

Ministry of Tourism & Culture
(Department of Tourism)



***Preparation of 20 years Prospective Plan
For
The state of Orissa***



FINAL REPORT

January, 2002

**ORG-MARG RESEARCH LIMITED
NEW DELHI**

LIST OF CONTENTS

Sl.	Title	Chapter No.	Page No.
1.0.0	INTRODUCTION		
1.1.0	Background	1	1
1.2.0	Need for the Study	1	2
1.3.0	Terms of Reference	1	3
1.4.0	Methodology	1	8
1.4.1	State Level	1	8
1.4.2	District Regional Level	1	11
1.4.3	Local Level	1	13
2.0.0	STATE PROFILE		
2.1.0	Topography & Geography	2	1
2.1.1	Location	2	1
2.1.2	Climate	2	2
2.1.3	Geography	2	2
2.2.0	Natural Resources	2	5
2.2.1	Forest	2	5
2.2.2	Coastal Belt & Water Resources	2	6
2.2.3	Mineral Resources	2	7
2.2.4	Hills	2	7
2.3.0	Demography	2	8
2.4.0	Language	2	9
2.5.0	Social Life	2	9
2.6.0	The Weaker Sections	2	10
2.7.0	Cultural & Historical Heritage	2	10
2.8.0	Assets of Orissa	2	11
	a) Wild Life Sanctuaries	2	11
	Similipal	2	12
	White Tiger Breeding	2	13
	Chandaka Elephant Reserve	2	13
	Tikarapara	2	13
	Ushakothi	2	14
	Karlapat	2	14
	Bhitarkanika	2	14
	Chilika & Nalabana Sanctuary	2	15
	Konark balukhanda Sanctuary	2	15
	Sunabeda Sanctuary	2	15
	Kothgarh	2	16

LIST OF CONTENTS

Sl.	Title	Chapter No.	Page No.
	Lakhari Valley	2	16
	Nandan Kanan Zoological Park	2	16
	Bhetoni	2	17
	b) Art & Crafts	2	17
	Textile	2	18
	Horn work	2	18
	Applique	2	18
	Metal Crafts	2	19
	Silver Filigree	2	20
	Patta Chitra	2	21
	c) Festivals of Orissa	2	22
	Magha Saptami	2	22
	Maha Shiva Ratri	2	22
	Ashoke Ashtami	2	22
	Taratarini Mela	2	22
	Chitta Prabha & Chhow Festival	2	23
	Sitala Sashti	2	23
	Rathayatra	2	23
	Ganesh Puja	2	24
	Dussera	2	24
	Lakshmi Puja	2	24
	Bali Jatra	2	25
	Konark Festival	2	25
	Dhanu Yatra	2	25
	d) Beaches	2	25
	Puri	2	26
	Chandipur	2	26
	Gopalpur on Sea	2	26
	Konark Beach	2	27
	Balighai Beach	2	27
	Talsari Beach	2	27
	Pati Sonapur Beach	2	27
	e) Tribal Focus	2	28
	Tribal Paintings	2	29

LIST OF CONTENTS

Sl.	Title	Chapter No.	Page No.
	f) Dances	2	31
	Chhow Dance	2	31
	Danda Natya	2	31
	Ranapa & Chaithi Ghoda Dance	2	32
	Koya Dance	2	32
3.0.0	TOURIST CIRCUIT & TRAFFIC		
3.1.0	Introduction	3	1
3.2.0	Tourist Circuits	3	1
	a) Sambalpur – Hirakud – Huma – Samaleshwari	3	2
	Sambalpur	3	2
	Huma	3	8
	Hirakud	3	11
	Chiplima	3	11
	Goddess Samaleshwari	3	12
	b) Chilika – Barkul – Rambha	3	12
	Satpada	3	17
	Nirmala Jhar	3	18
	Narayani	3	18
	Banpur	3	18
	c) Ratnagiri – Lalitgiri – Udaygiri	3	19
	Ratnagiri	3	19
	Lalitgiri	3	24
	Udaygiri	3	27
	Pathrajpur	3	29
	Langudi Hill	3	29
	d) Similipal – Jashipur – Balasore – Baripada – Khiching – Chandipur	3	33
	Lulung	3	36
	Joranda	3	36
	Nawana	3	36
	Barehipani	3	37
	Chahala	3	37
	Jamuani	3	37
	Gurguria	3	37

LIST OF CONTENTS

Sl.	Title	Chapter No.	Page No.
	Jashipur	3	37
	Bangriposhi	3	37
	Ramatirtha	3	37
	Chandipur	3	39
	Balramgudi	3	40
	Panchalingeshwar	3	40
	Nilgiri	3	41
	Sajangarh	3	41
	Khiching	3	41
	Remuna	3	41
	Deokund	3	41
	e) Bhubaneshwar – Konark – Puri	3	44
	Bhubaneshwar	3	44
	Lingaraja Temple	3	47
	Bindu Sagar Sarovar	3	47
	Mukteshwar Temple	3	48
	Parashurameshwar Temple	3	48
	Atri	3	48
	Nikko Park	3	48
	Nandan Kanan	3	49
	Shanti Stupa, Dhauli	3	49
	Dhavaleshwara Shiva Temple, Dhauli	3	51
	State Museum	3	51
	Barabati Fort, Cuttack	3	54
	Netaji Subhas Chandra Bose Memorial, Cuttack	3	55
	Konark	3	56
	Chandrabhaga Beach	3	57
	Puri	3	58
	Bada Danda	3	59
	Atahrnala Bridge	3	59
	Balighai	3	59
	Sankaracharya Math	3	59
	Raghurajpur Village	3	60
	f) Gopalpur – Taptapani	3	62
	g) Bhitakanika – Dangmal – Gahirmatha	3	64

LIST OF CONTENTS

Sl.	Title	Chapter No.	Page No.
3.3.0	Tourist Traffic	3	72
3.3.1	Monthwise Tourist arrival in Orissa	3	72
3.3.2	Projected Tourist Arrival in Orissa for next 20 Years	3	73
3.3.3	Statewise Break – up of domestic tourists visiting the State	3	74
3.3.4	Mode of arrival of Tourist Traffic at Orissa	3	75
3.3.5	Foreign Tourist Arrival in Orissa	3	75
3.3.6	Employment Generation	3	75
3.3.7	Tourist Traffic at a glance for the next 5 years at selected places	3	77
4.0	TOURISM DEVELOPMENT PLAN & IMPLEMENTATION		
4.1.1	Areas & Aspects	4	1
4.1.1.1	Development of Basic Infrastructure	4	1
	Rail, Road, Air Connection	4	1
	Power	4	2
	Communication	4	3
4.1.1.2	Development of Circuits / Certain Areas	4	4
	Similipal National Park	4	4
	Chandipur	4	4
	Bhitarkanika	4	5
	Gopalpur on Sea	4	5
	Lalitgiri – Udaygiri – Khandagiri	4	6
	Nandan Kanan	4	6
4.1.1.3	Product Development	4	7
	A) Urban Haat at Pipili	4	7
	B) Hot Air Ballooning at Similipal	4	16
	C) Value Added Aquatic Activities at Chilika	4	26
	D) Ropeway at Udaygiri & Khandagiri	4	43
	E) Ayurvedic Centre at Similipal	4	50
	F) Ethnic Tour of Orissa	4	59
4.2.0	Economic Impact	4	64
4.2.1	Expense trend of tourists	4	64
4.2.2	Indirect Benefits to Tourism	4	65
4.2.3	Employment Generation	4	65
4.3.0	Social Impact	4	66
4.4.0	Privatisation of tourism units in Orissa	4	67

LIST OF CONTENTS

Sl.	Title	Chapter No.	Page No.
4.4.1	Units already leased out	4	67
4.4.2	Unit for which tender has already been received	4	68
4.4.3	Units ready for leasing out	4	69
4.4.4	Private Sector participation in Conservation Work	4	69
4.5.0	Present Status of Existing Master Plans	4	70
	Buddhist Circuit	4	71
	Rural Tourism	4	71
	Eco – Tourism Development	4	71
	Destination Development	4	71
	Large Revenue Generating Projects	4	72
	Development of Beaches	4	72
4.6.0	Implementation Schedule	4	73
4.6.1	Short Term Plan (2002 – 2007)	4	73
4.6.2	Medium Term Plan (2007 – 2012)	4	75
4.6.3	Long Term Plan 2012 – 2022)	4	78
5.0.0	ENVIRONMENT IMPACT ASSESSMENT		
5.1.0	Introduction	5	1
5.2.0	EIA	5	2
5.3.0	Conservation of natural Resources including Forestry and wildlife	5	8
5.3.1	Biosphere Reserves	5	8
5.3.2	Wetland, Mangroves and Coral Reefs	5	8
5.3.3	Eco Development	5	9
5.3.4	Threatened Species	5	10
5.3.5	Activities under Eco Development Programme	5	10
5.4.0	Project Elephant	5	11
5.5.0	Project Tiger	5	12
	Eco – Tourism	5	14
	Action Plan	5	16
5.6.0	Conclusion	5	17

LIST OF CONTENTS

Sl.	Title	Chapter No.	Page No.
6.0.0	FINANCIAL PLAN & FUNDING		
6.1.0	IX th Plan Outlay & Expenditures for State of Orissa	6	1
6.1.1	Proposed X th Plan Outlay	6	3
6.2.0	The Plan	6	6
6.2.1	Structure for working out the plan	6	6
6.2.2	Sectorwise Classification	6	8
6.3.0	Funding	6	11
6.3.1	Central Financial Assistance	6	11
6.3.2	Normal Funding	6	12
6.3.3	Grant of Assistance	6	13
6.3.4	Institutional Assistance	6	13
6.3.5	Role of TFCI	6	14
6.3.6	OECD	6	15
6.3.7	Objectives of Development	6	15
6.3.8	Role of State Government	6	16
6.3.9	Development Approach	6	16
6.3.10	Land	6	17
6.3.11	Finance	6	17
6.3.12	Roads	6	17
6.3.13	Air Connection	6	18
6.3.14	Water Transport	6	19
6.3.15	Hotels & Other Tourism facilities	6	19
6.3.16	Religious Tourism	6	20
6.3.17	Convention Tourism	6	21
6.3.18	Package of Incentives	6	21
6.3.19	Private Sector Participation	6	24
7.0.0	MARKETING & PROMOTION STRATEGY		
7.1.0	Areas Identified	7	1
7.2.0	Strategy	7	2

LIST OF TABLES

Table No.	Title	Chapter No.	Page No.
3.1	Accommodation facility at Sambhalpur	3	5
3.2	Traffic Arrival at Lalitgiri – Lalitgiri - Udaygiri	3	32
3.3	Approach of Similipal from Prime Locations	3	34
3.4	Tourist Traffic Arrival At Similipal	3	36
3.5	Accommodation Facility in and around Similipal	3	38
3.6	Some Hotels at Bhubaneshwar, their Category and no. of rooms	3	45
3.7	Tourist Traffic at Bhubaneshwar	3	46
3.8	Some Hotels of Puri & their Tariffs	3	61
3.9	Tourist Arrivals at Puri	3	61
3.10	Charges at Bhitarkanika	3	68
3.11	Visitors in Orissa from different Indian States	3	74
3.12	Employment Generation in selected Tourist Spot	3	76
3.13	Employment Generation in selected Tourist Spot	3	76
4.1	Proposed floor Area of the Buildings	4	9
4.2	Tentative Cost of construction of buildings	4	11
4.3	Tentative Preliminary Expenses	4	11
4.4	Tentative Cost of Equipments	4	12
4.5	Tentative Cost of Operations	4	12
4.6	Tentative Total initial Expenditure	4	12
4.7	Rental Income from Artisans	4	14
4.8	Income from Food Stalls	4	14
4.9	Tentative Total income from the Haat	4	15
4.10	Equipment Cost – Cost of the Balloon	4	23
4.11	Other Preliminary Expenditures	4	23
4.12	Tentative Civil Cost	4	24
4.13	Tentative Total initial Cost	4	24
4.14	Specification of the Cruise Boat	4	27
4.15	Specification of the Amusement Boat	4	32
4.16	Tentative Cost of Equipment for Boat Cruise	4	33
4.17	Tentative Cost of Water Skiing Equipment	4	33
4.18	Tentative Cost of Para Sailing Equipment	4	34
4.19	Tentative Cost of Snorkeling & Scuba Diving Kit	4	34
4.20	Tentative Cost of Boats to be used as Water taxis	4	34
4.21	Tentative Cost of Water Scooter & Accessories	4	35

LIST OF TABLES

Table No.	Title	Chapter No.	Page No.
4.22	Tentative Cost of Amusement Boat	4	35
4.23	Tentative Total equipment cost	4	36
4.24	Preliminary Expenditures	4	36
4.25	Tentative Total Income	4	37
4.26	Tentative Income from all the activities	4	42
4.27	Cost of Equipments	4	47
4.28	Preliminary Expenditure	4	47
4.29	Tentative Total Cost	4	48
4.30	Tentative Revenue from Ropeway	4	49
4.31	Tentative Civil Cost	4	54
4.32	Tentative Cost of Decoration	4	55
4.33	Tentative Cost of Plant & Equipment	4	55
4.34	Cost of Accommodation	4	56
4.35	No. of People Attending Courses	4	56
4.36	Tentative amount of revenue generated	4	57
4.37	Revenue from messages of various types	4	58
4.38	Tentative total income from the Centre	4	58
4.39	Tourism units already leased by Government of Orissa	4	68
5.1	Impact Identification Matrix for proposed Urban Haat at Pipili	5	4
5.2	Impact Identification Matrix for proposed Hot Air Ballooning	5	5
5.3	Impact Identification Matrix for proposed Boat Cruise	5	5
5.4	Impact Identification Matrix for proposed water Sports facility	5	6
5.5	Impact Identification Matrix for proposed Amusement Boat	5	6
5.6	Impact Identification Matrix for proposed Ropeway	5	7
5.7	Impact Identification Matrix for proposed Ayurvedic Centre	5	7
6.1	Outlay & Expenses for the IX th Plan	6	2
6.2	Costing of Facilities	6	6
6.3	Annual fund Out lay at Orissa	6	9
6.4	List of Projects	6	24

LIST OF FIGURES

Sl.	Title	Chapter No.	Page No.
2.1	District Map of Orissa	2	4
2.2	An Artist engrossed in Applique Work	2	19
2.3	Famous Metal Crafts of Orissa	2	19
2.4	Artist performing Chhow dance	2	31
2.5	Artists performing famous dance	2	32
2.6	Details of Tourist destinations	2	33
3.1	The birds at Chilika	3	13
3.2	Existing water sports at Chilika	3	14
3.3	Archaeological Delights of Orissa	3	19
3.4	The famous rock shelters of Udaygiri & Khandagiri	3	20
3.5	The famous tiger at Similipal	3	35
3.6	The majestic waterfall at Joranda	3	37
3.7	The towering Lingaraj temple	3	47
3.8.a	The Dinosaur Model at Nandankanan	3	49
3.8.b	A tiger basking at Nandan kanan	3	49
3.9	The Shrine of Buddha at Dhauli	3	50
3.10	The famous Konark Temple	3	56
3.11	The Famous Car Festival at Puri	3	58
3.12	Taptapani	3	63
3.13	Mangrove Forest at Bhitarkanika	3	65
3.14	Crocodiles at Bhitarkanika	3	71
4.1	Management Committee of the Haat	4	10
4.2	Burner of a Balloon in Action	4	18
5.1	Stages in an EIA Process	5	3

EXECUTIVE SUMMARY

E.1 Department of Tourism under the Ministry of Tourism and Culture, Government of India, has proposed a 20 years Perspective plan for development of Tourism industry in state of Orissa. Keeping in mind the aforementioned objective, Ministry of Tourism, Government of Indian, has assigned ORG-MARG Research Pvt. Ltd. to prepare the plan. The Draft plan is divided into 7 chapters under different headings.

E.2 The state of Orissa has, at present 30 districts covering an area of 1,55,707 sq. km with a population of 36,706,920. Orissa, one of the 28 states of India, ranks eleventh in population and ninth in area. Perpetually washed by the blue waters of the Bay of Bengal. It lies on the east coast with a coastal length of 482 km. It is bounded by West Bengal and Bihar on the north, Andhra Pradesh on the south, the Bay of Bengal on the east and Madhya Pradesh on the west.

The state can be broadly divided into four natural regions, i.e, (a) the hilly areas in the north and northwest, (b) the Eastern Ghats, (c) the central and the western plateau and (b) the coastal plains.

An important feature of the population of Orissa is its component of the weaker sections comprising the scheduled tribes and the schedule castes. Orissa consisting of 62 tribes account for 22.15% and the later comprising 93 castes make up for 16.12% of the total population. The scheduled tribes are concentrated in order of density in the districts of Mayurbhanj, Koraput, Keonjhar and Phulbani.

The cultural heritage of Orissa is reflected in a number of vibrant art forms. Culture imparts flavour and animation to the social and religious activities of people. It flows as an under-current of inspiration and acts as a powerful chain of human craftsmanship.

Orissa has a distinct tradition of painting, architecture, sculpture, music and dance.

E.3 The tourist Circuits identified were as under

- a) Sambhalpur – Hirakund Dam – Huma- Samaleswari
- b) Chilka-Barkul-Rambha
- c) Ratnagiri-Lalitgiri-Udayagiri
- d) Similipal- Jashipur – Balasore – Baripada – Chandipur - Khiching
- e) Bhubaneswar - Konark – Puri (The Golden Triangle)
- f) Gopalpur - Taptapani
- g) Bhitarkanika – Dangmal – Gahirmatha

This apart a number of places were covered under the survey and their potential as a tourist spot were evaluated. A few prominent spots that were evaluated on the basis mentioned above are as follows:-

Pathrajpur, Langudi Hill, Bindu Sagar Sarovar, Shanti Stupa, Dhabaleshwar Shiva Temple, State Museum, Barabati Fort, Netaji Subhas Chandra Bose Memorial, Chandrabhaga Beach, Shankaracharya Math, Raghurajpur Village

E.4 Insufficient operational infrastructure i.e. approach road, sanitation, drinking water, parking place, sheds at the spot are the parameters that require immediate attention from the concerned authorities.

- ☞ Balasore an important junction on the Chennai - Howrah route is the nearest stop for the fast trains for tourist going to Similipal. This has a meter gauge connection with Baripada, Bangriposhi, and Jashipur due to this train takes more than 5 hours to cover the distance of 95 kms.
- ☞ NH 5, backbone of road infrastructure in Orissa badly requires reconstruction. This passes parallel to Southeastern railway and hosts highest traffic in Orissa.
- ☞ The present Airport at Bhubaneswar is a domestic airport and has connectivity only in the afternoon for long distance flights thereby resulting in wastage of entire day for the tourists. Though it has been declared as an International terminal recently, the Ministry of Civil Aviation, Airport Authority of India, various state departments (power, sanitation, water, municipal corporation) PWD, have to work in close co-ordination to fulfil the task at the earliest. As a result besides being beneficial for the tourists it shall also promote trade & commerce in the state of Orissa.
- ☞ During the study it was identified that power availability is very poor at spots, virtually some spots do not have power connection at all.
- ☞ Communication was identified as major limiting factor to tourism growth as very few spots were identified having public calling office (PCO) in their proximity. STD facility was also missing at a number of places, as a result the tourist were not able to contact their near & dear ones. Besides this the budget accommodation / guesthouse

facility near spots lack cable connectivity. In this Jet age tourists find themselves completely cut out from the external world.

- ✎ Basic amenities like sanitation, drinking water, parking place, food stalls and primary medical facility, were found inadequate at Simlipal, Bhitarkanika, Chandipur, Gopalpur on sea, Lalitgiri-Udaygiri-Ratangiri, Chilika, Barkul, Rambha, Puri, Konark. Even the state capital is lacking in hygienic exclusive food joints. Whatever places are there are a part of the hotel/lodge.
- ✎ Guides are not available at most of the destinations as a result tourists are not in a position to know either about the spot or surroundings. Many tourists have to defer their visit plan, as they are skeptical to move to any particular spot without any knowledge of the spot.

E.5 The Consultants evaluated **Govt. of Orissa's approach to privatise the tourism units of the State**. The Orissa Tourism Policy, 1997, which was prepared on the basis of Orissa Industrial Policy, 1996 envisages to encourage private sector for investment in Tourism related activities in Orissa. Meanwhile however, the State Industrial Policy, 1996 has been replaced by a new Orissa Industrial Policy, 2001, wherein certain changes have been made regarding the incentive and the concessions. Alongwith this, the Central Government also announced a new National Tourism Policy in 2002. Keeping in mind the above considerations, the Orissa Tourism Policy 1997 is being modified. A list of Tourism Units already leased out or in the process of leasing out are as follows.

Tourism units already leased out by Government of Orissa

1. Panthika, Bhadrak
2. Panthika, Khandagiri
3. Panthika, Sarankul
4. Panthika, Rameswar
5. Panthika, Gokarnika
6. Panthasala, Kantilo
7. Tourist Complex, Patharajpur
8. Wayside Amenity Centre, Angul
9. Panthasala, Gatagaon
10. Panthasala, JK Road
11. Panthika, Charichhak
12. Wayside Amenity Centre, Sakshigopal

Unit for which tenders have already been received

1. Panthasala, Kendrapara

Units ready for leasing out

1. Panthasala, Harishankar
2. Panthika, Charichhak
3. Panrhasala, Bhattarika
4. Tourist Complex, Atri
5. Panthasala, Gupti
6. District Tourism Centre, Phulbani
7. Panthasala, Taratarini
8. Panthasala, Chhapackina
9. Panthasala, Sunabeda
10. District Tourism Centre, Bolangir
11. Wayside Amenities Centre, Baragarh
12. Tourist Complex, Harishankar
13. Tourist Complex, Deuljhari
14. Tourist Complex, Bissam Cuttack
15. Panthasala, Gupteswar

There is hardly any initiative from the private sector to conserve and restore ancient monument in the State of Orissa. A suitable strategy can be framed in order to motivate them amicably so that they participate actively in the preservation of rich cultural heritage of the State of Orissa.

E.6 Master Plans have been prepared at different times by the Government of Orissa. These are: -

- a) 10-year Perspective Master Plan for Orissa (1992-2002) had been prepared by TCS.
- b) A comprehensive master plan for the State of Orissa had been prepared by ITDC in the late 70s.
- c) Master plan on Chilika Lake had been prepared by Town & Country Planning Organisation in late 70s.
- d) Comprehensive Master Plan on Buddhist Circuit of Orissa comprising Ratnagiri – Lalitgiri & Udayagiri had been prepared by TCS and A.F. Ferguson in mid 90s.

The purpose of all the above master plans were to ensure planned development of tourism in the state, however, due to various reasons, the integration both the private and the public sectors could not be achieved.

However, in accordance with the new National Tourism Policy, 2002 and with the separate guidelines issued by the Government of India, the State Department of Tourism is currently engaged in preparation of master plans for the integrated development on the following subjects.

- ♦ **Buddhist Circuit comprising of Dhauli, Ratnagiri, Lalitgiri, Udayagiri and Langudi**
- ♦ **Rural Tourism at Raghurajpur Village**
- ♦ **Eco-Tourism Development at Chilika & Bhitarkanika**

- ◆ **Destination Development at Puri, Chandipur, Gopalpur**
- ◆ **Large Revenue Generating Projects**
- ◆ **Development of Beaches**

E.7 Suggestions made by the consultant include development of operational infrastructure, improvement in amenities at various spots/circuits, products conceptualization for tourist attraction. Some highlights of these are:

- ☞ Being the most preferred medium of transportation roads require special attention from the concerned authorities. NH 5 should be widened to accommodate the increasing traffic. In addition 35 km approach road to Bhitarkanika should be improved to an all terrain road.
- ☞ Bhubneswar should have international airport so that foreign tourist can directly land at destined place. Besides this it shall also facilitate the domestic operators to re-schedule their timing. The aviation department has to work in close coordination with Orissa State Tourism Department for smooth implementation of this plan.
- ☞ Rail network is efficient in Orissa. Still some improvement is required at Balasore, Jashipur, and Bangriposhi. Conversion of meter gauge railway track into broad gauge should be undertaken immediately.
- ☞ Communication kiosks (PCO, Cyber café) should be installed at spots. Cable connection should be made mandatory at all the budget hotels/bungalows.
- ☞ Amenities including sanitation, potable drinking water points and other public conveniences as well as wayside cafeterias are suggested at Bhitarkanika, Simlipal, Chilka, Puri, Konark, Balasore,

Chandipur, Gopalpur, Satpada, Rambha, Jaypur, Raygada. Motels on connecting points to varied spots can be a good option to for accommodation and food.

☞ Power back up facilities should be arranged which can be at a higher rate than the SEB.

☞ The consultant has identified the following places.

- Accommodation Projects(hotels/resorts/motels)
- Cafeteria Projects(restaurants, wayside facilities)
- Service oriented projects (travel agency/operators/franchise)
- HRD
- Products such as
 - Urban Haat at Pipli near Bhubaneshwar
 - Ballooning at Simlipal National Park
 - Value added Aquatic Activities at Chilika Lake
 - Ropeway - Khandgiri and Udaygiri Hills
 - Ayurveda Center at Similipal
 - Ethnic tour of Orissa (Bhubhaneshwar - Rayagada-Jeypore – Koraput – Vizag)

☞ The consultant has explored the economic as well as social impact as a result of the development of tourism:

- ☞ One of instant impact will be on average spending and duration of stay of the tourists, to enjoy the improved amenities at spots.
- ☞ Return on investment can be planned through imposing charges on various services offered for tourist.
- ☞ Investment plan should be framed keeping in view the volume and type of traffic at particular spot.

- γ Revenue model suggested for products conceptualized should be compared with the capacity & volume of traffic at the spot.
- γ Suggested preservation of heritage can't be implemented without participation of local community. This will be an additional employment opportunity for them.
- γ The development plan suggested by the consultant will lead to mass generation of employment in turn uplift the lifestyle of local inhabitants.
- γ The improved infrastructure facilities & demand created by increase in traffic would further accelerate the economic development of the area

E.8 The tourist always wants value for money when any destination is visited. This varies from tourist to tourist & destination to destination. Besides this it also varies for domestic and international tourists since they have different needs as well as motivations for an experience is different in both the cases. As per the study foreign tourist are more interested in tribal area, ethnic tourism, adventure, wildlife tourism, culture & heritage, eco-tourism, handicrafts whereas on the other hand domestic or day visitors were interested in religious places, monuments, amusement facilities, leisure tourism. The plan has to be focussed on these needs.

- Traffic inflow should be tracked and compare it with the projections. Any variation should be scanned along with reasoning and measures to motivate the tourists.
- **The outlay approved for IX th Plan for Orissa Tourism was 1950 lakh. The actual details of out lay and expenditure are enclosed in Chapter 6.**

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- **An outlay of 2472.41 lakh has been proposed for X th Plan Period for Orissa Tourism. Details of the same are enclosed in Chapter 6.**
 - The consultants have worked out three phases for development based on demand priority for development and magnitude of various developmental projects. The total duration of all the phases collectively is 20 years indicated as short terms (2002-2007), medium term (2007-2012), long-term (2012-2022).
 - Short term, is the first phase spanning for a period of five years. Projects that have already been taken up by the Orissa Tourist Development Corporation are envisaged to be completed within this time frame. At the same time priority projects identified by the Consultants would be planned in detailed during this phase. Still emphasis should be on developing operational infrastructure suggested by the consultant at tourist spots/circuits.
 - Medium term plan concentrates on development of products conceptualized during the study. Monitoring of the tasks implemented is also necessary in order to maintain the standards and revenue.
 - Prime objective of long-term plan is performance appraisal of projects implemented during short and medium term. Any deviation from the objective should be taken care of before they get delayed and non revertible.

E.9 Eco tourism has been identified as major thrust area in Orissa. Catalyst identified was abundance of natural assets i.e. not

utilized properly till date. State government decision of sharing the income from forest products with local inhabitants is a leap forward step in right direction. Consultant has identified some steps for this:

- It is desirable that new tourism projects should not bring about any impairment to the environment. Hence the consultant feels that due cognizance be given to the environmental aspects and proposes that environment impact assessment should be made an integral part of all forthcoming projects. The Environment Impact Assessment matrices of all the suggested products are enclosed in Chapter 5
- The consultant has suggested 11 activities to be performed for eco development and maintenance of natural assets. Suggestions are made for preservation of endangered species and other forest products.
- Similipal tiger reserve is incomparable asset of Orissa as it was one of the 8 national park initially identified for development under Tiger conservation programme (TCP). This is among major attraction point for adventure as well as wild life tourists. The forest department has conceptualized eco-development program for this area with cooperation from local inhabitants. (refer Chapter –5)
- One major suggestion is reducing the dependency of local inhabitants on forest. Cultivation is very poor in state and people are dependent on forestry products despite vacant agricultural land. Other identified revenue stream should be implemented in order to create conducive environment for this change.

- It has been observed that Joint Forest Management (JFM) has been successful, by and large in managing forests in a sustainable manner in various parts of the country. This approach has exemplified fruitful collaborative efforts of the forest department. This should also include local community participation for forest conservation.

E.10 The Tourism Perspective Plan for development of basic infrastructure, tourism product development and creation of selective tourism circuits requires a sizeable capital investment towards creation of additional facilities to cater the needs of projected flow of tourist traffic.

The plan should focus on Sustainable tourism development which is eco & environment friendly, tourist friendly. Tourism is said to be at opposite heads with environment wherein tourists at a particular destination leads to overcrowding which in turn leads to waste generation resulting in generation of various types of pollutants of different forms & types. The sustainable development consists of various benefits in different forms such as benefiting

- local population / inhabitants
- participating agencies/associates/bodies
- provide a lasting experience
- informative in nature
- conserving resources(cultural & historical heritage)
- Emphasis on quality & not quantity.

An environment planning approach is essential for sustainable development of tourism. This implies that all aspects of environment be carefully studied, analyzed while proposing development at

sensitive tourist destinations, thus it calls for an separate cell whereby all monitoring activities can be carried out related to the environment.

- ☞ Tourism dept. should give high priority to planning new approach roads and maintenance of existing ones that provide linkage to thrust areas and other identified destinations of tourist importance. The roads from Bhitarkanika/Dhauri/Jaypur/Similipal/Hirakud dam require immediate attention this priority should be assigned.
- ☞ Central government assistance through various plans like Prime minister **Gramin Sadak Yojna**, National Action Plan for Tourism (NAPT) and Golden Quadrilateral etc. should be utilized properly in order to generate effective results. (refer chapter-7)
- ☞ The consultants has proposed tourist information center at Chandipur / Gopalpur / Taptapani / Hirakud to facilitate the tourists, this will require an investment of INR 20 lacs.(refer chapter –6)
- ☞ Basic amenities like sanitation, potable water, parking area were suggested at Chandipur/ Bhitarkanika /Similipal/ Gopalpur/ Lalitgiri/ Nandankanan. The approx. cost is INR 65 lacs.
- ☞ Two new museums were suggested at Konark and Buddhist circuit (Lalitgiri-Udaygiri-Ratangiri) with cost ranging between INR50-60 lacs.(refer chapter –6)
- ☞ Wayside cafeteria and motels are suggested on the way to Lalitgiri/Udaygiri/Ratnagiri/Dangmal/ Sambhalpur/ Hirakud dam with an individual cost of INR 20 lacs.(refer chapter –6)

- ☞ To curb the accommodation problem consultant has proposed budget hotels at Similipal, Chandipur, Satapada, Barkul, Bhitarkanika, Lalitgiri, Ratnagiri, Koraput, Jaypur, Taptapani. The room strength should vary between 25-30/hotel and require an investment of INR 100 Cr..approx.
- ☞ These subheads have been divided into periodic plans with projected fund outlay.
- For working out the plan following structure has been adopted.

Costing of facilities

Facilities	Average Cost (Rs. in Lakhs)	Locations
Tourist Information Centre	18-20	Chandipur / Gopalpur/ Taptapani / Hirakud
Sanitation/Public Conveniences	14-17	Chandipur/Bhitarkanika /Similipal/ Hirakud/Huma
Approach Roads	1200-1300	Bhitarkanika/Dhauli/ Jaypur/Similipal/ Hirakud dam
Cafeteria/Wayside Amenities	90-110	Lalitgiri/Udaygiri/Ratnagiri/Dang mal/ Sambhalpur/Hirakud dam
Potable water	18-25	Gopalpur, Lalitgiri, Similipal
Landscaping/Garden	35-40	Lalitgiri,Udaygiri, Hirakud dam
Parking Area	15-18	Nandankanan, Konark, Puri, Huma
Museum/Art Gallery	50-60	Konark, Buddhist circuit
Security Booth	4-8	
Power Back-up 35 KVA	20-24	Various circuits
Budget Hotels [130-150 rooms]	750-1050	Similipal, Chandipur, Satapada, Barkul, Bhitarkanika, Lalitgiri, Ratnagiri, Koraput, Jeypore, Taptapani

For details on the above refer Chapter –6 of the main report

Development of tourism infrastructure and improvement of tourism products mainly consist of the following :

- i) Central Financial Assistance for integrated infrastructure development.
- ii) Central Assistance to state government for developing tourist circuits and product development.
- iii) Institutional Assistance
- iv) Package of incentives for promoting private investment in the tourism sector.

☞ Funding options have been also taken care of through identification of institutions specializing in supporting tourism development activities. The institutional assistance for developing tourism facilities is available from domestic financial institutions i.e. TFCL, IFCI, SIDBI, SFCs, IDBI, ICICI.

➤ Since most of the infrastructure components and delivery systems are within the preview of the state government, providing financial assistance to State Government is mainly developing the infrastructure for tourism. The central Government investment for the improvement and creation of tourism circuits are channelised through the state government on a cost sharing basis. The specific schemes for which assistance is provided have been subdivided into

- (i) construction schemes (forest lodges, tourist complex, wayside amenities, tourist reception centre, public convenience etc.)
- (ii) Tourist transport (mini buses, jeeps etc. for wild life viewing, cruise boats, ferry launches for water transport, tourist coaches in selected circuits etc.).

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- A tax holiday should be made available for a period of 5-10 years on the capital investment to various tourism projects whether declared by the Central government (circuits) or the state government located in designated areas as well as located on state as well as national highways. Necessary administrative arrangements shall be made available at state as well as district level to make the incentive scheme operational.
 - The OTDC shall have to assume a catalytic role focussed on acting as a clearing house of information, production & distribution of brochures, literatures etc. Besides this the department shall open its offices at various important cities of India to provide publicity as well as tourism information along with packages, circuits, tariffs etc.
 - Intensive efforts shall be undertaken to attract private investors from other states as well as countries including NRI's to invest in tourism sector. The Department of Tourism along with OTDC shall have to play an active role in ensuring smooth and clear cut permissions, information, plans are available to them easily without any hassles of the government.
 - A special task force needs to be created under the chairmanship of the Secretary as well as the Director of tourism along with other core members for effective co-ordination & implementation as well as monitoring the activities among various government departments, agencies to speed up the decision making process as well as take corrective measures on the spot and implement the same.
 - To make the entire system result oriented it is necessary that there be a strong feedback and monitoring system.

- ☞ The most popular pattern for funding is the 'normal funding' under which, the Dept. of Tourism, Govt. of India meets almost the entire expenditure except the cost of land and interior decoration in case of the construction projects. Around 60% of the project cost has to be raised as loan from financial institutions or banks.
- ☞ Package of incentives for promoting private Investment in Tourism industry should be designed with support from TFCI, IFCI, IDBI and other financial institutions. These can be opted from available incentive options like: priority sector, interest subsidy, income tax exemptions, capital subsidy for heritage hotel, etc.

E.9 The development of tourism is connected with a number of factors such as

- Changing lifestyles & demographics
- Political climate
- Economic factors
- Investment climate

Marketing of the spots has to be planned with respect to attracting more tourists as well as repeat tourists. This is divided into 2tier plan

1st tier

- Creation of facilities
- Awareness build - up
- Target the tourist community (state specific)

2nd tier

- Invite private participation
- Provide operational incentives

There are certain areas which can be focused on the type of tourists i.e,

- | | |
|---------------------|-----------------------------------|
| • Ethnic Tourism | <i>International Visitors</i> |
| • Religious Tourism | <i>Domestic Visitors</i> |
| • Adventure Tourism | <i>International visitors</i> |
| • Water Sports | <i>Domestic</i> |
| • Urban Haat | <i>Domestic and International</i> |
| • Boat cruise | <i>Domestic and International</i> |
| • Buddhist circuit | <i>International</i> |

- Keeping in view the above areas of development, the strategy has to be focused and type specific, which shall vary & cannot be a uniform approach.

