

*Sector Specific Inventory & Institutional Strengthening for
PPP Mainstreaming - Tourism Department*

**DEVELOPMENT OF
ADVENTURE SPORTS CAMPS
ON PUBLIC PRIVATE PARTNERSHIP MODEL
AT VARIOUS LOCATIONS IN KARNATAKA**

PRELIMINARY FEASIBILITY REPORT



APRIL 2012

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LIST OF ABBREVIATIONS

BPO	Business Process Outsourcing
CAGR	Compound Annual Growth Rate
CMIE	Centre for Monitoring Indian Economy
DEA	Department of Economic Affairs
DoT	Department of Tourism, Government of Karnataka
F&B	Food and Beverages
Goi	Government of India
GSDP	Gross State Domestic Product
IDD	Infrastructure Development Department
INR	Indian National Rupee
IRR	Internal Rate of Return
IT	Information Technology
Km	Kilometer
KSTDC	Karnataka State Tourism Development Corporation
MICE	Meetings, Incentives, Conferences and Exhibitions
MIS	Management Information System
NH	National Highway
NPV	Net Present Value
NSDP	Net State Domestic Product
PPP	Public Private Partnership
PSC	Public Sector Comparator
RFP	Request for Proposal
RoFR	Right of First Refusal
ROW	Right of Way
RTC	Rights Tenancy & Crops
SH	State Highway
Sq.Km.	Square Kilometer
TA	Transaction Advisor
TOR	Terms of Reference
VFM	Value for Money

CHAPTER

1

EXECUTIVE SUMMARY

Karnataka is the country's fifth most popular tourist destination. With the largest number of institutes in hotel management and catering technology in the country, the State has a large pool of skilled human resources. The Sector is attracting significant investment by domestic and global players as infrastructure is being ramped up to meet the needs of the growing tourist activity. Through the Karnataka Tourism policy 2009-14, the state government sets a vision to promote tourism as Karnataka's principal and largest economic activity, as an employer, revenue-generator and engine of growth, by being among the top two tourism destinations in India by 2016-17.

In this context, M/s Feedback Infrastructure Services Private Limited, New Delhi has been engaged by the Infrastructure Development Department, Government of Karnataka for providing Consultancy Services for "Institutional Strengthening & Sector Specific Inventory for PPP Mainstreaming in Tourism Sector".

The PPP concept is relatively new and the implementing officers require necessary insight, orientation and assistance into the project development for effective marketing and implementation of the projects. Hence, the basic aim of the assignment is to strengthen the project development process in the Tourism Department for implementing Tourism Infrastructure Projects through Public Private Partnership (PPP).

The Present deliverable has been prepared as a Preliminary Feasibility Study with an objective to provide an insight of financial viability of the envisaged project – "Development of Adventure Sports Camp at Shantisagar, Trasi, Anekal and Kere Tonnur through Public Private Partnership". The report also presents various project structuring options, applicable laws & acts with legal and regulatory framework which shall be considered while implementing the project through PPP. The report concludes with recommendations on the project structure and concession period considering the financial viability and nature of the project.

Results of financial analysis show that Post Tax Equity IRR of the projects in all locations vary between 24% - 26%, which is higher than the target of 20%, which is IRR that investors will most likely seek from such an investment. And considering a discount rate of 20%, the NPV of equity cash flows, which symbolizes the surplus generated by the project, while insuring 20% returns on developer's equity, comes out to be INR 1.54 Crore for Anekal which is the highest among all locations. While for other project locations the equity NPV is around 80 lakhs. This indicates that the envisaged projects at Shantisagar, Trasi, Anekal and Kere Tonnur have potential to generate INR 85 Lakh, INR 81 Lakh, INR 154 Lakh and INR 85 Lakh respectively in NPV terms, which is the indicative amount that DoT may receive from the private developer/s.

CHAPTER

2

INTRODUCTION

2.1 ASSIGNMENT BACKGROUND

Karnataka State possesses various attractive spots of natural beauty and rich cultural heritage. There is an array of ancient sculpture site of heritage value, breathtaking landscape, exotic wildlife, temple towns, Heritage sites, Temples, Forts, Sandalwood Forests, Coffee plantation, Water Falls, Wildlife, Western Ghats, Hill Stations. In this background, there are ample opportunities for tourism in Karnataka having traditional tourist spots, temples with good sculptural glory, religious places, seashores with spectacular beauty Malnad area and good climatic conditions. In the year 2010, Karnataka ranked fifth among States as a tourist destination with around 3.8 lakh international and over 382 lakh domestic tourists visiting the State. The State has the second-highest number of protected monuments in the country (507 centrally and 750 additional protected by the State Governments) to nature and wildlife – there is much to draw the tourist to Karnataka.

Karnataka is the country's fifth most popular tourist destination. With the largest number of institutes in hotel management and catering technology in the country, the State has a large pool of skilled human resources. The Sector is attracting significant investment by domestic and global players as infrastructure is being ramped up to meet the needs of the growing tourist activity. Through the Karnataka Tourism policy 2009-14, the state government sets a vision to promote tourism as Karnataka's principal and largest economic activity, as an employer, revenue-generator and engine of growth, by being among the top two tourism destinations in India by 2016-17.

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2.2 NEED OF THE ASSIGNMENT

In Karnataka 105 PPP projects worth Rs. 80,000 crores are at various stages of development and implementation. In addition to the above projects in pipe line, 30 pre-feasibility studies have been undertaken and nearly 30 are being planned as a part of this assignment out of which 5 pre-feasibility studies shall be of the projects pertaining to the tourism sector. To develop these projects it requires generating an inventory of projects, undertaking pre-feasibility studies, identification of Transaction Advisor (TA) for projects to be taken for bidding. Further the tourism department would require hand-holding during the project development process in areas of information generation /

sharing, monitoring of projects, etc. For mainstreaming PPP in tourism sector / department there is a need to build institutional capacity through manning and training. The information on projects that are generated out of this process need to be initially marketed through workshops before they are bid-out with the assistance of respective Transaction Advisors.

2.3 OBJECTIVE AND SCOPE OF WORK

The main purpose of the consultancy service is to assist the Infrastructure Development Department, Government of Karnataka in undertaking the following activities:

2.3.1 Strategic Objectives

- Providing assistance in organizing an initial workshop in the tourism sector.
- Drawing up the Tourism Sector inventory and undertaking five pre-feasibility studies.
- Preparation of Procurement Plan for Selection of Transaction Advisors/ Technical Consultant for the above identified projects.
- Providing assistance in Information collation / updation about the programmes / projects in necessary websites / MIS
- Providing assistance in creating a PPP cell within the Tourism department to institutionalize the PPP mainstream.
- Capacity building of the Department's PPP cell personnel in areas of appraisal of studies, appraisal of bid documents and MIS.
- Providing assistance in investor meet for the Tourism Sector as sector knowledge partner.

2.3.2 Detailed Scope of Work

The detailed scope is as below:

- i) Providing assistance in organizing an initial workshop in the tourism sector:** To help in organizing a workshop in order to understand the tourism sector requirement, learnings from best practices from India and abroad about programmes and projects implemented successfully through PPP and draw up a tourism sector inventory of PPP projects that can be implemented in Karnataka.
- ii) Drawing up the Tourism Sector inventory and undertaking five pre-feasibility studies:** To undertake five pre-feasibility studies and finalise the tourism sector inventory. Part I- Assessment and ranking of 10 possible locations in the state where a particular facility to meet public need can come up based on economic criteria, financial analysis and their strategic importance to the state etc. Part II- Detailed Study for three locations based on the above ranking; locations will be identified in consultation with the tourism department and the IDD.
- iii) Preparation of Procurement Plan for Selection of Transaction Advisors/ Technical Consultant for the above identified projects:** To prepare a procurement plan for selection TA/ tech consultant(if needed) for projects resulting out of the pre-feasibility studies already

undertaken earlier or as a part of this assignment. Procurement Plan will include: (a) TOR for Transaction Advisor/ Technical Consultant including task, Deliverables and Timeline; (b) Experience required for firm and experts for Transaction Advisor/ Technical Consultant; (c) Evaluation Matrix (This will be moderated by the Tourism Department/ IDD to remove any bias). To train the department personnel to select TA/ technical consultant for other projects.

- iv) Providing assistance in Information collation / updation about the programmes / projects in necessary websites / MIS:** To collate and provide programme / project related information in the websites of Tourism Department / IDD / Project Review Unit (PRU) and train the department personnel on the same.
- v) Providing assistance in creating a PPP cell within the Tourism department to institutionalize the PPP mainstream:** To assist the Tourism Department in creation of a PPP cell by providing necessary assistance for administrative approval like draft Government Order / Cabinet Note. To train the personnel in the cell to undertake project monitoring by functioning also as a Project Monitoring Unit.
- vi) Capacity building of the Department's PPP cell personnel in areas of appraisal of studies, appraisal of bid documents and MIS:** To provide assistance in training PPP cell personnel in areas of appraisal of studies, projects and appraisal of bid documents by using available tools (DEA Toolkits) or developing newer tools. To provide hands-on training to PPP cell personnel and to identify 30 to 50 personnel within the department / sector / underlying agencies covering various functional areas like engineering, finance, commerce & legal under DEA Program.
- vii) Providing assistance in investor meet for the Tourism Sector as sector knowledge partner:** To draw up the tourism sector investment potential in the State and to assist the Tourism Department & State as knowledge partner (to prepare brochure and presentation with project profile) in undertaking Investor Meet where the potential projects will be show cased.

2.4 THE PRESENT DELIVERABLE

This report has been prepared as a Preliminary Feasibility Study with an objective to provide an insight of financial viability of the envisaged project. The report also presents various project structuring options, applicable laws & acts with legal and regulatory framework which shall be considered while implementing the project through PPP. The report concludes with recommendations on the project structure and concession period considering the financial viability and nature of the project.

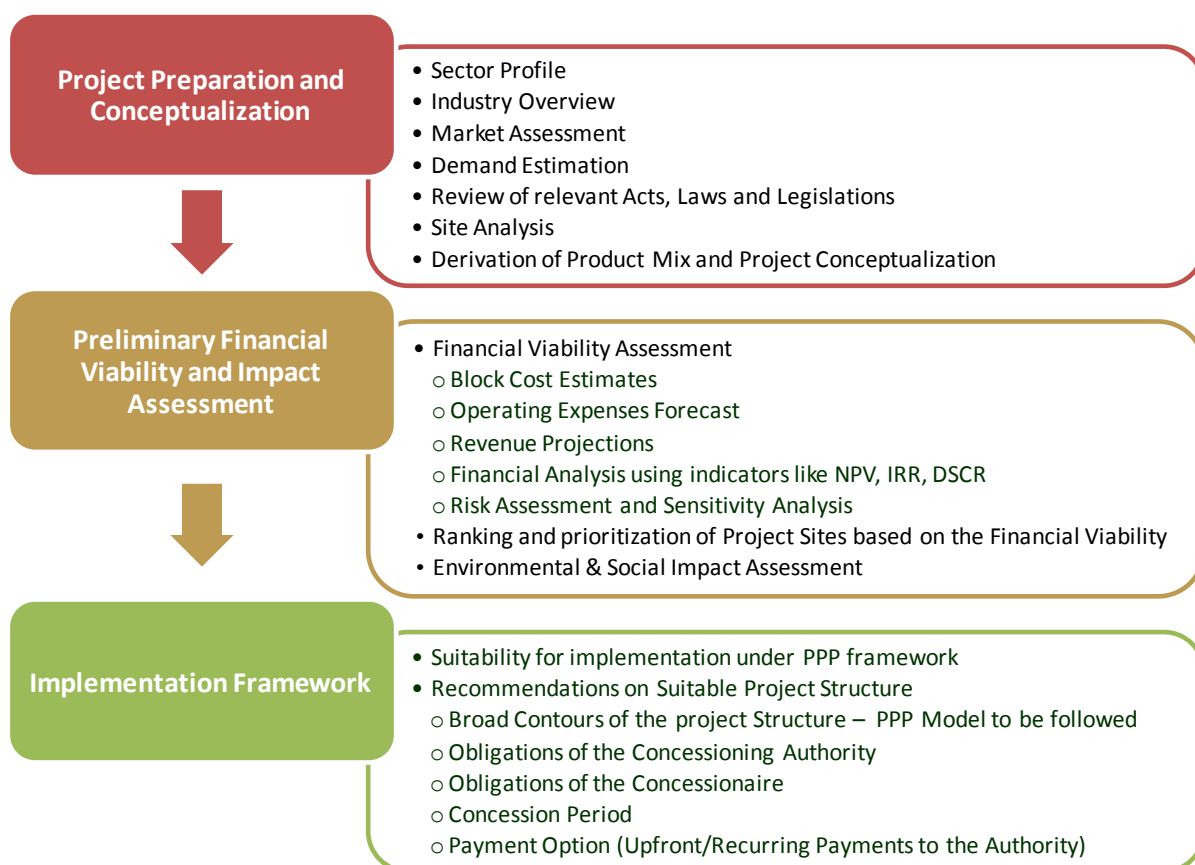
CHAPTER 3 APPROACH AND METHODOLOGY FOR PRESENT DELIVERABLE

3.1 APPROACH

A stage wise approach for the subject assignment will be adopted. The approach will include:

- Research supported with quantitative and qualitative analysis
- Collection of data from authentic sources
- Cross checking of data before using for analysis
- Validation of the outputs at appropriate levels in the organization
- Validation of viability with the market players
- Inputs on the attractiveness of the proposed PPP structure
- Continuous feedback and inputs from the client etc.

