waste.
- ♦ To sea turtles and other animals, plastic bags look very much like the jellyfish they love to eat. But if they try to swallow the plastic, it is likely to kill them! To avoid this:
 - ♦ Keep all plastic objects in a safe place on board.
 - ♦ Pick up damaged fishing nets or lines cut away from propellers. Do not leave them in the sea. They too could harm the marine wildlife.
 - ♦ Make sure nobody uses lightweight plastic or styrofoam objects on the deck: a gust of wind could blow them into the sea.
- ♦ Avoid discharging toilets or sewage holding tanks in confined or crowded places, environmentally sensitive areas or marine protected areas.
- ♦ Non-toxic oils are available and should be used wherever possible. To dispose of your waste oil, wait until you get to a marina. A specific receptacle will always be provided.
- ♦ Avoid pumping oily bilge water into the sea, particularly when you are near a coral reef. Unless the boat is in danger, wait. Avoid using detergents or emulsifiers as bilge cleaners.
- ♦ If you use a two-stroke outboard engine, opt for alkylate petrol.
- ♦ Refuel only at dock or in the marina. You never know... if you fill up at sea, you could spill fuel into the water.

You can also help to make other crew members and passengers more aware of these issues. Simply explain what they can do to protect the coral reefs. Now you know how...

United Nations Environment Programme, "Tips for Safe Navigation", 2002
<http://www.unep.org/pc/tourism/sensitive/coral/english/navigation/navigation.htm>
data retrieved December 2007.

Annexure

16

Diving guidelines by Coral Reef Alliance

Divers and other coral reef visitors are becoming some of the strongest and most effective advocates for coral reef conservation. Please follow these simple guidelines and be a “coral friendly” diver.

Begin at Home

Support coral reef conservation by choosing your resort with care and being a “green consumer” with your vacation dollars.

- ♦ Opt for environmentally conscious places to stay.
- ♦ Look for coral parks and other marine conservation areas, and pay user fees that support marine conservation.
- ♦ Choose Coral Friendly dive operations that practice reef conservation by:
 - ♦ Giving diver orientations and briefings.
 - ♦ Holding buoyancy control workshops.
 - ♦ Actively supporting local coral parks.
 - ♦ Using available moorings.
 - ♦ Using available wastewater pump-out facilities.
- ♦ Keep your diving skills finely tuned, and be sure to practice them away from the reef.
- ♦ Learn all you can about coral reefs – they are fascinating and fragile environments.

In the Water

Never touch corals; even a slight contact can harm them and some corals can sting or cut you.

- ♦ Carefully select points of entry and exit to avoid areas of reef.
- ♦ Make sure all your equipment is well secured.
- ♦ Make sure you are neutrally buoyant at all times.

- ♦ Maintain a comfortable distance from the reef.
- ♦ Practice good finning and body control to avoid accidental contact with the reef or stirring up the sediment.
- ♦ Stay off the bottom and never stand or rest on corals.
- ♦ Avoid using gloves and kneepads in coral environments.
- ♦ Take nothing living or dead out of the water, except recent garbage.

Minimize Contact with Marine Life

- ♦ Do not chase, harass or try to ride marine life.
- ♦ Do not touch, handle or feed marine life except under expert guidance and following established guidelines.

Photography & Videography

Divers need advanced diving skills to take pictures and video underwater. Photographic and video equipment is cumbersome and affects a diver's buoyancy and mobility in the water. It is all-too easy to touch and damage marine life when concentrating on "the shot".

On Dive Boats

- ♦ Choose dive operations whose boats make use of available moorings – anchors and chains destroy fragile corals.
- ♦ Make sure garbage is well stowed, especially light plastic items.
- ♦ Be sure to take away everything you brought on board, such as packaging and used batteries.