The strategy for the development of tourism should be based on the following

- Connectivity
 - Infrastructure
 - Hygiene
 - Safety & Security
 - Affordability
 - Accessibility
- ☞ Tourism department should improve the support system with cooperation from the authorized tour operators. Services required includes facilitation center, approved guide, photography, brochure of the particular circuit as well as spot, facility to make the tourist at ease etc.

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- ☞ Developing multi-optional tour packages will definitely be a great savior of time and money for tourists. These should be designed keeping in perspective the past trend of tourist inflow and promoted through approved operator.
 - ☞ Government should formulate strategies to promote suggested types of tourism targeted at domestic as well as international tourists respectively.
 - ☞ Ethnic Tourism is quite popular among international tourist, during the study it was identified that most of the visitors originate from Italy, Germany, Holland & USA. Tourism department should encourage tour operators to collaborate with international travel agents and promote this package extensively.
 - ☞ The tour operators do not package Buddhist circuit rightly; state should give incentive to bring the tourist to this circuit. For example it can be 1-3% commission on the bookings made.
 - ☞ To achieve these following steps need to be adopted
 - Project Orissa as a major destination within and outside the country.
 - Identify the USP of various circuits / products.
 - Focus on the operators and agents other than OTDC.
 - Improve inter destination connectivity.
 - Provision of Basic facilities [irrespective of the traffic] needs to be developed at various identified areas.
 - Attract high-end tourist and focus on certain themes/ products.
 - For remote areas, central power backup systems [generator 30-35 KVA] and charge for the same at higher rates than SEB.

E.10 Create a brand image for the state for promoting the same in India & abroad by building various themes such as

- Land of Peace
- Buddhism
- City of Temples & Dances
- Tiger Reserve & Olive Ridley Turtles
- Beach adventure
- Rich tribal culture

CHAPTER -1

INTRODUCTION

1.1.0 Background

Recognising the importance of tourism as an instrument for economic development, a comprehensive tourism policy was framed by the government. As a consequence of economic restructuring & liberalisation of policies, the Tourism Industry was declared as a priority sector for foreign investment.

Though India has the potential of becoming the number one destination in the tourism circuit, the lack of commitment & changing policies are causing hindrance. Tourism has to be given the status of India's top economic driver & become a national priority.

India is getting just 2.6 million foreign arrivals a year & its share in world tourism arrivals has remained at a constant 0.40%. The number of Indians travelling abroad is much more than that of the number of foreign tourists coming in. On the other hand domestic tourism has grown by leaps & bounds from 64 million to 176 million but the average Indian spending is much less than the world average, which is approximately 10% on travel & tourism. The Indian average, which is 4.6%, is slowly on the rise that shall translate India being the highest growth country for tourism demand in the world.

The government spending in India is a mere 0.9% of its total spending on travel & tourism, compared to other countries, which ranges between 5-15% of the total expenditure.

This translates into lack of infrastructure in terms of

- rail, road, air connections
- communication
- accommodation
- tourist information network

Secondly, unplanned growth is having its impact on local environment as well as creating socio-cultural problems in existing high traffic areas. This has resulted in overcrowding. As a result India is unable to capitalise fully the dramatic shift visualised by the tourism industry, which is, a shift of tourist destination from America & Europe to Asia & Far East.

The visitors to India come mainly from England & US followed by Sri-Lanka, France, Germany, Canada, Japan, Australia & Singapore. The majority of visitors are in the younger age bracket between 25 & 44. Nearly 70% of the visitors are men. Besides this 45% of the overseas visitors to India are repeat visitors.

1.2.0 Need for the Study

As narrated earlier, the tourism industry has been generating an impressive volume of employment and is also one of the major foreign exchange earner. The development of this industry depends on the quality of environment and availability of facilities and amenities, which are of utmost importance, as people expect an ambient atmosphere.

As a result accessibility, accommodation & recreation are the three essential factors, which go a long way in the development of tourism.

India has an immense potential to be developed as the main tourist destination in the coming years because of some of the important features which are as mentioned below:

- India with a population of over 1 billion is spread over an area of 3287 sq. kms.
- A coastline of over 7516 kms
- Railway network sprawling over 62,700 kms
- Over 61,500 hotel rooms in over 1083 hotels (3 star – 5 star)
- Some of the most beautiful beaches in the world.
- Over 80 national parks & 444 wildlife sanctuaries
- Over 51 hill stations

The potential of domestic tourism has grown substantially during last few years due to increase in income levels & emergence of dynamic urban middle class with increase in spending habits.

To assess the tourism potential the Ministry of Tourism has entrusted the task of Preparation of 20 years perspective plan for the state of Orissa to **ORG-MARG Research Ltd.**

1.3.0 Terms of reference

- i) A perspective plan with a time frame of 20 years needs to be developed for developing sustainable tourism giving year-wise phasing of investment having regard to the resources available. Department of Tourism shall provide Central financial assistance for this purpose subject to the maximum of Rs. 20.00 lakhs.
- ii) The Plan should indicate short-term and long-term plans, targets and ground realities.
- iii) The Plan should indicate all activities to be undertaken by different agencies clearly indicating the time frame for each activity.

- iv) The Plan should be able to assess the existing tourism scenario in the State/Union Territory with respect to existing traffic levels and inventory of:
 - natural resources
 - heritage and other socio-cultural assets
 - quantitative / demographic factors like population, employment, occupation, income levels etc.
 - services and infrastructure already available
- v) The Plan should review the status of existing development / investment plans of schemes for the development of tourism in the region.
- vi) The Plan should list and evaluate existing potential tourist destinations and centers and categorise them on the basis of inventory of attractions, infrastructure availability, degree of popularity, volume of traffic flow etc.
- vii) The Plan should analyse and categorise existing / potential destinations and centers, as a stand alone destinations, part of a circuit and / or as major attractions for special interests groups, etc.
- viii) The Plan should assess the existing infrastructure levels at identified destinations / centers in terms of quality of roads / transportation facilities, civic amenities, enroute transit facilities, boarding and lodging facilities etc.
- ix) The Plan should be able to broadly assess traffic flow to identified destinations & centers for assessment of infrastructure requirements taking into account past growth trends, suggested linkages and integration, future expected developments including likely investments by the State and investment climate / incentive for the private sector etc.

- x) The Plan should attempt and arrive at an indicative cost configuration of likely investment on infrastructure development under different heads and to prioritise investment needs by drawing up a phased investment plan covering the next 20 years.
- xi) The Plan should identify the existing as well as new tourism projects including projects for expansion / augmentation, upgradation of facilities and services destinations & centers, which have potential for development.
- xii) The Plan should undertake product conceptualization cum feasibility exercise inter-alia for identified projects covering aspects like locational evaluation, schematic product planning & conceptualization including quantification of individual project parameters, assessment of overall investment levels and of project viability cum feasibility study exercises etc.
- xiii) The Plan should prepare an action plan for implementation of identified potential development schemes / projects / products and for development of infrastructure in conformity with the policy objectives & guidelines provided by the concerned state / central agencies / departments and the requirements of national development and funding agencies. The overall development plan to also take into account WTO's Bali declaration on tourism development.
- xiv) The Plan should include Project-wise potential for employment generation; a reasonable percentage of potential employment is to be reserved for women.
- xv) The Plan should indicate the actual and the projected number of domestic and foreign tourist arrivals for each proposed tourist place.

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- xvi) Prioritise the scheme on the basis of employment potential of the project and the tourist arrivals at the proposed place.
 - xvii) An inventory of existing infrastructural facilities (including paying guest facility) is to be made; after which, the proposed infrastructure needs to be split up into various segments concerning different State Government Departments, such as PWD, Forest, Culture, Handicrafts etc., and dovetailed with the Tourism Plans.
 - xviii) Since the perspective plan would be used for external assistance, it would be desirable to suggest State tourism projects to foreign funding agencies for financial assistance; each project has to be properly and finalized accordingly.
 - xix) Other sources of funding such as loans from the Financial Institutions, the Tourism Finance Corporation of India (TFCI) etc., need to be explored. Besides, proper incentives need to be suggested for private sector participation.
 - xx) Further the available institutional machinery in the State to oversee / coordinate the development of tourism infrastructure has to be specifically suggested.
 - xxi) Facilities for performance by local artists; cultural troupes should be built into the perspective plan.
 - xxii) Cultural complexes can be suggested with the financial help from the State Department of Culture and later made economically viable on pattern of Dilli Haat.
 - xxiii) Handicraft shops should be suggested at various tourist places; these could be run by women.

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- xxiv) Perspective plan should include potential developing health resorts at / near the tourist places. Yoga classes, nature cure facilities, ayurvedic system of medicines should be available at these places to attract tourists.
 - xxv) Consultant preparing the perspective plan should be asked to give an executive summary of the plan along with the report.
 - xxvi) The perspective plans should incorporate attractive packages / schemes to attract private sector investment.
 - xxvii) It is necessary that the environmental issues are dealt with in sufficient details and environmental impact assessment studies made in respect of all new projects.
 - xxviii) The perspective plans should include carrying capacity studies, instruments of spatial and land use planning, instruments of architectural controls for restoration of old properties and construction of new ones in old towns and cities, strategy for local community participation and protection of cultural identity, awareness programmes for local participation and local commitment to the project.
 - xxix) Measures necessary for mitigating the adverse environmental impacts and rehabilitating and tourist places already environmentally damaged should be incorporated in the perspective plans.
 - xxx) The perspective plan should include strategy for privatization of the tourism related properties owned by the State and the State Tourism Corporation.

1.4.0 Methodology

The methodology had been drafted in relation to the objectives outlined based on the Consultants' understanding of the requirement.

1. Preparation of Tourism Master Plan for the State as Stage I and
2. Preparation of Detailed Tourism / Spot Plans for individual tourist centres as stage II at the local level.

The methodology has been arrived at after careful consideration of the nature and scope of the study supported with relevant analysis and background research.

Broadly speaking, this study cannot be viewed as a linear process of research rather as an iteration of tasks correlated in a logical sequence leading to an understanding of complex issues. In other words, the study had to be conducted at various levels of spatial reference, namely, state, district and the local level so as to bring the whole process into a meaningful systems framework.

1.4.1 State Level

At the state level, emphasis would be to evolve an ecologically sound and economically viable Tourism Master Plan to encompass the tourism potential of the concerned state. The Master Plan would be formulated for a time scale of about 20 years, which would include X Plan, XI Plan XII Plan and XIII Plan periods.

The strategy for the development of tourism will be an outcome of the following exercise

- a. *Identification of Existing tourism potential (areas / places) of different survey states*
- b. *Classification of the tourism potential based on the nature, scope, scale and mix of the activities.*

The scale and mix refers to the intensity of the potential and the amount of revenue generated as a result of the spill over effect and its possible utilization. The classification would largely depend on the economic aspects and the social value of the potential in terms of its image and prestige.

- c. *Assessment of Environmental sensitivity of the region and categorization of differential sensitivity zones.*

All development activities concerning tourism must consider the question of ecological sensitivity to ensure that development would not have adverse effect on environment. In this respect, it is proposed to delineate the state into zones of environmental sensitivity by utilizing number of indicators relating to altitude, slope, rainfall, land use, flora, fauna etc. so as to assess their amenability to intervention for tourism development.

- d. *Identify natural and possible travel circuits that have emerged by virtue of their location, scale and accessibility and evolve or enlarge additional or new circuits, which could be developed by removing barriers such as accessibility etc.*

In this process, it would become necessary to view tourist potential centers in a wider spatial perspective.

- e. *Assess the economic impact of ongoing / new tourism activities including their multiplier effect.*

Deliverables

- a. Evolve an ecologically sound and economically viable Tourism (development) Master Plan, through integration of identified travel circuits and the ecological sensitivity zones.
- b. An assessment of the interaction between the economic and demographic parameters and the tourism areas / places leading to an overview of tourism in the state.
- c. Integration of the basic tourist and other infrastructure with the overall developmental framework for proposed survey state.
- d. Identification of priorities of development and formulation of a sound tourism / marketing strategy showing assessment of what would sell and at what price to the potential tourists (Domestic & International).
- e. Evaluate what facilities / assets could be created to meet the above-generated demand.
- f. How to position the product / packages through preferences and image building (niche marketing) as well as the institutional capability building for creation, maintenance and operation of assets over the plan period.
- g. Development of regional linkages & connectivity with intra-regional transport system. The perspective plan at this stage would define the improvement & new requirement for air, water & surface transport system from tourism development angle.
- h. Various infrastructural support systems such as power, telecommunication etc.

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- i. Employment potential & social welfare capacities of tourism development process in respective state.
 - j. An overall investment pattern indicating short term, medium term & long-term investment for development of required infrastructure & facilities for the respective state.
 - k. Institutional development plan for implementation & management of tourism assets

1.4.2 District / Regional Level

The District level highlights the task of formulating programmes for various districts towards tourism. In addition, guidelines relating to infrastructure provision would be attempted at this stage. This becomes essential in order to reconcile with the areas of emphasis between the regional strategy and the state level policies.

The specific programme formulated would include the following features:

Stage I

- a. Identification of the various tourist centers / spots.
- b. Classification of these tourist centers based on their nature and tourist statistics including the magnitude of tourists in terms of numbers and longevity and their location in the environmental sensitive zones of various order.

Stage II

- a. Identification of factors either inhibiting or promoting the growth of tourism, both domestic and international in various districts / regions.
- b. Assessing the infrastructure facilities in each of the centers and its present level of utilization which will include the following elements :
 - Level of infrastructure available at four levels, namely at destination areas, transit arrangements, ancillary activities and origin areas.
 - Economics of infrastructure in terms of investment.
 - Promotional infrastructure aimed at up-liftment of social values.

Deliverables

Formulating a set of plans with specific reference to the type of infrastructure to be provided in these centers in relation to their location in environmental sensitive zones. Their present / proposed primacy in travel circuits along with the investment pattern to strengthen the existing infrastructure in addition to the new ones.

1.4.3 Local Level

The local level study deals with the individual centers exclusively in a detailed manner wherein they are classified and graded. Tourism Development (Master) Plan would be prepared for typical centers for the first five years with promotional schemes and these Development Plans would contain the following elements.

- a. Evolution of the center as tourist spot.
- b. Historical / Architectural / Cultural significance of the center.
- c. Assess the present state of the center in terms of its land use, climate, geology, demography, agriculture, economic activities, community facilities, transport network and infrastructure facilities with reference to tourism.
- d. Conduct market research exercise at various locations & points including a sample survey of the following segments:

Categories of tourist

Business, holiday, religious, adventure/sports, heritage etc

Hotels

Star category, private hotels, guest houses, lodges.

Agents & tour operators

Govt. approved agents, tour & travel operators, packaged tour operators.

As a result forecast for both domestic & foreign tourist.

Besides this secondary research shall also be carried out to generate tourist statistics, information and publicity details.

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- e. Assess the tourism amenities and facilities presently available to the tourists.
 - f. Assess the need for tourism amenities, facilities and infrastructure with respect to the needs of different socio-economic groups.
 - g. Expected benefits and socio-economic effects of the potential tourism demands in the center and in its regional context.
 - h. Specific proposals for improving tourist inflow with specific reference to enhancing and development of tourist attractions.
 - i. Product development plans including a sub plan for the development and marketing of some unique tourism product for each state.

The new products may include new site development tourist complexes, entertainment parks, botanical gardens, resorts, sports facilities, health clubs, nature care facilities/ ayurved centers, handicrafts center, shopping mall, cultural complexes etc.

- j. An outline of the investment programs alongwith various incentive schemes, packages to attract private investment.
- k. Phasing of the investment proposed alongwith time frame for each developmental activity.
- l. Implementation schedules, monitoring and management including role/responsibilities of different agencies.

m. Protection Measures :

- Environmental impact of tourism on ecology need for conservation
- Impact of tourism development projects on the environmental and local culture
- Vigilance for protection of tourists against exploitation and fleecing.

The above methodology would thus carry out a detailed study on the tourism potentials of respective states giving full justice to the immense varieties of tourist interest in the state and would also bring out a plan document that is pragmatic.

The study was based on surveys of sample zones and centers. Semi structured questionnaires were administered amongst a set of respondents. Besides this, in depth discussions were carried out with various government & non-government agencies, institutes, state government bodies, experts, associations etc. This also covered tourists and related service institutions within its purview.

CHAPTER -2
STATE PROFILE

2.1.0 TOPOGRAPHY AND GEOGRAPHY**2.1.1 Location**

Orissa is a maritime state, on the east coast of India, between the states of West Bengal and Andhra Pradesh. Its location is between 17°49 `N to 22°34 `N latitudes and 81°27E to 87°29E longitudes. Large number of small and big rivers flow through the state into the Bay of Bengal.

The separate province of Orissa had only six districts i.e, Cuttack, Puri, Sambalpur, Ganjam, Balasore (Baleshwar) and Koraput.

Later more changes were made and the state of Orissa has, at present 30 districts covering an area of 1,55,707 sq. km with a population of 36,706,920. Orissa, one of the 28 states of India, ranks eleventh in terms of total population and ninth in terms of area. Perpetually washed by the blue waters of the Bay of Bengal, it lies on the east coast with a coastal length of 482 Kms. It is bounded by West Bengal and Jharkhand on the north, Andhra Pradesh on the south, the Bay of Bengal on the east and Chattisgarh on the west.

The state can be broadly divided into four natural regions, i.e, (a) the hilly areas in the north and northwest, (b) the Eastern Ghats, (c) the central and the western plateau, and (d) the coastal plains.

Being a coastal state, six of her 30 districts, i.e, Balasore (Baleshwar), Bhadrak, Kendrapara, Jagatsinghpur, Puri and Ganjam are situated on the coast of the Bay of Bengal.

2.1.2 Climate

Being a coastal state, the climate of Orissa is equable; it is neither very hot in summer nor very cold in winter. There are, however, hilly regions and plateaus, where one can experience extreme climate. In the western districts of Bolangir, Sambalpur and Sundargarh, it is very hot in summer and very cold in winter. The summer temperature at times hovers as high as 45°C-46°C and in winter, it becomes intolerably cold. Koraput and Phulabani districts are very cold in winter. In fact, being situated on the hilts, Jaypore in Koraput and Phulabani depict hill stations. Throughout the state, the summer temperature ranges between 27°C to 49°C and in winter, it ranges between 4.4°C to 15.6°C.

2.1.3 Geography

The eastern plateau comprises of the districts of Mayurbhanj, Keonjhar, Sundargarh and Palabahara. It consist of various hill ranges such as Malyagiri, Mankernacha and Meghasini. The average elevation is around 3,500 feet.

There are in all 30 districts, which act as administrative units of the state.

- Angul (Central)
- Baleshwar(East)
- Bolangir (West)
- Bauda (Central)
- Cuttack (East)
- Bhadrak(East)
- Baragarh(West)
- Deogarh(North)
- Mayurbhanj (North-East)

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- Khurda (Central)
 - Ganjam (South)
 - Nayagarh (Central)
 - Dhenkanal (Central)
 - Puri (East)
 - Jajpur (East)
 - Kendraparha (East)
 - Kendujhar(Central)
 - Subarnapur (Central)
 - Kandhanal (Central)
 - Sambalpur (North)
 - Sundargarh (North)
 - Gajapath (South)
 - Kalahandi (West)
 - Koraput (South)
 - Malkangiri (South)
 - Rayagarha (West)
 - Mabarangapur (West)
 - Nuaparha (West)
 - Jharsuguda (North)
 - Jagatsinghpur (East)

Figure 2.1: District Map of Orissa



2.2.0 Natural Resources

2.2.1 Forests

Out of the total area of Orissa, a little more than 40% is covered by forests of various types. The forests are not dense everywhere. In most places, they are mere shrubs. But in the hills of Mayurbhanj, Phulabani and Koraput, they are very thick, with varieties of flora and fauna for which Orissa is famous in India.

Growth of forest accounts for interesting specimens of wild animals. Carnivorous animals abound in these forests, tigers are seen in the dense forests in the hilly regions. Leopards and wolves are found in almost all the districts. Bears, deer, spotted deer, sambhar, black bucks and boars are found everywhere. Elephant is another wild animal for which Orissa is famous.

The total forest area about 36.71% of the total geographical area (1,55,707 sq. kms) is around 57183 sq. kms. Considering the population of Orissa (36.7 million) as per census 2001, the per capita forest area works out to be 0.15 ha. The various forest areas can be grouped as under:

- There are two famous national parks
 - Similipai (Tiger reserve)
 - Bhitarkanika (Mangrove) & Gahirmatha (Sea turtles)

- Sanctuaries (Over 17 in number). A few important ones are :-
 - Ambapani
 - Belghar
 - Chandaka
 - Hadagarh
 - Karlapat
 - Khalasuni
 - Kaldiha
 - Lakhari
 - Padamtala
 - Tikarpada (Crocodile)
 - Ushakothi (Tiger)
 - Sunabeda

2.2.2 Coastal Belt and Water Resources

It consists of the districts of Puri, Bhadrak, Baleshwar, Kendrapara and some parts of Ganjam.

The important rivers of Orissa are the Mahanadi, the Brahmani, the Baitarani, the Budhabalanga, the Subarnarekha, the Salandi, the Rushikulya, the Banshadhara, the Bada, the Bahuda and the Indravati. The rivers are the lifelines of the state. Because of their alluvial deposits, plains have been created in the river valleys but many of the rivers get flooded during the rainy season, which in turn causes devastation to the coastal and eastern districts. Since they flow hither and thither in the state, road and railway construction has become very costly on account of the need for many bridges.

The Mahanadi is by far the biggest river with a catchment area of about 1,20,500 sq. km.

The biggest and most famous lake of Orissa is the Chilika lake, near the Bay of Bengal, on the boundary of the districts of Puri and Ganjam. Besides this, there are two smaller lakes, Sara and Ansupa.

2.2.3 Mineral Resources

The Central and Western Plateau constitute the mineral belt of the state. The state has rich resources of iron and manganese ore, coal reserve, chromite, bauxite as well as graphite. Besides this there are reserves of Limestone, China Clay, Dolomite.

2.2.4 Hills

The hills in the coastal districts are not continuous ranges but are scattered in form of ridges separated by valleys. The ranges are mainly in the Eastern region. The various important peaks of Orissa are Meghasani in Mayurbhanj, Gandhamardan in Kendujhargarh, Deomali and Sinkram between the districts of Kalahandi and Koraput, Malaygiri in Pallahara in Dhenkanal district, Mankadnacha in the Sundargarh district, Panchadhara in Sambalpur, Srungaraj and Mahendragiri near Parlakimidi in Ganjam district, Nimnagiri in Koraput district and Bankasham in Kalahandi district.

Most of the tribal population of the state lives in this region. The Eastern Ghats pass through the coastal districts of Baleshwar, Bhadrak, Kendrapara, Jagatsinghpur, Puri, Khurda, Cuttack, Nayagarh and Ganjam with an extension into the districts of Koraput and Dhenkanal. The district of Phulabani is the meeting point of these two mountain ranges. These hills lie parallel to the coast at a distance of about 100 km from the coastline. Nowhere, they are more than 760m high.

2.3.0 Demography

Orissa, with a total population of around 3.67 million (as per 2001 census) represents around 3.57% of the total Indian population. It is spread over an area of around 1,55,707 sq. km, which is around 4.7% of the total area of the country. As per the socio-economic indicators of Orissa with respect to other states (28), it is ranked 11th in terms of the geographical area and 11th in terms of population too. The density of population at present is 236 per sq. km, which has increased from 203 per sq. km in 1991. The All India figures in the same category is 324 per sq. km in 2001.

The literacy rate in the state has gone up from 49% in 1991 to 63.6% in 2001 with a variation of 14.5%. The male-female divide being of the order of 76:51 which is still behind the All India level of literacy, which is 65.4%.

About 87% of Orissa's population live in villages. The districts of Phulbani, Mayurbhanj and Kalahandi are mostly rural. Only about 13% of the people live in towns and cities. Of these, there are only 12 cities with a population of one lakh and above. Two of these cities, Bhubaneswar and Rourkela, are of the modern type, the rest have the traditional urban structure of agglomeration of houses in rows along roads or lanes.

The work force of the state consists of 37.5% percent of the population. As usual, the rural people constitute a greater percentage of workforce i.e, 38.7%, while male workers are greater in number, female workers outnumber the males in marginal work. Orissa's economy being preliminary agricultural, majority of the work force is composed of cultivators and agricultural labourers, their percentage being 44.2 and

28.9 respectively. The rest are engaged in household industries and other occupations.

2.4.0 Language

Oriya, one of the oldest languages in the country having Sanskrit origin, is the predominant language spoken in the state and its outlying tracts. It is spoken by about 84% of the population of Orissa, Hindi, Urdu, Bengali and Telugu are widely understood and sometimes spoken. Oriya is the official language of the state. English is spoken by the educated few.

Though Orissa possesses fewer cities than most other states of the country, almost all the languages recognized by the constitution including recently included Nepalese have their speakers among the people. Apart from the speakers of Hindi and Urdu, there are the speakers of other languages like Punjabi, Gujarati, Malayalam and Tamil. Orissa may be described as a polyglot state, there being hardly any presence of linguistic intolerance.

2.5.0 Social Life

People in Orissa, whether rural or urban, live in families. Those who have to stay away from family at their places of work in towns or industrial areas usually come to spend their holidays in their village homes. The joint family system is largely in vogue in villages, but is breaking up gradually. People living in their places of work often live with nuclear families, but do not like to break their ties with the joint family if they happen to be members of the same community/family.

2.6.0 The Weaker Sections

An important feature of the population of Orissa is its component of the weaker sections comprising the scheduled tribes and the schedule castes. Orissa consisting of 62 tribes account for 22.15% and the later comprising 93 castes make up for 16.12% of the total population. The scheduled tribes are concentrated in order of density in the districts of Mayurbhanj, Koraput, Keonjhar and Phulbani. The scheduled castes are widely distributed in all the districts of the state, but are found in greater number in Phulbani district followed by the districts of Baleshwar and Cuttack. Among the states of India, Orissa has the largest percentage of scheduled tribes next only to four others, namely Nagaland, Meghalaya, Manipur and Tripura. The scheduled tribe and scheduled caste population in Orissa constituting 38.25% of the state population is much higher than the country's average of 23.5%.

2.7.0 Cultural and Historical Heritage

A land of rich and diverse artistic achievements, Orissa's art and culture has a long historical process in which the spiritual, philosophical and humane dimensions have merged to yield the finest effects of cultured civilized life. The cultural heritage of Orissa is reflected in a number of vibrant art forms. Culture imparts flavour and animation to the social and religious activities of people. It flows as an under-current of inspiration and acts as a powerful chain of human craftsmanship.

Orissa has a distinct tradition of painting, architecture, sculpture, music and dance.

The Orissa School of painting has three streams in distinguishing aspects. These are the tribal, the folk and the classical. There is a constant interchange of ideas and motifs among the three streams, and these interchanges have helped to enrich the culture and significance.

2.8.0 Assets of Orissa

The various assets of Orissa can be classified as under :

a) Wild life Sanctuaries

Along the dusty forest roads of interior Orissa winding through lush green Sal forest one finds the road blocked by herd of pachyderms guarding their little ones and dust-bathing, and the royal majesty the tiger giving out a deafening roar that scares an intruder while watching the kill. The pink and white flamingoes, busy in feeding in the shallow water look up, as one takes a look at these majestic birds. Lively orchids in full bloom in numerous colours on tree tops greet and sway in the nature. These and many more fascinating sights greet the tourists when one visits the wilderness of Orissa, unique of its kind in the country.

Similipal

Similipal located almost at the center of Mayurbhanj, the northern most district of Orissa, adorns the forehead of the state like a diamond. Orissa is proud of this 2,750 sq. kms stretch of Sal forest over an undulating landscape which boasts of very rich flora and fauna.

Similipal offers an excellent exposure to the delights not only of its wildlife, but also of its wonderful natural beauty. Scenic beauty of the lush forests and mountains and valleys is as extravagant as it is varied. The best way to see as much as possible would be to take a package tour which could take in the Barehipani waterfall (399 meters) and the Joranda falls (150 meters), the lush grasslands of Bachhuri Chora, the Meghasani peak (1,158 meters) and the wildlife in the environs, Jashipur, one of the two entry points to the park, has a crocodile sanctuary; and other being Lulung.

Similipal was declared as one of the 9 tiger reserves of the country in 1973. This vast forest area has a number of perennial streams, two beautiful large waterfalls namely Barehipani and Joranda and few smaller ones. Number of valleys, gorges and hills lend it a unique charm.

Similipal boasts of tigers, leopards, elephants, gaurs, sambhars, cheetals and many other rare species. The vast expanse and changing topography and the vegetational and climatic variations in Similipal has been one of the major reasons for the successful regeneration of flora and fauna.

White Tiger Breeding

One of the rarest creatures in the world, the regal white tiger received a new lease of life with the important research and concerted efforts initiated to try and breed them in the natural environs of Nandankanan.

The Chandaka Elephant Reserve

Only one of its kind, is perfect for eco-tourism activities. Apart from the fabulous elephants, cheetal, bear, pea-fowl, sambhar and numerous other animals roam about carrying out their daily activities.

Tikarapara

The site of one of the most fabulous vistas of river and forest, the Satkosia Gorge, where the great Mahanadi river crashes in with monumental force is a dizzyingly enervating experience for the visitors. The meandering pace of the sensuous river, 22km of thick forest, offers scenic delights of the frothing, boiling water as it winds its way, consider to be one of the most enchanting spots in the world. The Gharial sanctuary at Tikarapara is a must for wildlife fans. Located at about 211 km from Bhubaneswar and 58 km from Angul, it offers forest bungalow accommodation at strategic places.

Ushakothi (Badrama Sanctuary)

One of Orissa's smaller sanctuaries, it still offers visitors a perfect opportunity to see elephants, tigers, panthers, sambars, from the watch towers placed strategically near the watering holes or board a jeep about 45 km from Sambalpur. This small sanctuary was established in 1987.

Karlapat

About 35 km from Bhawanipatna, the district headquarters of Kalahandi, on Bhawanipatna to Nuamula-Rampur road is Karlapat famous for charming wildlife. Tigers, Sambhar, Leopards, Gaur and Chitals have rich presence in these forest areas.

Bhitarakanika

This estuary of Brahmani and Baitarani in Kendrapada district, crossed by meandering tidal rivers and creeks offers fascinating experiences to cruise through the estuarine river flanked by dense mangrove vegetation and stay in Forest Rest Houses at Dangmal, Ekaula, Habelikhati or Gupti. But the list shall remain incomplete if mention is not made of Gahirmatha, of Olive Ridley sea turtles which have made this the largest nesting ground of the species in the world upto 6,00,000 female turtles. The sanctuary has protected the estuarine crocodiles since 1975.

Chilika & Nalabana Sanctuary

A bird paradise in India's largest Ramsar. This 1000 sq. km brackish water lake holds a little (15.3 sq.km) submergible island Nalabana which attracts almost 20,00,000 migratory birds especially in the winter months. Of those 95 species, there are about 70 resident species of birds. More than 150 dolphins have been reported from the lake. This water body has a very good population of birds also. The narrow strip of land separating sea from Chilika has been planted up with casuarinas and is beautiful. The Berhampur Forest Rest House is a very attractive place between Sea and Chilika. Other places to stay are Panthanivas at Rambha. Barkul and Satpada for which journey to the sanctuary and other parts of Chilika and to different islands like Kalijai temple. Barkuda (breakfast island) and Cheeliakuda (Honeymoon island) provide exhilarating experience. This water body has a very good population of birds also.

Konark Balukhnada Sanctuary

Constituted out of coastal sand between Puri and Konark is this man made casuarina forest. Though quite crowded due to the marine drive it remains unparalleled in beauty and serenity and still has a good population of Cheetals and Black Bucks besides being a home to other smaller animals.

Sunabeda Sanctuary

In Nawapara District close to Chattisgarh border the above sanctuary stands out due to its extensive grassy plateau and small water falls and pools. Wild animals migrate between this sanctuary and Udanti in the neighbouring state. It is totally cut off between June to October. One can stay in the Sunabeda Forest Rest House on the plateau.

Kothgarh

In Phulbani district, there is yet another sanctuary, which is attractive due to its topography, perennial streams and wooden Forest Rest House in Belghar. P.W.D. bungalows at Kothagarh and Tumudibandh are ideal locations to stay.

Lakhari Valley

Situated in the Gajapati District this Valley boasts of the most population of elephants in Orissa. Tiger, Leopard and all other fauna of tropical forests are found here. Mahendragiri hill, close to this sanctuary is rich in its floristic composition and medicinal plants. One can stay at Podamari, Digapahandi, Panthanivas at Taptapani (hot spring).

Nandankanan Zoological Park

It has also been notified as a sanctuary. But this is a biological park with international recognition. It is famous for its breeding of gharials for the first time in captivity and white tiger breeding. This beautiful park carved out of a natural forest is a visitors paradise. The meandering lake is the USP of this park, it has a white tiger Safari, nature trail, a rope-way across the lake to Botanical garden, nocturnal house, reptile park and children's park. Over 67 kinds of mammals 18 varieties of reptiles and 81 species of birds co-exist in the deeply forested boundaries. The zoo enjoys an excellent reputation, internationally, for successfully breeding Black panthers, Gharial crocodiles and White tigers in captivity.

Bhetoni

In Ganjam District is famous for its black buck population in the paddy fields, thanks to the support of the people of Orissa for their protection.

There are many other wildlife areas which deserve mention because of their rich wildlife as well as scenic beauty. One of them is Gandhamardan hill in Bolangir, Bargarh and Nuapara districts famous for its Harishankar and Narsinghnati streams, shrines and medicinal plants, Kondakameru in Malkangiri districts is also very rich in biodiversity and is reported to be the last hold of wild buffalo in Orissa. Narayanpatna in Rayagada district still has good population of tigers and leopards besides prey population. Milyagin close to Rengali reservoir also deserves mention as a potentially rich area and water body along with the sloping land adjoining Rengali reservoir. Debi mouth and Rushikulya mouth are newly identified rookeries of sea turtles.

Though nearly 10% of the forest area has been declared as sanctuary and some more in the pipeline, efforts both from the government as well as people and voluntary organizations are needed to provide adequate protection to the wildlife whether in the protected area or outside.

b) Arts and Crafts

Orissa's religious heritage has played one of the most dynamic roles in designing the infinite variety of crafts available in the numerous stores lining the city streets and the artists' villages. Buddhism, Jainism, Shaivism and Vaishnavism movements have left their imprints on Orissa's ancient arts and crafts, as have its strong tribal traditions. Its sea-faring history has brought in influences from Indonesia and China.

Textiles

Ikat- gloriously woven, blurry edged, gem coloured design, in gorgeous yarns of silk and cotton has become synonymous with Orissa. Speaking eloquently of its old maritime linkages with Bali, the Ikat tradition of Orissa is the intricate process of Tie and Dye, i.e. knotting selections of yarn before dipping them in separate colours one at a time and finally weaving them to produce one of the most delightful designs in multi-hued tones, in motifs drawn from the richness of nature, in threads both silken and gold. The double-Ikat designs form are great buys as are the gold embroidered ones from Sonapur. The Bomkai ikats have motifs drawn from the Shakti cult. Tusser silk – produced from non-mulberry silk fabric – is the famous nubby hand-reeled fabric in natural tones.

Horn Work

Parlakhemundi and Cuttack are famous for the horn work, created out of cow and buffalo horns to skillfully produced ash-trays, jewellery and figures of birds and animals. Excellent pottery is also produced in these places.

Applique

Applique in Orissa is an old temple art, which has been refined to perfection. A fine example of the craft is the enormous appliqué canopies above the reigning deity of Puri, Lord Jagannath. Applique art is the process of cutting coloured cloth into shapes of animals, birds, flowers, leaves and other decorative motifs and stitching them on a piece of cloth that can ultimately be used as a lamp shade, a hand bag or even a garden umbrella. The village of Pipli, close to Bhubaneswar

is the site of beautiful appliqué work, created by artists, quite a few of whom have won national awards for their crafts.



Figure 2.2 – An Artist engrossed in Applique Work

Metal Craft

Metal craft has reached a great deal of perfection in Orissa with some truly indigenous designs emerging from its craftsmen's skills. Bell-metal



Figure 2.3 – Famous Metal Crafts of Orissa

and brasswork are carried throughout the state, with craftsmen churning out numerous religious and household utensils. Lamp bells, ornate with ethnic designs are quite lovely. The traditional dhokra work is a typical tribal craft in bronze with its meshlike features giving it its distinctive beauty. The tribal families in Sadeiberini, a village near Dhenkanal town, produce this unusual craft familiar in items like boxes, gods, goddesses and lamps.