The above mentioned approach and the following methodology will be adopted to undertake the study. The activities to be performed can be clubbed in following three major parts:



3.2 METHODOLOGY

Following section describes the activities and research methods which will be used to undertake the assignment:

3.2.1 Project Preparation and Conceptualization

- **Sector Profile and Industry Overview:** Sector Profile will detail out the overview of the sector, key issues, need of project etc. As a part of secondary research, documents like Karnataka Tourism Master Plan, Karnataka Tourism Policy, Vision Plans, Previous Reports in the tourism sector, etc will be review and analysed to understand the regional profile and get an overview of the tourism industry. The consultations with various stakeholders will also be used to get a firsthand experience of various development issues pertaining to the sector.
- **Market Assessment and Demand Estimation:** In order to know the marketability of the project, analysis of demand supply scenario of project components in areas of influence, will be conducted. Various demand-supply parameters influencing the marketability of the tourism infrastructure project (e.g. typology, absorption, pricing trends) will be studied and analyzed. Preliminary benchmarking analysis will be conducted to understand positioning of the tentative product mix. A mix of secondary and primary survey techniques will be used, which include discussion with various players in market like developers, investors etc.
- **Review of relevant Acts, Laws and Legislations:** Review of existing development bye Laws and regulations will be undertaken. The development control rules, zoning rules and other relevant laws and rules will be reviewed in the context of subject development.
- **Study of identified Sites and SWOT Analysis:** The identified sites will be studied in order to understand its suitability potential for the kind of development, which is envisaged. Various factors influencing the site's potential like accessibility, linkages, physical features, economic activities and developments in proximity, proximity to important commercial, transportation and residential hubs etc will be analysed. Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis will be conducted. Primary and secondary research tools like interviews, reconnaissance survey, study and analysis of available media and research reports, will be used at this stage.
- **Derivation of Product Mix and Project Conceptualization:** Based on sector profile and need of the development, projects will be conceptualised and its broad contours will be identified. Broad contours will include the project components, area requirements, investment requirements etc. Case studies of similar project executed elsewhere will be conducted to understand its various technical, legal and financial aspects. Based on demand assessment, a

product mix will be derived. Product mix will identify activities to be carried out and broad guidelines for location in the site and areas required.

3.2.2 Preliminary Financial Viability and Impact Assessment

- **Financial Viability Assessment:** Based on the data collection, analysis and discussions with stakeholders concerned a financial model would be prepared. Suitable assumptions regarding the cost, revenue sources and expenses would be made. A preliminary financial feasibility would be undertaken to assess the development potential of the site. The financial feasibility analysis would consist of:
 - Cost Estimation (Capital as well as recurring Expenses) - The cost of implementing the above conceptualized project would be derived. Operating expenses will be estimated based on the proposed usage pattern and base cost for the operating various project components like electricity, water, housekeeping, landscaping, security etc. The base cost for O&M will be arrived at after analyzing expenditure pattern for the similar projects which are already operational. An appropriate percentage will be applied for the projection of cost in upcoming years.
 - Identification of various Revenue Streams and Revenue Projections - Revenue projections will be done based on proposed occupancy pattern and base price/user charges for the proposed activities. The base price for activities will be determined after benchmarking analysis with other facilities which are similar in configuration. An appropriate percentage will be applied for the projection of revenue in upcoming years.
 - Financial Viability Assessment - Financial analysis will be undertaken to understand the project's potential to generate sufficient returns in order to make it a commercial venture. Various financial indicators like Net Present Value (NPV), Internal Rate of Return (IRR), Debt Service Coverage Ratio (DSCR), Value for Money (VFM), etc. will be analyzed to estimate the project's viability.
 - Scenario generation and Sensitivity Analysis - The analysis of various risks like decrease in footfalls, competition faced from the existing similar facilities etc will be analysed and factored-in the financial analysis.
 - Recommendations on the best option based on commercial viability.
- **Environmental & Social Impact Assessment:** A preliminary assessment will be done to understand environment & social impacts of the project and respectively mitigation measures will be identified to address the key issues.

3.2.3 Implementation Framework

- **Suitability for implementation under PPP framework:** The project to be undertaken under PPP should have sufficient profit generating potential, in order to attract the private bidders. If there is any viability gap, that would be filled with the government's grant or some other

alternate sources. Based on financial analysis results, it will be analyzed whether the project is suitable to be undertaken under PPP framework or not.

- **Recommendations on Suitable Project Structure:** Based on project financials and impact assessment an implementation strategy will be worked out and a suitable structure of PPP transaction will be finalized at this stage. Various options for structuring the transaction having varying possibilities of risks and liabilities for both the parties of transaction will be suggested. The following broad modalities will also be suggested:
 - Broad Contours of the project Structure – PPP Model to be followed
 - Obligations of the Concessing Authority
 - Obligations of the Concessionaire
 - Concession Period - duration of PPP contract
 - Payment Option (Upfront/Recurring Payments to the Authority)

CHAPTER

4

TOURISM SECTOR PROFILE

4.1 AN OVERVIEW OF THE STATE

4.1.1 General Overview



Figure 4.1: Karnataka - Physical Map

Karnataka is a state in South West India located in the western half of the Deccan plateau. Karnataka is bordered by the Arabian Sea to the west, Goa to the northwest, Maharashtra to the north, Andhra Pradesh to the east, Tamil Nadu to the southeast, and Kerala to the southwest. The state covers an area of 1,91,976 sq.km. (74,122 sq.mile) or 5.83% of the total geographical area of India. It is the eighth largest Indian state by area. With over 61 million inhabitants (2011), Karnataka is the ninth largest state by population, comprising 30 districts. Physiographically, the state forms a part of two well defined macro regions of Indian Union; the Deccan Plateau and

the Coastal plains and Islands. The State has four physiographic regions viz. Northern Karnataka Plateau, Central Karnataka Plateau, Southern Karnataka Plateau and Karnataka Coastal Region.

Karnataka is well connected by a wide network of air, rail and road with important destinations of the country as well as of the globe. Bangalore being the capital of the state is well connected by air, rail and road.

- **By Air:** The state has 6 airports located in Bangalore, Mangalore, Hampi, Hubli, Mysore, Belgaum and Bijapur. The Mysore airport is not operational at the moment. Bangalore has an international airport that operates flights to important destinations across the globe.
- **By Rail:** Karnataka has a well maintained network of rails connecting important destinations of the state. Bangalore is the most important railhead, served with express and super-fast trains to/from different parts of the country.
- **By Road:** The excellent road network of the state offers a comfortable and hassle free journey to the visitors by bus or car. Major cities and tourist destinations of South India can be approached by road from Bangalore.

4.1.2 Economic Overview

The state offers a wide range of fiscal and policy incentives for businesses under the New Industrial Policy, 2009-14. Additionally, the state has well drafted sector-specific policies for biotechnology, IT, Business Process Outsourcing (BPO) and textiles.

The state has well-developed social, physical and industrial infrastructure and virtual connectivity; has good supply and distribution of power, seven airports and substantial port infrastructure (one major and ten minor ports).

Karnataka has emerged as a key state with knowledge-based industry such as IT, biotechnology and engineering. The state also leads in electronics, computer software and biotechnology exports, with US\$ 19.13 billion for 2009-10. It is the science capital of India with more than 100 Research and Development (R&D) centres, and a preferred destination for multinational corporations with more than 650 such companies.

Following are some key snapshots of the economic indicators for the state:

GSDP

- At current prices, the Gross State Domestic Product (GSDP) of Karnataka was about US\$ 70.8 billion in 2009-10.
- State's average GSDP growth rate between 2004-05 and 2009-10 was about 13.9 percent

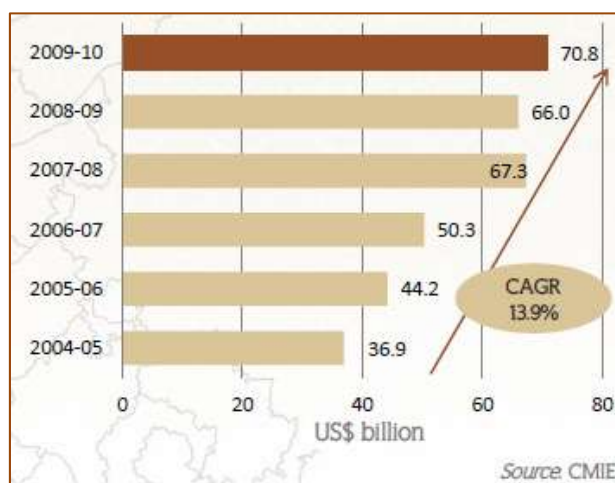


Figure 4.2: Karnataka GSDP, 2004-2010

NSDP

- The Net State Domestic Product (NSDP) of Karnataka was about US\$ 62.5 billion in 2009-10.
- The average NSDP growth rate between 2004-05 and 2009-10 was 13.6 %.

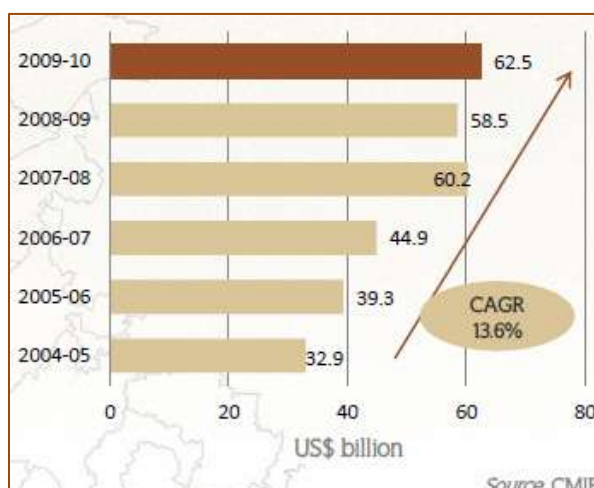


Figure 4.3: Karnataka NSDP, 2004-2010

Per Capita GSDP

- The state's per capita GSDP in 2009-10 was US\$ 1,209.4.
- The per capita GSDP increased at a CAGR (Compound Annual Growth Rate) of 12.5 per cent between 2004-05 and 2009-10.