Shoreside

- ♦ Support coral parks and other conservation projects by:
- ♦ Paying user fees in recognized coral parks and conservation areas that are actively supporting coral reef conservation.
- ♦ Encouraging and supporting the use of dive moorings.
- ♦ Filling in wildlife sighting forms.
- ♦ Participating in cleanups.
- ♦ Volunteering your skills.
- ♦ Donating used equipment such as cameras, dive gear or reef ID books.
- ♦ Avoid purchasing souvenirs made from coral, turtles or other marine life – often this is illegal, and it's never environmentally wise.
- ♦ Speak up; make sure your dive buddies understand these simple but important conservation practices.
- ♦ Good divers know the best way to enjoy a reef is to slow down, relax and watch as reef creatures go about their daily lives undisturbed. Be sure to find out about local laws and regulations as they may differ from these general guidelines.

These guidelines were developed by the Coral Reef Alliance of the Coral Reef Alliance and are co-endorsed by the Project AWARE Foundation.

Coral Reef Alliance, "Diving", 2007

http://www.coralreefalliance.org/index.php?option=com_content&task=view&id=53&Itemid=68 data retrieved December 2007.

Annexure

17

Project Aware – Tips for Divers

1. Dive carefully in fragile aquatic ecosystems such as coral reefs. Many aquatic organisms are fragile that are harmed by the bump of a tank, knee or camera, a swipe of a fin or even the touch of a hand. By being careful you can prevent devastating and long-lasting damage to magnificent dive sites.
2. Be aware of your body and equipment placement when diving. Keep your gauges and alternate air source secured so they don't drag over the reef or bottom. Control your buoyancy, taking care not to touch fragile organisms with your body or equipment.
3. Keep your dive skills sharp with continuing education. Before heading to the reefs, seek bottom time with a certified professional in a pool or other environment that won't be damaged. Or refresh your skills and knowledge with a PADI Scuba Review, PADI Advanced Open Water Diver course or Project AWARE Specialty course.
4. Consider how your interactions effect aquatic life. Resist the temptation to touch, handle, feed and even hitch rides on certain aquatic life. Your actions may cause stress to the animal, interrupt feeding and mating behavior or provoke aggressive behavior in normally nonaggressive species.
5. Understand and respect underwater life. Using them as toys or food for other animals can leave a trail of destruction, disrupt local ecosystems and rob other divers of experiencing these creatures. Consider enrolling in a Project AWARE Underwater Naturalist Specialty course to understand sustainable interactions.
6. Resist the urge to collect souvenirs. Dive sites can be depleted of their resources and beauty in a short time. If you want to return from dives with souvenirs, consider underwater photography.
7. If you hunt and/or gather game, obey all fish and game laws. Local laws are designed to ensure the reproduction and survival of these animals. As an underwater hunter, understand your effect on the environment and respect the rights of other divers in the area who are not hunting.
8. Report environmental disturbances or destruction of your dive sites. As a diver, you are in a unique position to monitor the health of local waterways. Report these observations to responsible authorities in your country.
9. Be a role model for other divers in diving and nondiving interaction with the environment. As a diver, you see the underwater results of carelessness and neglect.

Set a good example in your own interactions and other divers and nondivers will follow suit.

10. Get involved in local environmental activities and issues. You affect your corner of the planet. There are plenty of opportunities to show your support of a clean aquatic environment, including participating in local beach and underwater cleanups, attending public hearings that impact local water resources and supporting environmental legislative issues.

Project AWARE Foundation (Asia Pacific), "Tips for Divers", 2007

<http://www.projectaware.org/asiapac/english/educations/tipsfordiver.asp>
data retrieved December 2007.

Annexure

18

UNEP Tips for Travelers

In the water...

When you snorkel, admire the coral but do not touch it.

- ♦ Do not stand or rest on corals. They may look unbreakable but you can injure them simply by your touch, even if you are wearing gloves. If you really have to stand, find a spot where there is no coral.
- ♦ Do not kick up sand with your fins.
- ♦ Do not swim in shallow water.
- ♦ Do not feed the fish and never ride the turtles. Swim next to them instead. They love that.
- ♦ To protect your skin from the sun, wear a T-shirt rather than using oil-based sun cream.
- ♦ If you have a guide, ask him to give you a briefing on the ecosystem you are about to observe before you dive. It will make the experience all the more exciting.
- ♦ Take notes and photos, not pieces of coral or shells.
- ♦ Make sure that the boat captain does not anchor on the reef, and do not throw anything overboard.
- ♦ If you notice any damage to coral reefs, tell the organisers of the snorkelling trip. This way, you can play a role in monitoring the reefs.