Silver Filigree:

Of all the handicrafts of Orissa the most unique and the finest, in fact the queen among them, is silver filigree, locally called **tarakasi**. The craft is localised at Cuttack town and a few villages in Cuttack district. The process consists of drawing silver through a series of consecutively smaller holes to produce fine strands of wire. These wires are then made into various shapes by hands of the craftsmen by bending them into different designs and soldering them with pincer and scissors. Silver used by the artisans is usually of high purity often exceeding 90%.

Items manufactured cover a wide range though they can be broadly divided into a few categories. Ornaments for the ladies which include necklaces, brooches, ear pendants, anklets, hairpins, decorative key rings and bangles etc. besides this tie pins and cufflinks. Replicas of temples, horses, elephants and other animals and chariots besides a variety of other items. Lastly, utility items like plates, cups, bowls, containers, indigenous spoon called belas for feeding milk to young children, incense containers, vermilion containers and ladies handbags.

The silver filigree and other silver items have, like other handicrafts, a very important socio-cultural function. Silver filigree has been an important export items of Orissa from ancient times.

Patta Chitra

Miniature paintings are called patta chitras. Pattas are now used as wall hangings. The subject matter of Patta paintings is limited to religious themes. The stories of Rama and Krishna are usually depicted on the pattas. “ Rasa Lila”, “ Vastra Haran”, “ Kaliya Dalan’ are some of the recurring themes of Patta art. Patta chitras of Lord Jagannath, Balabhadra and Subhadra, the Navagrahas and the deities are also famous.

Patta paintings are so called because they are executed on silken hand woven cloth. They are painted with bright colours and possess a charm peculiarly of their own. Their unique paintings technique and line formations together with colour schemes make them a remarkably original art form that is distinct from any other school of painting either in or outside India.

c) Festivals of Orissa

Magha Saptami (January-February)

Celebrated in praise of Lord Surya, Magha Saptami is one of the most colourful and popular festivals in the state. It is the second biggest festival in Orissa after the Rath Yatra. The festivities are most spectacular at Konark.

Mahashivaratri (February-March)

Shiva's Great Night' is celebrated with great zest in the month of February-March. Fasting and singing of devotional songs continue throughout the great day which culminate in the lighting of the 'Mahadeep' (sacred lamp) at the dead of night on the top of the temple and kept burning all night long. The lamp symbolizes the eternal light of wisdom shown by the Lord to his erring devotees. The fast is broken by taking a holy dip.

Ashokastami (March-April)

Lord Lingaraja is taken out on a wooden chariot (34' high) to the Rameswar Temple about two kilometers away from the Lingaraj Temple. After a four-day sojourn, it is returned to the original abode with great festivity and religious fervour. This is an annual feature.

Taratarini Mela (March-April)

One of Orissa's largest fairs, the Taratarini Mela takes place on every Tuesday in the month of Chaitra at Taratarini Pitha, 35 km from Berhampur. A great influx of tourists takes place on the third Tuesday.

Chaitraparba and Chhow Festival (April)

This eight-day festivals is enjoyed by both tribals and non-tribals. Hunting and dancing are the tribal festivals. The head of the family pays homage to his ancestors in presence of the priest. The Danda Nata and Chaiti Ghoda Dance (folk dance forms) are performed in the coastal areas. The Chhow Festival commences on the 11th/12th April every year and continues for a period of three days concluding on 'Mahavisuba Sankranti' at Baripada. Performed by exponents and troupes of Chhow Dance, it is a festival of festivals enjoyed by the people of the country and enthusiasts from abroad.

Sitalasasthi (May-June)

Celebrated with great show at Sambalpur, Barapali and Bhubaneswar, this festival marks the holy matrimony of Shiva and Parvati. The images of the married couple are taken in a procession on beautifully ornate carriages. A great Puja culminates with the installation of the Divine couple at the Shiva temple.

Rath Yatra (June-July)

The passing of time has certainly not dimmed the pomp and ceremony or the intense religious aura that surrounds the annual rites for one of the most dynamic temple-festivals in the world. The Rath Yatra of Lord Jagannath at Puri is one of the most important festivals not only for the Orissans but also for the whole human race. The Jagannath Temple is one of the four holiest places (dhams) in India for the Hindus and the chariot procession (rath yatra) every year is a cultivation of the religious importance, the deities enjoy.

The sheer sizes of the chariots are enough to fire the imagination. These enormous raths, hoisted on huge wheels are hauled by thousands of frenetic devotees to the Gundicha Ghar, where Lord Jagannath,. His sister Subhadra and brother Balhadra rest for a week. The whole process is repeated when the images are transported back to the Jagannath Temple amidst a great deal of colour and frenzy activity.

Ganesh Puja (August-September)

The God of learning and good fortune is worshipped all over the country. Festivities in Orissa include the gorgeous clothing and decoration of the God and in vocational songs, followed by innovative entertainment programmes all week long.

Dussehera (September-October)

In Cuttack, the celebration of Durga Puja (Dussehra) is particularly vibrant with the images of the Goddess being dressed most exquisitely and finally being carried in a colourful procession for immersion in the river.

Laxmi Puja (September-October)

Week-long celebration, particularly colourful in Dhenkanal, Choudwar and Kendrapara.

Bali Yatra (October-November)

Orissa's ancient maritime linkages with Bali are celebrated in this unusual festival. Observed on the full moon day of Kartika (considered highly auspicious), tiny boats made of either paper or bark of banana tree are lit with clay lamps and floated in rivers and tanks all over the state. A big fair popularly known as Bali Yatra is held at the fort area of Cuttack on the banks of the Mahanadi on this occasion.

Konark Festival (December)

A festival of classical dances performed by the celebrated danseuses of the country in the Open Air Auditorium with the Sun Temple at the backdrop is organized annually at Konark. During the festive evenings, the atmosphere is surcharged with rhythmic dancing beats and melodious tunes accompanied by the waves of the lonely sea.

Dhanu Yatra (December-January)

Relating to the episode of Lord Krishan's visit to Mathura to witness the ceremony of 'Bow' Dhanu Yatra is colourfully observed at Bargarh. The town of Bargarh becomes Mathura, the river Jira becomes Yamuna and the village Amapalli becomes Gopa. Different acts of the puranic descriptions are enacted in their right places and the spectators move from place to place to witness these variegated performances.

d) Beaches

Orissa has a long coastline of over 480kms on the Bay of Bengal interspersed by a couple of beautiful beaches.

Puri

Situated around 55kms from state capital, numerous pilgrims take an holy dip while visiting the Jagannath temple at Puri's lonely beach which is considered to be one of the best beaches not only in Orissa but also in the country. The currents are quite strong over here. Puri offers tourists the rare opportunity of witnessing sunrise as well as sunset on the same beach.

Chandipur

Located 16kms from Balasore on NH-5, its 230 kms from state capital and around 314 kms from Kolkata. The nearest rail junction is Balasore around 16kms on the South-eastern railway. Chandipur is one such beach with a unique distinction of its own, unlike other beaches, the sea-water here recedes away from the shore line about 5kms twice a day, an unusual phenomenon rarely found anywhere.

In other beaches the waves come and go dashing but in case of Chandipur its something different. Here the visitors have to wait for the water. When the water disappears, one can even take a jeep ride. Besides this there is an added attraction of red crabs, sea shells and drift wood. Hardly 2 kms away is Balramgadi, where the river Budhanalang meets the sea (mouth of the river).

Gopalpur on Sea

Located at around 16kms from Berhampur Gopalpur on sea is one of the most pastime beaches of Orissa.

Konark - Beach

Only 32km from Puri on Marine Drive, is the sprawling beach at Konark, rated as one of the finest in the world. With a long stretch of clean sands – cool blue sea making rapids in rolling waves the beach claims to be one of the best in the eastern coast for having lovely serenity of its own. At a strolling distance one finds the famous splendour of the sun Temple, Konark – a world heritage monument.

Balighal Beach

About 8 km to the east of Puri on the Marine Drive, alongwith casuarinas plantations.

Talasari Beach

At a distance of 88 km from Balasore, 4km from Chandaneswar and 8km from Digha (in West Bengal) is the tranquil beach at Talasari.

Pati-Sonapur Beach

Approximately 20km from Berhampur, 35km from Gopalpur-on-sea and 4km off the NH-5 that connects Calcutta with Chennai the virgin beach at Pati-Sonapur is one of the most exquisite on the east coast. .Right on the confluence of river Bahuda and Bay of Bengal.

e] Tribal Focus

Orissa has 62 districts tribal groups, making it the largest collection of tribal people in a single state in the country. Each of these tribal groups have their own indigenous customs and continue to practice them even today. Orissa is home to India's ancient civilization and most of it is concentrated around the Eastern Ghat hill ranges in the region of Koraput, Sundargarh and Mayurbhanj. Many tourists do get to meet some of these tribal groups and see them in their natural habitat, though access to some tribal areas is still strictly restricted.

The tribal economy is by and large based on activities around the jungles. Food gathering, hunting and fishing continue to be the main source of livelihood though some of the larger tribes such as the Santals, Mandas and Gonds have become agriculturists. The Juang, Bhuyan, Bondo, Saora and Dharua tribes follow the shifting cultivation practice. The Koya tribals are cattle breeders while the Mohali and Lohara are simple artisans involved in basket-weaving and tool making. The Santhal, Munda and Ho tribals have now also become involved in mining and certain industrial belts of Orissa.

Though their economy is a bit shaky, the Orissan tribals enjoy a rich and varied cultural heritage, the most powerful instance of this being in their music and dance, which are as colourful as they are rhythmical. The cycle of life offers numerous reasons to celebrate and is done so with vigour and grace, either in the privacy of the family home or as a community activity. The changing seasons, religious customs and the traditional rhythms of superstitious belief are strong incentives for creating a string of festivals to augment their importance to the tribals.

The Paraja tribe is primarily located in the Kalahandi and Koraput regions of Orissa. Their language is 'Parij'. They worship numerous Gods and Goddesses who live in the hills and forests. They love dance and music during weddings.

The Saora tribe is one of the most ancient and they are known for being marathon walkers, expert hunters and climbers.

The Gonds are the warrior caste who have traveled the vast areas of central and south India. The Oraon tribals are economically better placed because of their ways and interacting with the modern world, in the field of agriculture.

Tribal Paintings

Orissa has a rich tribal culture. The Sauras, the Kondhs and the Santals decorate their houses with motifs of flowers, birds and geometrical designs. The Saura paintings are intimately related to religious beliefs and are drawn in order to appease demigods and spirits. On the Occasion of animal sacrifices, the Sauras draw ittals on their walls. The themes of these paintings are usually dream sequences. Continuation of objects such as a comb or even a bicycle map figure in modern Saura paintings. The Kondh wall paintings are generally in the form of geometrical designs. Santals also paints their houses with figurative patterns.

The paintings differ from place to place. For example , in most rock shelters the paintings are mostly linear. But in Mainkamada, the paintings have a more pictorial quality and are of a greater variety and range in their depiction of figures and nature. The paintings have received several coats of paints and are thick in texture, while there are some others, which have been very roughly sketched.

The pigments used by the rock painters are oxides of iron which give the colours red and brown, white is derived from lime and green from copper compounds. These colours are mostly available near the rock shelters. Obviously these paintings have been done by primitive men, the ancestors of the tribals of Central Asia and Western Orissa.

The paintings of the Saura tribals in Koraput and Ganjam districts still are the assets of rock paintings.

f) Dances

Chhow Dance

Folk and tribal dances comprise an important part of Orissa's cultural heritage. The origin of the Chhow dance is lost in the mists of time, but its richness and vibrancy exist with enduring vigour even today. A favourite dance of the Mayurbhanja district. Chhow which has traces of tribal, folk and classical dances, appears to be a rendition of non-verbal theatre, with the legs and body moving flexibly to convey the themes drawn from the Ramayana and Mahabharata, the great India epics. A favourite theme in Chhow is Krishna and the Gopis. The core theme of the Chhow dance revolves around love, romance, chivalry and victory of good over evil.



Figure 2.4 – Artists performing Chhow Dance

Danda Nata (Dance)

The performance is a day-long affair, it culminates at night in a whirl of acrobatic sequences.

Ranapa and Chaiti Ghoda Dances

The Chaiti Ghoda is a festival dance of the fishing community with three central characters including a horse.



Figure 2.5 – Artists performing the famous dance

Koya Dance

The Koya women hold sticks fitted with bells made of brass and beat on the ground while dancing. The beating of the sticks after the steppings is indigenous to the Koya dance. Male participants wear turbans fitted with bison horns and play huge drums (dhol) hung around their necks.

Figure 2.6: Details of Tourist Destinations



CHAPTER 3

TOURIST CIRCUIT & TRAFFIC

3.1.0 Introduction

The state of Orissa consisting of 30 districts is a potential state for the development of and promotion of tourism in the eastern part of India. The range of flora & fauna are really astonishing and needs no further elaboration. The state is divided into major tourist circuits for the convenience of the tourists to cover as much as possible in the short time span.

3.2.0 Tourist Circuits

- a) Sambhalpur – Hirakund Dam – Huma- Samaleswari
- b) Chilka - Barkul - Rambha –Satpada
- c) Ratnagiri – Lalitgiri - Udayagiri
- d) Similipal- Jashipur – Balasore – Baripada – Chandipur - Khiching
- e) Bhubaneswar - Konark – Puri (The Golden Triangle)
- f) Gopalpur - Taptapani
- g) Bhitarkanika – Dangmal - Gahirmatha

a) SAMBALPUR-HIRAKUD-HUMA-SAMLESHWARI**SAMBALPUR****Location**

Situated on the left bank of the river Mahanadi is an ancient town mentioned in the book of Ptolemy (2nd century A.D) as Sambalaka situated on the left bank of river “ Manada” now known as Mahanadi. From the records of Hiuen T’ Sang and in the writings of the celebrated king Indrabhuti (oldest known king of Sambalpur) the founder of Vajrayana Buddhism and the Lama cult, Sambalpur has earned a place in the cultural history of India. Goddess Samleshwari is the presiding deity of the area.

It was last Governed by the Tendal Chiefs of the Chauhan Dynasty till 1803 and then came under the British empire. The name of veer Surendra Sai, who fought an epic struggle against the British rule, is recorded in golden letters in the history of India’s struggle for independence.

Sambhalpur serves as the gateway to the western part of Orissa. It is the divisional head quarters of the Northern administration division of the state - a very important commercial and educational center.

Connectivity

- There is a direct train connection from Kolkata (565 kms, 12 hours by train). New Delhi (1960 kms, 26 hours by train), Chennai (1010 kms, 32 hours by train). Bhubaneswar, the capital city of the state is connected through NH-42 (325 kms,

8 hours by bus or train). Ahmedabad and Mumbai are linked through Jharsuguda Junction (48 km). The nearby airports are at Bhubaneswar (325 kms) and Raipur (300 kms).

Area : 17,570 sq. kms.

Climate :

Summer :	Max Temp.	43.7°C
	Min Temp.	24.2°C
Winter :	Max Temp.	28.5°C
	Min Temp.	11..5°C
Rainfall :	152.7 cms	

Clothing : Light cotton in summer and heavy woolen in winter.

Language : Oriya, Hindi, Bengali and English

Best Season : Round the year : best months being October and April.

Identity

Sambalpur is famous for its Handloom textile works. Popularly known as Sambalpuri textile. It has earned international fame for its unique pattern, design and texture. Sambalpuri handloom sari, handkerchief, bed sheets and other items can be bought in the shops and Gole Bazaar including the Sambalpur handloom co-operative show-rooms.

The art work of the Sambalpuri tie and die weavers, fascinating fabrics with enchanting designs and motifs is cherished for the uniqueness by the connoisseur of handloom the world over.

Infrastructure

- As regards the availability of hotels a number of budget hotels are available in the town as well as there is an OTDC run Panthaniwas for the tourists. All the hotels have the basic amenities for the use of tourist.

Table 3.1: Accommodation facility at Sambalpur

Name	Size	Tariff (Rs.)
Panthanivas	Deluxe (4)	575
	D/R AC (8)	400
	D/R Non AC (5)	225
	Air Cool D/R (6)	300
Hotel Sujata	Single	150
	Double	250
	A/c	550
	Deluxe	450
Bombay Lodge	Single	120
	Double	175
	Delux/Non AC	350
Laxmi Niwas	Single	150
	Double	250
	Non AC	400
Hotel Uphar Palace	Single A/c	225
	Double A/c	450

Besides the above hotels there are certain budget hotels such as

- Hotel Sheetal
 - Ram Lodge
 - Indrapuri Hotel
- All there are very close to the local Bus station.
 - All the hotels are attached with modern restaurant facilities that serve India, Chinese and Continental cuisine. For Chinese food one can try the Hong Kong Restaurant and Hotel Sujata on the V.R.S Marg. For exotic foods one can

try the restaurants Hotel Shella Tower. Esquire at Hotel Tribeni, Sarada at Hotel Uphar and Trupti of Linza.

- The Central Hotel opposite the Indrapuri Guest House, Town Hotel at Gole Bazaar and Prabhat Hotel near Municipal Council Building are good places for ethnic Sambalpuri food.

Attractions

- ❖ Every year three days folk dance and music festival is held between 4th and 6th January at Gangdhar mandap.

It is celebrated to adopt the following objective :

- 1) To project the cultural heritage of western Orissa with a view to promote cultural tourism.
 - 2) To strengthen the bonds between people and their cultural heritage.
 - 3) To explore, reveal and revive the dying performing art forms.
 - 4) To reawaken people to their own culture by developing an awareness of its living presence.
 - 5) To disseminate and diffuse knowledge of cultural heritage.
 - 6) To define areas and to devise methods at individual, institutional level and to define area where the state should extend patronage in the endeavour to strengthen cultural heritage of the state.
- ❖ The World famous Hirakund dam, and its lake with the winter visitors from Siberia, leaning temple of Huma and the wildlife sanctuary at Badrama (Ushakuthi) and Debrigadh wildlife sanctuary. Barapahad mountain range – Chouraimal, Ghantesweri temple attract tourists. Near by Narsinghnata and Harishankar attracts tourists to its scenic surroundings.

- ❖ Anthropological studies revealed that primitive men dwelled in the thick forests around Sambalpur., settling themselves in the natural rock covers. Vikramkhol, Manikmodi, Phuldungri, Ushakothi, Bhimamandli, Ulapgadha, Sargikhol are a few amongst them.
- Sambalpur and its vicinity are the storehouse of varied culture and festivals.
- Sambalpur is spear-heading the resurgence into the 21st century. A host of social and Non-Governmental Organizations (NGO) are active in this regard.

HUMA: [THE LEANING TEMPLE]

Location

This temple is situated 28 kms East of Sambalpur on the serene surroundings on the left bank of river Mahanadi, the leaning temple of Huma attracts the devotees, tourists, researchers and photographers all around the world. The Sulvan serenity, the unique piece of archaeological monument, the melodious tenor of the crystal clear flowing water of the river Mahanadi and the calmness of the place adds to its beauty. Thousands of devotees gather every year on the sacred occasion of Mahasivaratri (in the month of Fagun Kurshanapakhya Chaturdashi). The locality turns into an area of entertainment and a place of commerce during the mela.

History

Many enigmatic stories, legends and mysteries are associated with regards the construction of the temple. The temple was first constructed by the Chowon King Balaram Dev during the fifth century BC and finally completed during 1617-1657 by Veer Balinyar Singh, the king of Sambalpur. The king donated seven villages Huma, Pulpatunga, Gangadharipalli, Dhatakapalli, Mahel and two other villages.

Significance

The temple Lord Vimalaeswar is seen standing leaning to one side. The prominent deity of Vimalaeswar is Chief of the deities among the “ Asta Sambha”. People said this “ Linga” as “Vimalaeswar Baba” some prominent persons also said this “ Linga as” “Bimalaeswar” Baba).

There are two different versions regarding the history of the temple’s construction. The first one tells that King Ananga Veem Deva – III, who suffered from the virulent ailment of Tuberculosis erected the temple as a measure of his remedy.

Receiving the divine direction the King walked along the Mahanadi Bank and reached the sacred spot of Huma. There he discovered a leaning “ Shiva Lingam”.

The country folk of the neighborhood villages believe that Lord Viswakarma built the temple. It is also believed that the “ Shiva Lingam” lies hidden under the earth.

Amazingly all other structures like the Bhairabi Temple, Kapileshwar Temple, Bhubaneswar Temple, Jagannath Temple, Aruna Stambha, First gate, Hanumana Bigraha etc. built later also leaned to one side. This temple has been built on a 200 feet long and 120 feet broad rectangular size of stone. As for the archeological peculiarity of the temple no satisfactory research has been done. The experts say that the temple leans towards the North-East direction at 5 ° to 6°. Supporting corridors have been built around the fifteen feet tall temple, to shield it from coming down.

Attraction

- The Machindra Ghat which is of 56 steps and 40 feet long at the back side of the temple provides a spectacular sight of Red Kudo fish that attracts a thousand of the visitors. Every year in the Kartik-Suklapakhya Cahturdashi day the Ghatpuja is observed at the Machindra Ghat. The Kudo Fishes have different names and they all are called individually and offering are offered.

Infrastructure

- ❖ No internal transport available.
- ❖ From the main road the tourist have to cover around 4kms by foot.
- ❖ One has to hire a vehicle to reach this place.
- ❖ Not a single medicine store or a decent restaurant or hotel is available.
- ❖ Tourists visiting the place are facing lots of problems.

Limitations

- ❖ This is a religious place.
- ❖ This place is not so developed to attract tourist.
- ❖ Children Park can be developed on the bank of Mahanadi or near by any place. Opening of Hotels, Internal transport facility, medical facility, accommodating facility are required to project as a tourist spot.

Positive Aspects

- ❖ The Kuddo fish and the leaning temple is the uniqueness of the spot.

HIRAKUD DAM

History and Location

Built during the 1st five year plan (for which the foundation stone was laid by Sir. H. Lewis, the Governor of Orissa on 15th March, 1946) under the supervision of Late Er. M.Visresvaraya completed in 1953 and inaugurated by the Prime Minister Late Pandit Jawaharlal Nehru on 13th Janury 1957 only 10 kms North of Sambalpur is the largest main stream dam in the world. It measures 24 kms across great river Mahanadi. It covers an area of 1,33,090 square kilometer more than twice the area of Sri Lanka. The reservoir forms the largest artificial lake in Asia with an area of 746 sq kms. One can enjoy the sight of the mighty Hirakud Dam and the fantastic flow of water from top of the Gandhi Minar at the North and Jawahar Minar at the South. As the largest multipurpose river valley project envisaging flood control, power generation and irrigation, it is a real gift to the Nation. With successful irrigation projects Sambalpur is termed as the rice bowl of Orissa.

Attractions

CH IPLIMA

The place has gained prominence as the second Hydro-electric project of the Hirakund Dam. A natural fall of 80 feet (24.39 meters) high in the river Mahanadi is made use for generating electricity. It is 36 kms from Sambhalpur and connected by an all-weather road.

GODDESS SAMALESHWARI

Originally the Goddess was known as Samaleshwari (Soma-eternal bliss) Samaleshwari Soma Datri meaning one who bestow “ eternal bliss”.

Other believe that, as Goddess Samaleswari was being worshipped under a Small tree (cotton tree), she was called Samaleshwari and later come to be known as Samaleshwari. A group of devotees believe that Sambalpur was named after the goddess.

b) CHILIKA-BARKUL-RAMBHA**Location :**

Chilika is situated on Bhubaneswar Puri Highway around 56 kilometer from Puri. Location 19°28 - 19°54'N, 85°06, 85°35E. Situated on the east coast of Orissa.

Area 116,500ha

Degree of Protection

Measures are being implemented to declare the area a sanctuary under the wildlife (Protection) Act, It already has sanctuary status under Orissa Forest (Shooting) Rules, 1972. Designated as a Ramsar site in October 1981.

Identity

Chilika is a shallow lake separated from the Bay of Bengal by a long sandy ridge not less than 200m wide. The lake is about 71km long and 3-32km wide, with an area in the dry season (December-June) of 89,100ha and in the rainy season (July-October) 116,500 ha.



Figure 3.1: The birds at Chilika

- The range in water depth is from 0.9-2.6 m in the dry season to 1.8-3.7m in the rainy season. In the north the Daya-and Bhargavi rivers flows into the lake and, with some eight other rivers, annually discharge about 3,75,000 cusecs of freshwater. Carrying some 13 million metric tones of silt into the lake.
- The lake is connected to the Bay of Bengal via a channel through the sand ridge in the north-east. These factors tend to dominate alternately the lake environment, resulting in extreme annual cyclic change in salinity from 0.1 to 36.0 parts per 1,000.
- The lake vegetation varies with salinity.
- At high salinity it consists of species of the algae Entermorpha, Gracillaria, Spirogyra, Cladophora and Polysiphonia.
- At low salinity it consists of Najas, Pondweeds, Potometagon are present throughout the year.

- On the sandy ridge and some islands the vegetation is plantation forest.
- The fauna includes 158 species of fish and crustaceans, blackbuck Antelope cervicapra, Spotted Deer, Feral Cattle, Striped Hyena, Golden jackal and Dolphin.



Figure 3.2: Existing Water Sports at Chilika

Chilika is a well known tourist place in Orissa. It is India's biggest inland lake spread over 1,100 square kilometers. It runs along the borders of three districts of Puri, Khurda and Ganjam and finally joins the Bay of Bengal through a narrow mouth, forming an enormous lagoon of brackish water. It is considered as Asia's largest Brackish water lake. Chilika is home to a rich variety of aquatic fauna. It is also a sanctuary and winter resort of migratory birds, some coming from as far as Siberia. It's a real paradise for bird watchers. Containing a large variety of fish, the lake provides livelihood to thousands of fishermen.

- Hundreds of boats sail out daily on the lake's blue expanse in search of mackerel, prawn and crabs. The sight provide an insight into the pageant of rural India at its colourful best.
- Encircled by hills all along its arched shape Chilika lake changes colour with passing clouds and the shifting sun.

Attractions

- ❖ Honeymoon Island and Breakfast Island
- ❖ Nalabana – An asylum for long-range migrants in winter.
- ❖ Birds Island – A heaven for resident and migratory birds with a special attraction for which Chilika is famous - DOLPHINS
- ❖ Kalijai – Abode of the island goddess “ Kalijai”. It is necessary to develop this spot in terms of amenities like public convenience, restaurants, eating joints, a viewing tower also can be erected.
- ❖ Satapada – An ideal place for viewing cavorting dolphins. The entire site is flat. An approach road leads upto the lake where some development has taken place.
- ❖ Brahmdpur – A place of scenic beauty.
- ❖ Parikud and Malud – Colourful islands within the lake.
- ❖ Nirmala Jhar – It is 21 km from Barkul and Narayani is 10km from Barkul. Both the places are picnic spot as well as there is a shrine of Goddess Narayani, which adorns the place. It is also an ideal place for pleasure and relaxation especially for day visitors.
- ❖ Banpur is 13 km from Barkul and 8 km from Balugaon. It's a centre of religious activities revolving round the shrines of Goddess Bhagabati and Dakshya – Prajapati.

- ❖ It was observed during field study that there were day visitors as well as tourists. The maximum traffic is generally observed from October-February while the rest of the year traffic is very less.

Limitations

It was observed during the study and spot visits the tourists did not prefer staying at Rambha as there are no budget hotels available. Secondly, other than the lake and water there is no other enjoyment such as Children's park or some classical show which shall help in promoting tourism as visitors shall tend to stay back. An OTDC Panthaniwas only exists at Barkul.

- ❖ The major impediment at Chilika - Barkul and Rambha is inadequate power situation.
- ❖ Motor launches of OTDC Ltd. are available at Barkul and of the Revenue Department at Balugaon. Country boats can be hired from private operators also.
- ❖ Though such as vast water lake exists but because of the menance of weeds over a large area and the shallow water, development of water sports is still not developed.
- ❖ Barkul – the new mouth has been an added spot for tourists. This site is bounded on the North by Barkul village, on the east by Chilika, on the West by the B.G. railway line (Howrah- Chennai). The entire region is flat with a slope towards the lagoon. It is at the foothills of Bhaleri range.

Infrastructure

- ❖ Bhubaneswar is the nearest airport – 105km from Barkul (Chilika). Indian Airlines has flights from Delhi, Calcutta, Visakhapatnam, Raipur, Hyderabad, Mumbai and Chennai.
- ❖ The Calcutta-Chennai rail route of South Eastern Railway touches Chilika lake at Balugaon. Balugaon is the nearest railway station for Barkul, which is 5km away.
- ❖ The Chennai **bound** NH No. 5 links Calcutta-Cuttack-Balugaon - Bhubaneswar-Barkul-Berhampur and Visakhapatnam runs along the lake.
- ❖ Besides this there are number of private operators (taxi) as well as state road transport buses available for Chilika. Buses and taxis to Chilika are available at Cuttack, Bhubaneswar, Puri and Berhampur. Autorickshaws are available at Balugaon for Barkul.

It was observed that though 'Chilika' station exists no major/long route trains are stopping at Chilika. Besides this reservation facilities/center also needs to be developed.

Satpada

Nestling in the heart of coastal Orissa, Satapada is on one side of Chilika. It mainly attracts tourist for dolphin containing a large variety of fish, the lake provides livelihood to thousands of fisherman. Hundred of boats sail out daily on the lake's blue expanse in search of Mackerel, Prawn and crabs.

Attractions

- **NIRMALA JHAR** – Nirmala jhar is 58 km from Satapada. A place of religious worship as well as a picnic spot of great interest.
- **NARAYANI** – Narayani is 59 km from Satapada. By the side of a perennial stream, the shrine of goddess Narayani adorns the place. It is also an ideal place for pleasure and relaxation.
- **BANPUR** - Banpur is 56 km from Satapada. A centre of religious activities revolving round the time honoured shrines of Goddess Bhagabati and Dakshya – Prajapati.

Connectivity

- Bhubaneswar the nearest airport 110 km from Satapada. Indian airlines has flights from Delhi, Calcutta, Visakhapatnam, Raipur, Hyderabad, Mumbai and Chennai.
- The Calcutta-Chennai rail route of south eastern railway. The nearest railway station for Satapada is Puri (50km).
- State Transport Buses are available for Satapada going to Puri (50km) and back to Satpada. Share taxis to Satapada are available at Puri, Bhubaneswar. Autorickshaws are also available at Puri for Satapada.

Infrastructure

- OTDC and other private tour operators provide luxury coaches and cars from Puri and Bhubaneswar both A/c and non A/c at reasonable rates.
- Motor launch of OTDC Ltd. are available at Satapada. Country boats can be hired from private operators to view dolphins.
- Basic amenities like potable drinking water and electricity is still very scarce.
- There are no proper, hygienic eating / refreshment place nor any relaxing point for the tourists.

c) RATNAGIRI-LALITGIRI-UDAYGIRI**Location**

Ratnagiri (latitude – 20°38', North and Longitude 80° 20' East) is located about 100 km from Bhubaneswar and forms the Buddhist Golden Triangle comprising two other key Buddhist sites namely Lalitgiri and Udayagiri. The excavated Buddhist remains of Ratnagiri are situated atop a hillock midway between the rivers Brahmani and Birupa.

Ratnagiri is around 10 kms away from Udaygiri. The total area is around 18 acres.



Figure 3.3: The Archaeological Delights of Orissa

The structural remains consist of the main stupas and a number of minor stupas.

Total Area – 18 acres

Ratnagiri is famous for the Archaeological museum which is well furnished. The area is surrounded by some villages and paddy land. Other crops which are produced are Jute, groundnut etc.

Surrounding villages are Rahusahi, Patana, Alibagh, Compageda, Hetsahi, Malasahi. There are as many as 5000 house holds and 25,000 people living around the area.



Figure 3.4:- The famous rock shelters at Udaygiri & Khandagiri

Identity

History reveals that one Buddhist king named by Basukalpa Raja had 3 queens, in the name of 3 queens, the place is called Puspagiri and 3 queens are – Ratnadevi, Udayadevi and Lalita Devi – thereafter 3 girls developed in course of time. Those are Ratnagiri, Udaygiri and Lalitagiri. It is a centre of Buddhism.

Observation

- ❖ Different Categories of tourists come to the spot for various interest such as archaeology, geological survey, research work etc. Some tourists also come here for observation of historical monument and archaeological works.
- ❖ The Excavation work was conducted between 1958 to 1962 by Archaeological Survey of India. But no further work after that has been taken place.
- ❖ Winter season is the Peak season and summer is the lean season here. The maximum traffic is of the day visitors that too domestic visitors. The foreign tourists are hardly 10% of the domestic visitors. The foreign visitors belong to France, Denmark, Germany, U.K, Vietnam and Korea.

Infrastructure

- ❖ There is no facility for the tourists to stay overnight. There is not a single budget hotel nor a guest house or any OTDC accommodation. Though funds have been sanctioned for the construction of a guest house at Ratnagiri, till date no development has taken place.
- ❖ Besides accommodation there are no restaurants or small kiosks for providing some basic necessities etc.
- ❖ The road to Ratnagiri is good but certain stretches are kutcha as a result it but very difficult to go to some villages. One of the locations i.e, Bari only 8 kms away, but as there is no bridge over the 2 rivers and its branches, it is not possible to go to Bari – one of the important place in Jeypore district.

Attractions

- ❖ Annual festival is observed on Bisuba Sankranti every year for 3 days, where more than 10,000 people gather at the spot.
- ❖ Changada Yatra takes place during that festival. The myth is that the infertile women take mango from the yatra for their fertility/pregnancy.
- ❖ The local residents/inhabitants get engaged in small business at Ratnagiri market. They do good business during the peak season and when the festival takes place.

- ❖ There was communication problem during the rainy season, but after the construction of a bridge on Genguti river, the problem has been solved. Secondly a pucca road was constructed because of allocation of fund from the Buddhist society.
- ❖ The entry charges varies for class and type of tourists.
 - Rs. 5/- per head for Domestic tourist.
 - Rs. 100/- per head for foreign tourists.

The museum remains closed on Friday.

Positive Features

- ❖ Excavated archaeological monuments have been well conserved and well furnished which are major attractions.
- ❖ There is a well-decorated and well-furnished museum where the monuments are kept for the visit of tourists. All the Boudha Kirti are found there.
- ❖ Daily register is maintained where in data regarding information can be found.
- ❖ The entire structure is of stone work.
- ❖ Monuments and Archeological works are built with stone which can be conserved for long period of time and in open
- ❖ It is believed that there was a university consisting of 3 storied building.
- ❖ Museum (with 4 galleries).

Negative Aspects

- ❖ There are no local guides tourists for the tourists, which shall be helpful to guide the tourists and tell about the actual significance and history.
- ❖ Potable Water Problem, since ground water is at very low level.
- ❖ There is no electricity connection at the spot, secondly the lighting facility as well as communication facility in the surrounding villages is not up to the mark.
- ❖ No plantation work is there around the spot.

To develop this Buddhist spot /circuit and attract tourist.

- ❖ More excavation work should be undertaken.
- ❖ Expansion of museum to be envisaged.
- ❖ Leisure spots like garden, musical fountain to be developed.
- ❖ Staying accommodation/ Guest house facility is required on top priority.
- ❖ Private canteen, a market complex may be constructed.
- ❖ Water pipeline should be extended / newly land laid till the hill for availability of potable water.

LALITGIRI**Location**

Lalitgiri is another Buddhist Pitha which is around 55km from Cuttack, 15km from Udayagiri.

The total area is approximately 95 acres.

Identity

There is an archeological museum at Lalitgiri but as per official records it has not been declared so. The hill is surrounded by some villages and paddy land.

Surrounding villages of the spot are, Sukuapada, Lalitgiri, Akarpada, Purusotampur, Hoariotpur. There are as many as 1200 households and 8400 people living around the area.

The entry fee for domestic tourists is Rs. 2/- whereas for the foreigners its Rs. 100/-.

Significance

According to history Lalitadevi was the last wife of the Budhist King Basukalpa. As a result the place was made famous by the name of Lalitgiri. There was a Buddhist hostel at Lalitgiri, which was an one storey building.

The excavation work was conducted between 1965 to 1972 by archaeological survey of India. No further excavation work has taken place after that.

Infrastructure

- ❖ Large number of Tourists from various parts come to this spot - largely it is domestic tourists or day visitors. Large number of visitors come here during Budha Purnima festival.
- ❖ There are no budget hotels nor any guest houses/ for overnight stay. Only one guest house by the name Puspagiri built by the Rural Development Department exists.