Figure 4.4: Karnataka Per Capita GSDP, 2004-10

Per Capita NSDP

- The state's per capita NSDP in 2009-10 was US\$ 1,068.8.
- The per capita NSDP increased at a CAGR of 12.4 per cent between 2004-05 and 2009-10.

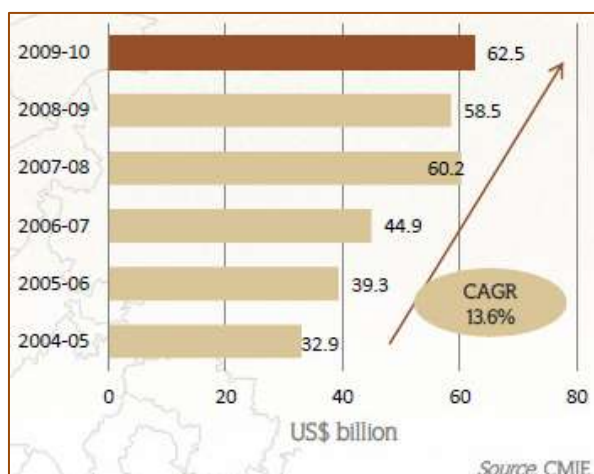


Figure 4.5: Karnataka Per Capita NSDP, 2004-10

Percentage Distribution of GSDP

- In 2009-10, the tertiary sector contributed 54.1 per cent to the state's GSDP at current prices, followed by secondary sector (28.1 %) and tertiary sector (17.8 %).
- At a CAGR of 16.3 %, the tertiary sector has been the fastest growing among the three sectors from 2004-05 to 2009-10.

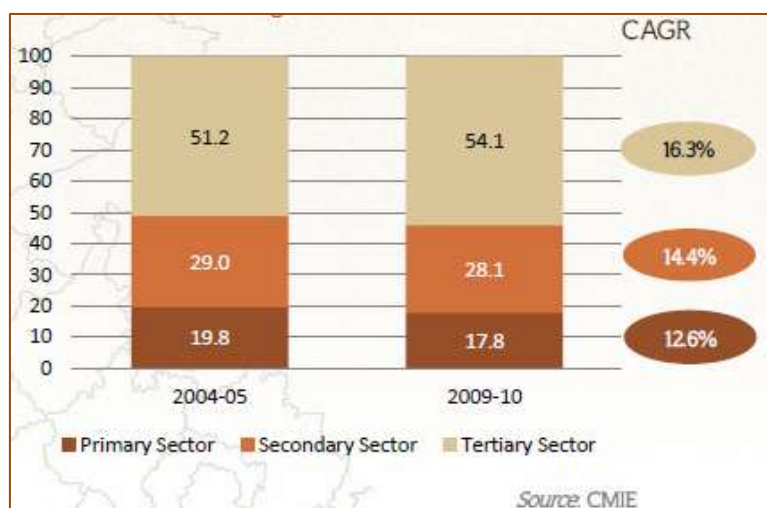


Figure 4.6: Karnataka Percentage Distribution of GSDP, 2004-05 and 2009-2010

- The growth has been driven by trade, hotels, real estate, finance, insurance, transport, communications and other services.
- The secondary sector grew at a CAGR of 14.4 % between 2004-05 and 2009-10. It was driven by manufacturing, construction and electricity, gas and water supply.
- The primary sector grew at a CAGR of 12.6 % between 2004-05 and 2009-10.

4.1.3 Tourism Sector Overview

Karnataka with its great Heritage and Cultural Background has vast potential for the sustainable development of tourism industry. State Government has declared 'Tourism as an industry' since 1988. The Department has brought out a series of Tourism Policies with the package of incentives, concessions and subsidies for development of Tourist Infrastructure in the State through the private investment. Tourism has been given priority and it is instrumental for Socio-Economic growth of the State as well as providing lot of employment opportunities for both skilled and unskilled man power. The tourist flow in to the State has been increasing steadily in the last decade.

In view of integrated development of tourism, the State government has announced new tourism policy for 2009-14. In the overall period of this policy (5 years), it is estimated that Rs.25,000 crore of private investment will be invested in the

KARNATAKA TOURISM POLICY 2009-14

Mission

Exponentially enhance and tap the tourism potential of Karnataka; coordinate to deliver a leisure experience that is engaging and gives value for money to the tourists. This is to be ensured in an effective, efficient and outcome-based manner.

Vision

Make tourism Karnataka's principal and largest economic activity, as an employer, revenue-generator and engine of growth, by being among the top two tourism destinations in India by 2016-17.

Values

The values of "Punniya Koti" enshrined in Karnataka's culture will form the hallmark to ensure hospitality services to foreign and domestic tourists i.e., "Promises Made and Kept".

tourism sector. And in the same period 29 to 41 lakhs of employment opportunity will be generated. To minimize the financial burden, the PPP scheme has also been introduced to attract more number of mega investors. Revenue realised by the tourism in Karnataka by the three organization viz., Directorate of Tourism, Jungle Lodges & Resorts Ltd. and Karnataka Tourism Development Corporation during the year 2007-08 was Rs 62.77 crore and it was Rs 68.98 crore in the year 2009-10.

Karnataka is the country's fifth most popular tourist destination. With the largest number of institutes in hotel management and catering technology in the country, the State has a large pool of skilled human resources. The Sector is attracting significant investment by domestic and global players as infrastructure is being ramped up to meet the needs of the growing tourist activity.

4.2 TOURISM SCENARIO IN THE STATE

4.2.1 Introduction

Karnataka State possesses various attractive spots of natural beauty and rich cultural heritage. There is an array of ancient sculpture site of heritage value, breathtaking landscape, exotic wildlife, temple towns, Heritage sites, Temples, Forts, Sandalwood Forests, Coffee plantation, Water Falls, Wildlife, Western Ghats, Hill Stations. In this background, there are ample opportunities for tourism in Karnataka having traditional tourist spots, temples with good sculptural glory, religious places, seashores with spectacular beauty Malnad area and good climatic conditions. In the year 2010, Karnataka ranked fifth among States as a tourist destination with around 3.8 lakh international and over 382 lakh domestic tourists visiting the State. The State has the second-highest number of protected monuments in the country (507 centrally and 750 additional protected by the State Governments) to nature and wildlife – there is much to draw the tourist to Karnataka.

Significance of Tourism in the State:

As an industry, Tourism industry has the highest Multiplier Effect due to its strong linkages with socio-economic development of the society. The development in tourism sector not only directly affects increased revenue generation of the state from the outside visitors (both domestic and foreign) but also enhances employment and income generation at the local levels. Being a labour intensive industry, tourism related activities generate income and employment particularly for women, rural artisans, educated unemployed and youths. Furthermore, as the development of the tourism sector is basically an integrated one, it also facilitates developments in other related sectors/industries like Power, Water, Transportation, Agriculture and Allied, Small-Scale sectors (like Handicraft, Handlooms, Artisan etc), Hotel etc.

- *The state currently ranks as the 5th most popular destination in the country.*
- *Around 38.2 million domestic tourists and 3,80,995 foreigners visited the state during the year 2010.*
- *The state attracts around 5.1% of the total tourist arrivals to India.*
- *Total revenue from tourism increased at a CAGR of 53% between 2005-06 and 2008-09 to reach US\$ 2095 Million.*
- *63% increase is anticipated in foreign exchange earnings from US\$ 104.1 Million in 2010 to US\$ 169.5 Million in 2020.*

4.2.2 Key Tourist Destinations

Broadly, tourist destinations in Karnataka can be divided into the following categories:

- Heritage Destinations
- Natural and Hill Destinations
- Wildlife Destinations
- Coastal Destinations
- Cultural Destinations
- Adventure Destinations



Figure 4.7: Tourist Clusters in Karnataka

4.2.2.1 Popular Tourist Destinations

CATEGORY	PLACES
Heritage	Hampi, Badami, Pattadakal, Aihole, Lakkundi, Kittur Chennamma Fort, Chitradurga Fort, Bijapur, Gulbarga, Bidar, Mysore Palace, Srirangapatna, Somnathpur, Belur, Halebeedu, Bangalore Palace, Tipu's Fort and Palace, Bellary Fort, Adi Chunchanagiri
Natural	Coorg, Agumbe, Kemmangundi, Nandi Hills, Chikmagalur, Jog Falls, Unchalli Falls, Magod Falls, Hebbe Falls, Shivanasamudra Falls, Abbey Falls, Iruppu Falls, Kalhatti Falls, Lalguli Falls, Sathodi Falls, Gokak Falls
Wildlife	Bandipur National Park, Rajiv Gandhi National Park, B R Hills Sanctuary, Ranganathittu Bird Sanctuary, Kokkrellur Pelicanry, Kaggaladu Heronry, Bannerghatta National Park, Anshi National Park, Dandeli Wildlife Sanctuary, Gudavi Bird Sanctuary, Bhadra Wildlife Sanctuary, Kudremukh National Park, Chamarajnar, Dubare Elephant Camp
Coastal	Karwar, Kurumgad, Gokarna, Marawanthe, St. Mary's Island, Murudeshwar, Malpe, Kaup, Mangalore
Cultural	Udupi, Dharmasthala, Murudeshwara, Shravanabelagola, Moodabidri, Karkala, Sringeri, Shivaganga, Talakad

4.2.3 Tourist Circuits

Five circuits have already been identified by the Government of Karnataka to develop tourism infrastructure and in order to identify new tourism destinations. Apart from these five circuits, as a part of their ongoing activities to boost up tourism sector in the state, they are also trying to develop some more attractive tourist circuits. However, these are yet to be given a concrete shape. The five circuits which have been already identified by the state government are as follows:

- (i) Northern Circuit
- (ii) Southern Circuit
- (iii) Coastal Circuit
- (iv) Wildlife Circuit
- (v) Hill Resort Circuit

4.2.3.1 Northern Circuit

The Northern Circuit consists of Northern Districts of Karnataka namely Belgaum, Bijapur, Dharwar, Bidar, Gulbarga, Raichur, Bellary and Chitradurga. Once the capital of the early Chalukyan dynasty (6th to 8th centuries), Aihole and Patadakal (Bagalkot District), are picturesque villages on the banks of the Malaprabha river and are historically famous as the cradle of Hindu temple architecture built between the 6th & 8th centuries and some even earlier. Badami is known for its rock-cut cave temples. Hampi - a world heritage centre which is the ruins of the great capital of Vijayanagar dynasty is also a part of the circuit. The Virupaksha Temple, one of the best attractions, is still being

worshiped. The inverted shadow of the Gopuram (gate) of the temple is an amazing attraction. The other major attractions in this ruined city are: the Stone Chariot, Ugra Narashimha, King's Balance, Lotus Mahal, Queen's Bath, Elephant stable, the musical Temple etc.

The other destinations of the northern circuit like Bijapur, Bidar, Belgaum and Chitradurga are mostly historically important heritage and pilgrim centres. Temples, Monuments and Forts are the major tourist attractions of this circuit.

4.2.3.2 Southern Circuit

The Southern Circuit consists of Districts of Bangalore, Mysore, Mandya, Hassan, Kolar, Shimoga, Chikmagalur and Tumkur. The southern circuit includes Bangalore, the capital of Karnataka. Bangalore ranks as one of the fastest growing cities in Asia and is also known as "Garden City of India" "IT Hub" etc. Mysore is also known as the City of Palaces and the political capital of the Wodeyar dynasty. Mysore City also possesses a number of gardens, shady avenues and sacred temples. Carnatic Classical music and dance is also a prominent aspect of the city. The other major destinations of the circuit include Srirangapatna which was once the capital of the warrior king Hyder Ali and his son Tipu Sultan. There are beautiful monuments that are well worth a visit. Bandipur national Park which is one of the most beautiful wide life centers in the country also is an attraction besides Ranganathittu bird sanctuary housing exotic birds.