A few practical tips for snorkellers:

- ♦ Lie flat in the water and keep your legs straight.
- ♦ Kick from the hips rather than from the knees.
- ♦ Try not to use your hands and arms.
- ♦ Keep your equipment under control to avoid bumping into the reef.
- ♦ Always snorkel with a friend and wear a flotation device if you feel more comfortable.
- ♦ Before diving, make sure that your mask, snorkel and fins are properly adjusted.

On the beach...**Have fun - and respect a few simple guidelines**

- ♦ Use bags made of fabric rather than plastic to carry your belongings. For marine animals, particularly turtles, plastic bags look like food and they can be lethal.
- ♦ Avoid all lightweight plastic or styrofoam objects (such as bags, boxes and cups). The wind could blow them into the sea.
- ♦ Dispose of any litter, including cigarette butts - in the waste bins provided.
- ♦ Never walk on the corals.
- ♦ Never pick up any corals or shells that have been washed up onto the beach.

In the souvenir shop...**Look at the cost for nature, not just for your purse**

Some wildlife souvenirs you buy could end up costing a lot more than the price you paid for them. Do not encourage trade in these objects. Refuse any offers of coral souvenirs or coral jewellery, particularly black coral, starfishes, shells, seahorses, sponges or any objects made from sea turtles. Think about it! The survival of the reef ecosystem depends on your decision.

Rules to be respected:

The CITES convention controls the trade of certain endangered species. In some cases, trade may be prohibited, in others controlled trade is allowed. A permit may be required from the country of origin. Any breach of CITES regulations may result in heavy fines, including at the port of entry in your home country. More information on www.cites.org and www.traffic.org.

In the restaurant ...**Do not put the ecosystem on your plate**

When you spend your holidays in the tropics, virtually all the restaurants have seafood on the menu. In many countries, the fishing of certain species is subject to restrictions. Lobster, for example, is subject to restrictions with respect to season and size. Catching sea turtles is banned outright. To find out more, ask the hotel manager or the environmental officer. In all cases, however:

- ♦ Never order turtle soup or steak. Fortunately, it is becoming increasingly rare to find it on the menu.
- ♦ Never order conch or lobster during the closed season. If they are on the menu, they should be frozen or imported.

At the hotel...**It is up to you to be responsible**

Water is an increasingly scarce resource. The production of electricity from non-renewable energy sources contributes to global warming and hence to coral bleaching. Monitor your personal consumption...

- ◆ Save water simply by turning taps off and limiting the time spent in the shower.
- ◆ Another simple gesture: switch off the lights and air-conditioning when you leave the room.

Take part in the environmental protection initiatives organised by the hotel.

When you go home...

You can contribute to the protection of the environment in general and the coral reefs in particular

Here are a few ideas:

- ◆ Adopt a dolphin, a manatee or ... a reef.
- ◆ Support marine protected areas.
- ◆ Save energy. Coral bleaching, which is killing reefs around the world, is linked to global warming.

If you were lucky enough to see a beautiful, healthy coral reef on your holiday, the same will hopefully be true next time.

United Nations Environment Programme, "Tips for Travellers", 2002

<http://www.uneptie.org/pc/tourism/sensitive/coral/english/tips/home.htm> data retrieved December 2007.

Environment Guidelines for Tourism Projects in the Andaman Islands by MoEF

1. Introduction

The natural environment of Andaman Islands and its resources are a national heritage that need to be protected and preserved for the benefit of future generations. The protection and preservation of the land and water resources, flora and fauna as well as the beaches, reefs, lagoons, mangroves, rainforest, creeks and flats and all natural habitats of the Andaman Island are important for sustainable development of the Union Territory. Particular care must also be taken to protect and preserve the territorial integrity and sanctity of indigenous tribes of the Andaman Islands and to ensure that any proposed development has no adverse impact upon their way of life or their futures as a community.