- ❖ As regards basic facilities such as power supply and potable water, there are no arrangements at the spot.
- ❖ The main/peak season for visit is winter.
- ❖ Lalitgiri is 8 km away from Express Highway (Paradeep Daitary road). This highway to Lalitgiri is a narrow pucca road. There is no facility of local vehicles/transport facilities. Tourist arrange vehicle from Cuttack or Chandikole or Kendrapada.
- ❖ It is 85 km from Bhubaneswar, the nearest railway station is Cuttack, which is 55km away.
- ❖ There are no local guides available at the spot for the tourists.

Positive Aspects

- ❖ A teeth of Buddha was discovered during the process of excavation work. Besides this, there also exists a Chaitka temple.

Negative Aspects

- ❖ No proper/adequate and continuos electricity supply.
- ❖ The reservation facility for the guest house (only one) has to be done in Cuttack.

UDAYGIRI

Location

Udaygiri is surrounded by the small hills, which makes the place more beautiful. On another side, there is vast agricultural land through the middle of which the river flows (which is the branch of river Brahmani).

Udaygiri is 7 Kms from Bhubaneshwar. There is a diversion road at Krushnadaspur on express highway, which is 10 kms away from Chandikhol on NH5. A pucca road has been developed towards Udaygiri from Kurshnadaspur.

Significance

There are 3 hills – which comprise a remarkable Buddhist complex. According to History. As per records available Hiuen T' Sang, the Chinese Pilgrim found it as a Buddhist University called Puspagiri. Besides this, reins of a number of brick pagodas, sculptural stone and Buddhist images have been discovered during the process of excavation.

According to the officials at Udaygiri, this place is situated on 365 acres of land. The area is more hot during summer and cold during winter.

History

Udaygiri is one of the notable Boudha Pitha. Buddhist monks were staying there after the Buddhist era. There are 3 types of architectural works found from the excavation work.

1. Vihar – Residing and Meditation.
2. Stupa – Memorial type
3. Chaita - Temple

Some Budha statues and other beautiful statues have been found. Some are broken and some are intact.

The excavation work has started in 1985-86. The discovered architectural works are now part of the national and international news.

Attractions

- ❖ A number of villages i.e, Udaygiri, Gopalpur, Majhipada, Chandia, Dhaudiapada are some of villages which are on the base of the hills. Some tribal people also live in the surrounding areas.
- ❖ Digging, cutting stones & metals are prohibited for better conservation of hills resources. But it was learnt that the businessmen used to illegally dig and cut stones as well as sell the same for construction purpose.
- ❖ Mahakala temple and Bishnu temple are in the boundary of Udaygiri area.

- ❖ There is ancient well-called Bambhi from the era of Buddhism that is still existing. But it is not used by the tourists or by the local authority.
- ❖ Udaygiri, Ratnagiri and Lalitgiri are within 30kms radius. Mahalinayak temple is another natural place, which attracts the tourists for its natural beauty..
- ❖ It was observed that a large number of tourists (day visitors) come to these places for research as well as archaeological studies. Photography is prohibited.

PATHRAJPUR

It is located on the Expressway, about 15 Kms from Chandikhol, which is located on the National Highway No. 5. Pathrajpur is close to the buddhist sites of Lalitgiri (5 Kms), Udaygiri (10 Kms), Ratnagiri (15 Kms) and Langudi (30 Kms). Paradip Port is also about 40 Kms from here. At present there is a Panthasala with 2 rooms and a tourist complex with 10 rooms for the Tourist desirous of visiting the buddhist sites. The tourist complex has been leased out to a private entrepreneur namely, Nirvana Tours & Travels, which is exclusively promoting Buddhist tourism to India, including Orissa.

LANGUDI HILL

Langudi is a small hillock near the famous buddhist site Lalitgiri – Ratnagiri and Udaygiri. The hillock is situated near Jaraka in Jajpur district, has already been identified as the Puspagiri Mahavihar, one of the oldest Buddhist monastery mentioned by Chinese traveller Hiuen Tsang who visited Odra (Orissa) during 639 AD. The hill is mostly devoid of vegetation is an exposed

stretch, with several khondalite clusters all around. The River Kelua, a tributary of the second largest river of the state of Orissa, Brahmani, meanders across the northeast and eastern parts of the Langudi Hill. The effect of this river flowing against a backdrop of hills and plains is picturesque. Hiuen Tsang had detailed ten Ashoka stupas in Odra, where Buddha had preached and this has become the first such stupa to be unearthed. The stupa could date back to the third century BC that would make it one of the earliest stupas in Eastern India. The stupa is encircled by a laterite wall and covered with burnt bricks. Excavation at Langudi was undertaken about 10 years ago by the Orissan Institute of Maritime and South East Asian Studies, Bhubaneshwar. After excavation on a few site extension, archaeological remains of Buddhist heritage have come to light. The statues include a royal image with an inscription at the back, on the basis of which, the image is said to be that of Asoka. The Buddhist remains of the Langudi hill indicate that this place was a significant centre of the 'Hinayana', Mahayana and 'Vajrayana' sects of Buddhism. Langudi can be a befitting addition to the already popular site of Lalitgiri – Ratnagiri and Udaygiri.

Infrastructure

- ❖ There is no accommodation facility. The tourists are mostly daytime tourists from Bhubaneswar / Cuttack, who go back at the end of the day.
- ❖ More tourists come in between of November and February i.e. winter season. The foreign tourists come from Japan, China, USA. Some scholars, geologist come for undertaking research work.
- ❖ The Nearest railway station is Cuttack and airport is Bhubaneswar.
- ❖ There is no electricity supply to the surrounding area neither there is potable water. One tubewell exists inside the area from where Iron water is fetched.
- ❖ There are no operators/guides available at the spot for guiding/informing the tourists.
- ❖ No proper / clean eating / refreshment place available.
- ❖ Recently a Panthasala of Orissa Tourism at Patharajpur has come up but it needs to be further developed in terms of amenities.

Table 3.2 Traffic Arrival at Lalitgiri, Ratnagiri, Udaygiri

Year	Domestic Tourist Arrival	Foreign Tourist Arrival	Total Arrival
1992	56505	122	56627
1993	61980	144	62129
1994	66966	131	67097
1995	72950	258	73208
1996	81235	442	81677
2000	98740	773	99513

Source: Statistical Bulletin

Positive Aspects

- One of the important Boudha Pithas in the world.
- Beautiful architectural works and monuments have been excavated from the spot, which attracts the tourists and scholars.
- Approach roads (Pucca roads) to the spot are good.
- Building a museum should conserve the excavated statues and shrines.
- Plantation work may be undertaken to make the area more beautiful and green [eco friendly].
- As it is a picnic spot development work should be undertaken to attract more tourists in the form of musical fountains, meditation hall.
- Soil conservation work should be undertaken to protect the hills.

Negative Aspects

- Basic amenities like electricity /telephone /drinking water are still scarce.
- No museum has come up at the spot so far.
- The excavated statues are not preserved and lying here and there inside the spot. No guest house or budget accommodation as a result the tourists do not get more time to spend there.

d) SIMILIPAL-JASHIPUR- BALASORE - BARIPADA - KHICHING - CHANDIPUR

SIMILIPAL

Location

Similipal was proposed as a sanctuary in December 1979 and was declared as a national park in June 1986. It is a tiger reserve as well as a crocodile rearing center. It covers an area of 2,750 sq. kms (core area of 845.50 sq. kms and buffer area of 1904.50 sq. km).

It is located in north - eastern Orissa

Latitude : 20°17'N – 22°34'N

Longitude : 85°40'E - 87°10'E

Rainfall – 2000mm

➤ **Main Rivers**

Budhabalanga, Papala, Sanjo, East Deo, Thakthaki, Salandi, Telsim, West Deo, Bandhan, Khain, Khadekei.

➤ **Wildlife**✓ **Mammals**

Tiger, Leopard, Elephant, Bison, Bear, Sambhar, Spotted Deer, Mouse Deer, Barking Deer, Wild Boar, Chowsingha, Mongoose, Pangolin, Giant Squirrel, Flying Squirrel, Otter, Hanuman, Langur, Rh. Macaque.

✓ **Birds**

Pea Fowl, Red Jungle Fowl, Hombill, Hill Myna, Grey Wagtail, Parakeet and Serpent Eagle.

✓ **Reptile**

Python, Cobra, King Cobra, Common Crait, Viper, Banded Crait, Monitor Lizard, Forest Calotes, Chameleon, Mugger, Crocodile, Black Turtle , Tent Turtle.

➤ Approach from different places (in Kms.)

Table 3.3: Approach of Similipal from Prime locations

From	Jashipur	Pithabata
Bhubaneswar	252	290
Calcutta	290	270
Balasore	160	80
Jamshedpur	113	175

- ❖ Entry closed from June 15th to October 15th.
- ❖ Climatic condition – maximum temperature (42°C)
- ❖ Minimum temperature (3°C)
- ❖ Peak season November-January.



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Figure 3.5: The Famous Tiger at Similipal

The national park has access from two sides through Pithabara (22km from Baripada) or through Jashipur (94 km from Baripada on NH-6).

- Entry permits can be obtained from the Range Officer, Pithabata check gate or the Assistant Conservator of Forests at Jashipur on payment of prescribed fees.
- Day visitors can enter between 6am and 12noon and visitors with reservation between 6 am and 2pm. Entry of visitors is stopped after 2pm.
- In case of overnight stay /night halt reservation is required 10-12 days in advance.

Connectivity

- ❖ Baripada, the district headquarter of Mayurbhanj on the junction of NH 5 and 6, is 270km from Bhubaneswar 240 km from Kolkata and 60km from Balasore. Its around 175 kms from Tatanagar. Both the places are well connected by regular state transport bus service, private taxis and jeeps are also available on sharing basis.
- ❖ The nearest railhead is Balasore (60km from Baripada), served by major trains running on the south-eastern sector.
- ❖ The Nearest airports are Bhubaneswar (270km) and Kolkata (240km)

Table 3.4: Tourist Traffic arrival at Similipal

Year	Domestic Arrival	Foreign Arrival	Total Arrival
1992	73900	103	74003
1993	78100	125	78225
1994	82005	198	82203
1995	86150	210	86360
1996	90460	244	90704
2000	109954	357	110310
2001	115437	390	115841

Source: Statistical Bulletin

Attractions

LULUNG – Panoromic view, Tribal dances, Nature paradise, Entry point of Similipal forest,

JORANDA – Waterfall 150 mtr. (493ft.) – Panormic view, wild life, Bird

NAWANA – Valley

BAREHIPANI – Water fall 399 mtr. (1308 ft.), Panoromic view, wild life evidence, Orchids

CHAHALA – Wild life, a watch tower is built to observe the wild life and scenic beauty.

JAMUANI – Tribal life, picnic spot.

GURGURIA - Jungle driving, nature and trail trek, tribal dances,



Figure 3.6: The majestic waterfall at Joranda

JASHIPUR - Entry point of Similipal.

BANGRIPOSI – Small market, worth visiting for forest produce.

RAMATIRTHA – Its an crocodile rearing center near Jashipur which is an great attraction.

Infrastructure

The various hotels and accommodation available are as under

Table 3.5: Accommodation facility in and around Similipal

Sl No.	Name	Km from Jashipur	No. of Suits	Total Beds
1.	Chahala E. Villa	35	1	5
2.	Chahala Dormitory	35	2	8
3.	Nawana FRH	60	2	4
4.	Nawana Pine Villa	60	1	2
5.	Nawana Dormitory	60	2	6
6.	Jaranda FRH	72	2	4
7.	Barehnipani Fall View	52	2	4
8.	Dorm-I (Jashipur)*	-	1	10
9.	Dorm – II (Jashipur)*	-	1	10
10.	Tribal Hut (Jashipur)*	-	3	2/S
11.	Jamuani FRH	25	2	4
12.	Jamuani Tribal Hut	25	2	4
13.	Barehipani FRH (Muktapur)	55	2	4
14.	Gudgudia FRH	25	3	2/S
15.	Gudgudia Tourist Cottage	25	2	4
16.	Gudsgudia Dormitory	25	1	7
17.	Badampahar FRH	16	2	4

Negative Aspects

- ❖ Lack of power and communication facility inside Similipal only small lamps are provided to the tourists. Due to non-availability of safe drinking water (rion water), all the tourist carry own water.
- ❖ No good restaurants / eating place available for the tourists inside Similipal. Normally they carry their own food.
- ❖ Forest rest house and OTDC lodge are available inside the Similipal .[4-5] . All others 10-12 are around 25-60 kms from Jashipur. Before 10 days, the reservations have to be made which is quite cumbersome.
- ❖ Internal road facility is not good. It is a red metallic road. During rains maximum length of the roads is damaged by rainfall., Hence it remains closed from 15th June to October 15th.

- ❖ No medical facilities are present inside Similipal forest, the nearest facility available are Jashipur PHC, Lulung PHC, Baripada District Headquarter Hospital.

Positive Aspects

- ❖ This biosphere reserve is a sanctuary and one of the Tiger Projects and National Parks of India. With wide range of rain falls and emphatic variations, ranging from dry deciduous to moist green forests, it is suitable to different species of plants, 87, varieties of orchids, 42 species of mammals, 29 types of reptiles and 231 species of birds are the proud possession of this plateau.
- ❖ Average mean elevation of Similipal is 900 meters. Tall and luxuriant Sal Trees in large numbers stand like sentries. The handsome peaks of Khairiburu (1178 meters), Meghasani (1158 metres) add to the beauty of nature-lovers i.e, it's a nature's paradise.

CHANDIPUR

Location

Chandipur is well connected by road, 15 kms from Balasore on NH-5. Bus and Trekkar services are available from Balasore. It is 60 kms from Baripada.

Connectivity

- The nearest railway station is Balasore on S.E. railway. As regards the air connection, Bhubaneswar airport is 230km and Kolkata airport is 320 kms. Balasore is an important hub for all the fast trains connecting East and South.

Identity

- Chandipur-on-sea has its unique distinction of its own due to casuarina trees around the area, which attracts the tourists of all types from all parts of country as well as from other countries.
- Chandipur attracts the attention of scholars and researchers because of the red crab and Horseshoe crab, which are very rare among the ocean resources.
- The sea-beach at Chandipur is a unique beach. The area belongs to Patrapada Gram Panchayat. Surrounding villages are Srikana, Patrapada, Mirzapur, Chandipur which consist of a number of Bengali and Muslim refugees. Majority of them are dependent on fishing and fish related business for their livelihood.

Attractions around Chandipur**BALARAMGUDI**

2 kms away from Chandipur is an important fishing centre where the river Budhabalang meets the sea. Thousands of boats and trollers are engaged in fishing business, which is a major tourist attraction.

PANCHALINGESHWAR

- Natural stream/waterfall running over the shiva lingams.
- Animals such as elephants/bear are found strolling around the hill
- Calm and quite place, ideally suited for nature lovers and researchers. The atmosphere is also pleasant and cool due to large number of trees.

NILGIRI

Around 40kms from Chandipur is famous for trekking as well as it has a religious touch because of the Jaganath temple.

SAJANGARH

This is around 5kms from Nilgiri consists of the shrine of Bhudara Chandi.

KHICHING

149km from Baripada and 55km from Jashipur is famous for the shrine of Kichakeswari (ancient temple) and stone crafts made of different colour stones. There is a small museum consisting of historical specimen of culture and arts.

REMUNA

About 60km from Baripada and 10 km from Balasore is famous for the shrine of Khirachora Gopinath, visited by Sri Chaitanya.

DEOKUND

Around 65km from Baripada and 111 km from Balasore is an enchanting place with a series of waterfalls and a shakti shrine set against the outer periphery of Similipal

Infrastructure

- ❖ A well furnished OTDC Panthanivas is there which is adjacent to the sea-beach. Besides some hotels like Hotel Subham, Hotel Chandipur, Hotel Larika, Hotel Anandmayee are there for the tourists. Majority of tourists favour to stay at Panthanivas and Hotel Subham. But no Star Hotel is there. All are budget hotels.
- ❖ Chandipur has only one guest house which belong to forest department i.e, 'CASUARINA HOUSE' which is also adjacent to the sea-beach. It has been observed that tourists do not prefer staying over there since it is not being maintained by the department.
- ❖ Tourists do not prefer monsoon season and the booking are done in advance from Calcutta and Bhubaneswar.
- ❖ Panthanivas and Hotel Subham provide all types of facilities to the tourists.
- ❖ As regards food and cuisine Chandipur is well equipped to handle different categories and class of tourists. Indian, Chinese, Bengali etc. are available in the hotels.
- ❖ As regards the drinking water, its is a major issue in Chandipur as the water which is available is saline.
- ❖ As regard the medical facility, there is a PHC within Chandipur area. In case of major problem the people travel to Balasore headquarter hospital or Jyoti Private Hospital.

Uniqueness

- Unlike other sea beaches, the sea water in Chandipur recedes away from the shore about 5 kms twice a day, which is an unusual phenomenon rarely found anywhere.
- One can see the sea water literally vanishing and also see coming back at regular intervals.
- In other sea beaches the waves are wild and the visitors are calm but in Chandipur the visitors go wild while the waves remain calm. The water waits for the visitor but here the visitors love to wait for the water.
- Red crab, rare sight to witness.
- Important trading centre for different kinds of fishes.

Positive Features

- ❖ It is very close to Balasore, which is well connected by Bus and train (on NH-5 and S.E Railway).
- ❖ DRDO's office and Interim Test Range (ITR) are near Chandipur Area. Due to establishment of DRDO's office and Interim Test Range, the road to Chandipur and surrounding areas have been developed
- ❖ Good infrastructure facilities are available in terms of accommodation, sight seeing, budget hotels.
- ❖ Scenic Beauty, and Casurina forest, fishing business centers etc. add to the beauty.
- ❖ Ideal place for nature lovers and researchers.
- ❖ During winter day visitors are maximum. The peak season is summer for tourists from different states
- The other spots of interest located nearby are Digha, Chandaneshwar and Talasari.

Negative Features

- At present there is no decent place on sea beach from where one can enjoy the sea.
- Lack of basic amenities on the sea-shore for the tourists.
- During night, no provision of any lighting arrangements are there on any elevated site for viewers to watch the hide and seek of the sea.
- ❖ Few lights are provided by the Panthanivas and Hotel Subham.
- ❖ No provision for any recreation in form of children's park.
- ❖ Problem of security and safety along the beach dampens the spirit of Chandipur.

e) BHUBANESWAR – KONARK – PURI [THE GOLDEN TRIANGLE]

BHUBANESHWAR

Bhubaneswar, the present capital of Orissa and ancient kingdom of Kalinga. Bhubaneswar is known as the temple city of India. Among the finest of its 500 temple is the Lingaraja temple of Lord Shiva built in the 11th century. It is also the biggest in Bhubaneswar.

Infrastructure

The city of temples consists of budget as well as star hotels.
The various hotels in Bhubaneswar are as under :

Table 3.6: Some Hotels at Bhubaneshwar, their category and No. of Rooms

Name of Hotels	Category	No of Rooms
Lingraj	Budget	14
Padma	Budget	12
Venus Inn	Budget	16
Rajmahal	Budget	21
Pushpak	Budget	19
Royal Midetown	Budget	48
Hotel Ambika	Budget	14
Marrion	3-star	60
Mayfair Lagoon	3-star	36 Cottages
Sevostillya	4-star	106
Oberoi	5start	70
Hotel Swosti	3-star	60
Crown	4-star	68

Majority of the Budget Hotels are having a restaurant, certain budget hotels only provide accommodation. In case of star hotels all of the above mentioned are having multi-cuisine restaurants, coffee shop, convention centre, secretarial service/ (minimum – 2) business centre, conference hall, bar, swimming pool, Bakery shop, Money changers. Besides this each rooms is furnished with TV, Telephone, Minibar, Travel desk, Laundry.

Connectivity

- Bhubaneswar is well connected with air and rail with major towns of India.
- It's the major rail head of the S.E. railway. It has fast and super fast connections with Delhi, Calcutta, Chennai, Bangalore, Hyderabad, Mumbai and other towns of the country.

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- It also has daily flights connections with Chennai, Mumbai, Delhi, Calcutta, and Hyderabad. Recently it has also been given the status of an International airport, which needs to be developed into a full fledged international airbase.

Table 3.7: Tourist Traffic at Bhubaneswar

Year	Domestic Arrival	Foreign Arrival	Total Arrival
1992	284239	11427	295666
1993	298914	10362	309276
1994	311151	10335	321486
1995	327050	10921	337971
1996	344123	15005	359128
2000	418283	21968	440250
2001	439197	24164	463361
2002*	461157	26580	487739

** anticiapated*

Attractions

LINGARAJ TEMPLE

The most famous of all the temple is the Lingaraj temple of Shiva built in the 11th century and is also the biggest temple in Bhubaneswar, soaring upto an height of about 54 meters



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Mukteshwar and Parsurameshwar Temple on the other side. This is considered to be a sacred pond which is said to be have been consecrated by the water brought from different sacred rivers of India at the time of consecration of the Lingaraja Temple. The local people perform different rites and rituals including obsequies on different occasions. This is also ideal for

performing boating. In fact, the ceremonial boat ride is organised for Lord Lingaraj during summer months as an annual ritual.

MUKTESHWAR TEMPLE

Built in the 10th century with its famous stone arch at the entrance is known as the gem of Orissan architecture. It is full of sculptures on its out walls. This small and compact temple is located within a compound wall.

PARASHURAMESHWAR TEMPLE

Located close to the Mukteshwar temple has equally exquisite carving on its walls but is more famous for its latticed windows.

ATRI

It is a hot water sulphur spring, 42 kms from Bhubaneswar which has medicinal properties attached with it. It is frequented by large number of tourists willing to heal themselves naturally.

NIKKO PARK

It is one of the major attractions among children specially during the weekends and holidays. It is an water amusement park located in the heart of Bhubaneswar.

NANDANKANAN ZOOLOGICAL PARK



Figure 3.8 a:- The Dinosaur model at Nandan Kanan

Figure 3.8 b:- A tiger basking at Nandan Kanan



Endangered species of animals are housed in the park for the rare white tigers and mitratory
birds. The park is also the country's largest lion Safari
Park. The park has a toy train and a cable car. The park is located
20 km from Bhubaneswar. The park is open on Mondays. Ticket system is available
on

Domestic Tourist	-	Rs. 5/- per head
And Foreign tourist	-	Rs. 40/- per head.
Camera Ticket		Rs. 5/-

SHANTI STUPA, DHAULI

Dhauli is a small hillock on the outskirts of Bhubaneshwar (about 8 Kms from the city) around which the ill famous Kalinga War was fought in 261 B.C. The result of this great war was significant in the context of not only ancient Kalinga but also the whole world. Emperor Ashoka, who was instrumental in raging the war, won it but was terribly moved by the horrors and embraced buddhism. Thereafter he championed the cause of Buddhism and spread the message throughout the world. At Dhauli he erected an edict containing the

message of Buddhism along with the rock cut sculpture of an elephant. Dhauri thus became a Buddhist heritage site. On the Dhavalgiri hill, stands the modern monument of world peace – the Shanti Stupa, which was constructed in 1972 by the Kalinga Nippon Buddha Sangha. Below the Hills, flows the river Daya. The area in and around Bhauri hill can be elegantly landscaped and light and sound can be arranged at the venue in order to transform it into a grand tourist attraction. The stalls occupying approach to the Shanti Stupa can be shifted into an elegantly built small kiosk, which would add to the aesthetics of the place.

- The service lane from Bhubaneswar-Pipli main road to Dhauri is one lane stretch of 2.5kms. This needs to be resurfaced as well as widened into a 2-lane road.
- Besides the Shanti-Stupa the local authorities should construct an OTDC run cafeteria as well as an small garden/rest place where the tourists can relax and spend time. Currently there is no space to sit. One has to sit on the steps.



Figure 3.9: - The shrine of Buddha at Dhauri

DHABALESHWAR SHIVA TEMPLE, DHAULI

There is also a Siva Temple dedicated to Lord Dhabaleshwar in the vicinity of the Shanti Stupa. Many tourists visiting the Shanti Stupa also visit the temple in addition to the local people who visit the place regularly. However, at present shoddy stalls occupy the place imparting a negative impact to the aesthetics of the place.

STATE MUSEUM

The genesis of the State Museum goes back to the year 1932, when 2 notable historians Prof. N.C Banerjee and Prof. Ghanashyam Dash of Ravenshaw College, Cuttack started collecting the archeological treasures from various places. The small museum was then housed within the premises of the college. In 1938, by a suitable order, the Government of Orissa transformed this nucleus into the Provincial Museum of Orissa and appointed a committee of management. The museum continued to maintaining close contact with the public and the Archeological department of Government of India. Initially it was only an archaeological museum with collection of sculptures, terracota, numismatics, copper –plates and specimens of fine arts. With the shifting of the State Capital from Cuttack to Bhubaneswar in 1947-48, the provincial museum was also shifted there. The foundation stone of the building was laid on 29th December, 1957, by Dr. Rajendra Prasad, the president of India. The construction of the building alongwith an administrative block, an auditorium and a guest house was completed in 1960, and in the same year the museum was shifted to the place and was renamed the Orissa State Museum. Ten branch museums were established at places like Khiching, Baripada, Balasore, Salipur, Dhenkanal, Berhampur, Puri, Jeypore, Belkhandi and Khariar, which at present are acting as extensions of the Orissa State Museum.

The collections of the State Museum are divided into the following sections, each of which are described briefly below

- a) **Archaeology** – Offers a comprehensive panorama of the civilisation of the ancient and medieval kalinga. The treasures are exhibited in 3 big halls covering a long span of time between 3rd century BC and 13th century AD. Here an ensemble of sculptures from all schools of art, that developed in this region, in chronological sequence, and are a living embodiment of Orissa's rich cultural heritage.
- b) **Epigraphy and Numismatics** – This contribution of ancient Orissa, with special reference to the above 2 aspects in Indian civilisation is remarkable. The Epigraphy gallery has the distinction of possessing original copper plate grants, stone inscriptions, a good number of plaster cast inscriptions and estampages of the originals. The numismatic treasures of the museum consist of punch - marked coins of the pre Mauryan and Mauryan age, Kushana Age, Gold Coins from Gupta Age, Sri Nanada, Kalachuris, Yadava, Ganga Fanams. Silver Coins from Mughal Emperors.
- c) **Armoury** – This section depicts ancient weapons like swords, shields, battle axes, guns and cannons marks an important milestone on the march of civilisation. The most prized collection is a personal gun of late Madhusudan Dash, one of makers of modern Orissa.
- d) **Mining and Geology** – As narrated in Chapter 2, Orissa is blessed with rich mineral assets. The exhibits include a host of stones mostly used for building purposes in addition to samples of minerals and models of mining operations. This galley was opened in assistance with Directorate of Mines.
- e) **Natural History** – This section mainly covers the fauna of the State. Invertebrates, vertebrates, birds and mammal specimens

are colourfully displayed in 2 spacious halls and attract the instant attention of the visitors.

- f) **Art and Crafts** – It is a vast repository of exquisite pieces shaped with consummate skill at the hands of traditional artisans.
- g) **Contemporary Art** – In this gallery, there are displayed sculptures, oil and water colour portraits, landscapes, sketches and graphics prepared by contemporary artists of Orissa.
- h) **Gopabandhu Gallery** – The life and work of Utkalmani Pandit Gopabandhu Dash is displayed in visual form through a variety of exhibits housed in this gallery.
- i) **Anthropology** – This section comprises of exhibits related to pre-historic, folk and tribal culture and musical instruments. The depiction of tribals in dioramas, with singers and dancers in traditional forms, thematic display of puppets, the tribal and folk musical instruments attuned to musical sounds in this section keep visitors spell bound.
- j) **Manuscript Gallery** – This section, with a large collection of rare manuscripts including more than 50,000 palm leaf manuscripts, which is a unique treasure of the museum.
- k) **Library** – A well equipped reference library of the Museum is a destination point for researchers and scholars of different disciplines. The total collection of the library at present exceeds 30,000 titles, including books, periodicals, maps etc. and covers a variety of subjects.

BARABATI FORT, CUTTACK

Barabati Fort is located in the city of Cuttack, which served as the capital of ancient Orissa during the rule of various dynasties including the British rule. It was also the capital of modern Orissa, even after independence, until 1957, when the capital was shifted to Bhubaneswar. It enjoyed a strategic location for military operation as well as political activities.

The ruins of the old Fort lie on the right bank of the Mahanadi, in the western part of the city of Cuttack. At present, all that remains of the Fort is an arched gateway and a broad moat, about 93 meter wide and 3.5 meter deep, faced with stone masonry walls. Archaeological surveys have revealed that the fort was roughly rectangular in structure having an area of over 102 acres, and it was surrounded on all sides by a wall of laterite and sandstones.

The main building of the fort was called the 'Navatala Prasada' or nine stored building, the first of which was used for elephants, camels and horses, the second was occupied by the artillery and the guards, the third by the patrol and gate-keepers, etc. In fourth story was located the workshop in the fifth Kitchen etc. and finally in the ninth and the last there was the sleeping chamber of the king.

To the west of the mound there is a tank. In the north-eastern corner of the mound are remains of what once was a temple. The temple was made of whitish sandstone over foundations of laterite blocks. About four hundred fragments of mouldings and some mutilated pieces of sculptures have been recovered so far. This temple of the Ganga period containing a stone idol of Lord Jagannath was razed to the ground by Feroz Shah Tughluq in 1361 A.D. The ruins of the fort, on the bank of the Mahanadi, evoke memories of bygone days, while the fort's location is home to a modern stadium, which rings with the sounds of sports events and cultural programmes today. The venerated

shrine of Cuttack Chandi, the presiding deity of the city, is situated at a strolling distance from the fort area.

However, during the recent past, the Fort lost its significance amidst modern building. In the Barabati Stadium (a leading stadium in India for multipurpose activities) further aggravated by encroachment problem has practically overshadowed the importance of the Fort. The Archeological Survey of India has now taken up excavation of the Fort to bring to light the lost glory.

NETAJI SUBHAS CHANDRA BOSE MEMORIAL, CUTTACK

Netaji Subhas Chandra Bose, a luminary of freedom struggle of India was born at Cuttack. Hence, his birthplace can attract tourists as a site to be seen. It is therefore, under implementation to renovate the building, where he was born and convert it into a memorial so that it can be marketed as a tourism attraction besides preserving it as a part of cultural heritage.

KONARK

The temple chariot of the Sun God (Black Pagoda) on the sands of the Eastern Coast is the 13th century architectural marvel. It is designed as a celestial chariot of the Sun God with twelve pairs of wheels and seven houses.

It is 65 kms from Bhubaneswar and a world heritage site of prominence

- The Konark Dance festival held every year (Dec 1-5) is a great attraction for the tourists.
- The Sun Temple museum of the ASI has a good collection of sculptures from temple ruins.
- 2 Guesthouses operated by OTDC, Panthanivas and Yatrivas are located in Konark with 14 AC and non AC rooms. Besides this there are some private budget hotels.



Figure 3.10: - The Famous Konark Temple

- Being a world heritage monument steps have to be taken to conserve it.
- No other place/spot to spend the time.
- In the back of the Sun Temple on weekend/holiday in the evening some classical music/folk dance could be arranged from 7-9pm [2 hours] with separate entry tickets.

Attractions

CHANDRABHAGA BEACH

Chandrabhaga Beach on the Bay of Bengal is located about 3 Kms from Konark, which is famous for reasons elucidated earlier - the only World Heritage Monument in Eastern India. Fairly wide and Clean, this beach is ideal for swimming and sun – bathing. In clear weather, sunrise on this beach is worth watching. In olden days, the Chandrabhaga river met the sea at this point. Though the river has dried up now, the mouth is still visible. A dip in the backwaters at the mouth is considered holy and sacred on Magha Saptami Day, when about 2 Lakh People congregate and a big festival is held on the beach. However, odd and shanty structures that have occupied the beach needs to be relocated amicably so that it contributes to the beauty of the beach.

PURI

Location

Puri one of the destinations of the golden triangle is 65kms from Bhubaneswar by road and 35 kms from Konark on Marine drive.



Figure 3.11: The Famous Car Festival (Rathayatra) at Puri

Significance

- Puri, the city by the sea, is a major pilgrim centre in India. Adi Shankara founded one of the Peethas here. Puri is also famous for its Golden Beach, ideal for swimming and surfing.
- But the fame of Puri emanates most from the Jagannath Temple. This 12th century temple is known for its annual Rath Yatra or Car Festival. Within its precincts are the smaller temples of Vimala, Lakshmi, Vishnu and innumerable Gods and Goddesses and the Ananda Bazar, the world's biggest food market. Gundicha Ghar is a

small sanctum about km from the main temple, where the idols are taken during Rath Yatra for a week's sojourn. On the outskirts of the city is Shri Lokanath, an honoured shrine of Lord Shiva.

Attractions

BADA DANDA

This grand road is a shopper's delight. It offers typical Puri handicrafts like miniature stone sculptures, wood carvings, sea-shell items, patta-paintings on cloth and appliqué work.

ATHARNALA BRIDGE

The bridge near Puri spans seven centuries. Built in the 13th century A.D. this engineering marvel over the Madhupur stream is still in use.

BALIGHAI

An estuary of the river Nuanai, 8km north of Puri. A famous picnic spot, it abounds in deer and colourful birds.

SANKARACHARYA MATH

The cult of Jagannath at Puri, one of the 4 celebrated Dhams of India, motivated a lot of saints and seers to establish maths and religious monasteries belonging to different sects at Puri. The most important and pioneer in this field is the Gobardhan Math, said to have been founded by Adi Sankaracharya. This Math is therefore a place of relevance and significance to Puri, which can be marketed as a major tourist attraction. The approach to the math remains a major cause of grievance for the inmates. Providing a clean and a

broad passage would substantially elevate the attraction of the Math.

RAGHURAJPUR VILLAGE

Raghurajpur is a small village located about 10 Kms from Puri (2 Kms from Chandanpur on Puri- Bhbaneshwar Road). It is an unique village in the sense that all the 103 families residing here are engaged in form of Art and Craft tradition. The village is mostly popular for Patta Chitra, a typical Orissan form of painting on a specially prepared cloth canvas with traditional ingredients. The painters are also painting now a days on Tusser and Silk, other forms of art and crafts include Palm leaf painting, Jatri Patti Painting, etching, stone carving, wooden toys, papier machie masks, cow dung toys, Coir crafts, weaving etc. the village is also the origin of the Gotipua dance tradition (which follows a *Guru Shishya Paramapara*), where young boys dressed as girls perform Orissi dance. The village is also known because of the legendary Orissi Dancer Keluchran Mahapatra, who hails from the Village. More than 100 Artist of the village have won State/ National Awards on different occasions. This is a village where one can watch from close quarters a glimpse of the Rural Indian Culture.

The State Government has chalked out an integrated development plan for the vilage, which is in stages of implementation. This apart, the approach road to Raghurajpur is in very bad shape, which needs to be improved at the earliest.

Infrastrcture

- Puri, the place of Lord Jaganath is one of the gateways, Orissa for domestic and international tourists. It is one of the most visited tourist destinations of the state.
- Star Hotels/resorts as well as low budget hotels, guest house are available in a large number because of the high inflow of leisure as well as religious tourists.

Table 3.8: Some hotels of Puri and their Tariffs

Hotels	Category	Rooms	Facility
Sea Point	Budget	28	Restaurant
Puri	Budget	78	Restaurant
Mayfair	3*	34	2 multicuisine, Coffee shop, Bar
Toshali	4*	38	2 multicuisine, Coffee shop, Bar
Victoria Club	Budget	56	2 multicuisine, Coffee shop, Bar
Neelanchal Hotel	4*	40	2 multicuisine, Coffee shop, Bar
Park	Budget	45	Restaurant
Paradise	Budget	35	Restaurant

Table 3.9: -Tourist Arrival at Puri

Year	Domestic Arrival	Foreign Arrival	Total Arrival
1992	765098	11659	776667
1993	773624	9911	783535
1994	808251	10376	818627
1995	840240	11542	851782
1996	873984	13737	887721
2000	162333	20112	1082445

f) GOPALPUR-TAPTAPANI**Location**

It is located near the commercial town of south Orissa, Berhampur, which is famous for the handicrafts and handloom products. It is approximately 16kms from Berhampur located in the coast of Bay of Bengal.

Identity

- One of the popular beach resorts of Orissa.
- An ideal place for good swimmers, deep and clear sea water. It is considered to be one of the finest beaches on the East Coast.
- A modern port is coming-up (earlier during the British rule it was an important port)

Connectivity

- Located close to NH5, regular start road transport buses are available from Berhampur. Besides this private taxis as well as share auto are also available for traveling.
- The nearest railway station is Berhampur on the S.E. railway and is connected by a number of first trains on Howrah-Chennai route.
- The nearest air connection to Bhubaneswar (190kms) and Vizag (260 kms).