The other major places of tourist attraction are Musical fountain of Brindavan Garden, Mandya, the architectural and pilgrim centres of Belur, Halebid, Shravanabelagola, Jog falls of Shimoga, the Coffee estate and pilgrim centres of Chikmagalur etc.

4.2.3.3 Coastal Circuit

The coastal circuit consists of the coastal districts of Uttar Kannada, Udupi and Dakshin Kannada. Uttar Kannada is considered to be the eco-tourist's paradise is a place of immense natural beauty. Its wide variety includes Beaches, Wild life sanctuaries, Scenic views, Adventure sports, Rock climbing and also religious shrines. Dakshin Kannada is surrounded by the soaring Western Ghats and Arabian Sea, the district is blessed with lush green vegetation, abundant rain fall, beautiful beaches, picturesque mountain ranges, temples and many more. The place is also known for its Buffalo racing by the farmers. The major attractions in and around the Dakshin Kannada are Kollur the home of Goddess Mookambika, Dharmasthala, Kukke Subramanya, Jamalabad, Karkala, Moodabidri, Udupi and many beautiful beaches.

4.2.3.4 Wild Life Circuit

The wild life circuit consists of Wild Life Sanctuaries, National Parks and Bird Sanctuaries. There are 5 National Parks, around 22 Sanctuaries and around 3 Jungle Lodges and Camps. Bandipur National Park nesting in the foothills of the Nilgiris, Kabini -situated amidst the Kharapur Forest, Kabini is the pristine pieces of land that abound with nature. Ranganathittu Bird Sanctuary, Mysore is a paradise for wildlife enthusiasts. Crocodiles basking under the sun, otters running free, flocks of birds gathered on tiny islands are some rare sights of the place. Birds from Siberia, Australia and even North America can be spotted here. Some of the rare birds like Bill Stork, The White Ibis, Egret,

Heron, Partridge or even the Cormorant can be spotted. The Nagarahole National Park, situated in the picturesque districts of Kodagu and Mysore in southern Karnataka has lush green vegetation, swamps and numerous water resources, rendering it an ideal habitat for a wide variety of wildlife and is wonderful attraction.

The other wildlife attractions of Karnataka includes Bandipur National Park, Bheemeshwari, Bhadra, B.R. Hills (Biligiri Hills), Dandeli, Kemmanagudi Wild life Adventure Resort etc.

4.2.3.5 Hill Resort Circuit

The Hill circuit covers the Hill stations of Mercara, Kemmannagundi, Kudremukh, Male Mahadeshwara Hills, BR Hills, Sandur, Nandi Hills and Jog Falls. Madikeri or Mercara, the district headquarters of Kodagu (or Coorg) also known as the Scotland of India, is gradually catching up as one of the most sought after Hill stations of the country. The other major Hill resorts of the state are Biligirirangana range of hills, picturesquely situated at a height of 5,091 feet between the Cauvery & Kapila rivers, Kemmannagundi which is a scenic hill station on the Baba Budan range of hills, Kudremukh (Horse Face), also known as K.R. Hills which overlooks the Arabian sea and Nandi Hills which is located near Bangalore.

4.2.4 Trends in Tourist Arrival

The state currently ranks as the 5th most popular destination in the country. Around 382 Lakh domestic tourist and 3.8 lakh foreigners visited the state during 2010. Table 4.1 shows the domestic and foreign tourist arrivals in Karnataka during last decade. Karnataka accounted for around 2.1% of the total foreign tourists visiting India during the year 2010 and ranked 11th among all the Indian states. The states which are ahead of Karnataka in terms of foreign tourist visiting Karnataka arrivals are Maharashtra, Tamil Nadu, Delhi, UP, Rajasthan, West Bengal, Kerala, Bihar, Himachal Pradesh and Goa. Domestic tourists for the same period accounted for 5.2% of the total domestic tourists visiting different destinations in India and ranked 5th among all other Indian states only after AP, UP, Tamil Nadu and Maharashtra.

Table 4.1: Domestic and Foreign Tourist Arrivals in Karnataka, 2001-2010

Year	Domestic Tourists			Foreign Tourists			Total Tourists		
	Karnataka	India	Karnataka's share	Karnataka	India	Karnataka's share	Karnataka	India	Karnataka's share
	(in Lakhs)			(in Lakhs)			(in Lakhs)		
2001	141.2	2364.7	6.0%	1.4	54.4	2.6%	142.6	2419.1	5.9%
2002	86.8	2696.0	3.2%	0.6	51.6	1.2%	87.4	2747.6	3.2%
2003	111.8	3090.4	3.6%	2.5	67.2	3.7%	114.3	3157.5	3.6%

Year	Domestic Tourists			Foreign Tourists			Total Tourists		
	Karnataka	India	Karnataka's share	Karnataka	India	Karnataka's share	Karnataka	India	Karnataka's share
	(in Lakhs)			(in Lakhs)			(in Lakhs)		
2004	271.9	3662.7	7.4%	5.3	83.6	6.3%	277.2	3746.3	7.4%
2005	304.7	3919.5	7.8%	5.5	99.5	5.5%	310.2	4019.0	7.7%
2006	362.0	4617.6	7.8%	5.1	117.5	4.3%	367.0	4735.1	7.8%
2007	378.3	5265.6	7.2%	5.3	132.3	4.0%	383.6	5398.0	7.1%
2008	128.0	5630.3	2.3%	3.2	143.8	2.2%	131.1	5774.2	2.3%
2009	327.0	6688.0	4.9%	3.3	143.7	2.3%	330.3	6831.7	4.8%
2010	382.0	7402.1	5.2%	3.8	178.5	2.1%	385.8	7580.7	5.1%

Source: Ministry of Tourism, Government of India

The foreign tourists who come to Karnataka are mainly from USA, UK, Australia, The Netherlands, Germany, France and other European nations, Japan, South Korea, Singapore etc whereas the domestic tourists who visit the state are mainly from Maharashtra, Andhra Pradesh, Tamil Nadu, Kerala, Delhi, UP, West Bengal, Orissa etc.

4.2.5 Strengths and Weaknesses of Karnataka as a Tourist Destination

The strengths of Karnataka as a tourist destinations are as follows:

- Presence of rich flora and fauna, historical forts and royal palaces, temples and heritage sites, beaches and hills, wild life and bird sanctuaries
- Variety of potential tourist attractions within short distances
- Virgin and unexplored destinations
- Adequate availability of Infrastructure like Power, Water and Communication
- Largely literate local community
- Brand Image of Bangalore as IT Hub all over the world
- Stable Government and Transparent administration
- The climate essentially being a tropical monsoon type is a joy for the visiting tourists
- Land of peace and communal harmony

The weaknesses of Karnataka as a tourist destinations are as follows:

- The image of Karnataka as a Technology Capital of India than a Tourist destination amongst both Indians and foreign tourists
- Most of the major destinations are stand alone and far off from Bangalore
- Poor accessibility to many tourist destinations due to basic Infrastructure bottlenecks
- Lack of tourist infrastructure & basic amenities at many tourist destinations
- Lack of information about tourist destinations
- Limited awareness among local community and misconceptions that tourism will bring environmental and social problems
- Unaggressive marketing and promotion of the tourist destinations

4.2.6 Initiatives by the Department of Tourism

In order to maximize impact, Karnataka Tourism has devised and implemented a four-pronged strategy for the development of tourism in Karnataka. The department has focused its efforts on four separate areas-policy and implementation, infrastructure development, marketing and preservation and sustenance. Progress made on these four fronts will achieve the ambitious development and revenue goals which have been set by the Department of Tourism. The single biggest achievement of Karnataka Tourism has been the creation of a cohesive, comprehensive, and seamless tourism strategy that overlooks no detail.

- 30 District Tourism Promotion Councils have been created for all the 30 districts which are headed by Deputy Commissioners of the concerned district. This committee will be functioning by focusing on development of identified areas in their region and will also monitoring the progress.
- A State Level Monitoring Committee is also been created for monitoring the overall developments and progress of Centrally Financial Assistance projects.
- Master plans for all the districts are under preparation.
- The detail project reports for infrastructure plans both for State and Central will be prepared through outstanding Architects / Consultants who are emplaned in the Department.
- Two World Heritage Centers are being developed under mega project, namely, Hampi and Pattadakal. The integrated development of the Hampi site has already in progress with an estimated cost of Rs.81.77 Crores. The detail project report for the development of circuits – Badami-Pattadakal- Aihole has been submitted to Central Government and the estimated cost of this mega project is Rs.143.00 Crores.
- Integrated development of Almatti Dam has been taken by providing tourist infrastructure near this dam with an estimated cost of Rs.16.00 crores.
- The existing KSTDC Hotels at various places have been upgraded and additional rooms are also been added.

- In addition to the existing Eco-tourism units, initiatives have been taken for the development of some more such Eco-tourism centers, namely, Talakale near Jog, Vilaspur tank in Bidar district.
- A separate Budget has been provided for development of Last mile connectivity roads leading to monuments from the main road. The works are under progress.
- It is proposed to add Night Safari Project at Bannerhatta National Park with a budget estimate of Rs.178.00 crores. Shortly the tender will be called for the purpose.
- Steps have been taken to construct an International Convention Center near Devanahalli with an estimated cost of Rs.1100.00 crores.
- It is proposed to construct a Theme Park about Hampi near Kamalapur with an estimated cost of Rs.50.00 crores.
- Estimates are being prepared to construct Wayside facilities at a distance of every 50 KMs on the National Highways and important roads leading to tourism destinations.
- Steps have been taken to erect singage"s and Hoardings across the state in the important locations.
- A systematic approach has been followed to increase the tourism man power specifically in Hospitality section by imparting tourism training through Institute of Hotel Management.
- Food craft Institutes at Hassan and Mangalore have been started to give training to the local young generation in various wings of catering services.
- Under the Rural Tourism Project, Anegundi, Kokkre Bellur and Attivari Bird Sanctuary have been developed. Schemes prepared to develop Rural Tourism at other places also to showcase rural life, art and culture and heritage.
- Estimates are being prepared for development of Hill stations such as Kemmanagundi and Nandi hills.
- A separate Budget Head has been provided for the development of Schedule caste Special Plan and Tribal Special Plan, under which tourists taxis have been provided to the eligible SC & ST candidates.
- Under the New Initiatives, the Department has proposed to develop Heli tourism, Cruise Tourism, Wellness tourism, Adventure tourism and Caravan Tourism.

CHAPTER

5

PROJECT BRIEF

5.1 PROJECT CONCEPT

Travel for the aim of exploration or travel to remote, exotic and possibly hostile areas is known as adventure tourism. With tourists looking for different options, adventure tourism is recording healthy growth. Adventure tourism refers to performance of acts, which require significant efforts and some degree of risk or physical danger. The activities include mountaineering, trekking, bungee jumping, mountain biking, river rafting, and rock climbing.

Adventure sports in Karnataka are one of the many attractions that would draw tourists from all over the world. The fun it gives is beyond imagination and that's why number of people opting for adventure sports is increasing by leaps and bounds in the state. The rugged terrain and the wide expanse of the blue waters make it possible for the state to organize several interesting outdoor activities. It is a paradise for nature enthusiasts.

The best part about Karnataka is that most of the sites for adventure sports are steeped in religion and mysticism. Such feature makes Karnataka more interesting. The state combines thrill and mystery.



5.2 CASE STUDIES ON SIMILAR CONCEPTS

5.2.1 Case Study – Della Adventure Park – Lonavala, Maharashtra

Della Adventure Park is considered suitable destination for adventure activities for both Corporate and families. The park is spread across 36 acres of green and boasts of several firsts and something for every type of adventure enthusiast.