2. Definition

In this guideline

- a. The “environment” means all living and non-living thing that surround and affect the lives of human beings.
- b. A “project” is any activity that is carried out with the purpose of achieving a certain social or economic objective.

3. Environmental guidance on individual projects

The concerned government authorities under the Andaman Administration shall provide the necessary guideline and advice on environment protection in accordance with the prevailing conditions and need of each specific project on each specific island in the wider framework of the guidelines provided by the government authorities. These guidelines are listed below:

- a. Water Generation: Tourism Projects should be water self sufficient Alternate sources of water such as Desalination Plants, RO Plants, collection of rainwater for utilization at the resort etc. may be proposed and submitted for EIA along with the resort master plan wherever required.

- b. Waste Water: All projects must feature wastewater- recycling and treatment techniques in order to conserve the resource.
- c. Waste Management: Every EIA should be accompanied by a comprehensive waste-management plan especially regarding non-biodegradable and metallic wasters
- d. Design: The construction wherever possible should be built using natural construction materials. Building height should not exceed 9 meters, or exceed the height of the canopy, whichever is lower. Buildings should be designed to leave minimum footprint on the land and ensure no interference with run-of / natural flows. In no event should more than 33% of the land area be built up in any project area. Buildings should conform to the recommendation of Shekhar Singh Commission. Buildings should be energy efficient, earthquake resistant and merging with natural surroundings.
- e. Energy: Should try to preferably use alternate sources of energy that are renewable namely salary, wind,etc.
- f. Felling of trees: In no event should any naturally grown trees be felled without prior approval from the Andaman Administration. Felling of plantation trees and plants such as coconut, arecanut, banana is allowable. Felling naturally grown trees may be carried out after permission from the Andaman Adiministration.
- g. Employment: At least 60% of post in the project must be filled by local residents of Andaman & Nicobar Islands
- h. Should company fully with all environmental legislation including Indian Forest Act 1927, Wildlife (protection) Act 1927, Forest Conservation Atc, 1980, Environment Protection Act. 1986 and Costal Zone Regulation (CRZ), etc.
- i. Should set up their individually tailored environmental programme to improve performance. The environmental programme so developed should include the guidelines and actions for operating business environmentally as outlined in the environmental action pack prepared by the International Hotel Association (IHA), The International Hotels Environment Initiative (IHEI) and the United Nations Environment Programme (UNEP) or acceptable substitute(s) approved by the Andaman Administration.
- j. Environmental Certification & Benchmarking: Where a resort is involved, all resorts must subscribe to and adheres to a globally recognized environment certification scheme such as Green Globe 21 (www.greenglobe21.com www.greenglobe.org) and obtain the ISO 14000 environmental accreditation within a time frame prescribed by the Andaman Administration or acceptable substitute(s) approved by the Andaman Administration throughout the duration of the project and must be in continual compliance with scheme(s).

As the pre-bid stage, the Committee prescribed in the bid document will set the bid limit of the location. In exceptional circumstances and with prior approval of the Ministry of Environment and Forests, the bed limit may be increased after representation by the successful bidder if it can be proved that appropriated technologies coupled with environmental safeguards can increase the carrying capacity of the location without adverse impact on the environment.

Any project bid must contain a summary of Environmental measure and detailing methods and steps taken to ensure herence to the above environment guidelines, along with the master plan.

4. The Termination of Projects

The A.N Administration shall be the authority to terminate, after giving 60 days notice for correction to the resort company, any project that has any undesirable impact on the environment arising from false representation by the resort company in submitted project master plans and EIA. A project so terminated shall not receive any compensation.

5. Waste Disposal, Oil and Poisonous Substances

- a. Any type of waste, oil, poisonous gases or any substances that may have harmful effects on the environment shall not be disposed within the territory of the Andaman Islands except with sufficient safeguards and prior approval from the Ministry of Environment & Forests.
- b. In cases where the disposal of the substances stated in paragraph (a) of this clause becomes absolutely necessary, they shall be disposed only within the areas designated for the purpose by the Andaman Administration. If such waste is to be incinerated, appropriate precaution should be taken to avoid any harm to the health of the population.