Attractions

- Tapatapani – it is 65kms from Gopalpur
 - It is known for its hot sulphur spring.
 - Thick forests and scenic beauty.



Figure 3.12: Tapta Pani

Infrastructure

- A number of medium budget hotels, guesthouses, premium hotels (Oberoi) are located in Gopalpur.
- Besides this there is an OTDC Pantha niwas in Gopalpur.
- Potable water and electricity as well as communication is not a problem. All facilities such as telephone, restaurants with multi-cuisines are available in Gopalpur.

Improvement Areas

Gopalpur needs to be projected as an important beach circuit along with other beaches.

g) BHITARKANIKA-DANGMAL-GAHIRMATHA**Location**

A trip of Bhatarkanika is a package in itself located around 190 kms from Bhubaneswar.

Significance

- Bhitarkanika is bounded by rivers on 3 sides and sea on the fourth. It is criss-crossed by numerous creeks and canals.
- It's a place, which can be approached through water only.
- It is a sanctuary & a national park besides, it is the breeding place for the turtles/Olive. It is extending over 600 square kilometers. It has a variety of animals in its mangrove forests. It is known for crocodiles, sea-turtles (at Gahirmatha) and water lizards. It has rare white crocodiles. [Sankua], rare species in the world. It is also a park for deer and migratory birds such as King Fister, open billed storks, sea eagles, kites, sand piper, Darters, Sea gulls. Besides this King Cobra, pythons, wild pigs, monkeys etc.
- This area comprises of a couple of tiny islands. Danghal in the centre, there are a number of other small ones such as Ekakula, Habalikhathi.



Figure 3.13: Mangrove Forest at Bhitarkanika

- It is one of the few evergreen mangrove vegetation in the world. More than sixty varieties of Mangrove are found there – breathing roots.
- As the area is the joint place of some rivers like Brahmani and branches like Khola river and Hansua river sea and river water spread in the surrounding area.
- Once inside Bhitarkanika the outside world disappears
- The only means of communication people of area use for their inter-communication and Transport are boats (manual or motorized).
- There are as many as 108 hamlets (including revenue area) in the surrounding area of Bhitarkanika and Dangmal. Most of the hamlets are Bengali belts (small size). Dangmal, Rangani, Talchua and Iswarpur Gram Panchayats are adjacent to Dangmal and Bhitarkanika area. Nearly about 25,000 people are staying in surrounding areas.

- Fishing is the only employment source for the entire hamlet.
- According to local officials, the sea animals have been staying by natural process. No artificial work has been done for creating the sanctuary. Day by day the number of sea animals are rising. Bhitarkanika is a natural habitat of a lot of wild creatures. There is a crocodile breeding farm at Dangmal.
- Boula crocodile is another significant aspect of Bhitarkanika. All these sea animals and wild animals are living within the dense Mangrove forest.

History

According to the local people Bhitarkanika was the ancient kingdom of the King of Rajkanika. It is said that the crocodiles do not attack boats or humans because there is elder brother –in- law and sister-in-law relationship between the crocodile and the boat. The local people can travel safely within the sanctuary area.

Connectivity

- After the construction of two bridges on river Brahmani and Khola, Bhatarkanika can be approached by land route since one year. The land route, which is 35 kms from Rajnagar is a very kucha road which is not convenient during the rainy season.
- The entry point to Dangmal which is the base of Bhitarkanika. Is Chandabali [62 kms from Bhadrak (on NH-5)]
- 2nd is from Rajnagar to Dangamal by motor boat – takes 3 hours – Rajnagar is 40kms from Kendrapara (85 kms from Cuttack).

- 3rd is from Gupti (25 kms from Rajnagar) – by motor boat – takes 2 hours.
- The nearest rail head is Bhadrak (65 kms from Chandabati or at Cuttack (120 kms from Rajnagar), Balasore (110 kms from Chandabali), Bhubaneswar (130 kms from Rajnagar).
- Another connecting place is also Dhamra which is one of the fishing Centres. By motor boat it takes almost 3 hours. Most of the people, tourists and officials go via Chandabali to Dangmal since boats are available frequently from Chandabali.

Infrastructure

- For overnight stay tourists prefer Aranyanivas at Chandabali. Besides this there are forests lodge and guest house at Dangmal, Ekakula, Gupti and Habilikhati. Permission to visit Bhitarkanika and reservation for staying can be obtained from Divisional Forest Office, Rajnagar or Asst. Conservator of Forest, Chandabali on payment of requisite fees.
- Motor boats / lounge (Dept of Forest and Private Boats) are available on hire basis from Rajnagar, Chandabali and Gupti to Dangmal. The boat charge depends on season and on tourist traffic.
- According to official source from Dangmal the hiring charges for boats varies from Rs. 800 to Rs. 2000/-. There are 12 boats of D.F.O, at Chandabali, 6 boats at Gupti for the tourists and 8 boats for official use.

- The Charges for tourists to visit Bhitarkanika are as under :

Table 3.10: Charges at Bhitarkanika

Parameters	Domestic	International
Entry Fee	Rs. 1/- per head	Rs. 5/- per head
Boat entry	Rs. 10	Rs. 20/-
Night Halt (with Boat)	Rs. 100/-	Rs. 200/-

Besides this it was also observed that international visitors had to pay twice the amount for overnight stay compared to domestic visitors.

- Though some villages nearby are connected by electricity but Dangmal and Bhitarkanika area are not connected by electricity. Solar light facility has been provided by D.F.O.
- Electricity, telephone, pucca houses are a day dream for the local inhabitants. No communication facility available once inside.
- Drinking water facility has not been provided by the government, only a solitary tubewell exists in the Dangmal area. The tourists face water crisis during their visit. Hence 90% of the tourists who are aware of the fact (through travel agents) carry their own water.
- Though canteen facility exists inside Dangmal but it is not functioning as its damaged.
- The area remains closed in May and June, the breeding period of the turtles.
- There is a PHC at Dangmal but most of the times doctor remains absent.

- Food is another impediment during their visit. The tourists have to carry food with them during their tour to Bhitarkanika. No restaurants are there.
- There are no tour operators and travel agents or guides at Chandbali and Rajnagar. So the tourists have to get information and guidance cell from Balasore or Kendrapara.

Attractions

- ❖ Gahirmatha a breeding centre of crocodile and turtles.
- ❖ Another attraction is 9th century monument – a temple for worship of Lord Shiva and the other, a Shakti shrine at Dangmal.
- ❖ The Olive Ridley sea turtles arrive in lakhs twice every year between January and March to lay eggs. These generally migrate from Canada.
- ❖ The boat journey from Chandabali and Rajnagar (takes 3 hours) and from Gupti (takes 1 ½ hours) to Dangmal is itself a very enjoyable and memorable in the life of a tourist.

Positive Features

- Dense mangrove forest
- Enjoyable and adventurous boat journey
- Crocodile sanctuary and Ridley sea turtles breeding centre
- A combination of islands

Negative Aspects

- ❖ There are no “*all seasonal approach road*” to Dangmal. Communication through land route is very difficult due to kucha road and specially during monsoon it becomes inaccessible.

- ❖ Due to long water Journey [2-3 hours] a number of tourist prefer to skip this scenic beauty.
- ❖ Communication/transport through boat is quite expensive. No fixed charges for log time unless the boat is completely full. This creates lot of problem during off-season.
- ❖ No lighting arrangement at Dangmal.
- ❖ No good accommodation facility at Dangmal.
- ❖ No private small hotels /restaurants there.
- ❖ The Tourism department / office does not function there.
- ❖ The local habitants are dependent on tourists, fishing, collecting wood, hunting animals. Economically very backward.

Opportunity for Developing the Spot

- The Crocodile Breeding Research Centre has collapsed due to non-provision of Govt. funds. It can be re-instituted.
- One tourist counter/information cell may be opened at Dangmal.
- The land route (35 kms) to Dangmal may be well constructed (2-lane) for smooth traveling. Emphasis should be on metal road with outlets on either side.
- Permanent protection to mangrove and wild life is urgently required.
- Better accommodation facilities may be provided to attract more tourists along with cuisine facility.
- The area should be well protected from attack on wild animals and from theft of wood (natural resource).

Uniqueness

- Natural Breeding Centre of crocodile.
- Vast Mangrove forests.
- White crocodile “Sankhua “ a rare species in the world, found here.



Figure 3.14:- The Crocodiles of Bhitarkanika

- Olive Ridley sea turtles from the Northern Hemisphere visit Gahirmatha twice every year between January and March to lay eggs is a unique characteristic and an USP for wildlife lovers.

3.3.0 TOURIST TRAFFIC

An idea about the recent tourist arrivals in the State of Orissa, with monthwise break – ups of domestic and foreign tourists visiting the state are as shown in the Table below:-

3.3.1 Monthwise Tourist Arrivals in the year 2000 in Orissa

Month	Number of Tourists		
	Domestic	Foreign	Total
January	107584	2387	109971
February	97766	3052	100818
March	103364	2754	106118
April	98126	1750	99876
May	113085	1019	114104
June	117733	1027	118760
July	110528	1196	111724
August	104172	1422	105594
September	97691	1321	99012
October	133306	1612	1347918
November	111586	3387	114973
December	279495	2796	282291
Total	1474436	23723	1498159

3.3.2 Tourist Arrival in Orissa Since 1980 & Projected tourist traffic for the next 20 years

Year	Domestic	Foreign	Total
1980	190293	23941	214234
1981	351738	26323	378061
1982	586597	27138	613735
1983	714491	29487	743978
1984	582992	28373	611365
1985	670902	26134	697036
1986	802126	26168	828294
1987	1044477	26848	1071325
1988	1108293	30083	1138376
1989	1131756	32829	1164585
1990	1212262	32191	1244453
1991	1221116	29388	1250504
1992	1264790	26639	1291429
1993	1278574	24856	1303430
1994	1324025	26024	1350049
1995	1360267	28201	1388468
1996	1401126	34303	1435429
1997	1431334	35081	1466415
1998	1462127	33101	1495228
1999	1324529	25758	1350287
2000	1474436	23723	1498159
2001	1493355	24526	1517881
2002	1512517	25261	1537778
2003	1531925	26019	1557944
2004	1551582	26800	1578382
2005	1571491	27604	1599095
2006	1591655	28432	1620087
2007	1612079	29285	1641364
2008	1632764	30163	1662927
2009	1653715	31068	1684783
2010	1674935	32000	1706935
2011	1696426	32962	1729388
2012	1718194	33949	1752143
2013	1740241	34968	1775209
2014	1762571	36017	1798588
2015	1785788	39097	1824885
2016	1809094	38210	1847304
2017	1831295	39357	1870652
2018	1854793	41754	1896547
2019	1878593	41754	1920347
2020	1902698	43006	1945704
2021	1927112	44296	1971408
2022	1951840	45626	1997466

3.3.3 Statewise Break up of Domestic Tourists Visiting the State

West Bengal continued to be major tourist generating state for Orissa contributing 6.52,212 tourists (44.23%) out of the total domestic tourists 14,74,436 during 2000 followed by Andhra Pradesh, Bihar and Madhya Pradesh 9.58%, 9.39% and 8.28% respectively. The number of domestic tourist arrival from different states and union territories of Orissa during last two years is given in the following table :

Table 3.11: Visitors in Orissa from different Indian States

Sl	Name of State/Union Territory	No. of Tourists during 1999	Proportion to total (in %)	No. of tourists during 2000	Proportion to total (in %)
1.	West Bengal	557448	42.09	652212	44.23
2.	Andhra Pradesh	136461	10.30	141198	9.58
3.	Bihar	129287	9.76	138518	9.39
4.	Madhya Pradesh	111173	8.39	122094	8.28
5.	Maharashtra	69690	5.26	78160	5.30
6.	Uttar Pradesh	59280	4.48	64889	4.40
7.	Tamil Nadu	45083	3.40	46056	3.12
8.	Karnataka	19453	1.47	20686	1.40
9.	Gujarat	25995	1.96	27055	1.83
10.	Rajasthan	13654	1.03	15583	1.06
11.	Assam	10096	0.76	12141	0.82
12.	Punjab	5768	0.44	6181	0.42
13.	Haryana	4662	0.35	4746	0.32
14.	Kerala	3765	0.29	4017	0.27
15.	New Delhi	48632	3.67	51085	3.46
16.	Other States	84052	6.35	89815	6.09
	Total	1324529		1474436	-

3.3.4 Mode of Arrival of Tourists to Orissa

Year	By Air/ No. of Tourist/Proportion of Total	By Road No. of Tourist/Proportion to total	By Rail No. of Tourist Proportion to total	Total Tourist
1996	53203 3.71%	509026 35.46%	873200 60.83%	1435429
1997	60548 4.13%	599749 40.90%	806118 54.97%	1466415
1998	62352 4.17%	-	-	1495228
1999	59053 4.37%	467598 34.63%	823636 61%	1350287
2000	56004	-	-	1498159

3.3.5 Foreign Tourist Arrival in Orissa

Year	No. of Foreign Tourist arrival in India	No. of Foreign Tourist arrival to Orissa	Share of Foreign Tourist arrival to Orissa (in %)
1996	2287860	34303	1.50
1997	2374094	35081	1.48
1998	2358629	33101	1.40
1999	2481928	25758	1.04
2000	2641157	23723	0.90

3.3.6 Employment Generation

Employment opportunity is one of the most remarkable benefits that tourism provides. An idea of the number of professionals employed in the different sub sectors of Tourism, compiled from various sources are as indicated in the Tables below:-

Table 3.12 Employment generation in Selected Tourist Spots

i) Accommodation Sector	7855
ii) Restaurant Sector	14902
iii) Shopping Sector	7325
iv) Transport Sector	11673
v) Other Sectors	4131
vi) Guides	217
Total Employment	46103
No. of Self Employed Professionals (included in the total employment figure)	9369
No. of Female Employment (included in the total employment figure)	3317

Table 3.13 Employment generation in Selected Tourist Spots

Khurda District has generated maximum employment	7153
Puri	6403
Cuttack	3507
Sambalpur	3481
Employment generated in the Golden Triangle, which constitute 30% of the total employment generated.	13556

3.3.7 Tourist Traffic at a Glance at selected places for the following 5 years

Sr. No.	Place	2000	2001	2002	2003	2004	2005	2006	2007
1.	Bhubaneswar	440250	463361	487737	510855	536398	563218	591379	620948
2.	Udayagiri/Lalitgiri	99513	103514	108690	113038	118690	124624	130855	137398
3.	Puri	1082445	1137372	1195117	1253952	1316650	1382483	1451606	1524187
4.	Similipal	110310	115841	121635	127714	134100	140805	147845	155238

CHAPTER - 4

TOURISM DEVELOPMENT PLAN & IMPLEMENTATION

4.1.0 AREAS & ASPECTS

4.1.1 In Orissa the tourism development should be focused and concentrated on certain areas and aspects, which have to be reviewed from time to time.

4.1.1.1 DEVELOPMENT OF BASIC INFRASTRUCTURE

RAIL, ROAD, AIR CONNECTIONS

- NH-5, the main corridor of the eastern state has to be developed & strengthened.
- Balasore, an important South Eastern Railway main line [broad gauge] junction on the Chennai - Howrah route is the nearest stop for the faster trains for the tourists going to Similipal.
 - ❖ Currently there is a meter gauge connection between Baripada – Bangriposhi - Rupsa – Balasore, which needs to be converted into a broad gauge line so as to have a faster connectivity with the Chennai - Howrah main line.
 - ❖ Since the entry point to Similipal National Park is through Jashipur, a distance of 95 kms has to be travelled from Baripada, which takes over 5 hours. It is suggested that if a broad gauge

line is laid between Bangriposhi – Baripada – Balasore the connectivity as well as the time taken to reach Jashipur shall be reduced for the tourist traffic. Secondly Baripada – Puri - Howrah shall have connectivity to both Southern and Northern India, thus providing better and faster linkages.

- ❖ This, shall also increase the traffic to at least one more destination i.e, Khiching, which houses an ancient Shiva temple.
- The airport at Bhubaneswar needs to be developed as fast as possible into a full fledged international airport so as to enable the international tourists to arrive directly at Bhubaneswar. Besides this, it shall also facilitate the domestic operators to re-schedule their timing so that the tourists can utilize the late evening or early morning excursions trips. The aviation department has to work in close coordination with Orissa State Tourism Department. Bhubaneswar has connectivity only in the afternoon for long distance flights thereby resulting in wastage of entire day time.

POWER

- During the primary survey it was observed that a number of circuits/spots do not have sufficient power connection. Certain areas are practically without electricity. Efforts should be made to complete the connection part.
- State government should plan the steps to improve the spread as well as connectivity.

- During our primary survey it was identified that very less highways have any streetlights. Driving is risky in night but still vehicles are operational, this creates a negative impact on the minds of the tourists. Streetlights should be installed and proper maintenance should be done for long term usage.

COMMUNICATION

- This requires a complete changeover since communications has become a very integral part of day to day activities. This segment needs to be given high importance in the state of Orissa since the system is in a very bad shape in certain stretches.
- Non - availability of communication kiosks is a major limitation for any tourist spot as all the tourists, these days wish to stay in touch with their near & dear ones. During our primary survey very few spots were identified that have any STD facility in their proximity. None of the budget accommodation / guesthouse facility near spots have cable connectivity. In this Jet age, tourists find themselves completely cut from the external world at those places.
- Advent of wireless techniques has thrown opportunity to utilize this medium for commercial development. This requires one time investment but generates recurring return to state exchequer.
- No STD facility is available at Lalitgiri / Ratnagiri / Dhauli.

4.1.1.2 DEVELOPMENT OF CIRCUITS / CERTAIN AREAS

SIMILIPAL NATIONAL PARK

- Lacks potable drinking water supply.
- Electricity as well as power back-up system to be provided.
- Centralised reservation system for all OTDC guest houses/forest bungalows irrespective of their location.
- Since tourists are permitted in Buffer area and not the Core area the timings needs to be in coordination with the major linkages i.e, connecting trainings at Bangariposhi from Balsoore and subsequently to Jashipur.
- Share taxi or private taxi operators to be increased between Jashipur and Bangriposhi with help of tour operators.
- Eating Joints/Restaurants to be provided and developed outside Similipal for the convenience of the tourists.
- Development of watch tower in order to view the entire boundary/area of the park. Some fees can be charged for viewing with help of Binoculars.

CHANDIPUR

- Provide proper lighting arrangements on the beach. Besides this provide seating arrangements in form of an elevated structure.
- Development of sea side eating joints, cafeteria, approach road.
- Promotion of the uniqueness i.e, the sea water recedes 5 kms from the shore twice in a day.
- To promote Balaramgudi – the fishing centre as an trading zone thereby making it an important centre for dealing with different types of fishes.

- Construct an fish Aquarium housing different type fishes as well as the Unique Red Crab and HorseShoe Crab.
- Local tour operators and packages to be provided covering Digha, Chandaneshwar, Talasari, Panchalingeshwar, Nilagiri.

BHITARKANIKA

- Communication through land [developed recently] needs to be improved. The approach needs to be an all terrain road. The road [35 kms] has to be a 2 lane. Metallic road, 4-5 Mt. wide, with wayside cafeteria area.
- Travel through motor boats needs to be subsidized.
- Lighting and budget accommodation facilities at Dangamal to be provided.
- A tourist office/information centre to be set up.
- Potable water and sanitation needs to be provided alongwith public convenience.
- Private local taxis/jeeps on individual or sharing basis to be provided either by OTDC or private operators.
- Promote under the USP of Olive Ridley Turtles and White Crocodiles
- Provide trained local guides thereby generating employment and also increasing the social status.

GOPALPUR ON SEA

- Power back-up facility to be provided
- Tourist information center/block to be provided.
- Taxi/Jeep operators to be encouraged for local sight seeing.
- To promote Berhampur a commercial town 16 kms from Gopalpur and organise weekly market under one roof for displaying Handicrafts and Handloom products, Sarees etc.

LALITGIRI-UDAYGIRI-RATNAGIRI

- Proper protection in some form for the excavated statues, currently spread over the place.
- Basic necessity such as Power to be provided.
- Soil conservation
- Develop a park and provide some greenery to beautify the area along with some fountain.
- Flood light arrangements near the monument
- Construct a rest room / cafeteria for tourists visiting the area. Provide staying facility [currently not there].
- Develop local guides for the Buddhist circuit thereby creating an opportunity for employment and lifting the socio-economic standards.
- Potable water to be provided
- Budget accommodation to be promoted along with hygienic cafeteria.

NANDANKANAN

- Develop a separate parking area as well as sanitation facility.
- Boating facility for tourists with new boats (mortised) as well as rescue boats, cleaning of lake from time to time, life jackets.
- Restoring the Botanical garden as well as provide a fountain with lights.
- Cafeteria inside the zoological park.
- Battery operated vehicles around the park to take the tourists. (at economical charges)

4.1.1.3 PRODUCT DEVELOPMENT**A) URBAN HAAT****Introduction**

It is proposed that an Urban Haat be built at Pipli. This modern concept would enable the actual artisans to display their crafts to the visitors. More precisely, the artisans shall get a platform to exhibit their talent hitherto unknown to the world and the domestic as well as foreign visitors shall get a chance to visit an one - stop shop exhibiting rural handicrafts. The Government of Orissa already has immense experience in developing Urban Haat, since, a similar project is being implemented at Bhubaneswar (Ekamra Haat)

The participating crafts-persons/weavers shall sell handicrafts/handloom products directly to the customers. This shall provide adequate direct marketing facilities to the crafts-persons/weavers and eliminate the involvement of any middle agencies. Another feature of the haat is that there shall be adequate stalls, selling authentic Indian cuisines typical to various regions in the country by rotation. The food and craft bazaar shall provide leisure and recreational facilities for both Domestic and International tourist in line with Dilli Haat, which has reached International status in just three years of its existence.

Design Concept of the Haat

The Urban Haat shall be set up at a strategic location in Pipli in consultation with the local authorities. The area should be developed providing the ambience suited to such a haat, with the creation of green belts in and around the haat. The haat should have sufficient open spaces as well. The area of haat may vary, depending upon availability of land. It may however not be less than 15000 sq. meters. The responsibility of providing developed land shall vest on the state government.

The entire complex shall be designed in order to keep a low profile in harmony with the surrounding environment and stalls themselves shall be constructed in order to reflect local culture.

The entire area shall be extensively landscaped in order to provide a conducive environment for recreation and also for leisure. The area shall be developed as a park, where constructed area would be limited to around 10% of the total area i.e. 1500 sq. meters. The courtyards in between the shops shall be paved in stone, inter-spread with grass to retain visual softness. A tentative layout of the Urban Haat is provided in the Annexure.

- A) Museum cum Administrative Unit:-** A museum and an office cum meeting room of moderate size to cater to the administrative requirement of the Haat.
- B) Handicraft Stalls:-** It is proposed that the shops/stalls shall be set up on platforms, which would act as a link in the Haat Design. It is planned to have 40 to 50 stalls, where the crafts-person/weavers shall sell their crafted items directly to the buyers. The stalls shall be

provided to the artisans on a rotational basis for fifteen days on nominal charges per day.

C) Amphitheatre - The complex shall also have tensile structures for cultural programmes, performing arts, exhibitions etc.

D) Food Stalls:- The food side of the Haat will have properly serviced 5-7 stalls with counters and space to accommodate kitchen equipments and with eating space for the visitors.

Proposed Floor Area:- The proposed floor area of various buildings in the proposed Haat would be as shown in the Table

Table 4.1 : Proposed Floor Area of the Buildings

Name of Building	Area (Sq. Mtrs.)
Museum cum Administrative Unit	450
Handicraft Stalls	600
Amphitheatre	300
Food Stalls	150
Total	1500

Administration of the Haat

It is essential that the Urban Haat should be professionally managed and sufficient technical staff be provided for its smooth and efficient functioning.

The following positions are suggested

- a) Manager
- b) Dy. Manager
- c) 5 Utility Workers
- d) 1 Accountant / Asstt.
- e) 1 Electrician / Maintenance Asstt.
- f) 1 Security Officer
- g) 6 Security Guards
- h) 1 Typist
- i) 1 Peon

Management Committee of the Haat

The overall responsibility for successful functioning of the Urban Haat will be of the "Management Committee" whose composition will be as shown in the figure below. Management Committee shall be responsible for policy formulation, overall control and functioning of the haat.

CHAIRMAN	⇒ Secretary, Handloom/Handicraft, Govt. of Orissa
MEMBERS	⇒ Secretary (Tourism), Govt. of Orissa ⇒ Director, Handlooms/Handicraft, Orissa ⇒ Representative of Finance Deptt. of Orissa ⇒ Nominee of DC(Handlooms), Ministry of Textiles ⇒ 4 Nominated Eminent people in the field of Handicrafts/Handloom

Fig 4.1 : Management Committee of the Urban Haat

It is proposed that a modern concept of rural products produced by actual artisans be displayed as well as artisans get a platform and the visitors from different parts get on one stop shop of rural handicrafts.

Cost Estimates of the Urban Haat

The different cost parameters of the project as understood from the industry experts are as indicated under the different heads as shown below:-

Development of Site

Total Area – 15000 sq. m

Development Cost - @ Rs 133 / sq. m

Total Cost – Approximately Rs. 20,00,000

Civil Cost –The civil cost to be incurred in order to develop the different units of the proposed Urban Haat.

Table 4.2: Tentative Cost of construction of the Buildings

Parameters	Area (in Sq.m.)	Cost (in Sq.m.)	Total Cost (in Rs.)
Museum cum Administrative Unit	450	1000	450000
Handicraft Stalls	600	600	360000
Amphitheatre	300	1500	450000
Food Stalls	150	800	120000
Road Development			100000
Green Belt Development (in Meters)	4000	200	800000
Sub Total			2280000

Preliminary Expenditures – The tentative preliminary expenses of the aforesaid project and its tentative break ups are as shown in the Table below:-

Table 4.3: Tentative Preliminary Expenses

Parameters	Tentative Cost (in Rs.)
Technical Consultant's Fees	250000
Other Preliminary & Pre-Operative Expenses	450000
Sub Total	700000

Equipment Cost – The tentative cost for the different equipments that would be required at the Urban Haat are as shown in the Table below.

Table 4.4: Tentative Cost of Equipments

Parameters	Cost (In Rs.)
Sanitary and Water Supply	1200000
Electricals	900000
Plant and Machinery Cost	1900000
Furniture and Fixtures	400000
Sub Total	4400000

Operating Expenses – The tentative annual operating expenses would be in the tune as shown in the Table below.

Table 4.5: Tentative Cost of Operations

Parameters	Cost (in Rs.)
Employee Remuneration	410000
Other Expenditures	90000
Sub Total	500000

Total Cost – The total cost of the Urban Haat project, based on the estimates above are as shown in the Table below

Table 4.6: Tentative Total Initial Expenditure

Parameters	Cost (in Rs.)
Sub Total – Land Development	2000000
Sub Total – Civil Cost	2280000
Sub Total – Preliminary Expenses	700000
Sub Total – Equipment Cost	4400000
Total Expenditures	9380000
Contingencies (10%)	938000
Total	1,03,18,000

Means of Finance

The capital cost of the project, which is expected to be in the tune of Rs. 103 lakhs, is proposed to be financed, as shown herein:

Ministry of Textile (70%)

State Govt. (15%)

Entrepreneur's Contribution (15%)

Besides the above mentioned sources, a lump sum grant of Rs. 10 lakh in the first year and Rs. 5 lakh in the second year is allowed from Govt. of India, Ministry of Textiles, for publicity of the project.

Sources of Income from the Haat

It is desirable that the Urban Haat should have a in-built mechanism to sustain its operation. Though the management committee shall remain responsible for efficient functioning of the Haat, and to formulate modalities for income generation, yet the sources of income that can be operationalised from various sources are indicated below. This is primarily suggestive in nature.

Rental Income from Artisans – Based on the assumptions indicated below, the income from the artisans who would sell their craft are as shown in the Table below:-

Table 4.7: Rental Income from Artisans

Components	Income (in Rs./ Annum)
Artisans per fortnight (on an average)	40
Charges per day	50
Total charges per day (40×50)	2000
Annual Income (250 ×2000)	5,00,000
Expected dropouts – 10%	73,000
Sub total	4,27,000

Income from Food Stalls –

Table 4.8: Income from Food Stalls

Components	Income (in Rs./ Annum)
Rate per month	5,000
No. of Food Stalls	5
Per month income	25,000
Total income (Presuming occupancy for 10 months in a year)	Rs. 2,50,000

Income from Entry Tickets

If it is assumed that on average 200 visitors visit the Haat in a day @ Rs. 5/- as entry ticket and presuming 200 visitors to come for 250 days.

Total Income from Entry Tickets - $200 \times 5 \times 250 = 2,50,000/-$

Total Income - Based on the above estimates the total income per annum from the Urban Haat would be as shown in the Table below:-

Table 4.9: Tentative Total Income from the Haat

Components	Income (in Rs./ Annum)
Rental Income from Artisans	4,27,000
Income from Food Stalls	2,50,000
Income from Entry Tickets	2,50,000
Income from Parking (10% of Total Income)	92,700
Total	10,19,700

B) HOT AIR BALLOONING

Introduction

Hot air balloon as a device of air travel dates back to the year 1783, when a balloon, named “Aerostat Reveillon”, carrying scientist Jean Francois Pilatre de Rozier along with his companion Marquis d’Arlandes, rose to the end of its 250 foot tether. This sparked off an era, the one “to conquer the atmosphere”. Though in this jet age, a hot air balloon remains a fairly impractical vehicle, since it cannot be steered and is heavily dependent upon the speed of wind. However, man’s interest in ballooning has grown leaps and bounds, since most of the balloon travellers have referred to the experience as one of the most serene, enjoyable activities they’ve ever encountered. This has, in-fact, promulgated incorporation of latest technology within this age-old system of flying.

Hot Air Balloons are based on a very basic scientific principle: warmer air is lighter than cooler air, since it has less mass per unit volume and hence it rises.

The Experience of Ballooning

Standing in a swaying but secure basket high above the ground and suspended under a colorful canopy filled with hot air provide an exhilarating experience. As the giant hot air balloon slowly drifts through the sky, one can have a bird’s eye view of the surroundings and also enjoy the panoramic view of mighty Similipal and enjoy it from the vantage position.

About the Hot Air Balloon

A Hot Air Balloon has the following major parts:-

- a) **The Envelope** – The envelope of a balloon is a colourful bag usually made up of fire-resistant rip stop nylon fabric, to hold the hot air inside it. When the air inside the envelope is heated, the balloon rises. In most modern hot air balloons, the envelope is constructed from **long nylon gores**, reinforced with sewn-in webbing. The gores, which extend from the base of the envelope to the **crown**, comprise of a number of smaller **panels**. Nylon works very well in balloons since it is lightweight and also fairly sturdy and has a high melting temperature. The **skirt**, the nylon at the base of the envelope, is coated with special fire-resistant material, known as **Nomex**, in order to keep the flame from igniting the balloon. The hot air won't escape from the hole at the bottom of the envelope because buoyancy keeps it moving up constantly.

- b) **The Burner** – The burner is located above the passenger's head and produces huge flame to heat the air inside the envelope. Modern hot air balloons heat the air by burning **propane** or **butane**. The heating of the Air inside the envelope takes place in the way as shown in the Flow chart below.

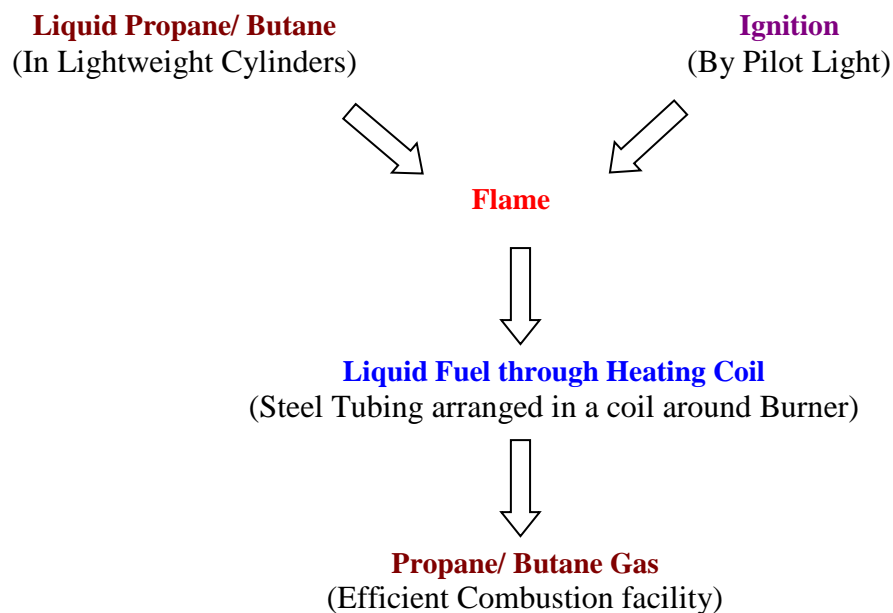


Figure 4.2: Burner of a Balloon in action

- c) **The Basket/ Gandola:-** Most hot air balloons use a basket made from resilient wicker enforced with a mesh of steel wire ropes, for housing the passengers. Wicker works very well because it is sturdy, flexible and relatively lightweight. The flexibility helps with balloon landings: In a basket made of more rigid material, passengers would feel the brunt of the impact force. Wicker material flexes a little, absorbing some of the energy. The Gondola carries a simple instrument panel consisting of a compass and an altimeter to guide the crew.
- d) **The Ropes:-** Different types of ropes are in use in a hot air balloon. These are:-
- **Crown Line** – Top of the Balloon in order to stabilize inflation
 - **Drop Line** – Released by the Pilot before landing so that the ground crew can pull.

Launching and Landing

A lot of the work in hot air ballooning comes at the beginning and the end of the flight, when the crew inflates and deflates the balloon. For the spectator, this is a much more spectacular show than the actual balloon flight.

a) Inflation

The Stages of Inflation of the Hot Air Balloons are shown below:-

- Once the crew has found a suitable launching point, they attach the burner system to the basket.
- Next, they attach the balloon envelope and begin laying it out on the ground.
- Once the envelope is laid out, the crew begins inflating it, using a powerful fan at the base of the envelope.
- When there is enough air in the balloon, the crew blasts the burner flame into the envelope mouth. This heats the air, building pressure until the balloon inflates all the way and starts to lift off the ground.
- The ground crew members hold the basket down until the launch crew is on board. The balloon basket is also attached to the ground crew vehicle until the last minute, so the balloon won't be blown away before it is ready to launch.
- When everything is set, the ground crew releases the balloon and the pilot fires a steady flame from the burner. As the air heats up, the balloon lifts right off the ground.

The entire process takes only 10 or 15 minutes.

b) Operation during Flight

Piloting a balloon requires skill, but the controls are actually very simple.

To lift the balloon, the pilot moves a control that opens up the propane/butane valve. As he turns it, the flow of gas increases, so that the flame grows in size. The pilot can increase the vertical speed by blasting a larger flame to heat the air more rapidly.

Hot air balloons also have a cord to open the **parachute valve** at the top of the envelope). When the pilot pulls the attached cord, the crown line, some hot air can escape from the envelope, decreasing the inner air temperature. This causes the balloon to slow its ascent. If the pilot keeps the valve open long enough, the balloon will sink.

Essentially, these are the only controls -- heat to make the balloon rise and venting to make it sink. As it turns out, pilots can manoeuvre horizontally by changing their vertical position, since wind blows in different directions at different altitudes. To move in a particular direction, a pilot ascends and descends to the appropriate level, and rides with the wind. Since wind speed generally increases as you get higher in the atmosphere, pilots can also control horizontal speed by changing altitude.

Of course, even the most experienced pilot doesn't have complete control over the balloon's flight path. Usually, wind conditions give the pilot very few options. Consequently, you can't really pilot a hot air balloon along an exact course. And it's very rare that you would be able to pilot the balloon back to your starting point. So, unlike flying an airplane, hot air balloon piloting is largely improvised, moment to moment. For this reason, some members of a hot air balloon crew have to stay on the ground, following the balloon by car to see where it

lands. Then, they can be there to collect the passengers and equipment.

c) Deflation

The landing process, combined with deflating and re-packing the balloon envelope is accomplished sequentially in the following process as shown below:-

- When the pilot is ready to land, he or she discusses possible landing sites with the ground crew (via an onboard radio).
- They need to find a wide - open space, where there are no power lines, tall trees etc. and plenty of room to lay out the balloon.
- The ground crew shall hold the basket down once it has landed.
- The ground crew sets out a ground tarp, in order to protect the balloon from wear and tear. Then the pilot opens the parachute valve all the way, so the air can escape out the top of the balloon. The ground crew grabs a cord attached to the top of the balloon, and pulls the envelope over onto the tarp.
- Once the balloon envelope is down on the ground, the crew begins pushing the air out. When the balloon is flattened, the crew packs it into a stuff sack. This whole process is a lot like packing up a giant sleeping bag.