Adventure Park offers over 86 exciting activities like Zorbing, Flying Fox, Paint Ball, Jet Ski, Artificial rock climbing, Para Gliding, Para sailing, Motocross dirt biking, broken bridge, Gian ladder etc. to name a few, 29 hobby activities, 2 specialty restaurants, music lounge and a



coffee shop, a 1500 seat amphitheatre, fully equipped concert stage, banquet hall, boardroom, training rooms, business centre, spa, gym, salon and much more, there's everything a corporate and family needs. It has the world's biggest & fastest 1600cc to 250bhp turbo charge Jet Ski as one of the major attraction to experience.







The Flying Fox is India's longest permanent zip line, zorb off on India's first permanent natural turf incline (200ft) or hang-tight on the dirt bike racing track, which is India's first permanent public track.

The recreation park is also well designed to cater to corporate and institutions for conducting their special events, Out-bound training, sports day etc. with an expansive model of infrastructure including a 1500 seat amphitheatre, fully equipped concert stage, banquet hall, boardroom, training rooms, business centre.

5.3 IDENTIFIED PROJECT LOCATIONS

To implement the project concept, four potential locations have been identified in consultation with the Department of Tourism, Government of Karnataka. A map demonstrating geographical positioning of these identified locations within the state is provided as Annexure-A.

<p>Shantisagar Lake</p> 	<p>Location and Connectivity:</p> <ul style="list-style-type: none"> • District – Davangere • It is connected through State Highway - 48 and is located on the main road. <p>Tourist Attraction: Shanti Sagar Lake ranked the largest lake in Karnataka and second largest in South India has water spread area of 64 Sq.Km. encompassing 28 villages. It is very famous among the local people of the district for sightseeing. Shantisagar lake is a famous picnic spot where people often visit on the weekends. Another factor of popularity about this place is that it is located on the main road (SH-48) where the visitors passing through thereby have a look of the lake. Shantisagar is a famous picnic spot in Davangere with lush green vegetation, a mini zoo, park and a temple on the foot hills. It is famous for its serene beauty and vast lake view.</p>
<p>Trasi</p> 	<p>Location and Connectivity:</p> <ul style="list-style-type: none"> • District – Udupi • It is located about 12 km from Kundapur and 2 km from Maravanthe beach along the coast of Arabian Sea between Kundapur and Honnavar. • Trasi is well connected by road along the coast through NH-66 connecting Cochin with Mumbai along the Konkan belt. It is also

	<p>connected with the major centres of Udupi and Mangalore through Konkan railways.</p> <ul style="list-style-type: none"> • Nearest Domestic Airport : Bajpe Airport Mangalore – 75 km • Nearest International Airport : Bajpe Airport Mangalore – 75 km <p>Tourist Attraction: Trasi Beach – a white sand beach known for hatching of turtles is a popular tourist place. Its proximity to Maravanthe Beach (2 km) which has back waters of Sauparnika river on one side and Arabian sea on the other side is considered geological wonder and makes the scenery absolutely magnificent.</p> <p>Nearby Tourist Destinations: Trasi Beach, Maravanthe Beach, Sauparnika Back waters, Kundapura, Kollur, Keladi, Udupi, Anegudde Ganapati.</p>
<p>Anekal</p> 	<p>Location and Connectivity:</p> <ul style="list-style-type: none"> • District – Bangalore • It is located south of Bangalore at a distance of 35 kms from Bangalore City. <p>Tourist Attraction: Anekal is one of the growing towns around Bangalore, with a lot of developments coming up in the vicinity and with major economy generating places like Electronic City, Jigani and Hosur. Anekal is known for the karaga festivals. Muthyalamaduvu, a small picnic spot with a small waterfall is 5 km away from the town.</p> <p>Nearby Tourist Destinations: Banerghatta National Park.</p>
<p>Kere Thonnur</p> 	<p>Location and Connectivity:</p> <ul style="list-style-type: none"> • District – Mandya • It is located south of Bangalore at a distance of 130 kms from Bangalore City and 30 kms from Mysore; 3 kms off SH-19 connecting Mysore and Tumkur. • The nearest railway head is at Pandavapura at a distance of 8 kms. <p>Tourist Attraction: The historical lake is spread over 2150 acres. A bund/dam between two rocky hills forms the lake which is fed from Yadavanadi river and many small streams. The lake has a small river beach which is the safe place for swimming and other activities off shore. The lake is surrounded by paddy and sugarcane fields which gives a magnificent view of the place from the lake bund.</p> <p>The place is also of historical importance as it was home for saint Sri Ramanujacharya. There is a temple of Lord Ventakaramana on top of padmagiri hill, there are two other temples of Hoysala period which is being maintained by State ASI.</p> <p>Nearby Tourist Destinations: Melukote, Srirangapatna, Kunti betta, Mysore, Shravanabelagola, Nagamangala, Bindiganavole.</p>

5.4 PROJECT SITE DESCRIPTION – SITE 1: SHANTISAGAR LAKE, DAVANGERE

5.4.1 An Overview of Davangere District

5.4.1.1 Introduction

Davangere district is situated in the geographic centre of the state of Karnataka and is an Ancient city of historical importance. The district head-quarter is located at Davangere. Davangere is very famous in the state for the renowned educational institutes.

Previously known for its cotton mills, Davangere has been a fast-developing city of Karnataka. There was a time when the city was called Manchester of Karnataka due to its excellent quality of cotton produced in its cotton mills and hand looms. Now, the city is famous for Education and has the new Davangere University.



5.4.1.2 Location & Connectivity

Davangere is located on the Bangalore-Pune national highway NH-4 which is part of the Golden Quadrilateral highway network at a distance of about 260 km from the state capital of Bangalore. It is nestled at the foothills of the Western Ghats. It lies in the maiden region of the Deccan plateau and is surrounded by the Shimoga District in the South-West, Haveri District in the North-West, Chitradurga district in the South-East, and Bellary district in the North direction. Davangere is well connected by road and rail to major cities of Karnataka and neighboring states. Nearest Airport is Mangalore. Davangere is also connected by rail from Bangalore, Mysore and Hubli.

5.4.1.3 Demography

The population of the district according to 2011 Census is 19, 46, 905 with a literacy rate of 76.30%. Population density varies from 165 per sq. km in Jagalur to 644 per sq. km in Davangere. For every 1000 males there are on an average 952 females in Davangere district as compared to the state average of 964.

5.4.1.4 Economy

Davangere town is a major trading center of Karnataka state. It was called the "Manchester of Karnataka" for housing many cotton mills and supported trade and business. Being at the center of the State makes it suitable for trading. The surrounding hinterland provides support to business at Davangere. Crops like Rice, Arecanut and Cotton are traded here. There are many rice mills making

puffed rice and beaten rice in and around this town. Davangere is famous for textile mills. Shankar Textile Mills, Chigateri Mills, Chandrodaya Mills Ltd, Yallamma Cotton Woollen and silk mills Ltd all are contributing to the economic development of the city.

5.4.1.5 Tourism Resource

Tourism in Davangere district is a leisurely ride as there are very little number of places located, where one can go to relax, sightseeing and have a good time. Davangere district has an agreeable and healthy climate. Within the district, the southern belt has a more pleasant weather.

5.4.2 Site Details

Shantisagar lake is located in Channagiri taluk of Davangere district is the second largest fresh water tank in Asia. The lake is spread across 4416 acres located in the hilly region is fed through aqua duct from Bhadra reservoir. The tank provides water for 15 to 20 villages for irrigation purpose and also provides drinking water to Chitradurga. The nearest urban centres are Davangere (44 km), Shimoga (65 km).

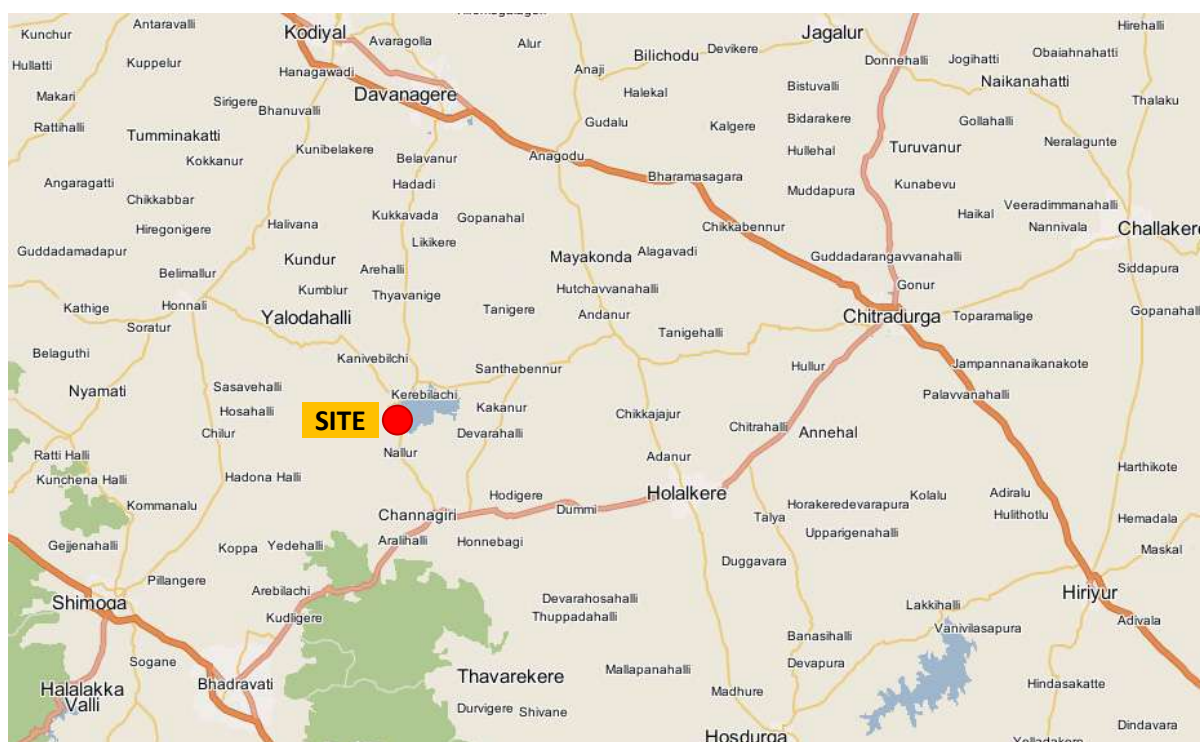


Figure 5.1: Location of the Site at Shantisagar

Following are the site specific details:

Extent of Land	10 Acre
Co-ordinates	Latitude - 14° 7'43.57"N Longitude - 75°53'10.42"E
Survey Number	39,274

Ownership of Site	Department of Tourism, Government of Karnataka
Present Site Condition	Site is being developed by DoT through Land army with toilet blocks, retail space for 5 shops, changing area, walk ways, jetty and boat ramps. There is availability of 2-3 acres of land adjacent to developed land for developing accommodation facilities.
Linkages and Connectivity	The site is well connected to the nearby towns of Davangere, Chitradurga and Shimoga through SH-65, SH-48 and NH-13 respectively.

The satellite image showing the site structure & its surroundings and the site pictures are presented as Annexure-B.

5.4.3 SWOT Analysis

Strengths

- Land parcel under consideration is abutting lake front.
- Availability of water in Shanti Sagar Lake throughout the year - lake is fed from Bhadra reservoir through aqua duct.
- Site is adjoining to the road which connects Davangere and Shimoga having a decent tourist traffic flow.

Weakness

- Road stretch between Shanti Sagar and Channagiri (8 kms) which connects to NH-13 is not in good condition.

Opportunities

- Lack of any recreational zones/places in and around Davangere
- Growing educational institutes in Davangere

5.5 PROJECT SITE DESCRIPTION – SITE 2: TRASI, UDUPI

5.5.1 An Overview of Udupi District

5.5.1.1 Introduction

Udupi district is located along the coast of Arabian Sea is carved out of Dakshina Kannada district. It is spread across 3 taluks namely Udupi, Kundapur and Karkala. The district is situated between the luxuriant mountains of the Western Ghats on the east and the vast & serene Arabian Sea on the west. Udupi is birth place for 4 PSU banks and is well known for its vivid & religious cultural heritage, making it the temple city of Karnataka. Shree Krishna Temple in Udupi is first among the seven places of pilgrimages. The district is also known as education hub as it houses the large education centre at Manipal.