6. Hazardous/Toxic Wastes

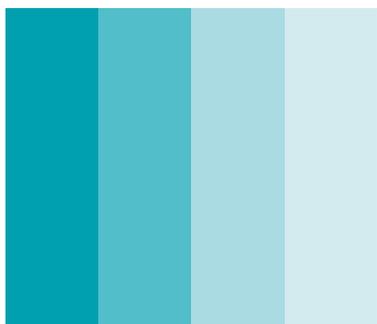
Hazardous / Toxic wastes that is harmful to human health and environment shall not be disposed off in the territory of Andaman & Nicobar Islands except as specified in accordance with the terms of project approval.

7. The Penalty for Breaking the Law and Damaging the Environment

Any violation to the environment shall be dealt under the relevant law such as Environment (P) Act 1986, Indian Forest Act, 1927, Forest Conservation Act, 1980, Wildlife Protection Act, 1972 and Coastal Zone Regulation by the concerned authority.

8. Compensation

The Andaman Administration reserve the right to claim compensation for all damages that are caused by activities that are detrimental to the environment. This includes all the activities that are mentioned in this guidelines as well as those activities that take place outside the projects that are identified here as environmentally damaging and which arise from negligence of the lessee.



Brief Profile of Collaborating Organisations

EQUATIONS (Equitable Tourism Options)

EQUATIONS is a research and policy advocacy organization (non-profit society) working on tourism and development issues in India. Its work has focused on women and tourism, the child and tourism, ecosystems, communities and tourism, and globalization impacts. EQUATIONS works closely, networking with organisations and communities, to influence people centered forms of tourism that ensure significant local benefits and take into account the negative impacts of an unbridled growth of tourism.

INTACH, Andaman and Nicobar Islands Chapter

The Indian National Trust for Art, Cultural and Heritage (INTACH) is a nationwide, non-profit membership organization. INTACH was set up in 1984 with the mission to protect and conserve India's vast natural and cultural heritage. The Andaman & Nicobar Islands chapter of INTACH has been actively engaged in preserving the cultural heritage of the Islands.

Society for Andaman and Nicobar Ecology

SANE has been working since 1986 on issues of ecology and indigenous communities of the Andaman & Nicobar Islands. SANE has been involved in several important research studies on coral reefs, people's strategy on biodiversity conservation, role of NGOs and impact of development on the Jarawas and other indigenous people. SANE has also been instrumental in moving several landmark PILs, some jointly with other likeminded organizations that have resulted in the protection of ecological sustainability and indigenous peoples' rights in the Islands.

Kalpavriksh

ENVIRONMENTAL ACTION GROUP

Kalpavriksh is a Non-Governmental Organisation working on environmental education, research, campaigns, and direct action. It began in 1979, with a campaign led by students to save Delhi's Ridge Forest area from encroachments and destruction. Starting with these roots in local action, Kalpavriksh has moved on to work on a number of local, national and global issues. It is based in Delhi and Pune.

Tata Institute for Social Sciences

Tata Institute of Social Sciences is a well known institute for post graduate studies in the areas of development and social work. It also works on the promotion of sustainable, equitable and participatory development, social welfare and social justice. In the Andamans the institute has been involved in relief work post tsunami in Katchal Island, following which it carried out assessment of resources and livelihoods affected by the natural disaster in Car Nicobar, Nancowry Group of Islands and Katchal Island.

ActionAid International India

ActionAid International an international development agency that is presently working in 43 countries to fight poverty and injustice. ActionAid India setup in 1972 works with marginalized sections of the rural and urban poor.

In the aftermath of the Tsunami (2004), ActionAid started its emergencies work in five countries – India, Sri Lanka, Maldives, Thailand and Somalia. In India, intensive work was carried out in A&N Islands, Tamil Nadu, and Andhra Pradesh. ActionAid's National Tsunami Response Programme in A&N Islands started in January 2005 and wound up in December 2008. The coverage area included the three districts of the Islands with a direct coverage of over 10,000 households, and an indirect coverage of all the people residing in the far flung islands through varied advocacy initiatives as well as addressing issues related to their lives and livelihoods.

This research study was supported by ActionAid.