Ideal Conditions for Balloon Flight

Seasonality:- The best time for hot air ballooning in India is from October to March, when the ambient temperature remains cooler. The cold climate enables the hot air inside the balloon to become lighter and enables it to rise and stay up for a longer period of time.

Time:- Usually early in the morning, right after sunrise, between 7 a.m. to 9 a.m. and late in the day, right before sunset, between 4 p.m. to 6p.m. Less turbulence in atmosphere is observed during the time period.

Some Essential Activities to be undertaken before the project should be undertaken

- i. Identification of Balloon Launching Site
- ii. Identification of Flight Trail
- iii. Training of Pilot & Crew
- iv. Permissions Required - A number of clearances are required in order to fly hot air balloons at any location of India, as per the Ballooning Club of India.
 - ✓ Director General of Civil Aviation
 - ✓ Airports Authority of India
 - ✓ Ministry of Home, Govt. of India
 - ✓ Department of Internal Security
 - ✓ Defence Establishment

Additionally, since Similipal, the proposed location is an eco-sensitive zone, an Environment Impact Assessment Report, with sound Environment Management Plan requires to be submitted to the Ministry of Environment and Forests for their clearance to the proposed project.

No. of Balloons

To begin with, it is proposed that a single hot air ballooning facility be installed at the place. The Balloon should have a capacity of 77,000 cubic feet. An entrepreneur can think of procuring the equipments from the Ballooning Club of India, or think of importing the same from abroad.

Cost Estimates

A tentative cost of the aforesaid project has been worked out based on the market prices and from the opinion of industry experts. The details are as shown in the subsequent headings below.

Table 4.10 : Equipment Cost - Cost of the Balloon

Equipment	Cost (in Rs.)
Envelope with Rotation vent × 2 and Nomex Scoop	13,80,000
Burner	
Basket with Cover including cylinder belt and fire extinguishers	
2 Stainless Steel Cylinders with Jacket	
Inflator Fan 5.5 HP	
Tether Rope	
Instrument Panel	78,000
A 2 Radio	28,000
Quick Release System	17,000
Artwork on Balloon	25,000
Total Cost of the Balloon	15,28,000

Table 4.11: Other Preliminary Expenditures

Cost Parameters	Cost (in Rs.)
Cost of Preparation of EIA Report	3,00,000
Training of 2 Pilots (@ Rs. 35,000 + Incidental Expenses)	1,00,000
Total Cost	4,00,000

Table 4.12: Tentative Civil Cost

Cost Parameters	Cost (in Rs.)
Ground Preparation of Balloon Launching Site (200 Sq. m. @ Rs. 200/ Sq. m.)	40,000
Construction of waiting room with basic furnishings (200 Sq. m. @ Rs. 100/ Sq. m.)	20,000
Total Civil Cost	60,000

Operating Expenditures (Cost of Fuel, Maintenance Cost & Spares, Remuneration of Employees) - **Rs. 6,00,000/ Year**

Miscellaneous Expenditures – Rs. 20,000/ Year

Total Cost – The tentative total cost of the Project based on the above calculations would be as indicated in the Table below:-

Table 4.13: Tentative Total Initial Cost

Cost Parameters	Cost
Equipment Cost	15,28,000
Preliminary Expenditures	4,00,000
Civil Cost	60,000
Other Miscellaneous Expenditures	20,000
Contingencies (10%)	2,60,800
Total	21,86,800

Income from Hot Air Ballooning– The tentative income from the Hot Air Ballooning Trips are as shown below:-

- a) In typical Indian weather conditions, one can carry out Hot Air Ballooning from October to March. However, Similipal remains open from November to June. Hence, in totality, approximately **5 months** or **150 days** are available for Ballooning purpose.
- b) Assuming for 10 days the weather remains turbulent for Ballooning Flight. Hence, total ballooning days available = **150 – 10 = 140 days**.
- c) 4 hot air balloon flights each lasting for an hour can be taken up per day. Therefore, total flying hour per season = **140 × 4 = 560 hours**
- d) Assuming Rs. 250 be charged from 1 tourist and in each flight 3 tourist can be taken up, then income from each flight would be = **450 × 3 = Rs. 750**
- e) Total Income from total flight hours = **Rs. 1350 × 560 = Rs. 7,56,000**

C) VALUE ADDED AQUATIC ACTIVITIES AT CHILIKA

The following Value Added Aquatic Activities are proposed at Chilika Lake.

1. **Boat Cruise:-** A boat is recommended in order to acquaint the tourists in groups to the mirth and beauty of night life at Chilika. The description of the proposed boat is as mentioned below:-
 - i) The boat should be made of marine grade FRP, which is absolutely maintenance free. The material can be easily cleaned off. Additionally, the colouring is not likely to get peeled off or get itself faded at a short interval. Hence, periodic painting is not at all required.
 - ii) The deck of the boat is 13.7 mts long and 4.1 mts wide, should be open type with steel tube firmly jointed to the boat, in order to prevent people from falling aboard.
 - iii) The boat has a capacity to accommodate 50 persons, with individual bucket type seating, crosswise facing towards fore portion, with sufficient pathway and all round visibility to the tourists.
 - iv) The engine room is situated at the aft portion of the boat, below the deck with a canopy of FRP material having 5 mm thickness.
 - v) The facilities would include a Change room, bar, toilet, water and fuel storage, low noise engine with easy handling and less maintenance.
 - vi) The boat should be powered with 58 HP outboard marine engine, with a speed of approximately 20 Knots.
 - vii) The drawing and design of the boat have been approved by Indian Registrar of Shipping.
 - viii) The specification of the proposed Boat to be used for Cruise are as shown below:-

Table 4.14: Specification of the Cruise Boat

Parameter	Specification
Length	13.7 m
Breadth	4.1 m
Depth	2.13 m
Draft	1.3 m
Capacity	50 seater
Suggested Power	58 HP Diesel Engine upto 235 HP single or twin
Speed	7 Knots to 20 Knots
Height	1.5 m

2. **Water Sports :-** This can be developed in the areas of Chilika, which is free from turbulence inside the lake itself. Some areas inside Chilika, where, this facility can be developed are around Barkul (new mouth) and Satpada, which is located in the middle of the lagoon on the western shore and at the foothills of Bhaleri village, close to the Narayani temple. The water sports facility that can be thought off in the area may include any or all the following:-

- i) **Water Skiing –** Skiing on water does sounds somewhat different. A little new to the adventure sports arena of India, water skiing is a lot more thrilling experience than snow skiing. The first major factor is that there are no snow or mountainous slopes instead one glides on water. Most importantly the tourist needs to be good swimmer because one never knows when one has to let go the tow-rope attached to the boat.
- ii) **Para Sailing -** The person undertaking this adventure sport, is strapped to a parachute. Usually, a guide accompanies the Tourist. The parachute is connected to a tether line, which is connected to a speedboat. All take-offs are into the wind,

whose velocity should never exceed 15 mph. The flyer should wear a safety harness comprising of helmet, life vest, and required foot protection. After stepping into the harness and hooking onto the Para-Sail, the tourist is ready. Next, the boat idles out into the wind until the tow-line is taut and completely extended. The sail is then spread and held up on both sides by the flight crew. When everything is ready, the signal is given to power up. It normally takes three to five steps before the exhilaration of lift-off.

Once aloft, the tourist can get comfortable in the harness by sitting on it. Using 300 ft. rope, lifting to a maximum altitude of 200 feet can be expected. The average boat speed shall hover within the range of 15-30 mph (more during the time when boat turns). The tourist shall get a grand view of the Chilika and its sublime surroundings. The flight is usually finished while heading into the wind, landing shall be in the water. The driver reduces the throttle and the flyer gently drifts downward. The boat should be stopped completely just before splashdown in order to avoid dragging the tourist and chute through the water. The para-sail traps air and floats, hence there is no need for the tourist to worry about sinking. After landing, the tourist shall unhook from the sail and await pick up. The para-sail is usually pulled into the boat first, followed by the lines taking care so that it does not get entangled for its next flight.

- iii) **Scuba Diving & Snorkeling** – Diving under water in order to have a first hand glimpse of the underwater flora and fauna, which is typical and full of grandeur at Chilika. Snorkeling involves travelling underwater to the photic zone (upto which light travels) in order to view the aquatic fauna. On the other hand, in scuba diving, the tourist travels to deeper depths, armed with elaborate respiratory apparatus. The whole process of Scuba Diving/ Snorkeling consists of the following steps that have to be taken care of.
- A. **The First Step:-** To check that all underwater gears are in the proper condition. Getting the tourist into the diving gears starting from the facemask to the fins.
 - B. **The Second Step:-** The following step is to load weights into the belts in order to take himself / herself down. After that, one can get into the jacket with the gas cylinders.
 - C. **The Third Step:-** To check whether a support line is attached to the tourist.
 - D. **The Fourth & Final Step:-** Once inside the waters of Chilika, one can enjoy the mirth and beauty of the aquatic species of this wonderful lagoon.
- iv) **Water Taxi** – A boat to house 4-6 passengers, should be used for the following value added services inside Chilika. 2 speed boats can be kept ready for the same purpose.
- a) *2 Hr. Dolphin Cruises* – An enchanting journey with the amazing dolphins boarding on an water taxi, which would span for a period of 2 hours.
 - b) *Full Day Island Trips* – The full day Island Trip would encompass a visit to all the important islands at Chilika in a Water Taxi.

- v) **Water Scooter** – The adventure sport slowly becoming popular is that of the water scooter. The system consists of an accelerator. The engine can be started by a push button. There would be no brake system, either the engine is switched off, or made to operate at neutral. Light, maneuverable and sturdy, this multi-purpose aquatic vehicle with its unique design and construction outperforms any other boat in its class. Made of sandwich-layered fiberglass reinforced plastic with unsinkable floatation chambers, the water scooter provides easy operation with multiple usage whether someone is cutting through choppy waves or cruising along peaceful inland waterways. Some important features of the Water Scooters available in India includes the following:-

- Optional hatch cushion for sun-bathers
- Rim of aluminium and rubber for impact protection
- Specifications are :- Length 9'6', Width 5'1', Depth 2'4', Weight – 90 Kgs, Draft - 3"

3. **Amusement Boat** :- The proposed boat should have an in-built Amusement facility, which can float over the deep blue waters of lakes and rivers. Meant for a group of tourists, this boat can be anchored at any convenient spot on Chilika and the occupants can engage themselves in recreational activities. The boat shall have the following accessories and equipments.

- a) Drivers Cabin with all controls as supplied by Volvo Penta along with Engine. Along with this the vendor shall provide a Compass and a Depth sounder of imported make. The cabin shall have toughened glass with sliding and lockable door for the cabin.
- b) Roof Lights fitted form passengers sitting area, drivers cabin and engine room.

-
- c) Pentograph wiper for Windscreen
 - d) D type rubber fender all around the boat.
 - e) Seating will be of Blow Plast Ltd. or of equivalent quality.
 - f) The entire length of the boat shall be covered by FRP awning supported by pipe stands.
 - g) The forward shall have stainless steel railing.
 - h) Buoyant Apparatus as per no. of seats.
 - i) Life Buoys 4 Nos.
 - j) Serving counter for drinks.
 - k) Heavy Duty Battery 2 Nos.
 - l) Fire Extinguisher 3 Nos.
 - m) Tool Kit, Tool Box
 - n) 2 Nos. Boat Hooks with wood stove 12ft. long
 - o) Bollars, Cleats.
 - p) The boat shall be built as per the drawings approved by Indian Register of Shipping (I.R.S.) and Builders Certificate shall be provided by IRS.
 - q) Navigation Lights 4 Nos.
 - r) Pneumatic Fenders 4 Nos.
 - s) Anchor with Bulone Rope 30 Mtrs
 - t) Two fans in cabin
 - u) Search light on tope of cabin
 - v) Fop Horn
 - w) Bilge Pumps for all compartments – Hand Pump for engine rooms, duly connected.

The specification of the boat would be as elucidated in the Table below:-

Table 4.15: Specification of the Amusement Boat

Parameter	Specification
Length	10.40 m
Beam	3.60 m
Draft	1.00 m
Positive Buoyancy	
Fully enclosed FRP cabin & with Sliding Windows	
Speed – 15 Knots to 18 Knots	
Fitted with Volvo Pents – Sweden 200 HP Duo Prop	
Stern Drive AD 4 1 Single Engine	
Seating Capacity 40 Persons on FRP Bucket type Seats	

The Boat would have the following facilities:-

- a) On Board Cafeteria
- b) Indoor Games Facility

On the outer side of the Hull, floating platforms are arranged in water level, over which tourists can get over after swimming or diving.

However, to begin with only Indoor Games Facility, Sun Bathing Facility and Swimming Facility be installed. Subsequent value additions can be done at a later stage depending upon the turnover of the tourists.

Cost Estimates

A tentative cost calculation has been undertaken based on the basis of quotation received from vendors and existing rates of products as procured from the market. The figures are primarily suggestive in nature.

Expenditures of the Project

i) Boat Cruise

The proposed Boat Cruise would incur the following expenses as shown in the table below:-

Table 4.16: Tentative Cost of equipments for Boat Cruise

Equipment	Cost Per Unit (in Rs.)	Quantity	Total Cost
Cost of the Boat	1800000	1	18,00,000
Cost of Life Jackets	900	52	46,800
Sub – Total			18,46,800

ii) Water Sports

A) Water Skiing

Table 4.17: Tentative Cost of Water Skiing Equipments

Equipment	Cost / Unit	Quantity	Total Cost
Speed Boat	300000	1	3,00,000
Ropes with Handle	1500	1	1,500
Ski	7000	1	7,000
Life Jackets	900	2	1,800
Sub – Total			3,10,300

B) Para Sailing**Table 4.18: Tentative Cost of Parasailing equipments**

Equipment	Cost / Unit	Quantity	Total Cost
Speed Boat	350000	1	3,50,000
Para Sailing Equipment Kit	65000	1	65,000
Life Jackets	900	4	3,600
Sub – Total			4,18,600

C) Scuba Diving & Snorkeling**Table 4.19: Tentative Cost of Snorkeling & Scuba Diving Kit**

Equipment	Cost / Unit	Quantity	Total Cost
Snorkeling Gear	9600	10	96,000
Scuba Diving Gear	25000	5	1,25,000
Sub – Total			2,21,000

D) Water Taxi**Table 4.20: Tentative Cost of boats to be used as Water Taxis**

Equipment	Cost / Unit	Quantity	Total Cost
Boats with seating Capacity of 5 persons excluding the driver	400000	2	8,00,000
Life Jackets	900	12	10,800
Sub Total			8,10,800

E) Water Scooter**Table 4.21: Tentative Cost of Water Scooters and Accessories**

Equipment	Cost / Unit	Quantity	Total Cost
Water Scooters	2,50,000	5	12,50,000
Life Jackets	900	5	4500
Sub Total			12,54,500

3) Amusement Boat**Table 4.22: Tentative Cost of Amusement Boat**

Equipment	Cost / Unit	Quantity	Total Cost
Cost of the Boat	3350500	1	33,50,500
Cost of Indoor Games (Pool Table+Carrom)	30000	1	30,000
Water Slides, Floats etc.	100000	1	1,00,000
Life Jackets	900	15	31,500
Sub – Total			34,94,000

Total Equipment Cost

The total expenditure of the aforesaid project (if all the facilities are installed at a time) would be as follows.

Table 4.23: Tentative Total Equipment Cost

Equipments	Cost
Boat Cruise	18,46,800
Water Skiing	3,10,300
Para Sailing	4,18,600
Scuba Diving & Snorkeling	2,21,000
Water Taxi	8,10,800
Water Scooter	12,54,500
Amusement Boat	34,94,000
Total	83,56,000

Preliminary Expenditures –The tentative preliminary expenditures of the project with the cost break ups are as shown below.

Table 4.24: Preliminary Expenditures

Parameters	Total Cost
EIA Report for Development of all aquatic activities	5,00,000
Development of a 200 sq. m. cabin by the lagoon side (@ Rs. 200 per sq.m)	40,000
Training of Crew	1,00,000
Other Expenses	1,00,000
Total	7,40,000

Total Expenditures –The tentative total expenditures of the project with the cost break ups are as shown below.

Table 4.25: Tentative Total Cost

Parameters	Total Cost
Equipment Cost	83,56,000
Preliminary Expenses	7,40,000
Total	90,96,000

Operating Expenses – The operating expenditures would be remuneration for employees and cost of spares and fuel cost. The total expenses would be around **Rs 4,04,500**.

Income from the Proposed Project

From Boat Cruise – The tentative income from the boat cruise, based on the following assumptions would be as follows:-

Suppose, 1 cruise be conducted per night, then total available navigable nights per annum would be in the tune of 250 (leaving aside low tourist turnouts, rainy season etc.). Therefore, total nights available for cruises would be equal to 250. If the boat is able to house 50 persons, then in 250 nights = $250 \times 50 = 12500$ persons can avail the facility per annum.

If Rs. 250 be charged from each person, then total revenue per annum would be $12500 \times 250 = \text{Rs. 31,25,000 per annum}$

From Water Sports – The tentative income from different proposed water sports facility are elucidated under respective headings.

A) Water Skiing – If Rs. 200 be charged from the visitors for skiing 15 mins. and if 2500 visitors visit per annum to avail the facility, the total income per annum from the same would be in tune of **Rs. 5,00,000 / per annum.**

B) Para Sailing– If Rs. 350 be charged per visitor and if 2000 visitors engage themselves annually in water sports, then income per annum would be in the tune of **Rs. 7,00,000/ per annum**

C) Snorkeling & Scuba Diving

Snorkeling – As mentioned earlier, Snorkeling involves travelling into the photic zone in order to view the aquatic fauna. Hence, the same involves diving to lesser depth.

Hiring charges Snorkelling Gears per hour = **Rs. 150**

No. of hours available per day = **5 hrs**

No. of gears that can be rented out / hour = **10 nos.**

Total no. of hours available = $5 \times 10 =$ **50 hrs**

Assuming 3 months of rainy season, off season etc., the total no. of available days would be = **250 days**

Total hours available per annum = $250 \times 50 =$ **12500**

Annual revenue from the facility = $150 \times 12500 =$ **Rs. 18,75,000**

Scuba Diving – It is assumed that less visitors would like to acquaint themselves with this particular sports activity. However, on an average 1000 visitors are expected to travel to the bottom of Chilika and engage themselves with scuba diving. If Rs. 500 be charged from them, the expected total annual revenue would be = $1000 \times 500 =$ **Rs. 5,00,000**

D) Water Taxi – As mentioned earlier, there would be 2 water taxis, one of them to take tourists to 2 hour Dolphin Cruises and the other to take tourists for a daylong ride along the numerous tourist spots of Chilika.

Water Taxi 1 – For 2 Hour Dolphin Cruises

No. of Tourists that can be taken in per cruise = 5

Charges per person = Rs. 100

Earning per Cruise = Rs. 500

Total no. of cruises that can be undertaken = 3

Total earnings per day = Rs 500 × 3 = Rs. 1500

Based on exigencies, the total available days for cruise per annum would be 200

Total earnings from Dolphin Cruises

= Rs. 1500 × 200 = **Rs. 3,00,000**

Water Taxi 2 – For Full Day Trips encompassing all Islands

Carrying Capacity would be 5 persons per boat/ trip

Hire charges per person day = Rs. 500

Earning per trip = Rs. 2500

Total days available per annum = 200

Total earning from Full Day Trips

$$= \text{Rs. } 2500 \times 200 = \text{Rs. } 5,00,000$$

Total income from Water Taxi Rides -

$$\text{Rs. } 5,00,000 + \text{Rs. } 3,00,000 = \text{Rs. } 8,00,000$$

- E) Water Scooter** – Water Scooter rides can be priced at Rs. 200 per person for a ride of 30 mins. Assuming 1500 visitors avail the facility, the total revenue from the same would be

$$\text{Rs. } 1500 \times 200 = \text{Rs. } 3,00,000$$

- 3) From Amusement Boat** – The tentative income from the proposed amusement boat facility are elucidated below.

No. of tourists that can be accommodated in the Boat at a time –
15 Nos.

No. of trips per day – 1

If Rs.300 be charged per tourist then total amount of revenue generated per trip / day = $3000 \times 15 = \text{Rs. } 4500$

If 200 be total navigable no. of days, then total earning from the same would be = $\text{Rs } 4500 \times 200 = \text{Rs } 90,00,00$.

Annual Income including all the proposed aquatic activities at Chilika**Table 4.26: Tentative Income from all the activities**

Parameters	Total Cost
From Boat Cruise	31,25,000
From Water Skiing	5,00,000
From Para Sailing	7,00,000
From Scuba Diving & Snorkeling	23,75,000
From Water Taxi Rides	8,00,000
From Water Scooter	3,00,000
From Amusement Boat	9,00,000
Total	87,00,000

D) ROPEWAY AT UDAYGIRI & KHANDAGIRI

Length of the Proposed Ropeway

The Proposed Ropeway should have a span of approximately 1200 mts.

The Principle

The proposed ropeway system would be an admixture of Aerial Tramway and Bi- Cable Material Carrier. It would consist of 2 trolleys that moves on rollers resting on top a steel cable stretched between the 2 points identified on Udaygiri and Khandagiri. The method of Installation is elaborated later. In this type of Ropeway, since the weight of the passengers would be the actual weight, hence, for safety purposes, the trolley would be made to rest on 2 cables.

Details about the System

The system as mentioned earlier, would consist of 2 trolleys attached to separate cables, so that, when 1 trolley moves up, the other comes down.

The system would work on a 2 Cable system. The first one would be:-

- A 20 mm **Support Cable** on which the 2 trolleys would rest.

The 2nd One would be:-

- A looped 13 mm **Control Cable**, that would move on a wheel on either side and to which the trolleys would remain tied. As the control cable moves, the trolleys that are tied to this, would also move.

Procedures for Installation

The proposed ropeway at Udaygiri and Khandagiri, is to be installed in sequential steps as mentioned below:-

Step 1:- Obtaining “No Objection Certificate” from the following Departments/ Agencies.

- ✓ **Forest Department** – To ensure that setting up of the proposed ropeway shall not lead to any illegal extraction from the forest resources, which are typical of the area.
- ✓ **Environment Department** – To ensure that no adverse environmental impact are brought about by the proposed ropeway.
- ✓ **Revenue Department** – To take care of the land law and other laws governed by land revenue department.
- ✓ **Local Development Authority:-** To ensure that the proposed ropeway is in parity with the Development plan sketched out by the aforesaid authority.
- ✓ **Orissa Tourism Development Corporation:-** In order to ensure that the proposed project is at par with the Tourism Development Plan of the State.
- ✓ **Archaeological Survey of India** – To ensure that the proposed project would not in any way bring about degradation of the archaeological wonders at Udaygiri and Khandagiri.

Step 2:- Selection of Spot – Exact location has to be identified on top of Udaygiri and Khandagiri. The spot has to be so selected that no obstacle stands in way of operation of the ropway, incurring minimum change in land use of the selected spot.

Step 3:- Erection of Platforms – Erecting platforms on the spot selected on Udaygiri and Khandagiri. These platforms would serve as embarking and disembarking platform for the passengers.

Step 4:- Erection of Engine & Control Room– The engine alongwith 2 control rooms are mounted on the platforms that have already been erected. The engine should remain at the higher end. The engine should be mounted on a platform below the wheel. The wheel should be mounted on a movable platform that can be moved with the help of a lever. A clutch system has to be installed so that the engine can be attached or detached from the control wheel. This clutch system consisting of 2 large V notch pulleys that get enmeshed into each other when they are brought close. Of the two large pulleys, one is attached to the engine and the other is attached to the control wheel. When the wheel is to be attached to the engine, the platform moves ahead so that the two V notches get enmeshed and the power of the engine is transferred to the control wheel. Declutching can be done by moving the wheel platform backwards, so that the engine no longer remains attached to the Wheel.

Step 5:- Mounting Support Cables & Control Cable – The “**Support**” and the “**Control**” Cables should be mounted next on both the ends. The wheel arrangement would consist of a pulley, on which the Control cable of the Ropeway would move. At the lower end, an wooden brake is to be attached to the wheels, in order to stop or to slow down the trolleys.

Step 6:- Test Run – Once the 2 wheels on both sides are moving freely, the trolleys, tied to the control and support cables on opposite sides, start functioning. Such is the mode of functioning, that if one trolley comes down, the other would move up.

Maintenance measures required

The following maintenance measures are to be maintained regularly:

- The bearings on the four rollers as well as on the two control wheels are to be greased once every 3 months.
- The support cables have to be tightened when they become loose.
- In addition, the support cables have to be oiled once or twice a year. This has to be done by a maintenance person travelling on the trolley.

Life Span of Components and Equipments

The various components of the Village ropeway have varying life spans

- The life of steel cables are reported to be about 15 years.
- The rollers and bearings have to be changed every year.

Cost Estimates

The different costs to be incurred in order to install the proposed ropeway at Udaygiri and Khandagiri, as understood from leading ropeway service providers are as indicated below. The figures are primarily indicative in nature. An elaborate cost calculation encompassing all micro parameters can be undertaken in a detailed project report that has to be separately undertaken.

Land Development Cost – Rs. 10 Lakhs

This includes Cost of Deforestation, Compensatory Afforestation, Levelling, Landscaping, Preparation of Temporary Roads.

Erection of Lower and Upper Platforms & related Constructions -

This would include Masonry work at Upper and Lower Platforms upon which the Ropeway is to be mounted, Construction of 1 Reception Room each at Upper and Lower Platforms, Construction of 1 Waiting Room each beside the Reception Room, mounting of towers to hold the ropeway together. **Approximate cost would be in tune of Rs. 25 Lakhs.**

Cost of Equipments – The tentative cost of different equipments required for installation of ropeway as understood from various sources are as shown below.

Table 4.27: Cost of Equipments

Equipments	Cost
Support Cable (2000 m)	20,00,000
Control Cable (2000 m)	17,00,000
Wheels & Axles	2,00,000
Trestle	50,000
Engine including Motor, Gear Box & Gears	50,00,000
2 Passenger Carriers (Weight – 100 Kgs each)	1,20,000
Electrical Equipments	10,00,000
Total	91,45,000

Other Preliminary Expenses**Table 4.28: Preliminary Expenditures**

Parameters	Cost
Cost of Documentation to obtain requisite clearance	3,50,000
Other Incidental Expenses	1,50,000
Sub Total	5,00,000

Operational and Maintenance Expenses

The annual expenses in maintenance are reported to be as follows:

- Purchase of 4 rollers with bearings
- Purchase of Mobil Oil for support cables
- Purchase of Grease for 8 bearings
- Remuneration of Employees.
- In case a Diesel Engine is attached, about 400 to 500 litres of Diesel are also required every year.

Total Cost for Operation and Maintenance – Rs. 5.5 Lakhs

The total cost can be summed up as shown in the Table below:-

Table 4.29: Tentative Total Cost

Cost Parameters	Cost (in Rs.)
Equipment Cost	9145000
Land Development Cost	1000000
Civil Cost	2500000
Preliminary Expenses	500000
Total	13145000

Income from the proposed Ropeway project

The tentative revenue from the proposed rope way project at Udaygiri and Khandagiri, based on the estimates are as shown below.

It has been observed that approximately 100 adults and 50 children visit the twin hills per day. The visitors are more during weekends and during tourist seasons. However for calculation purposes the above figures have been used.

The rate for an one way rope way ride per person are as shown below:-

Adult – Rs. 20/-

Child – Rs. 10/-

Based on the above estimates, and on condition if the ropeway operates for 200 days.

The total expected revenue per annum would be: -

Table 4.30: Tentative Revenue from Ropeway

Source of Income		Income (in Rs./annum)
From Adults	$200 \times 100 \times 20$	4,00,000
From Child	$200 \times 50 \times 10$	1,00,000
Total income per annum		5,00,000

E) AYURVEDIC CENTRE AT SIMILIPAL

The proposed Ayurvedic Centre would have a complex type infrastructure, with the facility of treating 50 persons at a time, with the following major blocks as shown below.

- A) Main Block** - The main hall would house the Reception, Accounts and Administration Office of the centre, which would look after of all the activities and act as the cardinal point of the organisation. The Main Block would also house shops, which would sell herbal extracts having medicinal importance and other relevant items.
- B) Accommodation / Dwelling Block** - The proposed accommodation facility would be of following types.
 - i) For Essential Staffs** – Accommodation facility for essential staffs are proposed within the complex, so that each block has 2 different units. At the beginning, it is proposed that the accommodation facility shall comprise of a single floor. However, provision for expansion of another floor in future should also be kept in due consideration.
 - ii) For Medium/ Budget Tourists** – A dormitory of sorts with separate facilities for male and female tourists is proposed.
 - iii) For Affluent Tourists** – In form of cottages with a kitchenette and an attached toilet to cater the upmarket customers.
 - iv) Toilets** – The Block would house Toilets for Budget Tourists and Essential Staffs, who would stay at the Ayurveda Centre.

- C) Food Block** - The proposed food block should have the following 2 subdivisions:-
- i) Kitchen** – For a visitor undergoing cleansing and rejuvenation, food is an essential element and therefore it has to be of the finest quality. The kitchen at the proposed Ayurvedic Centre would be able to provide a simple yet sumptuous vegetarian fare for its visitors. It should be a spotlessly clean outfit located close to the restaurant, having access to the garden situated close by.
 - ii) Kitchen Garden** – A vegetable garden is proposed near the vicinity of the kitchen. It is proposed that all the vegetables and herbs required for cuisine should be grown organically.
 - iii) Restaurant** – The restaurant should be in the form of a Hall with capacity to accommodate 100 individuals at a time.
- D) Health Block** - The proposed health unit is suggested over a built-up area of 200 sq. mts. It is proposed that it should be a single storied structure and would comprise of the following sub blocks.
- i) Consultation/ Treatment Rooms for Doctors**
 - ii) Separate Changing Rooms for male and female**
 - iii) Massage Rooms**
 - iv) Bathing Area** – The bathing area is proposed around a bean shaped tank with changing rooms, toilets etc. Access to this area would be made by means of a 1.5m wide path paved with locally available stones.

-
- E) Meditation Hall** – A meditation hall for conducting Yoga and Meditation is proposed at the Centre. Yoga, an oldest form of personal development, includes mind, body and spirit within its fold. As per ayurveda, the practice of yoga is a very important natural and preventive measure to good health. The proposed area of the Meditation Hall would be around 500 sq. m.
- F) Parking Lots** – The parking lots are proposed at a distance from the “heart of the ayurvedic centre”. The main idea behind proposing the location at a distance would be to restrict vehicular traffic at a certain point and prevent noise and pollutant emissions inside the premises.
- G) Landscaped Spaces** – The setting of the Ayurveda Centre should be serene, so as to elevate the mindset of the tourists into a spiritual bliss. Extensively landscaped spaces, suitably screened by a green belt to ward off dust, emissions and noise should be provided. A pedestrian linkage system, connecting all the important blocks to the strategic points (like vehicular parking lots), should be paved with locally available stones. The rest area should be covered with finely trimmed grass. Flowering plants to be planted at intervals to boost aesthetics.
- H) Herbal Garden** - A herbal garden is proposed within the premises of the Ayurvedic Centre, in order to cultivate the different variety of medicinal plants/ herbs. It is proposed that all the herbs in the garden should be cultivated organically.
- I) Water Treatment Plant** – A water treatment plant is proposed for supplying the Ayurvedic Centre with potable water. The water source can only be pointed out after undertaking a vivid hydrological study in the EIA.

- J) Waste Disposal Facility** – A waste disposal facility is also proposed at the centre, in order to treat the wastes generated from the various sources. It is proposed that the wastes be recycled in indigenous way in order to produce organic manure for the Herbal and Kitchen gardens.
- K) Waste Water Treatment Plant** - The Treatment plant would treat all the waste water generated from the Centre. The recycled water shall be used for gardening and for use in Toilet.
- L) DG Set** – A DG Set is required for supplying power to the proposed Ayurvedic Centre.

The tentative plan of the proposed Ayurvedic Centre is enclosed in the Annexure.

Some important features of the proposed Ayurvedic Centre

The Staff types of the proposed Ayurvedic Centre would be as depicted below: -

- Administrative Staff
- Front Office Staff – To look after Accounts
- Doctors
- Nurses
- Masseurs
- Gardeners for development and maintenance of Herbal gardens
- Gardeners for development and maintenance of Kitchen gardens
- Chefs
- Housekeeping Staffs
- Security Staffs

It is proposed that local manpower be employed at the Ayurvedic Centre except for the specialist positions mentioned above.

Cost Estimates

The cost break-up of the proposed Ayurvedic Centre with a capacity of accommodating 50 persons at a time is as elucidated below. The costs are based on estimates provided by the Industry experts and is primarily suggestive in nature

Land Development – The proposed Ayurvedic Centre shall be approximately 13000 sq. mts. in totality. Cost of developing the same @ Rs. 130/ sq. m. = $13,000 \times 130 = \text{Rs. } 16,90,000$

Civil Cost - The tentative civil cost of the above units based on prevailing rates are as shown in the Table below.

Table 4.31: Tentative Civil Cost

Item	Area (M ²)	Cost/ M ²	Total Cost
Reception	10	300	3000
Shops	80	250	20000
Accounts	20	350	7000
Administration	100	400	40000
Kitchen	50	250	12500
Restaurant	150	475	71250
Consultation Chambers	300	250	75000
Changing Rooms	20	200	4000
Message Room	100	250	25000
Bathing Area	80	200	16000
Cottages	130	400	52000
Budget Accommodation	125	350	43750
Staff Quarter	600	400	240000
Toilets	100	300	30000
Meditation Hall	200	300	60000
Parking Lots	200	50	10000
Development of Herbal Garden	500	150	75000
Development of Kitchen Garden	250	100	25000
Development of Green Belt (in Mtrs)	1500	100	150000
Sub Total			959500

Decoration Cost – The tentative decoration cost including furnishings and electricals for the different units of the Ayurvedic Centre would be in the tune as mentioned below:-

Table 4.32: Tentative Cost of Decoration

Item	Area (M2)	Cost/ M2	Total Cost (in Rs.)
Cottage	130	300	39000
Staff Quarter	600	200	120000
Budget Accommodation	125	50	6250
Toilet	100	100	10000
Reception	10	100	1000
Administration	100	150	15000
Accounts	20	100	2000
Shops	80	80	6400
Meditation Hall	200	30	6000
Food Block	200	50	10000
Consultation Chambers	300	120	36000
Sub Total			251650

Plant and Equipment Cost:- The other costs to be incurred at the onset would also incur the following expenditures as well.

Table 4.33: Tentative Cost of Plant & Equipment

Items	Total Cost (in Rs.)
Utensils for Kitchen	30000
Public Address System for Meditation Hall	60000
Lighting Arrangement	200000
Water Treatment Plant	350000
Waste Water Treatment Plant	350000
Sewerage Disposal Facility	200000
DG Set	200000
Sub Total	1390000

Operating Expenditures (Includes Remuneration of Employees, Fuel Cost etc.) – **Rs.14,65,600/ Annum**

Miscellaneous Expenditures – Rs. 1,00,000/ Annum**Income from the Ayurvedic Centre**

Income of the Ayurvedic Centre can be from the following sources :-

Income from Ayurvedic Treatment Packages

The Treatment Package for the tourists would be inclusive of Boarding and Lodging, Consultation and Massage Charges. The prevailing rates can be of the following types as shown in the Table below:-

Table 4.34: Cost of Accommodation

Package	Budget Accommodation (Rs. per person)	Cottage Accommodation (Rs. Per person)
07 Days Package	3500	5000
14 Days Package	3200	4500
21 Days Package	3000	4200
35 Days Package	2800	4000

Assuming the following no. of people attend the different packages per year,

Table 4.35: No. of People attending Courses

Package	No. of People attending in Budget Category	No. of People attending in Cottage Category
07 Days Package	45	5
14 Days Package	20	5
21 Days Package	12	3
35 Days Package	8	2

The income generation from the proposed Ayurvedic Centre would be in tune as shown below: -

Table 4.36: Tentative amount of Revenue Generated

Package	Revenue from People attending in Budget Category	Revenue from People attending in Cottage Category
07 Days Package	157500	25000
14 Days Package	64000	22500
21 Days Package	36000	12600
35 Days Package	22400	8000
Sub Total	279900	68100

Total income/ Year = 2,79,900+68,100 = 3,48,000

Income from Sale of Herbal Products

Handsome income can be earned from the sale of herbal products, which can be developed from the herbs cultivated in the herbal gardens. Ayurvedic products worth **Rs. 5,00,000** can be sold out per year to the tourists visiting the centre for treatment or otherwise to begin with.