5.5.1.2 Location & Connectivity

Udupi is located on the Mumbai – Cochin National Highway (NH-66) which forms the Konkan route. The NH-66 provides a link to Mangalore and Karwar via Kundapur. It is well connected with nearest urban centre – Mangalore through road and rail. Other significant roads include the State Highways to Karkala, Dharmastala, Shimoga and Sringeri. The district is well connected with rail to the other major towns through Konkan rail line with a railway network of over 100 kms and 6 stations. The nearest airport is at Mangalore at a distance of 75 km.

5.5.1.3 Demography

As of the 2011 India census, Udupi has a population of 11, 77, 908 with a population density of 304 persons per sq. km. The district has a sex ratio of 1056 females per 100 males with an overall literacy rate of 86.29%, higher than the national average of 59.5%.

5.5.1.4 Economy

Udupi's economy depends mainly on agriculture and fishing. Agriculture & Small scale industries largely contribute towards the employment & economic development. Paddy is the main crop and major fruits grown are Mango, Banana, Pineapple, Jack Fruit and Sapota. Small-scale industries like the cashew industry, and other food industries and milk cooperatives are the most prominent. Banking sector is strong owing to the presence of major players like Vijaya Bank, Canara Bank, Corporation Bank and Syndicate Bank. It is also developing into a hub for the software industry.



5.5.1.5 Tourism Resource

Udupi is known for the Krishna Mutt (Temple of Lord Krishna) which was founded by the Shri Madhvacharya, a Vaishnavite saint in the 13th century. The Ashta Mathas (set of 8 religious organizations) manage the temple administration, and the daily sevas. The other attractions in Udupi include Pajaka, Ananteshwar Temple, Chandramauleshwara temple. Apart from the temples, tourists also visit the famous Manipal, Kaup Beach, Malpe and Brahmavar.

Manipal is very famous educational centre and the medical college. There is a small museum showcasing artifacts collected by Mr. Vijaanath Shenoy. Malpe Beach is a port town, 6 kms from Udupi is famous for its scenic beauty. This place attracts many tourists owing to the estuary of the Malpe river and St Marys Island.

Udupi is also synonymous with the world-famous Udupi cuisine, which is served all over India in the efficiently-run Udupi restaurants, famous for dosas, idlis and other snacks.

5.5.2 Site Details

Trasi beach is located in the village of Trasi, Kundapur taluk of Udupi district is one of the white sand beaches along the coast which is known for turtle hatching. The beach is abutting NH-66 which connects Karwar, Honnavar in the north to Kundapur, Udupi in the south and 2 kms far from Maravanthe beach. The nearest urban centre is Kundapur at a distance of 12 kms and falls under the coastal tourist circuit covering – Murudeshwar-Trasi-Maravanthe-Anegudde-Udupi.



Figure 5.2: Location of the Site at Trasi

Following are the site specific details:

Extent of Land	6 Acre
Co-ordinates	Latitude - 13°41'32.73"N Longitude - 74°38'40.84"E
Survey Number	9
Ownership of Site	Department of Tourism, Government of Karnataka
Present Site Condition	The site has access through NH-66 and is facing sea on the other side. Out of the 6 acre land parcel, approx 3 acres of land is being developed through DoT, GoK providing parking facilities, platform with seating etc. The remaining 3 acre of land parcel is lying vacant and can be utilized for the envisaged project.
Linkages and Connectivity	The site is well connected to the nearby towns of Honnavar, Kundapur, Udupi through NH-66.

The satellite image showing the site structure & its surroundings, the record of Rights Tenancy & Crops (RTC) and the site pictures are presented as Annexure-B.

5.5.3 SWOT Analysis

Strengths

- Site is situated on NH-66 which connects Goa and Kerala
- Site falls under CRZ Zone-III
- Site is stretched along the shallow beach of Trasi which is already a well known tourist destination.

Weakness

- The site is situated near an environmentally sensitive area as the place is known for turtles hatching

Opportunities

- The envisaged tourism product can attract a lot of footfalls from the existing tourist traffic flowing on NH-66.

5.6 PROJECT SITE DESCRIPTION – SITE 3: ANEKAL, BANGALORE

5.6.1 An Overview of Bangalore Urban District

5.6.1.1 Introduction

Bengaluru Urban district came into being in 1986, with the partition of the erstwhile Bengaluru district into Bengaluru Urban and Bengaluru Rural districts. Bengaluru Urban has four taluks — Bengaluru North, Bengaluru East, Bengaluru South and Anekal. The city of Bengaluru is situated in the Bengaluru Urban district. The Bengaluru Urban district has 17 hoblies, 668 villages and 9 municipal corporations.

Bangalore is the capital city of Karnataka and is synonymous to Silicon Valley of India, IT Hub of Asia and IT Capital of India. It is the country's leading IT exporter in the country and 4th largest technological hub in the world.

Anekal is a taluk of Bangalore district. It lies in the southern part of the Bangalore metropolitan area around 35 kilometres from downtown Bangalore. Anekal is known for the karaga festivals.



5.6.1.2 Location & Connectivity

NH-4 (Mumbai-Pune-Bangalore-Chennai), NH-7 (Varanasi-Nagpur-Hyderabad-Bangalore-Madurai & NH209 (Bangalore-Dindigul (Tamil Nadu)) provides accessibility to major cities. Bangalore is also connected by rail to most cities in Karnataka, as well as other states. Bangalore Airport is fourth busiest airport in India with about 105,000 aircraft movements, 9.92 million passengers and 175,000 tonnes cargo (2009). It has a capacity of handling 3000 passengers per hour. Chennai is the closest Port at the distance of 315 Km.

5.6.1.3 Demography

Bangalore is the most advanced district in Karnataka with a population of 6,537,124 of which 88.11% is urban as of 2001, as of Census 2011, its population has increased to 9,588,910, with a sex-ratio of 908 females/males, the lowest in the state and its density is 4,378 people per square km.

5.6.1.4 Economy

Anekal is one of the growing towns around Bangalore, with a lot of developments coming up in the vicinity and with major economy generating places like Electronic City, Jigani and Hosur around it. Electronics City the pride of India and hub of Bangalore's Information Technology companies is

Following are the site specific details:

Extent of Land	40 Acre
Co-ordinates	Latitude - 12°41'10.56"N Longitude - 77°39'54.44"E
Survey Number	1, 4, 18, 177
Ownership of Site	Department of Tourism, Government of Karnataka
Present Site Condition	Out of 40 acres of land parcel approximately 4 acre of land is flat and the remaining is under the slopes of valley. At present DoT is operating a restaurant with an accommodation facility (5 rooms). Other structures on the site include a Toilet Block and a small park which is under construction.
Linkages and Connectivity	The site is located in the Pearl valley which is 6 km from Anekal town and is well connected to Bangalore through NH-7.

The satellite image showing the site structure & its surroundings, site map and the site pictures are presented as Annexure-B.

5.6.3 SWOT Analysis

Strengths

- Site is in the valley and the existing topography results into two seasonal waterfalls during monsoons. These waterfalls attract decent footfalls from the nearby urban centers.
- Site is located in close proximity to the economic centres like Electronic City, Jigani and Hosur.

Weakness

- Pearl valley would dry up during the summer - less footfalls during that period
- Road connecting Anekal and Bannerghatta is not in good condition.

Opportunities

- Proximity to Bannerghatta National Park which is already a well developed tourist place would be helpful in forming a circuit for the tourist visitors.

5.7 PROJECT SITE DESCRIPTION – SITE 4: KERE THONNUR, MANDYA

5.7.1 An Overview of Mandya District

5.7.1.1 Introduction

The district was formed in the year 1939, it borders on the South by Mysore District, on the West by Hassan District, on the North by Tumkur District and on the East by Ramanagara district. It is located at a distance of 90 km from Bangalore and is well connected with the Capital city.

Mandya is spread across 7 taluks namely Mandya, Malavalli, Maddur, Pandavapura, K.R.Pet, Srirangapatna, and Nagmangala. It ranks 3rd in Sericulture produce and is also famous for Sugar produce with having the oldest sugar factory of Karnataka.

5.7.1.2 Connectivity

The major roads in the district are National Highway-206 connecting Tumkur to Honnavar via Mallavalli, National Highway-48 connecting Bangalore to Mangalore, State Highway-47 connecting Mandya with Hadagali via Tiptur, Huliya, State Highway-17E connecting Bangalore with Mysore via Maddur, Mandya and Srirangapatna. There are other roads connecting the neighbouring districts and far off districts of the state. The district has a broad gauge railway line passing through the district from Bangalore connecting Mysore to other urban centers in the State via Mandya, Maddur and Srirangapatnam. Apart from this there is another rail link passing through the Western part of the district. It connects Mysore to Mangalore via Hassan. Thus, the district has good regional connectivity with major urban centers in the district as well as the State.

5.7.1.3 Demography

The total geographical area of the district is 4961 sq.kms with total population of 17.64 lakhs (as per 2001 census). The average population density in the district is 355 / sq km. Out of the total population the rural population constitutes 14.81 lakhs (83.97%) and urban population constitutes 2.83 lakhs (16.04%). The sex ratio in the district is 985 which is higher than the State average of 964. The Mandya district has an average literacy rate of 61% which is less than the State average of 67% and National average of 65%.

5.7.1.4 Economy

Mandya district is one of the most agriculturally prosperous districts in Karnataka. With the advent of irrigation from the K.R. Sagar dam & reservoir in 1930's, there was substantially marked



transformation in cropping pattern, composition of crops, better grown yield level, ultimately leading to better economic conditions of the people. The total geographical area of the district is 4, 98,244 ha, out of which 2, 48,825 ha forms the sown area. More than half of the total land area in the district is put to agricultural use.

5.7.1.5 Tourism Resource

The Mandya district is a well known tourist destination in the State. The district has a blend of various attractions for the tourists which has made it a popular destination. The destinations in Mandya form a part of tourist circuit in Mysore district. The major tourist attraction is Srirangapatna which has many spots related to great ruler Tipu Sultan and Hyder Ali is a nationally and internationally renowned destination. The district is also rich in ancient history with temples having excellent architectural value. The River Kaveri flows across the Southern part of the district along which lot of natural/ecological destinations like bird sanctuaries, waterfalls, river front, lakes, dam & reservoirs etc are located.

5.7.2 Site Details

Kere tonnur is located in Pandavapura taluk at the Southern foot of the Yadugiri hills. It is located at a distance of 120 km from Bangalore and 55 km from Mysore. It is 6 km off State Highway-19 connecting Srirangapatna to Nagamangala. The nearest railway station is also in Pandavapura. The nearest urban centres are Pandavapura (9 km), Srirangapatna (25 km), Mandya (44 km) and Nagamangala (48 km).

The site has a very picturesque view with the lake on one side and view of the surrounding villages on the other. The main feature of the site is its location at an altitude and the lake surrounded by hills and greenery. Apart from this, it has proximity to four ancient temples among which the largest and oldest being the Lakshmi Narayana temple. It is a 12th century temple constructed during the reign of Hoysala dynasty. The temple of child Krishna has some exquisite utsava vigraha, which are metallic images of the Vijayanagar period.

Following are the site specific details:

Extent of Land	5 Acre
Co-ordinates	Latitude - 12°34'2.75"N Longitude - 76°38'39.32"E
Survey Number	345, 346
Ownership of Site	Department of Tourism, Government of Karnataka
Present Site Condition	Land is available if fragmented into three land parcels. Part 1 is a flat land 50-100 mts away from the lake front, Part 2 is abutting lake; Part 3 is elevated portion having hilly terrain with a picturesque view of the lake from top.

Linkages and Connectivity

The site is located 2 km from the town of Kere Thonnur which is connected by a 25 feet asphalted road.

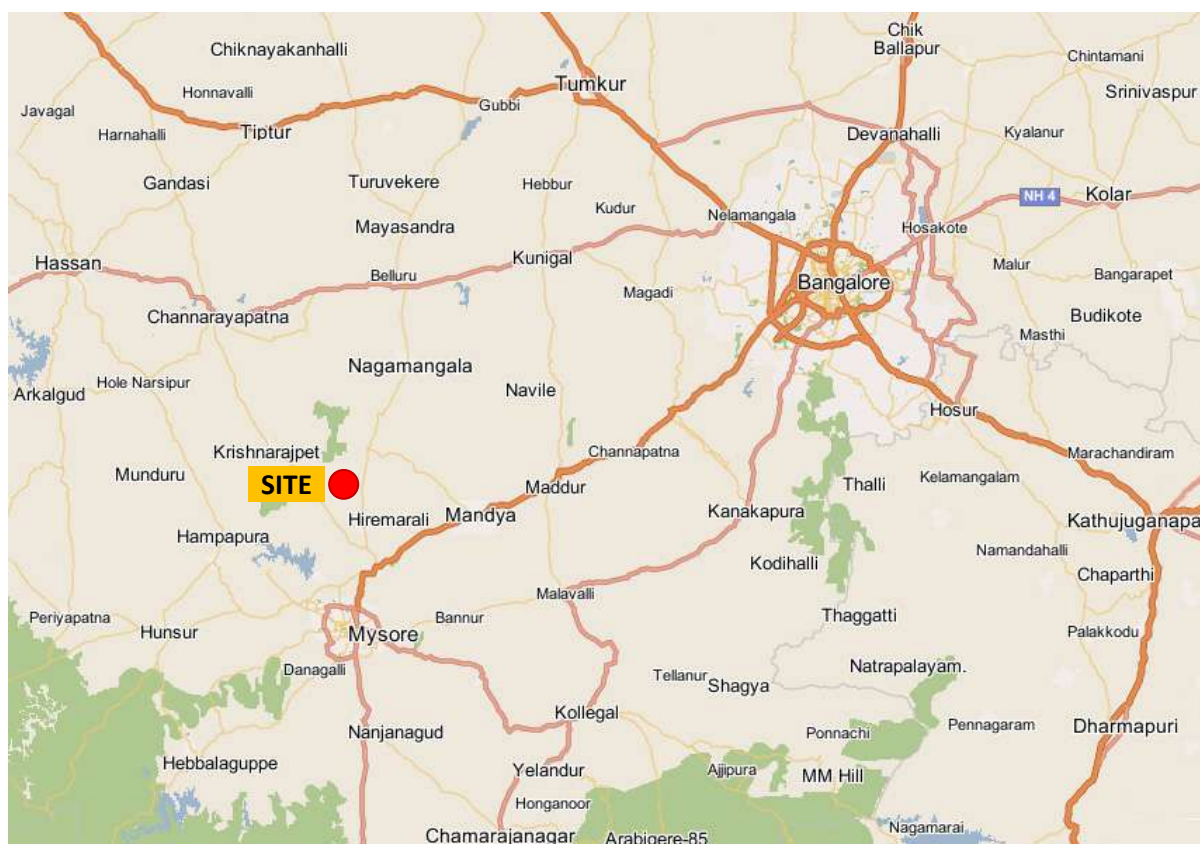


Figure 5.4: Location of the Site at Kere Tonnur

The satellite image showing the site structure & its surroundings and the site pictures are presented as Annexure-B.

5.7.3 SWOT Analysis

Strengths

- Picturesque view with the lake on one side and view of the surrounding villages on the otherside creating an ideal location for developing tourist cottages.
- Lake suited for water sports activities as availability of water is there throughout the year

Weakness

- All the places in the vicinity of Kere Thonnur (Melukote, Srirangapatna etc) are religious/heritage importance. Adventure Sports would not fit the existing circuit hence would require adequate marketing efforts.

Opportunities

- The site is well placed in terms of the proximity to the urban centers of Bangalore and Mysore which are within a radius of 120 km.

CHAPTER

6

MARKET ASSESSMENT

6.1 INDUSTRY OUTLOOK

Adventure, outdoor recreation and sports are the most rapidly growing components of modern tourism. Adventure tourism is mainly seen as thrilling activities tourism and activity based tourism, such as, mountaineering, trekking, sailing, white water rafting, angling, ballooning, parachuting, and so on. Adventure tourism is becoming quite a rage with the younger generation, who wants to venture into and experience the unknown adventure world. Adventure tourism is rapidly growing in popularity as tourists seek unusual holidays, different from the typical beach vacation.

The continuous scale of adventure tourism in India is mainly because of its different geography and climate. On land and water, underwater and in the air, one can enjoy every form of adventure in India. The hilly regions present many opportunities for mountaineering, rock climbing, trekking, skiing, skating, mountain biking and safaris, while the flowing rivers from these mountains are ideal for river rafting, canoeing and kayaking. The oceans are not far behind as well. The huge and profound area of water provides many chances for adventure sports in the form of diving and snorkeling.

India with its natural diversity and its varied geographical and climatic conditions is considered very conducive for adventure tourism. India, in that context is a “One Stop Adventure Shop” and offers a huge potential for adventure tourism activities. India, therefore, offers the keen adventurer with a fascinating range of areas and activities to choose from. India offers a wide range of adventure sports for tourists. Trekking and Skiing in the Himalayas, White Water Rafting on the Ganges and Beas, Camel and Jeep safaris in the deserts of Rajasthan, Paragliding in Himachal, Watersports in Goa and Scuba Diving in Lakshadweep and Andaman are just some of the options available to the adventure seeking tourists.

Adventure tourism India has increased in recent years due to the efforts taken by the Indian government and the Ministry of Tourism. The scope for adventure tourism in India is endless because the country has a rich diversity in terms of climate and topography. Adventure tourism India has registered a formidable growth in recent years. For this growth to continue and to tap its potential, efforts must be taken by the Government of Karnataka so that the state also ranks alongside international destinations for adventure tourism.

6.2 OPPORTUNITIES & DEMAND ASSESSMENT

Karnataka is a great destination for the adventure seekers with its deep blue sea, verdant forests and picturesque hill ranges offering a golden opportunity for water sports, trekking, rock climbing, river rafting, angling and parasailing. There are several destinations in Karnataka where one can experience the thrill of aero sports, water sports and trekking. Karnataka having blessed with beautiful valleys, meandering and roaring rivers, pristine lakes and water bodies suitable for carrying out water based adventure sports, suitable terrain for rock climbing and rappelling activities, perfect

trails in the coffee and tea gardens of Coorg and Sakaleshpur for off-road rallies - has everything to offer for adventure enthusiasts.

Karnataka can be called as the trekker's delight. Most of the trails are found in the Western Ghats-Shimoga, Hassan, North and South Canara, Coorg and Chikmaglur. Kudremukh is the second highest peak in the Western Ghats. It lies in the middle of dense evergreen forests. Other popular trekking trails in Karnataka are Kumaraparvath in Dakshina Kannada, Jenukallubetta, Brahmagiri near Sakleshpur, Mullayangiri of the Baba Budan Range, Nandi Hills, B. R. Hills and Male Mahabaleshwar Hills. Karnataka has some excellent spots for rock climbing too. Water sports can also be an essential part of the adventure tourism in Karnataka. The beaches of Karnataka are ideal for scuba diving, canoeing, coracle riding, surfing, kayaking and windsurfing. The main water sport sites in the state are equipped with kayaks, surf boards and canoes. Honnemaradu, located in the backwaters of Sharavathy river, is a perfect destination to enjoy windsurfing, rafting, canoeing and some other water sports. Other popular sites for enjoying the water sports like scuba diving, canoeing and surfing are Devbagh near Karwar Beach, Marawanthe beach in the Udupi district, Karwar beach and Gokarna beaches. The Mahseer is one of the best spots for fishing at the Cauvery. Along with angling, here one can enjoy other activities like river rafting, amateur fishing, trekking and coracle riding.

Currently, most of the market in this segment is captured by small resorts operating in the outskirts of Bangalore which does not provide comprehensive variety of games or larger theme parks. The state has potential for capturing adventure sports segment of tourism which can be done with developing adventure camp facilities with wide variety of outdoor adventure activities at suitable locations. The opportunities for growth of adventure sports activities in Karnataka are immense with corporate houses trying to find new ways of offering distressed programs for their over stretched employees. The rugged terrain and the wide expanse of the blue waters make it possible for the state to organize several interesting outdoor activities. It is a paradise for nature enthusiasts. The best part about Karnataka is that most of the sites for adventure sports are steeped in religion and mysticism. Such feature makes Karnataka more interesting. The state combines thrill and mystery for adventure tourism.

CHAPTER

7

PROJECT FINANCIALS

7.1 CONCEPT AND METHODOLOGY

The purpose of the Financial Analysis is to determine the financial viability of the investment in the project considering the cost of developing the project and the expected revenue stream over a period of time. It also includes study of different scenarios from the developer's perspective and to assess the receivables for DoT from the developer while ensuring that the developer gets a reasonable return on his equity.

Discounted Cash Flow (DCF) Analysis is a method of valuing a project, company, or asset using the concepts of the time value of money. All future cash flows are estimated and discounted to give their present values (PVs) – the sum of all future cash flows, both incoming and outgoing, is the net present value (NPV), which is taken as the value or price of the cash flows in question. DCF analysis is the most widely accepted valuation method in the fields of investment finance, real estate development, and corporate financial management.

NPV of post tax discounted project cash flows is considered as basic indicator of financial feasibility of a project, while insuring a return equivalent to the weighted average cost of capital. The positive and negative NPV indicate "Go" or "No Go" for the project respectively.

NPV of post tax discounted equity cash flows is considered as indicator of surplus generated from project, while insuring a return in the range of 20-25% on equity to developer. Thus Post Tax NPV of equity cash flows reflects the amount which developer can pay towards land premium to DoT, while making a reasonable return on his equity.

As a part of financial analysis, firstly NPV of discounted project cash flows have been analyzed to gauge the initial viability of the project. If the project displays the positive NPV, then NPV of equity cash flows are calculated. The following section presents the assumptions and consideration for financial analysis.

7.2 PROJECT DESIGN AND PRODUCT MIX

On the basis of the strengths of the project locations, opportunity analysis as per the demand assessment and the objectives of DoT, the broad activity mix for the project has been worked out.

The product/ activity for the envisaged developments are derived based on following factors:

- Demand pattern for the various product components/activity types
- Product Mix of other successfully running similar facilities
- Area standards, guidelines and current industry practice for various activities

A broad activity mix for the envisaged development has been derived based on combination of above factors and presented in the following section:

	Shantisagar (10 Acre)	Trasi (3 Acre)	Anekal (40 Acre)	Kere Thonnur (5 Acre)
Accommodation Zone	2 acre	0.6 acre	8 acre	1 acre
No. of Cottages	20	20	30	30
No. of Hotel Rooms	X	X	30	X
Multi-purpose Hall	X	X	1	X
Recreation Zone	2 acre	0.6 acre	8 acre	1 acre
Food Court with Kitchen	✓	✓	✓	✓
Adventure Activity Zone	6 acre	1.8 acre	24 acre	3 acre
Reception Area	✓	✓	✓	✓
Equipments Room	✓	✓	✓	✓
Changing Room	✓	✓	✓	✓
Quad Bike Tracks	X	X	✓	X

The area for different zones and activity mix is derived for each location based on the available land with Department of Tourism.

7.3 ASSUMPTIONS FOR FINANCIAL ANALYSIS

7.3.1 Construction Period

It is assumed that the components of water sports activity which includes procurement of water sports equipments, construction of jetties wherever required (floating jetties in some case) and construction of facilities for operations of water sports will be developed within 1 year. For the Accommodation facilities, it is assumed to be completed within 2 years.