Income from Massages of various types

Various types of massages can be offered to the visitors, who would come here to avail this facility only. The charges are exclusive of lodging facility. The different types of massages and tentative monthly income from the same are as shown in the Table below:-

Table 4.37: Revenue from Massages of various types

Types	Charges/ in Rs./ Hr.)	Tourists per month	Total Income per month
General Body Massage	400	20	8000
Whole body Herbal Oil Massage	1000	10	10000
Body massage with Herbal Powder	750	8	6000
Pouring oil in continuous stream on selected body points	550	10	5500
Retention of Luke Warm herbal oil on head	1200	5	6000
Controlled massage with herbal oil	300	25	7500
Sub Total			43000

Therefore total annual income from the Ayurvedic Centre would be :-

$$\text{Rs. } 43,000 \times 12 = \text{Rs. } 5,16,000$$

Total income from the Ayurvedic Centre

Based on the calculations performed above, the Ayurvedic Centre is likely to generate a total annual income of the centre would be as shown in the Table below: -

Table 4.38: Tentative Total Income from the Centre

Types	Income (in Rs.)
From Treatment Packages	348000
From Sale of Herbal Products	500000
From Massage	516000
Total Income per annum	13,64,000

F) ETHNIC TOUR OF ORISSA**BHUBHANESHWAR - RAYAGADA- JEYPORE- KORAPUT-VIZAG**

Tribes of Orissa hold a major charm among international visitors that's why the trip is also meticulously planned for them. Tour operator supports in making their visit memorable. Trip is planned from Delhi or any other Metro because these are the entry points of foreign visitors.

Tour packages are designed in light of specialty of each tribe and their geographical differences. Normally trip starts on Sunday and continue for anything between 9-12 days. This way the visitors are able to make most of the trip as well as experience the specialty of each tribe.

On an average each group consists of 10-12 people but it is flexible as per demand & supply ratio and seasonality. Visitors are mostly from Italy; Germany & Holland but US & UK tourists have shown interest since last 2–3 years.

Tour is planned by car with occupancy of 2 people.

Charges for Non AC car is INR 6-7/Km and for A/C car it is INR 10-12/Km. Travel is planned accordingly that tourist should make a drive for not more than 300 Km in a day (To-Fro).

DAY 1 BHUBANESHWAR - RAYAGADA

After the arrival of the tourists in Bhubaneshwar the tourists are picked from BBSR in the morning and drive through Chilika & Taptapani towards Rayagarha. As there is no proper & clean accommodation available in Taptapani the tour operators arrange for accommodation in

Rayagada. Accommodation is available through Budget (2-3 Hotels) as well as one Star hotel (Sai International). Tariff varies between INR 300-500 in a Budget Hotel and INR 800-1000 at a Star accommodation. Rayagarha is a base station for the tour as no accommodation is available at nearby spots.

Significance of the tribe

- ❖ Saoras are one of the oldest known tribes of Orissa. The term Saora appears to have two versions , one derived from the sagories the scythian word for axe and the other from saba roye, the sanskrit term for carrying the dead body.
- ❖ The appearance of the tribes is pre-dravidian. The dress worn by the male population is Lanjiya.
- ❖ The principal food of the Saoras is gruel, prepared out of rice. The are considered to be the best cultivators. The Saoras are famous for their wall paintings known as ICONS.

DAY 2 RAYAGADA- BISSAMACUTTAK

Tourists move for Bissamcuttak in the morning. The local tribes in this locality are Dongaria & Kond. There is a local Horticultural market at Chatikona and a weekly market on every Wednesday at Bissamcuttak. International tourists are greatly engrossed with the simple & ancient culture of these tribes. They prefer buying local articles to memorize the visit. In the evening they make a trip back to Rayagarha.

Significance of the Tribe

The Dongaria Kondh tride are very primitive tribes. The women folk wear white clothes with lot of ornaments and hair pins. These tribes are expert in horticulture.

DAY 3 RAYAGADA-BALIGURA-JEYPORE

The tourists would make a move for Baligura to have an experience of the Kutiya Kond tribe. These tribes are famous for making Tattoos. After enjoying the place they make a move to Jeypore; next spot. They stay for two to three days, here 4-5 hotels are available for the tourists. Jeypore is best among these with a tariff of INR 800-1000/ day.

DAY 4 JEYPORE

Local sight seeing of Jeypore and enjoy the local market on Thursday.

DAY 5 JEYPORE - KORAPUT & BACK

Leave for Koraput, Thursday market is organized here and the scenic beauty is impressive for the visitors. In evening they are back to Hotel at Jaypur because no accommodation is available here.

Day 6 JEYPORE- GUPTESHWAR & BACK

Tourists make a move towards Gupteshwar for seeing the Dhurva tribes most respected tribe in Orissa. Besides this there is a Lord Shiva temple at this place which is a unique heritage monument. Saturday market is another attraction for the tourists because most of the tribal people bring handmade articles that are substantially cheaper than the outlets in major towns. Tourist are back again at Jeypore in the evening.

DAY 7 JEYPORE - ANUKUDYALI & BACK

Last spot in Ethnic tour is Anukudyali. Besides being a hub for Bonda & Gadhwa tribes, this place is also known for Desi Liquor preparation. Bonda tribes are notorious in nature and always carry bow & arrow. Foreign tourists are very excited to view them. Weekly market is organized on Sunday at this place and tribes trade through barter system.

Significance of the Tribe

- ❖ Bondo tribes are the hill tribes, their language is called as REMO. These tribes belong to mundari group, they are divided into three groups, upper bondo, bara jangar & lower bondo.
- ❖ These tribes wear very few clothes. The women folk cover their bodies with beads.
- ❖ Their main occupation is agriculture.
- ❖ These tribes follow the barter system, they sell their marketable surplus as well as exchange crops for various essential articles.
- ❖ The most important and interesting feature is that the bondo women prefer marrying younger men.
- ❖ The gadhwa tribes are very primitive and colourful tribes of Orissa.
- ❖ Their economy also centres around agriculture. These tribes are very fond of dance and music and also believe in many gods and goddesses.

DAY 8 JEYPORE - VIZAG/BBSR

Normally this is the last day of Ethnic tour and tourists are dropped according to their convenience at Vizag or Bhubaneswar.

There is a seasonal element in this trip and Nov-Feb (Mid) is peak time for the visitors.

Commercial Charges are as below:

Transportation—INR 20,000 (for a group of two person)

Accommodation & other expenses—INR 20,000 (for a group of two person)

It was observed during the study that this ethnic tourist circuit was very prominent with international tourists.

4.2.0 Economic Impact

Like any tourism promotion plan the Orissa Tourism Perspective plan also shall have economic, social and environment impact.

4.2.1 There are certain direct benefits associated with increased tourist spending in the State due to increase in the number of arrivals in the area. This is in turn calculated by allocating the tourist expenditure to the various sectors that receive them. Further due to the additional facilities and infrastructure being created the average spending of a tourist shall increase, since the length of the stay at a site shall also in turn be more. The amount spent by the tourists shall be received by different segments of the tourism industry which shall provide the various services and facilities. There is a scope for imposing charges for the use of these various tourist facilities proposed at different locations.

There are various parameters attached with the economy such as

- Daily expenditure
- Traffic

The CAGR of traffic is different for domestic and international passengers. On the basis of past trend and certain unforeseen circumstances in the past the projected traffic for domestic and international tourists has been computed.

The Expenditure Pattern also varies for domestic and international tourists. The share of expenditure on different segments is different in both the cases i.e.

- Boarding & Lodging
- Shopping
- Sight seeing
- Entertainment
- Others

4.2.2 There are certain indirect benefit of the spending in the state by different segments of the tourist industry as they have to outsource the services from other sectors of the industry to fulfil the tourist requirements. This additional requirement of the tourism segment from other sectors of the industry is known as indirect impact / benefit of tourism.

4.2.3 Employment Generation - The tourism industry is a labour intensive industry compared to other industry. As indicated in the Report on working group on tourism for the IX plan (1997-2002) every 1.2 international tourist provides employment to 1 person and on the same lines 17 domestic tourists generate employment for one person.

4.3.0 Social Impact

There are several benefits due to development of tourism in the state of Orissa.

4.3.1 There are certain heritage sites in the state such as the Mukteshwar temple, Lingaraja temple, the world heritage monument – the sun temple, which needs preservation and restoration. This involves local people as well as of nearby areas so as to achieve the sustainability in future.

4.3.2 As suggested in the development plan, strengthening / expansion of certain stretches of the main road , service road as well as building of cafeteria, wayside amenities, budget accommodation develop certain new products (as suggested). All the above activities shall involve employment & thereby improve the social status of the local people as well as of nearby localities.

4.3.3 The improved infrastructure facilities & demand created by increase in traffic would further accelerate the economic development of the area and new economic activities shall also come –up around specific identified spots / circuits over a period of time.

4.4.0 Privatisation of Tourism Units in Orissa

The Orissa Tourism Policy, 1997, which was prepared on the basis of Orissa Industrial Policy, 1996 envisages to encourage private sector for investment in Tourism related activities in Orissa. For this purpose, Tourism related activities like Hotels, Motels, Way side Amenities Centre, Golf Course, Road ways, Water Sports, Aero Sports, Tourism Camp and camping sites, Health Resorts, Amusement Park etc. are treated as Industry and are eligible for incentives and concessions as admissible under the industrial policy. Meanwhile however the State Industrial Policy, 1996 has been replaced by a new Orissa Industrial Policy, 2001, wherein certain changes have been made regarding the incentive and the concessions. The new National Tourism Policy has also been announced in 2002 by the Central Government. The Orissa Tourism Policy 1997 is being modified keeping in mind the above alterations.

4.4.1 Units already leased out

As a part of encouraging the private sector to involve itself in tourism trade, the Department of Tourism, Government of Orissa have decided to lease out management of the new Tourism units coming up in the state to the private sector. Under this decision, 12 units have already been leased out and is enclosed in Table 4.39.

Table 4.39 Tourism units already leased out by Government of Orissa

Sl.	Unit	Lessee	Amount	Period of lease	Present status
1	Panthika, Bhadrak	Sri P.K. Mohanty Bhadrak	Rs. 57,000/-	10 Years	In operation since 17.6.99
2	Panthika, Khandagiri	Mr. Dilip Kumar Behera Rourkela	Rs.1,40,000/-	10 Years	In operation since 14.10.99
3	Panthika, Sarankul	Mr. Gajendra Kumar Sahoo	Rs.16,500/-	5 Years	In operation since 8.3.2000
4	Panthika, Rameswar	Sri K.C. Patnaik ,Cuttack	Rs. 1,00,000/-	5 Years	In operation since 3.12.2000
5	Panthika, Gokarnika	Prafulla Kumar Sahoo	Rs. 61,000/-	10 Years	In operation since 01.11.01
6	Panthasala, Kantilo	Mr. Gajendra Kumar Sahoo	Rs. 56,800/-	5 Years	Likely to be operated soon.
7	Tourist Complex, Patharajpur	Nirvana Travels, Kolkata	Rs. 40,000/-	10 Years	Likely to be operated soon.
8	Wayside Amenity Centre, Angul	F.K. Patnaik	Rs. 1,02,400/-	10 Years	
9	Panthasala, Gatagaon	Gopabandhu Das	Rs. 37,100/-	10 Years	
10	Panthasala, JK Road	P.K. Balabanta Ray	Rs. 1,01,300/-	10 Years	
11	Panthika, Charichhak	S.K. Agrwala	Rs.24,000/-	10 Years	
12	Wayside Amenity Centre, Sakshigopal	Aditya Rath	Rs.15,501/-	10 Years	

4.4.2 Unit for which tenders have already been received

Panthasala, Kendrapara

4.4.3 Units ready for leasing out

15 units, which are either already complete and ready for operation or are nearing completion, have been put to tender for leasing out. They are :-

1. Panthasala, Harishankar
2. Panthika, Charichhak
3. Panrhasala, Bhattarika
4. Tourist Complex, Atri
5. Panthasala, Gupti
6. District Tourism Centre, Phulbani
7. Panthasala, Taratarini
8. Panthasala, Chhapackina
9. Panthasala, Sunabeda
10. District Tourism Centre, Bolangir
11. Wayside Amenities Centre, Baragarh
12. Tourist Complex, Harishankar
13. Tourist Complex, Deuljhari
14. Tourist Complex, Bissam Cuttack
15. Panthasala, Gupteswar

4.4.4 Private sector Participation in Conservation Work

In Orissa there is hardly any visible participation of private sector in conservation and up keep of ancient monuments. However, there is definitely, a scope to motivate them in this regard. A strategy could be formulated to motivate the private sector to take up such work in respect of monuments frequented by tourists.

4.5 Present Status of Existing Master Plans

The state Department of Tourism had prepared the following Master Plans at different times for different purposes.

- a) 10-year Perspective Master Plan for Orissa (1992-2002) had been prepared by TCS.
- b) A comprehensive master plan for the State of Orissa had been prepared by ITDC in the late 70s.
- c) Master plan on Chilika Lake had been prepared by Town & Country Planning Organisation in late 70s.
- d) Comprehensive Master Plan on Buddhist Circuit of Orissa comprising Ratnagiri – Lalitgiri & Udayagiri had been prepared by TCS and A.F. Ferguson in mid 90s.

The purpose of all the above master plans were to ensure planned development of tourism in the state. The master plan envisaged maximum investment by the private sector, which did not come for various reasons. The amount envisaged to be invested by the public sector also could not be mobilized due to resource constraint.

The master plan for the Buddhist Circuit was put forward for OECF assistance through Government of India but was not approved.

It has been observed that assistance and cooperation of many line departments is a pre-requisite to motivate any entrepreneur for investment in the Tourism Sector in Orissa. These line Departments would help in providing basic infrastructures like roads, power, water facilities as well as clearances under various acts, rules and provisions. Without these infrastructures in place, it is difficult to mobilize private investment. The masters so far prepared hardly helped in motivating the line departments for creating the required infrastructure and consequently did not allure the entrepreneurs enough to invest in the tourism sector in Orissa.

However, in accordance with the new National Tourism Policy, 2002 and with the separate guidelines issued by the Government of India, the State Department of Tourism is currently engaged in preparation of master plans for the integrated development on the following subjects.

♦ **Buddhist Circuit**

One firm has already been identified through a tender process to prepare a comprehensive master plan for development of Buddhist Circuit comprising of Dhauli, Ratnagiri, Lalitgiri, Udayagiri and Langudi. Government of India have been requested to sanction the estimated cost for preparing the master plan. Response from the Government of India is awaited in this regard. Meanwhile, State Government has decided to assign the job to the identified firm in anticipation of response from Govt. of India.

♦ **Rural Tourism**

Raghurajpur Village near Puri has been identified for development and promotion of rural tourism. INTACH has been identified as the agency to prepare the master plan. Orders have already been placed with them and the master plan is expected shortly.

♦ **Eco-Tourism Development**

Chilika Lake and Bhitarkanika have been identified for development of eco tourism. Tenders were invited for selection of firms to prepare the master plan. The offers received in this connection are under examination by the State Department.

♦ **Destination Development**

Puri, Chandipur and Gopalpur have been identified as three destinations for development of destination tourism. A firm has been identified to prepare master plan on these three tourist centres. Orders are being placed with them shortly to take up the work.

♦ **Large Revenue Generating Projects**

This is a joint venture project in which the Central Government and the State Government would join hands with private sector on equity basis for implementing large revenue generating projects, the estimated cost of which will not be less than Rs. 10 crores. There is also an element of loan in this proposal. Department of Tourism has invited offers to express interest from the private sector to participate in this venture.

♦ **Development of Beaches**

As mentioned earlier, Orissa has a long coastline of over 480 kms. With a few wide and clean beaches, Government of India has agreed to provide funds for preparation of master plan for development of these beaches. As a first step, a master plan of Puri beach has been prepared through TCS and submitted to Government of India for approval. The beach at Gopalpur and Chandipur shall be covered in the master plan being prepared under destination development. For other beaches, Government of India have been requested to provide funds, after which steps will be taken to prepare a comprehensive Master Plan.

4.6.0 Implementation Schedule

Though the entire state has a lot of tourism potentials. It shall not be appropriate to start development all over the state simultaneously due to fund constraints and other limitations.

The consultants have worked out three phases for development based on demand priority for development and magnitude of various developmental projects. The total duration of all the phases collectively is 20 years indicated as short terms (2002-2007), medium term (2007-2012), long term (2012-2022).

4.6.1 Short Term Plan [2002-2007]

This is first phase spanning for a period of five years. Projects, which have already been taken up by the Orissa Tourist Development Corporation are envisaged to be completed within this time frame. At the same time priority projects identified by the Consultants would be planned in detailed during this phase.

- With reference to point no. 4.1.1 the consultant proposes to develop operational infrastructure in the state. The Orissa Tourism Department should work on a joint platform to get things installed in initial phase.
 - (a) Mourn roads for approach roads at spots should be planned.
 - (b) Sanitation & Public convenience at spots and midways.
 - (c) Drinking water facility at various points.
 - (d) Power supply in the locality in which the tourist spots are based.

- Efforts should be put on to develop basic infrastructure for connectivity. This objective will require co-operation from central as well as State Government. Similarly on this pattern some more areas should be connected through rail.

Regarding basic infrastructural requirements in the state of Orissa, the state government along with the various concerned and associated departments such as Representatives of the Central Departments of Tourism, Culture, Telecommunication, and state Departments of Tourism and Culture, Public works, water supply, electricity, forest, finance may be formed for smooth execution.

By adoption of the proposed short term plan, the legal formalities are established. For implementation it is essential that the political commitment to develop tourism on a planned basis and a strong leadership should be exercised in both private and public sectors of tourism. The respective roles of the private sector, the state government bodies, (OTDC), (OIIDC) and others have to be clearly spelt out and a time frame has to be provided as well as there has to be close coordination between all the concerned agencies.

The Department of Tourism and Culture (Tourism) (DOT&C) shall be a nodal agency in the State of Orissa for the development of tourist facilities and services in Orissa.

For undertaking the implementation, DOT&C would need adequate strengthening both in terms of human resources and operational facilities.

- Strengthening of the NH-5
- Conversion of meter gauge line to broad gauge.
- Strengthening of domestic airport into an operational international airport.
- Power back-up facilities as well lighting arrangements.
- Potable drinking water and sanitation at mentioned circuits/spots.
- Budget accommodation facilities and cafeterias along with security.
- Identify tourist zones where private participation can be called for depending upon the feasibility of the product/zone
- Carryout-feasibility studies for the short-listed products and identify the zone to be taken up immediately.

Most of the prioritized projects will be executed during this time frame. Projects for development of circuits will get top priority in this phase.

4.6.2 Medium Term Plan [2007-2012]

It is envisaged that the product items/identified can be taken up for implementation after conducting a detailed feasibility of the same

- Urban Haat
- Ballooning
- Water Sports
- Ethnic tourism

Besides the above products it shall also be necessary for the state ministry to gear itself up with regards to the traffic

(anticipated) invite private parties to take up the entire project or partly fund the same.

Monitoring should be considered an integral part of plan implementation so that problems are detected in their early stages and remedial measures are taken.

Economic, environmental and socio-cultural impacts of tourism generally, and for specific projects, is essential. Even though time-based targets are to be established, they should be considered flexible based on changing circumstances. During the short term it is more important to maintain a balance between the development of tourist facilities, services and infrastructure and actual market demand.

The agency would appoint project director for specific projects identified under for mega tourism projects identified.

The various parameters that shall be involved in the total development of tourism shall be as under:

- i. Plan adoption and allocation of responsibility
- ii. Stages of development
- iii. Apply zoning and other regulations
- iv. Standards and design guidelines
- v. Various facilities
- vi. Monitoring and Controlling
- vii. Nodal Agency

It would be necessary to constitute separate task forces e.g. Puri Development Task Force, to manage integrated development of various tourist circuits.

- Improve the communication infrastructure like satellite connectivity, telephone spread, Mobile connectivity at various spots, cable connection to various break points etc.
- Information sharing and networking of various department should be implemented so that anyone from anywhere can have access to relevant and required information will strengthen the image of state regulatory body in turn attract more aware visitors to state.
- Emphasis should be given in establishing some development institutions for tourism & hospitality industry. Regular satisfaction ratings should be maintained and analyzed. This should be performed through local inhabitants to serve both the purpose of area development as well as tourism development.

4.6.3 Long Term Plan (2012-2022)

- Performance appraisal of strategies implemented during Short as well as Medium term plan.
- Though the traffic has been projected till 2022 but due to uncertainty in economic & political scenario of India the anticipated traffic may not be as per the projections hence it is necessary to review the various stages in the medium term plan & keep a close watch on the developments.
- Power Load factor (PLF) of different Power projects is an impediment that affects not only state development but also tourism industry as a whole. Most of the plants are PSU operated, strategy should be implemented to improve the ratio with changes in capital assets as well as sops offered to them.
- Tourism department should undertake community development plans and co-ordinate with other related departments in order to generate most of the strategies implemented during short and medium term.
- Spots should be reclassified according to Tourist interest and respective inflow. Identified hot spots should be rightly promoted to attract more diverse tourists.

CHAPTER 5

ENVIRONMENT IMPACT ASSESSMENT

5.1.0 Introduction

5.1.1 The basic objectives of the Ministry of Environment & Forest are :

- Conservation and Survey of flora, fauna, forests and wildlife.
- Prevention and control of pollution.
- Afforestation and regeneration of degraded areas and
- Protection of environment

These objectives are to be fulfilled by

- Environmental impact assessment (EIA)
- Eco-regeneration.
- Assistance to organizations implementing environmental and forestry programmes.
- Promotion of environmental and forestry research.
- Dissemination of environmental information
- International cooperation
- Creation of environmental awareness among all sectors

5.1.2 Under the provision of Environmental Impact Assessment (EIA) notification, various expert committees were reconstituted for different sectors for appraisal of projects received for environmental clearance.

5.1.3 Keeping in view the size of the projects and their environmental impact, the Ministry has further amended the Coastal Regulation Zone (CRZ) notification, in August, 2001 to dispense with the requirement of public hearing in various categories of projects like widening and strengthening of highways, mining projects with lease area of up to 25 ha. Units located in export processing zones. Special economic zones, modernization of existing irrigation canals,

small-scale industrial undertakings located in industrial estates/areas or under the jurisdiction of industrial development authorities.

5.1.4 In order to make the provisions of wildlife (protection) Act, 1972 more effective, a draft Amendment Bill was prepared by the Ministry and was vetted by Ministry of Law.

5.1.5 There are 89 natural parks and 497 wildlife sanctuaries in the country covering an area of 1.56 lakh sq. kms.

5.2.0 EIA

5.2.1 Most of the developmental activities use natural resources as raw material and waste generated is disposed into different environmental media. The signs of stress on the scarce natural resources are evident from the deteriorating air quality, soil degradation, polluted river and streams and in general status of environment in various regions. It is now well recognized that, for sustainable development and optimal use of natural resources, environmental considerations are required to be integrated in planning, designing and implementation of development projects. The envisaged benefits from development projects cannot be fully realized unless they are environmentally and socially sound and sustainable

5.2.2 Environmental Impact Assessment (EIA) is one of the proven management tools for incorporating environmental concerns in development process and also in improved decision-making. The growing awareness, over the years, on environmental protection and sustainable development has further given the needed emphasis on requirement of sound environmental management practices through preparation of Environment Management Plans for minimizing the impact from developmental activities. The process of Environment Impact Assessment is pictorially depicted in the diagram below: -

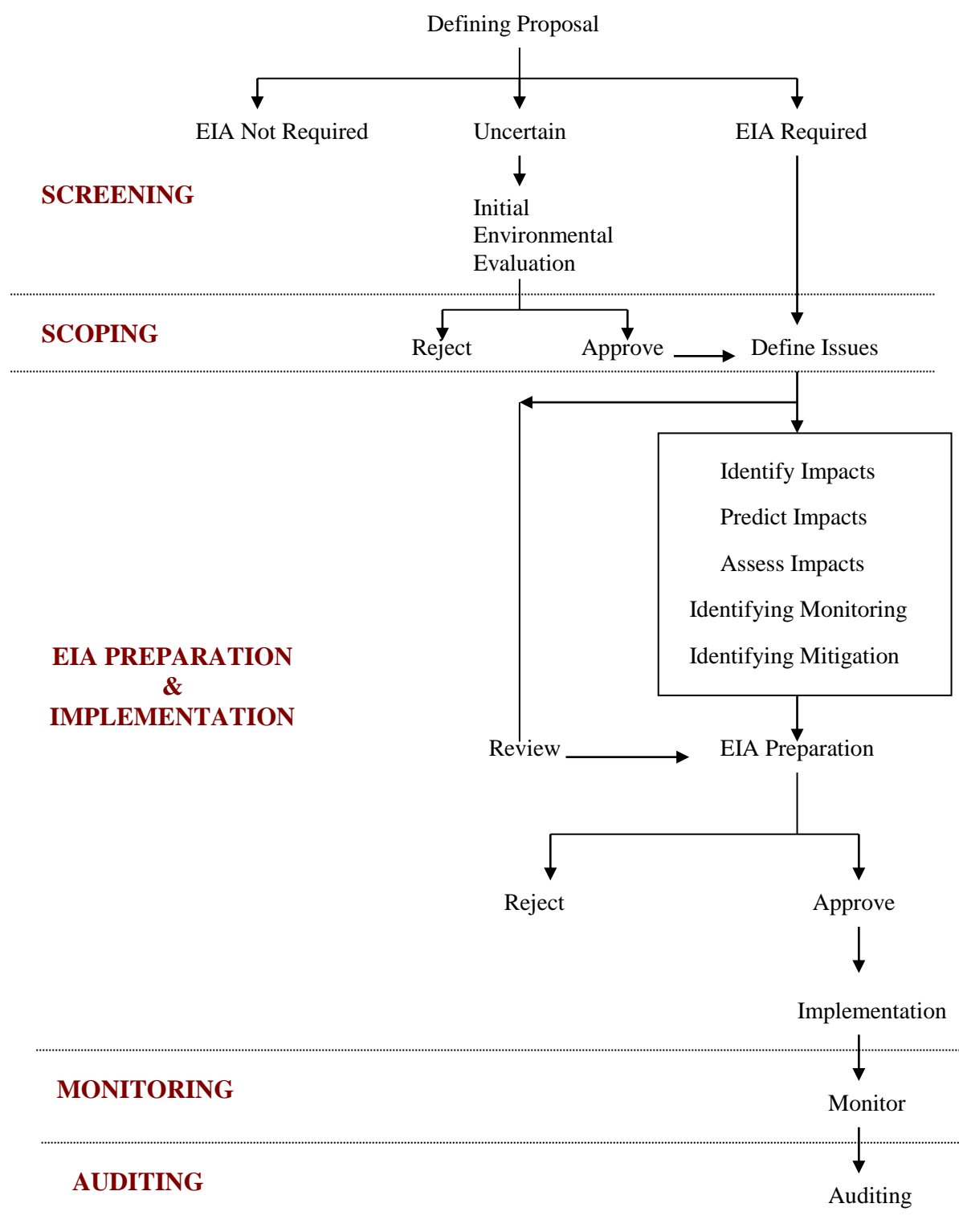


Figure 5.1: Stages in an EIA Process

It is desirable that new tourism projects should not bring about any impairment to the environment. Hence the consultant feels that due cognizance be given to the environmental aspects and proposes that environment impact assessment should be made an integral part of all forthcoming projects. The EIA matrices of all the new products suggested in Chapter 4 are enclosed herein.

Key to the Matrices

+ = Beneficial Effect

- = Negative Effect

1 = Marginal impact

2 = Controllable impact

3 = Appreciable impact

4 = Severe impact

Table 5.1 : Impact Identification Matrix for proposed Urban Haat at Pipili

Environmental Aspects								
Activities	Air	Water	Soil	Noise	Flora/ Fauna	Deforestation	Socio- Economics	Aesthetics
Land Development	-2	-2	-2	-2	-2	-2	+2	-2
Construction Activities	-2	-1	-2	-2	-2	-2	+3	-2
Landscaping			+2		+2		+3	
Development of Green Belt	+2		+2	+3	+2		+3	+3
Haat in Operation	+2				+2		+3	+3

Table 5.2: Impact Identification Matrix for proposed Hot Air Ballooning at Similipal

Environmental Aspects									
Activities	Air	Water	Soil	Noise	Land - Use	Deforestation	Flora/ Fauna	Socio- Economics	Aesthetics
Preparation of Launching Site	-1		-1	-1	+1	-1	-1	+3	+3
Training of Pilot								+3	
Training of Ground Staff								+3	
Flight Plan identification							-1		
Test Flights							-1		+1
Inflation of Balloon				-1					
Launching of Balloon	-1								
Balloon in Flight									+3
Deflation of Balloon	-1								
Ground Crew Activities				-1			-1		

Table 5.3 : Impact Identification Matrix for proposed Boat Cruise at Chilika

Environmental Aspects							
Activities	Air	Water	Soil	Noise	Flora/ Fauna	Socio- Economics	Aesthetics
Test Trips using boat of similar energy output and carrying capacity	-2	-2		-2	-2		
Test Trips using actual boat	-2	-2		-2	-2	+2	
The Cruise in Operation	-2	-2		-2	-2	+2	+2

Table 5.4 : Impact Identification Matrix for the proposed Water Sports Facility at Chilika

Environmental Aspects							
Activities	Air	Water	Soil	Noise	Flora/ Fauna	Socio- Economics	Aesthetics
Water Skiing		-2		-3	-2	+2	
Para Sailing		-2		-3	-2	+2	
Scuba Diving/ Snorkeling		-1			-2	+2	+2
Water Taxi				-3	-2	+2	+2
Water Scooter		-2		-3	-2	+2	+2

Table 5.5 Impact Identification Matrix for proposed Amusement Boat

Environmental Aspects							
Activities	Air	Water	Soil	Noise	Flora/ Fauna	Souci- Economics	Aesthetics
Test Trips using boat of similar energy output and carrying capacity	-2	-2		-2	-2	+2	+2
Test Trip using the actual boat	-1	-1		-2	-2	+2	+2
Operation of the Amusement Boat	-1	-1		-2	-2	+2	+2

Table 5.6: Impact Identification Matrix for proposed Ropeway at Udaygiri & Khandagiri

Environmental Aspects									
Activities	Air	Water	Soil	Noise	Land - Use	Deforestation	Flora/ Fauna	Socio- Economics	Aesthetics
Spot Selection					+1		-2	+3	
Land Development	-2		-2	-2	+2	-2	-2	+3	-2
Installing the Ropeway	-2		-2	-2	+2		-1	+3	-2
Test Runs	-2			-1			-1	+3	+2
Operation of the Ropeway	-2			-1			-1	+3	+2

Table 5.7 : Impact Identification Matrix for proposed Ayurvedic Centre at Similipal

Environmental Aspects									
Activities	Air	Water	Soil	Noise	Land - Use	Deforestation	Flora/ Fauna	Socio- Economics	Aesthetics
Land Acquisition						-2	-2		
Land Development	-2	-2	-2	-2	+2	-2	-2	+3	+3
Construction Activities	-2		-2	-2		-2	-2	+3	
Erection of Waste Disposal & Treatment Facility				-2		-2	-2		
Erection of Water Treatment Plant				-2		-2			
Development of Gardens			+3				+3	+3	+2
Landscaping Activities					+1		+2	+3	+3
Operation of the Centre	-2	-2	-2	-1				+3	+2

5.2.3 Coastal Regulation Zone (CRZ) Notification has also been amended in April, 2001 permitting certain activities in CRZ-I areas such as (a) construction activities related to the projects of Department of Atomic Energy (b) laying of pipelines, conveying systems including transmission lines and (c) facilities that are essential for activities permissible under CRZ-I. Under this amended notification, exploration and extraction of oil and natural gas is also permitted between Low Tide Line (LTL) and High Tide Line (HTL) in areas, which are not ecologically sensitive. Facilities for receipt and storage of Liquefied Natural Gas (LNG) and facilities for its re-gasification can also be permitted in CRZ area not classified as CRZ –I (i) subject to implementation of certain safety regulations.

5.3.0 CONSERVATION OF NATURAL RESOURCES INCLUDING FORESTRY AND WILDLIFE

5.3.1 Biosphere Reserves

- A total of 13 Biospheres Reserves have been set up so far in the country to protect representative eco-systems and to serve as laboratories for evolving alternative models of development.
- UNESCO's approval for designating the Sundarbans (West Bengal) and Gulf of Mannar (Tamil Nadu) Biosphere Reserves of the country on World Network of Biosphere Reserves was obtained.

5.3.2 Wetlands, Mangroves and Coral Reefs

- Management Action Plans were prepared for 19 wetlands so far for conservation and management and two research projects were also approved to Supplement Management Action Plans. In order to designate 25 more wetlands as Ramsar sites in the country, India has sent details of 16 wetlands to Ramsar Bureau after getting authentication of maps from

Survey of India, Dehradun. Chilika Lake has already been declared as a Ramsar Site.

- The National Committee on Mangroves and Coral Reefs endorsed the recommendation of the sub-committee and financial assistance was provided to identified mangrove areas in the respective states.
- National Mangrove Genetic Resource Centre has been established at Bhitarkanika in Orissa.
- The Ministry has launched an Indian Coral Reef Monitoring Network (ICRMN) to cover activities related to monitoring of health of coral reefs, training and capacity building, establishment of database network, promotion of research on the identified thrust areas with a view to integrate the same with the management of this fragile ecosystem.
- Existing Centre of Zoological Survey of India at Port Blair has been designated as National Coral Reef Research Institute.
- A Bio-diversity Festival was organized during the year at Delhi-Hatt, Delhi.
- The Bio-safety protocol has been signed by 105 countries, of which, eight have ratified it. India signed the protocol on 23.1-2001 and actions are being initiated to ratify the same.

5.3.3 Govt. of India have launched a Centrally sponsored scheme entitled `Eco-development around National Parks and Sanctuaries including Tiger Reserves in the year 1991-92. The basic objective of the Eco-development programme is to reduce biotic pressure in the Protected Areas (PAs) by alleviating the hardship faced by the villagers living in and around the National Parks and sanctuaries due to curtailment to their access for grazing, fuelwood, fodder and collection of various non-timber forest products.

5.3.4 Threatened Species

Indian contains 172 species of animal considered globally threatened by IUCNB, or 2.9% of the world's total of number of threatened species (Groombridge, 1993). These includes 53 species of mammals, 69 birds, 23 reptiles and 3 amphibians. India contains globally important populations of some of Asia's rarest animals, such as Bengal Fox, Asiatic Cheetah, Marbled Cat, Asiatic Lion, Indian Elephant, Asiatic Wild Ass, Indian Rhinoceros, Markhor, Gaur, Wild Asiatic Water Buffalo.

The proection of wildlife has a long tradition in Indian History. Wise use of natural resource was a prerequisite for amny hunter-gahter societies which date back to at least 6000 BC. Extensive clearance of forests accompanied the advance of the need for ecological prudence emered and many so-called pagan nature conservation practices were retained. As more and more land become settled or cultivated., so these hunting reserves were subsequently declared as national parks or sanctuaries, mostly after indpenedence in 1947.

5.3.5 Activities under Eco-development Programme

Keeping in view the primary objectives of satisfying the basic need of local people and improving the productivity of buffer zone of protected areas, following socio-economic welfare activities are envisaged in Eco-development programme.

1. Raising of fuel-wood and fodder plantations of fast growing indigenous species.
2. Silvipastural development
3. Soil Water conservation measures in cultivated fields.
4. Setting up of small irrigation dams/anicut
5. Fixing of solar street lights in the village
6. Supply of improved chullahs, solar cookers and gobar gas plants

7. Setting up of fixed/mobile dispensaries including vaccination/family planning clinics.
8. Setting up of live-stocks veterinary centers.
9. Providing safe drinking water
10. Setting up cottage industries based on appropriate technology.
11. Development of agriculture, sericulture, pisciculture etc.
12. Training of staff, volunteers, village level workers in Eco-development and related activities/techniques.

Funding

Govt. of India under its centrally sponsored scheme extends 100% financial assistance to the State Governments for implementing the programme in Protected Areas. During 1992-93, 1993-94, 1994-95 and 1995-96 financial assistance of Rs. 4.20 crores, Rs. 4.84 crores, Rs. 3.46 crores and Rs. 4.67 crores was extended respectively to various state governments.

5.4.0 Project Elephant

5.4.1 Project Elephant was launched in 1991-92 to assist states having ranging populations of wild elephants to ensure long term survival of identified viable population of elephants in their natural habitats. States are being given financial as well as technical and scientific assistance.

It is being implemented in 12 states of the country. Three elephant reserves were set up during the year in the states of Jharkhand, Orissa and Meghalaya. An amount of Rs. 6.77 crores was released to the elephant-range states during the year for the purpose of habitat management, management of man-elephant conflict, payment of ex-gratia relief for the loss of life, strengthening of anti-poaching measures, capture and translocation of problem elephant population etc.

- Ecological restoration of existing natural habitats and migratory routes of elephants.
- Development of scientific and planned management for conservation of elephant habitats and viable population of Wild Asiatic elephants in India.
- Promotion of measures for mitigation of man elephant conflict in crucial habitats and moderating pressures of human and domestic stock activities in crucial elephant habitats.
- Strengthening of measures for protection of wild elephants from poachers and unnatural causes of death.
- Research on Project elephant management related issues
- Public education and awareness programmes

Habitat management of man-elephant conflict, payment of ex-gratia relief for loss of life etc. strengthening of anti-poaching measures, capture and translocation of problem elephant populations etc.

5.5.0 Project Tiger

5.5.1 Twenty-seven Tiger Reserves have so far been set up in various states covering an area of about 37,761 sq. km. in the country. An amount of Rs. 18.35 crores was released to the various Tiger Range states including North Eastern states, as on December 2001 under the project tiger scheme.

Simplipal Tiger Reserve

- Simplipal tiger reserve came under the umbrella of Project Tiger in 1973 and encompasses an area of 2,750 sq. kms out of which the core area is 845.70 sq. kms. The total core is still pending final notification as a National Park. In 1972 there were said to be 17 tigers but the 1992 census estimates 95 tigers. Over 22 species of mammals, 220 species of birds and several varieties of reptiles share this forest with the tiger. Many

hundreds of botanical species create a special bio-diversity for this natural system.

- A series of acute biotic pressures exert themselves on this natural resource.,illicit grazing of cattle, wood cutting for poles, agricultural implements, construction, forest fire for the easy collection of sal seeds, mahua seeds etc. encroachment of land for agriculture in protected forests etc. are activities that are organized. The timber and wood is sold in nearby towns.
- Mass hunting of wild animals or Akhand Shikar takes place yearly where 500-600 people armed with poisonous arrows and bows organize these hunts every year and a minimum of 400-500 animals are killed at a conservative estimate. The strength of the field staff is insufficient to prevent these offences. The present staff is the same as it was in 1973 even though the core area has increased nearly three times . Though a decision was taken in 1987 to bring the entire area under the control of the Field Director this process has not occurred and the buffer zone of the Park is under the control of the Divisional Forest Officer of another area. Such dual control makes the management of the area very difficult especially since the area faces strong biotic pressures. There are nearly 850 villages around a 500km periphery with a vast population. This excludes the villages inside the park.
- There has been a plan for the last decades to relocate the villages from inside the park so as to reduce the pressure. Through many formalities for this resettlement have been completed it is at the moment pending. A site specific formulation of an eco-development project is being planned so that through the next five years some of the problems concerning the people and the park are resolved.
- The Simlipal tiger reserve has been very strong and impressive in the field of research. Since 1987 after the appointment of a research officer the

research undertaken includes base-line data collection on meteorology, animal and plant inventory, monitoring research covering, improvement in the techniques for large-cat census, annual trends of tiger population estimates of large herbivorous, tourism trends and development of management strategies, restoration research covering and mugger crocodile restocking including all aspects of captive management.

- Simlipal tiger reserve face serious biotic pressures that if not controlled will have severe repercussions. The mass hunting of animals, illicit felling of wood and grazing must be quickly checked so that some of the important research being done here has a chance to effect the future course of this area.

ECO -TOURISM

- The activities of persons traveling to and staying in places outside their usual place of residence for not more than one consecutive year for leisure, business and other purposes constitute tourism. Such visits for being close to nature to enjoy its enormous creations, both biotic and abiotic. In a most environment friendly manner, without any adverse impact on the ecosystem, is particularly known as ecotourism.
- According to the World Tourism Organization (WTO), “ tourism that involves traveling to relatively undisturbed natural areas with the specified object of studying, admiring and enjoying the serenity and its wild plants and animals, as well as any existing cultural aspects (both of the past or the present] found in these areas “ is defined as ecotourism. Nature tourism (ecotourism) is distinguished from mass tourism or resort tourism by having a lower impact on the environment and by requiring less infrastructure development.

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- The key elements of ecotourism include a natural environment as the prime attraction, an optimum number of environment-friendly visitors, activities which do not have any serious impact on the ecosystem and the positive involvement of the local community in maintaining the ecological balance.

These ecosystems have become the major resource for ecotourism in India.

They are :

1. Biosphere Reserves
2. Mangroves
3. Coral Reefs
4. Deserts
5. Mountains and Forests
6. Flora and Fauna
7. Seas, Lakes and Rivers
8. Caves

Biosphere reserves are multipurpose protected areas for preservation of the genetic diversity and integrity of plants, animals and microorganisms in representative ecosystems.

Mangroves are very specialized forest ecosystems of tropical and subtropical regions bordering sheltered sea coasts and estuaries.

Major mangroves areas are :

- i) Northern Andaman and Nicobar islands
- ii) Sunderbans (West Bengal)
- iii) Bhitarkanika and Mahanadi Delta (Orissa)
- iv) Coringa, Godavari Delta and Krishna Estuary (Andhra Pradesh)
- v) Pichavaram and Point Calimere (Tamil Nadu)
- vi) Goa
- vii) Gulf of Kutch (Gujarat)
- viii) Coondapur (Karnataka)
- ix) Vembanad (Kerala)

Action Plan

- Establish standards, building codes and other regulations.
- Specify environmental, physical and social carrying capacities to limit development activities.
- Ensure continuous monitoring of adverse effects of tourism activities and initiate suitable corrective measures.
- Recognise and award quality labels to ecotourism operators.
- Provide visitor information and interpretation services covering particularly (i) what to see (ii) How to see (iii) how to behave. It be by way of brochures, leaflets, specialized guides, visitor information centers and such.
- Prepare and widely distribute codes of conduct to all visitors.

5.6.0 CONCLUSIONS

- 5.6.1 All the Tiger Reserves face increasing biotic pressure. To resolve it site specific eco-development plans needs to be formulated to ensure the participation of the local communities in the protection of these vial natural resources.
- Ensure their survival
 - Reduce the pressures on them and
 - Create a genuine harmony between local communities and the tiger reserve.
- 5.6.2 Project Tiger Reserves and all the biodiversity that abounds in them will not be harvested for commercial exploitation, used for dam sites or other mega or mini projects.
- 5.6.3 All Tiger Reserve face increasing threats from the poachers and smugglers of animals, wood and other vital forest produce.
- 5.6.4 All the tiger-bone trade booms in the Far East, India will take vital steps not only to ensure that her tigers are safe from external threats but also rally world communities to oppose the use of tiger bones in eastern medicine.
- 5.6.5 A new strategy will unfold to strengthen the protection of these areas in the light of new pressures and effective legal procedures formulated for quick and timely action.
- 5.6.6 A focus on research, on specific wildlife training and on increasing the motivation of the staff towards their duties in already a part of new strategies for better and more effective management.
- 5.6.7 Local communities, their participation, involvement and commitment are vital for the future safety of these areas.
- 5.6.8 A major educational effort has to be made to increase the level of awareness of urban dwellers who appear to have grown distant from

nature because of the prevailing lifestyle in the cities that exact a heavy toll the natural resources.

5.6.9 Project Tiger will therefore refocus, restructure and reformulate its strategies , but ultimately it is only through a collective approach where the local people, the urban dwellers and the state governments play a conservative role, together, that a new and dynamic era in tiger conservations will commence, to save the tiger and his habitat.

5.6.10 In recent years, it has been observed that Joint Forest Management (JFM) has been successful, by and large in managing forests in a sustainable manner in various parts of the country. This approach has exemplified fruitful collaborative efforts of the forest department. And the local communities in expediting the process of forest conservation. Local communities have been motivated to protect a section of the forests for a fixed time along with the Forest Department and in lieu of which they have been permitted to have access to various forest. Similar laws, which contain tenure and profit sharing incentives have been passed in favour of improved conservation in the buffer zone areas of the existing protected areas. All of such community based management regimes have met the subsistence and income generating needs of the local communities and provided them with the tenure security they need to protect the forest resource base.

These approaches are now in dire need of the integration of strict conservation objectives that would compliment and enhance livelihoods. WWF - India intends to evolve a paradigm by using the JFM approach whereby communities gain incentives and technical skills to conserve critical habitat of globally and locally significant species of animals and plants, while managing the resource base in a manner that will meet subsistence needs and increase household incomes.

CHAPTER 6

FINANCIAL PLAN AND FUNDING

6.1.0 IX th Plan Outlay & Expenditure for the State of Orissa

The original out lay approved for IX th Plan for Orissa Tourism was 1950 lakh. However, the actual out lay finally granted was 1191.46 lakh against which the expenditure incurred was 1515.48 lakh (the higher expenditure against lower outlay was due to late receipt of plan cut information from P & C Deptt.). Details of outlay and expenditure year wise are enclosed.

Table 6.1 **Approved outlay for IX th plan (1997 – 2002) and year-wise Outlay & Actual Expenditure incurred during 1997 - 98, 1998 - 99, 1999 - 2000, 2000- 01, & 2001-02**

Name of Scheme	9 th Plan outlay	1997 – 98		1998 – 99		1999 – 2000		2000 – 2001		2001 – 2002	
		Outlay	Expdr.	Outlay	Expdr.	Outlay	Expdr.	Outlay	Expdr.	Outlay	Expdr.
01 Tourist Centre	265.97	27.17	27.11	132.35	132.35	15.49	23.49	13.09	13.11	2.47	10.25
102 Tourist Accommodation	793.95	49.03	132.73	98.54	98.54	30.60	62.03	102.04	99.40	42.04	50.38
001 Direction & Administration	76.89	24.04	21.44	18.02	18.02	9.40	9.40	13.35	11.40	2.23	8.26
104 Promotion & Publicity	703.44	134.76	133.79	86.09	166.09	49.96	145.19	137.52	151.84	73.26	160.66
190 Investment in Public Sector Under Taking	75.00	15.00	15.00	15.00	15.00	-	-	0.01	10.00	-	-
103 Tourist Transport	34.75	-	-	-	-	-	-	-	-	-	-
Total :	1950.00	350.00	330.07	350.00	430.00	105.45	240.11	266.01	285.75	120.00	229.55
Outlay		- 1191.46		Expenditure – 1515.48							

6.1.1 Proposed Xth Plan Outlay

An outlay of 2472.41 lakh has been proposed for Xth Plan Period for Orissa Tourism, the break up of which is enclosed. Final approved outlay has not yet been received.

Proposal for inclusion in Xth Plan (All figures in Rs. Lakhs)

1.	Tourist Centre Development of landscape	10.00
Total (Item 1)		10.00
2.	Tourist Accommodation A. Completed projects/Ongoing projects	
	1. External W/S, External Electrification, Compound wall, Approach Road, Site Development etc. in ongoing tourism projects.	98.22
	2. Furnishing of Tourism Units (29 nos.)	40.00
	3. Development /improvement of Tourism Units	40.00
	4. Completion of staff quarters	3.46
	B. New Projects 1. Development of destination Tourism 15 destinations to be identified during the plan period @ 3 destination per year according to GOI guidelines. GOI would fund 90% & 10% will be born by State Govt. in the form of cost of land, E.g. Water supply, Electrification, Road, etc. Total cost of the 3 destinations will be of the order of rs. 400.00 lakh and the State Share will be Rs. 40.00 lakh per year.	200.00
	2. Development of Rural Tourism GOI provides about 50 lakh for such projects. Participation of State Govt. in the form of land, Ex. Water Supply, Electrification, Road, etc. One village need to be identified each year at a cost of Rs. 10.00 lakh	50.00
	3. Development Circuit Tourism One circuit needs to be developed each year according to GOI guidelines. Participation of State Govt. in the form of land, Ex. Water Supply, Electrification, Road, etc. would cost Rs. 40.00 lakh per annum per circuit.	200.00

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Preparation of 20 years Perspective Plan for State of Orissa

Continued from previous page

Total (Including Items 1, 2 and 3)		2179.68
4	State share to CSP (Annexure – II)	292.73
Total (Item 4)		292.73
GRAND TOTAL Items 1, 2, 3 and 4)		2472.41

6.2.0 The Plan

The Tourism Perspective Plan mentioned in Chapter 4 for the development of basic infrastructure, tourism product development and creation of selective tourism circuits requires a sizeable capital investment towards creation of additional facilities to cater the needs of projected flow of tourist traffic.

6.2.1 For working out the plan following structure has been adopted.

- i) Costing of Basic Facilities

Table 6.2 Costing of facilities to be installed at various places

Facilities	Average Cost (Rs. in Lakhs)	Locations
Tourist Information Centre	18-20	Chandipur / Gopalpur/ Taptapani / Hirakud
Sanitation/Public Conveniences	14-17	Chandipur/Bhitarkanika /Similipal/ Hirakud/Huma
Approach Roads	1200-1300	Bhitarkanika/Dhauli/ Jaypur/Similipal/ Hirakud dam
Cafeteria/Wayside Amenities	90-110	Lalitgiri/Udaygiri/Ratnagiri/Dang mal/ Sambhalpur/Hirakud dam
Potable water	18-25	Gopalpur, Lalitgiri, Similipal
Landscaping/Garden	35-40	Lalitgiri,Udaygiri, Hirakud dam
Parking Area	15-18	Nandankanan, Konark, Puri, Huma
Museum/Art Gallery	50-60	Konark, Buddhist circuit
Security Booth	4-8	Various circuits
Power Back-up 35 KVA	20-24	Various circuits
Budget Hotels [130-150 rooms]	750-1050	Similipal, Chandipur, Satapada, Barkul, Bhitarkanika, Lalitgiri, Ratnagiri, Koraput, Jeypore, Taptapani

Description of the facilities

Tourist Facilitation Centre

- An 200 sq. ft. built up area (at desired location) with necessary tourist maps, brochures
- Communication facility in the form of STD, Fax machine, along with necessary lighting arrangements. Besides this also provide a water cooler facility, tables as well as visitor chairs.
- The average expenditure is expected to be Rs. 2.50-2.80 lacs per center.

Sanitation & Public Convenience

- An 120 sq. ft built up area with lavatory & toilet facilities separately for ladies & gents needs to be constructed along with overhead water storage tanks.
- The necessary lighting facilities as well as 2 wash basins to be provided along with SS fittings.
- The average expenditure is expected to be Rs. 1.25 – 1.40 lacs per center.

Cafeteria / Wayside amenities

- It is proposed to have 2 floor cafeteria at the mentioned areas separately for domestic and international visitors having different types of food/snacks with a full fledged kitchen facility.
- An 1200 sq.ft built up area with hygienic interior, necessary lighting and other fixtures, chairs & tables along with a wash room. In certain cases also have a provision of A.C.
- The average expenditure is expected to be of the order of 18-20 lacs per center.

Approach road

- An approach all terrain road 3.75 mt wide(each lane) two lane is proposed at various mentioned locations. The total road length shall be 35-40 kms.
- The approximate cost shall be Rs.1300 lacs.

Budget hotels

- It is estimated to have 15-20 rooms per hotel along with necessary infrastructure facility as well as interiors and parking area.
- The approximate cost shall be Rs.90 lacs per hotel excluding land cost.

6.2.2 Sector wise classification of expenditure includes the following :

- Basic infrastructure
- Manpower
- Marketing and Promotion
- Identified Products
- Selectrive Tourism Areas/Spots

The expenditure of the development plan has been segregated into short term, medium term and long term plan on the lines suggested in point no. 4.4.0 of Chapter 4.

6.2.3.The annual fund requirement for tourism perspective plan for the state of Orissa is indicated in Table 6.3.

Table 6.3 - Annual Fund Outlay of Orissa (All figures in Rs. Lakhs)

Term	Year	Basic Infrastruct ure	Product Development	Circuits /Areas	Manpower	Promotion / Marketing	Total
SHORT	2002	5	-	-	-	-	5
	2003	15	-	10	3	5	33
	2004	200	150	15	3	5	373
	2005	20	250	25	3	4	302
	2006	15	300	30	4	5	354
	2007	-	-	15	4	5	24
	Subtotal	255	700	95	17	24	1091
MEDIUM	2008	5000	1000	300	10	5	6315
	2009	2000	1500	2000	15	5	5520
	2010	8000	2500	2500	10	5	13015
	2011	-	3500	-	10	10	3520
	2012	5000	-	-	10	8	5018
	Subtotal	20000	8500	4800	55	33	33388
LONG	2013	-	1500	-	5	5	1510
	2014	-	500	1500	4	5	2009
	2015	-	500	1500	4	5	2009
	2016	-	-	2000	4	-	2004
	2017	-	-	2000	4	-	2004
	2018	-	-	2500	4	-	2504
	2019	-	-	3500	4		3504
	2020	-	-	3500	4		3504
	2021	-	-	-			-
	2022	-	-	-			-
	Subtotal		2500	16500	33	15	19048
GRAND TOTAL		23255	11700	20385	105	65	55517

Thus the total plan outlay is of the order of Rs. 556 Crores.

6.3.0Funding

6.3.1 Development of tourism infrastructure and improvement of tourism products mainly consist of the following :

- i) Central Financial Assistance for integrated infrastructure development.
- ii) Central Assistance to state government for developing tourist circuits and product development.
- iii) Institutional Assistance
- iv) Package of incentives for promoting private investment in the tourism sector.

- i) **Central Financial Assistance for integrated infrastructure development.**

Under this scheme, assistance is granted to provide the requisite basic infrastructure including roads, landscaping, water and electricity supply, drainage, sewerage, waste disposal system etc. in identified tourism spots. The cost of development for each centre is proved to be shared amongst the central govt state government and financial institutions like Tourist Finance Corporation of India[TFCI], State Finance Corporation etc.

The total cost of development for each centre shall be worked out.

All the detailed feasibility studies and preparation of Master Plan will be funded by the Central Government. The developed land will be allocated to investors for putting up the necessary tourism superstructure in such a way that the loan component of

the development cost and the interest thereon is recovered in a period of 8-10 years.

ii) For developing tourist circuits and product development.

Since most of the infrastructure components and delivery systems are within the preview of the state government, providing financial assistance to State Government is mainly developing the infrastructure for tourism. The central Government investment for the improvement and creation of tourism circuits are channelised through the state government on a cost sharing basis. The specific schemes for which assistance is provided have been subdivided into

- (i) construction schemes (forest lodges, tourist complex, wayside amenities, tourist reception centre, public convenience etc.)
- (ii) tourist transport (mini buses, jeeps etc. for wild life viewing, cruise boats, ferry launches for water transport, tourist coaches in selected circuits etc.).

6.3.2 The most popular pattern for funding is the 'normal funding' under which, the Deptt. of Tourism, Govt. of India, meets almost the entire expenditure except the cost of land and interior decoration in case of the construction projects. Around 60% of the project cost has to be raised as loan from financial institutions or banks. This method of funding is applicable to bankable projects requiring large investment.

The state government desirous of availing the central assistance follows the following procedure :

- i) Preparation of list of projects proposed to be taken up during a particular year.

- ii) Discussion of the aforesaid list of the projects with the Deptt. of Tourism Govt. of India.
- iii) Short-listing or prioritizing of approved schemes.
- iv) Submission of detailed project reports alongwith required documents i.e. blue print of the project.
- v) Scrutiny of projects and proposals with reference to the yardsticks of approved schemes, their desirability and availability of resources.
- vi) Approval of projects satisfying guidelines for financial assistance.

6.3.3 Grant of Assistance

The grant of assistance to state government for the development of tourism include the following :

- i) Demand criteria i.e, number of popular tourist destinations and volume of tourist traffic.
- ii) Supply criteria i.e, availability of tourist facilities in respective centers.
- iii) Past performance and capacity criteria
- iv) Unique attractions of the state.
- v) Destination and circuits identified in the National Action Plan

6.3.4 Institutional Assistance

The institutional assistance for developing tourism facilities is available from domestic financial institutions i.e, TFCI, IFCi, SIDBI, SFCs, IDBI, ICICI.

6.3.5 TFCI is a specialized all India development finance institution to cater to the needs of the tourism and related activities, facilities and services i.e.. hotels, restaurants, holiday, resorts, amusement parks and complexes, safari parks, ropeways, cultural centers, convention halls, transport, travel and tour operating agencies, air, taxi services etc. The salient features of providing assistance by TFCI are :

- i) Providing all forms financial assistance for new, expansion, diversification and renovation projects, related activities, facilities and services.
- ii) Providing assistance by way of rupee loans, direct subscription/underwriting of public issues of shares/debentures.
- iii) Providing financial assistance to projects with capital cost of Rs. 3 crores and above; projects costing upto 3 crores and financed by TFCI alongwith the state level institutions/banks, major projects are financed with other All India Institutions like IFCI, IDBI, ICICI.
- iv) General norms of assistance are :
 - Minimum promoters' contribution 30% of project cost
 - Debt : Equity Ratio 1:5:1
 - Interest Rate bond : 14.5% to 17% p.a.
 - Repayment period 8 to 12 years.

6.3.6 OECF is the Japanese government's bilateral Official Development Assistance (ODA) leading agency to government and governmental institutions. The salient features of OECF assistance are as under :

- i) Assistance is available to finance upto 85% of the eligible components of the total project cost.
- ii) Items ineligible for OECF finance are :
 - a) Cost of land
 - b) Compensation/rehabilitation cost
 - c) Duties and taxes
 - d) Interest during construction
- iii) Terms and conditions of the loan to states would be as per the instructions issued from time to time by Ministry of Finance, Department of Economic Affairs regarding lands

External assistance is passed on to the State Government as 70% loan and 30% grant

6.3.7 The state of Orissa accords a very high priority for development of tourism in Orissa with the following main objectives

- a) Optimum harnessing of resources to attract the maximum number of domestic and foreign tourists with increased average duration of their sojourn in Orissa.
- b) Development of tourism-related industries which also lead to increased employment opportunities.
- c) Promotion of the rich handicrafts and handlooms of Orissa through tourism.
- d) Promotion of the natural grandeur and cultural heritage of Orissa through tourism.
- e) Promotion of cross-cultural interaction, socio-cultural amity and economic development through tourism and

- f) Involvement of the private sector, autonomous bodies, local authorities and the people at large in promotion of the tourism.

6.3.8 The state will encourage and facilitate activities that will promote tourism consistent with the tradition and culture.

The state will primarily act as a promoter and catalyst to create an environment for planned and sustained development of tourism.

6.3.9 Development Approach

- All projects assisted by Government of India and most of the state-sponsored projects will ordinarily be grounded with the Thrust areas.
- Tourism development projects (in specified spheres to be identified in individual cases) taken up management by Municipal Corporations, Municipalities, Notified Area Councils, Development Authorities, Regional Improvement Trusts, Zila Parishads etc. may be supported with one time assistance upto fifty percent of the estimated cost (not exceeding a fixed ceiling) from the Government after the projects are completed in all respects.
- Locations hitherto identified as Tourists Centres will be reviewed for short listing of viable ones. These locations will be supported by publicity efforts according to importance.
- Tourist towns in the identified areas will be covered, in a phased manner, under the IDSMT scheme and other schemes of urban development, priority being placed on creation of tourism related infrastructure facilities.

6.3.10 Land

- Government land for tourism-related activities declared as industrial activities under State Industrial Policy, 1996 will be allocated at the concessional rate prescribed under the said Policy of Industries. However, as mentioned earlier, the modifications are being incorporated in the Tourism Policy keeping in mind the change in the State Industrial Policy.
- The Industrial Infrastructure Development Corporation of Orissa (IIDCO) would be the nodal agency for acquisition of land for tourism projects whenever private entrepreneurs seek assistance of Government for the purpose, as in case of industries.
- Revenue Authorities including Collectors will make allotment of land for tourism projects as in case of Industries.

6.3.11 Finance

- The Directorate of Tourism and State Financing Agencies would make every endeavor to assist the tourism projects in getting adequate financial support within and outside the state.

6.3.12 Roads

The state will place high priority in planning new roads and maintenance and improvement of existing roads which provide linkage to thrust areas and other identified destinations of tourist importance. The Marine Drive from Puri to Konark, the road from Puri to Satapada, Pipili to Konark and Bhubaneswar to Puri will receive topmost priority.

The state will take steps to provide adequate transport services for various categories of tourists. Five percent of the accrual from M.V. Taxes will be earmarked for various passenger amenities.

- The Private sector will be encouraged to invest in this field to the maximum extent. Permits will be issued liberally by the Transport Authorities in favour of the Tour Operators for operation of Deluxe and Air-conditioned coaches and car on the identified travel routes. Operation of three-wheelers and car-van rental service will also be encouraged.
- Private entrepreneurs operating tourist taxis will have to use meter in accordance with the rules prescribed by the Transport Department. Rates will be fixed distance-wise from point to point. Auto-rickshaw will have meters.
- For investment in the field of Tourist Transport Service, support of the State Financing Institution and Banks will be organized.

6.3.13 Air Connection

Air link is vital to attract investors, spur industrial/commercial activities and also to promote tourism. Bhubaneswar airport is under expansion/moderation to facilitate landing/take off of wide-bodied aircrafts, specially for chartered flights. The state government will also continue to make efforts to have an international airport here. An air cargo complex with full custom clearance facility would come up. Efforts are on to increase the frequency of flights to Calcutta, Chennai, Mumbai and Hyderabad.

The State Government will endeavor to have direct links with important cities of the country. Efforts would continue to have a second national airport in the state. Inside the state, air taxi services connecting

Bhubaneswar with Jeypore, Jharsuguda and Rourkela will be organized. Efforts will be made to have air strips of industrial complexes like Dubri, Angul, Gopoolpur, Paradeep, Balasore etc. for air taxi operation.

6.3.14 Water Transport

- There are many places of interest in areas like Chilika and Bhitarkanika, which are best negotiated by boats. Tourists visiting these areas often look for regular ferry services to visit their destinations. The private sector will be encouraged to provide boats at places like Gupti, Chandabali, Satapada etc. River based transport will be encouraged.
- Water Transport apart from its need as ferry service, also be encouraged for amusement and water support. The existing infrastructural facilities of the water sports complex at Chilika will be fully utilized. The Sports and Youth Services Department will take steps for providing water sports facilities at specified locations. The private sector will be encouraged to set up such complexes.

6.3.15 Hotels & other tourism related facilities

- In view of the rising trend in the number of tourists visiting the state, special attention will be given to increase the accommodation facilities in important tourist centres in the state.
- State Government will encourage the private sector for this purpose by providing appropriate incentives for establishments of new hotels, as contained in the Industrial Policy, 1996. Preference will be given to locations at or in close proximity of identified Tourist sites.

- The following tourism related activities will be treated as industrial activity and will be entitled to incentives applicable to new industrial units, except exemption/deferment of sales tax and exemption of Octroi on raw materials and packing materials under Industrial Policy, 1996.
- Hotels/Motels/Golf courses/Ropeways and Wayside Amenity Centres satisfying the norms/conditions stipulated by the state government.
- Transport facility with air-conditioned car-coaches with minimum capital investment of Rs. 15 lakhs operation in travel circuits identified/certified by the Department of Tourism.
- Motor launches operating in tourist centres identified/certified by the Tourism Department with minimum investment of Rs 10 lakh.
- Water sports complexes and amusement parks with minimum investment of Rs. 10 lakh and operated in tourist centres and identified by the Department of Tourism.

6.3.16 Religious Tourism

- Orissa is endowed with numerous archaeological and religious monuments, which attract pilgrims and tourists having interest in archaeology, culture and region.
- A drive will be made for conservation and beautification of such monuments in identified tourist circuits and special tourism areas.
- Local bodies will be fully involved in providing amenities to tourists, including rest sheds and Dharamshalas. Volunteers of the National Services Scheme, Nehru Yuva Kendras, National Cadet Corps, Scouts and Guides and other local organizations will be motivated to join the efforts of local bodies to ensure sanitation and

cleanliness of tourists and pilgrim centres. Police protection and vigilance will be strengthened at those centres.

6.3.17 Convention Tourism

- Hoteliers, industrial/business houses and other private entrepreneurs will be encouraged to establish and maintain convention centres, in order to attract national and international meetings, conferences and cultural events. A large convention complex will be established at Bhubaneswar and efforts would be made to establish facilities at other important centres.

6.3.18 Package of Incentives for Promoting Private Investment in the Tourism

For attracting private investment in the tourism sectors, the following incentives are available.

- i) Priority status : Hotels and tourism related activities are declared as priority sector for foreign investment. As a result, 100% foreign equity is permissible in the sector and automatic approvals and also grant by the Reserve Bank of India for foreign equity upto 51% and subject to specified parameters.
- ii) Interest Subsidy : Approved hotels upto 3 star category and heritage hotels outside the 4 metro cities (Delhi, Mumbai, Calcutta and Chennai) are eligible for interest subsidy ranging from 3% to 5% in respect of loans taken from IFCI, TFCI and State Financial Corporations. This subsidy increases in the case of hotels constructed in the travel circuits -cum-destinations identified for intensive development under the National Action Plan for Tourism (NAPT).
- iii) Capital Subsidy for Heritage Hotels : Capital subsidy of 10% of the project cost or Rs. 5 lakhs, whichever is less is available for developing any structure (palace/fort/haveli etc.) of 75 years or

above as a heritage hotel, provided they are located outside the limits of corporations/municipalities and areas having more than 100 hotel rooms.

- iv) Confessional Customs Duty : Customs duty on specified items has been reduced to the level as applicable to project imports i.e, 25% provided the goods imported are required for the initial setting up of the hotel or for any substantial expansion of the hotel. Equipment for adventure sports can also be imported at a concessional rate of duty. Customs duty on specialised foods items have also been reduced to 25%.
- v) Income Tax Exemptions : 50% of the profits derived by hotels, travel agents and tour operators in foreign exchange are exempt from income tax under section 80 HHD of the Income Tax Act. The remaining profits in foreign exchange are also exempt if reinvested in tourism related projects. In respect of hotels which start operating in other places except Delhi, Calcutta, Mumbai and Chennai, the deduction allowed is 30% only (for 10 assessment year).
- vi) Import of Essential Goods : Hotels and travel agents/tour operators and restaurants approved by the department of tourism, govt. of India are entitled to import essential goods relating to the hotel and tourism industry upto a value of 25% and 10% respectively of the foreign exchange earned by them during the preceding licensing year.
- vii) Export Promotion Capital Goods (EPCG) Scheme: the import of capital equipment (including upto 10% under scheme at sl. No. (v) above) by hotels and restaurants, travel agents and tour operators is allowed at concessional rate of customs duty of 10% subject to an export obligation four times of cost, insurance and freight (CIF) value of the imports to be fulfilled in a period of 5 years. In case of CIF value of the imports of 20 crores or more, no duty is payable subject to export obligation to be 6 times the CIF value and the period to be 8 years.

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- viii) Liberalized Exchange Rate Management Scheme (LERMS) : Hotels, travel agents, tour operators and other organisations connected with the tourist trade are covered under LERMS. Authorised dealers can release foreign exchange for business visits, participation in conferences, seminars, training etc. with prior approval of the department of tourism. Under the Exchange Earners Foreign Currency (EEFC) Accounts Scheme (extended to hotels, travel agents, tour operators etc.), 25% of inward remittances in foreign exchange can be credited to this account and utilised for specified purposes.
 - ix) Assistance for Development of International tourism (ADIT) : Travel agents and tour operators in the country are being given assistance under the scheme for market research, promotional visits abroad etc. to develop markets abroad.
 - x) Investment Facilitation Cell : This cell has been setup in the Department of tourism for providing assistance of perspective entrepreneurs including the following :
 - a) Prepare investment profile for each state
 - b) Establishing linkages with embassies and other institutions
 - c) Process investment proposals received from both local and foreign investors and obtain various approvals and clearances from various agencies like FIB, SIA, MOEF etc.
 - d) Assist entrepreneurs in getting import licenses, finance land etc.
 - e) Provide technical assistance.

6.3.19 Private Sector Participation

Since various incentives have been offered for private sector participation as discussed the following projects would be considered for private sector participation.

Table 6.4: List of Projects

Sr No	Project
1	Boat Cruise
2	Ballooning
3	Ayurved Centre
4	Water Sports
5	Ropeway

CHAPTER 7

MARKETING AND PROMOTION STRATEGY

7.1.0 Areas Identified

7.1.1 The development priorities of the government are to place the economy on a significantly higher growth path that will deliver greater economic benefits in the context of the new global economic and security order but also enhance human well being, achieve social equity, sustainability and efficiency.

7.1.2 The perspective plan has identified certain areas and aspects which have to be developed and promoted by the Tourism Department in close co-ordination with the concerned departments/bodies/associations from time to time.

7.1.3 There are certain areas which can be focused on the type of tourists i.e,

- | | |
|---------------------|-----------------------------------|
| • Ethnic Tourism | <i>International Visitors</i> |
| • Religious Tourism | <i>Domestic Visitors</i> |
| • Adventure Tourism | <i>International visitors</i> |
| • Water Sports | <i>Domestic</i> |
| • Urban Haat | <i>Domestic and International</i> |
| • Boat cruise | <i>Domestic and International</i> |
| • Buddhist circuit | <i>International visitors</i> |

7.1.4 Keeping in view the above areas of development, the strategy has to be focused and type specific which shall vary & cannot be an uniform approach.

The strategy for the development of tourism should be based on the following

- Connectivity
- Infrastructure
- Hygiene
- Safety & Security
- Affordability
- Accessibility

7.2.0 Strategy

7.2.1 The marketing of the proposed plan should be a 2-tier structure.

1st tier

- Creation of facilities
- Awareness build - up
- Target the tourist community (state specific)

2nd tier

- Invite private participation
- Provide operational incentives

To achieve this following steps need to be adopted

- Project Orissa as a major destination within and outside the country.
- Identify the USP's of various circuits / products.
- Focus on the operators and agents other than OTDC.
- Improve inter destination connectivity.
- Provision of Basic facilities [irrespective of the traffic] needs to be developed at various identified areas.

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- Attract high end tourist and focus on certain themes/products.
 - Provide tourist information services before their arrival at the station such as
 - ◆ Historical & cultural background
 - ◆ Climate
 - ◆ Transportation schedules
 - ◆ Packages available
 - ◆ Location of shopping plazas, markets, postal facilities
 - ◆ Banks, medical facilities
 - ◆ Regional institutions

7.2.2 The proposed strategy shall provide benefits if certain tools are provided such as

- Shuttle transport facilities between spots and nearest connecting point.
- Communication linkages
- Tour operators – the main promoter
 - Provide budget for promotion [brochures, advertising]
 - Provide franchise for a particular territory.
 - Sales incentive (1%, 2% commission) on every booking which the state government shall provide.
- Develop a web site indicating the connectivity, infrastructure in terms of accommodation, period to visit, excursion trip, name of operators, availability of guides, appropriate duration along with cost components for Budget tourist.
- Centralised booking system to be adopted i.e, single window mechanism linking all PWD/ Forest bungalows/Tourist guest house & bungalows./OTDC for hotels as well as tourist bungalows, wherein

booking can be decided on respective allocations which has to be pre decided in consultation with all officials.

- Invite private participation by giving promotional incentives such as :
 - Free land for a period of 8-10years [state owned] for construction of 40 bed-50 bed hotel. Provide operational incentives such as :
 - ◆ LT Transformer [Power line]
 - ◆ Bore well [water]
 - ◆ Vehicle [sales tax off]
 - ◆ Luxury tax and entertainment tax waiver for a period of 5 years.
- Provide free mini buses for transit services wherein provide
 - ◆ Subsidy on interest
 - ◆ Provide/arrange for road licence
 - ◆ Fuel and maintenance to be borne by operator.
- Strengthening of major arteries, take the assistance of centre and state, the NHAI scheme of 50:50 participation.
- For strengthening service roads, approach roads, additional internal roads get assistance from PM Rural scheme [Gramin Sadak Yojana].
- For remote areas, central power backup systems [generator 30-35 KVA] and charge for the same at higher rates than SEB's.
- Promote local inhabitants / tribal people as guides, operators.