7.3.2 Period of Analysis

The period of financial analysis is taken as 30 years which includes 1 year for procurement and construction work of Adventure sports facilities and 2 year construction period of Accommodation facilities.

7.3.3 Capital Cost Assumptions

While calculating the project cost, the assumptions have been based on market feedback, as well as Feedback's own experience of advisory and project management consultancy.

Following are the cost considerations for the project:

Cost of Construction for Accommodation Facilities (including site work, construction & furnishing)		
Cottages	4200	Rs/sqft
Hotel	2400	Rs/sqft
Multi-purpose Hall	2000	Rs/sqft
Parking Area	400	Rs/sqft

Cost of Construction for Adventure Sports Facility (Including site work, construction)		
Reception Area	1000	Rs/sqft
Equipments Room	800	Rs/sqft
Changing Rooms	500	Rs/sqft
Landscaping and Beautification	200	Rs/sqft
Quad bike tracks	500	Rs/sqft
Landscaping for Strategic War Game	200	Rs/sqft

Cost of Construction for Recreation Zone (Including site work, construction)		
Food Court with Kitchen	2000	Rs/sqft
Toilet Blocks	1000	Rs/sqft
Landscaping	200	Rs/sqft

7.3.4 Pre-Operative Charges and Contingencies

Pre-operative charges include Design consultancy fees, Project management costs, Administrative costs, Charges payable to civic authorities, Publicity and advertisement expenses, Marketing expenses, Miscellaneous Expenses, Interest During Construction and Insurance During Construction. Following are assumptions taken into account while calculating the pre operative expenses:

Pre-operative Expenses	@15% of Construction cost
Interest during construction	@14% of per Annum

7.3.5 Operating & Maintenance Cost Assumptions

Following are the Operating and Maintenance Cost considerations for the project:

Marketing Expenses	
Marketing & Brokerage	@1.5% of the total revenue
Number of operational Days	300 days in a year

O&M Expenses	
Maintenance of Accommodation Facilities	@1% of the Capital Cost per year
Operating Expenses of Accommodation Facilities	@50% of revenue from Accommodation
Maintenance of Adventure Sports facility	
– Maintenance of Water Sports Machinery and Equipments	@10% of the Capital Cost per year
– Operating expenses of Adventure Sports	@40% of revenue from Adventure sports
Raw Material Cost for F&B	@60% of the revenue from Food Court
Increment in O&M expenses	@3% every year

7.3.6 Revenue and Utilization Assumptions

Following are the revenue sources identified and utilization assumptions for the revenue generation for the developer of the project:

	Shantisagar	Trasi	Anekal	Kere Thonnur
Rack Rent per cottage	1200 Rs/day	1500 Rs/day	2500 Rs/day	1500 Rs/day
Rack Rent per Hotel	-	-	1600 Rs/day	-
Annual Increase in Rack Rent	5%	5%	5%	5%
Revenue from F&B	25% of the revenue from Accommodation	25% of the revenue from Accommodation	25% of the revenue from Accommodation	25% of the revenue from Accommodation

Adventure Activity	Charges for Adventure activities - Fee/person/trip				No. of trips in a day*
	Shantisagar	Trasi	Anekal	Kere Thonnur	
Rappeling	-	-	50	50	10
Angling	-	200	-	-	10
Speed Boat Ride	50	50	-	50	30
Quad Biking	-	-	100	-	20
Jet Skiing	80	100	-	100	60
Banana Rides	80	100	-	100	30
Archery	50	50	100	100	40
Water Trampoline	80	-	-	100	40
Dirt Cycling	-	-	100	-	20

Adventure Activity	Charges for Adventure activities - Fee/person/trip				No. of trips in a day*
	Shantisagar	Trasi	Anekal	Kere Thonnur	
Flying Fox	50	50	100	100	200
Artificial Rock Climbing	100	150	150	150	10-40
Strategic War Game	-	-	200	-	15

*Carrying Capacity per trip varies at each location based on the no. of equipments deployed

Realization of Revenue	Operational Year			
	1	5	10-20	20-28
Occupancy of Cottages & Hotel	30%	40%	50%	60%
Occupancy of Water Sports Activities*	20%-30%	40%	50%	50%

*Occupancy of Adventure Sports activities is capped at 50% throughout the Operation Period as most of such facilities are operational fully during weekends, public holidays and summer vacations.

7.3.7 Financing and Taxation Assumptions

- **Debt Equity Ratio:** Debt Equity Ratio is taken as 70:30 for the project.
- **Interest Rate:** The rate of interest for the analysis has been assumed as 14% per annum for term loan.
- **Debt Repayment Period:** 10 year debt repayment period has been considered for the proposed development, which starts in first year of operation.
- **Taxation:** The tax rates have been taken as 33.99%
- **Depreciation:** The depreciation on the project components of Buildings, Plant & Equipment and Fittings has been taken as per the Company's and Income Tax Act through Written Down Value (WDV) method.

7.4 SUMMARY OF FINANCIAL ANALYSIS RESULTS

7.4.1 Capital Cost

Project Site	Shantisagar	Trasi	Anekal	Kere Thonnur
Civil Cost of Adventure Facility	0.42	0.56	1.29	0.59
Equipment cost of Adventure Sports	1.46	1.23	0.60	1.47
Recreation Area development cost	0.99	1.13	1.11	1.17

Civil Cost of Accommodation Facility	3.53	4.03	10.21	5.84
Pre-operative expenses	1.78	1.93	3.65	2.52
Total Capital Cost	8.17	8.89	16.76	11.58

7.4.2 Financial Indicators

Project Site	Shantisagar	Trasi	Anekal	Kere Thonnur
Post Tax Project IRR	20.34%	20.03%	20.02%	19.56%
Post Tax Equity NPV @20% discount rate (INR Crore)	0.85	0.81	1.54	0.85
Post Tax Equity IRR	26.21%	25.13%	24.90%	24.08%

Results of financial analysis show that Post-Tax Project IRR is coming out to be 20%. Post Tax Equity IRR of the projects in all locations vary between 24% - 26%, which is higher than the target of 20%, which is IRR that investors will most likely seek from such an investment.

Considering a discount rate of 20%, the NPV of equity cash flows, which symbolizes the surplus generated by the project, while insuring 20% returns on developer's equity, comes out to be INR 1.54 Crore for Anekal which is the highest among all locations. While for other project locations the equity NPV is around 80 lakhs. This indicates that the envisaged projects at Shantisagar, Trasi, Anekal and Kere Tonnur have potential to generate INR 85 Lakh, INR 81 Lakh, INR 154 Lakh and INR 85 Lakh respectively in NPV terms, which is the indicative amount that DoT may receive from the private developer/s.

7.4.3 Scenario Analysis

The following section presents the Scenario Analysis which provides the variation in the above discussed financial indicators in accordance with the variation in landed cost of the project as well as revenue from the project.

Scenario Analysis - Site 1: Shantisagar

Variation in Project IRR with respect to Landed Cost of Project and Revenue from the Project

Variation in Project IRR		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	17%	19%	21%	23%	25%	26%	28%	30%	32%
	-15%	16%	18%	20%	22%	23%	25%	27%	29%	30%
	-10%	15%	17%	19%	21%	22%	24%	26%	27%	29%
	-5%	14%	16%	18%	20%	21%	23%	24%	26%	28%
	0%	14%	15%	17%	19%	20%	22%	23%	25%	26%

	5%	13%	15%	16%	18%	20%	21%	22%	24%	25%
	10%	12%	14%	16%	17%	19%	20%	22%	23%	24%
	15%	12%	14%	15%	17%	18%	19%	21%	22%	23%
	20%	11%	13%	15%	16%	17%	19%	20%	21%	23%

Variation in Equity NPV with respect to Landed Cost of Project and Revenue from the Project

Variation in Equity NPV		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	-0.22	0.28	0.78	1.28	1.78	2.28	2.78	3.28	3.77
	-15%	-0.45	0.05	0.55	1.05	1.55	2.04	2.54	3.04	3.54
	-10%	-0.68	-0.18	0.31	0.81	1.31	1.81	2.31	2.81	3.31
	-5%	-0.92	-0.42	0.08	0.58	1.08	1.58	2.08	2.58	3.08
	0%	-1.15	-0.65	-0.15	0.35	0.85	1.35	1.85	2.34	2.84
	5%	-1.38	-0.88	-0.38	0.11	0.61	1.11	1.61	2.11	2.61
	10%	-1.62	-1.12	-0.62	-0.12	0.38	0.88	1.38	1.88	2.38
	15%	-1.85	-1.35	-0.85	-0.35	0.15	0.65	1.15	1.65	2.14
	20%	-2.08	-1.58	-1.08	-0.58	-0.08	0.41	0.91	1.41	1.91

Figures are in INR Crore

Variation in Equity IRR with respect to Landed Cost of Project and Revenue from the Project

Variation in Equity IRR		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	18%	22%	27%	33%	39%	47%	55%	63%	72%
	-15%	17%	20%	25%	29%	35%	41%	49%	56%	64%
	-10%	15%	19%	22%	27%	32%	37%	43%	50%	57%
	-5%	14%	17%	21%	24%	29%	33%	39%	45%	52%
	0%	13%	16%	19%	22%	26%	30%	35%	41%	47%
	5%	12%	15%	18%	21%	24%	28%	32%	37%	42%
	10%	11%	14%	16%	19%	22%	26%	30%	34%	39%
	15%	10%	13%	15%	18%	21%	24%	27%	31%	35%
	20%	10%	12%	14%	17%	20%	22%	26%	29%	33%

Scenario Analysis - Site 2: Trasi

Variation in Project IRR with respect to Landed Cost of Project and Revenue from the Project

Variation in Project IRR		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	17%	18%	20%	22%	24%	26%	28%	29%	31%
	-15%	16%	18%	19%	21%	23%	25%	26%	28%	29%
	-10%	15%	17%	18%	20%	22%	23%	25%	27%	28%
	-5%	14%	16%	18%	19%	21%	22%	24%	25%	27%
	0%	14%	15%	17%	19%	20%	22%	23%	24%	26%
	5%	13%	15%	16%	18%	19%	21%	22%	23%	25%
	10%	12%	14%	16%	17%	19%	20%	21%	23%	24%
	15%	12%	14%	15%	16%	18%	19%	20%	22%	23%
	20%	11%	13%	14%	16%	17%	19%	20%	21%	22%

Variation in Equity NPV with respect to Landed Cost of Project and Revenue from the Project

Variation in Equity NPV		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	-0.31	0.22	0.75	1.28	1.81	2.34	2.87	3.39	3.92
	-15%	-0.56	-0.03	0.50	1.03	1.56	2.09	2.62	3.15	3.68
	-10%	-0.81	-0.28	0.25	0.78	1.31	1.84	2.37	2.90	3.43
	-5%	-1.05	-0.53	0.00	0.53	1.06	1.59	2.12	2.65	3.18
	0%	-1.30	-0.77	-0.24	0.28	0.81	1.34	1.87	2.40	2.93
	5%	-1.55	-1.02	-0.49	0.04	0.56	1.09	1.62	2.15	2.68
	10%	-1.80	-1.27	-0.74	-0.21	0.32	0.85	1.37	1.90	2.43
	15%	-2.05	-1.52	-0.99	-0.46	0.07	0.60	1.13	1.65	2.18
	20%	-2.30	-1.77	-1.24	-0.71	-0.18	0.35	0.88	1.41	1.93

Figures are in INR Crore

Variation in Equity IRR with respect to Landed Cost of Project and Revenue from the Project

Variation in Equity IRR		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	18%	22%	26%	31%	37%	43%	51%	58%	66%
	-15%	16%	20%	24%	28%	33%	39%	45%	52%	59%
	-10%	15%	18%	22%	26%	30%	35%	40%	46%	53%

	-5%	14%	17%	20%	23%	27%	32%	36%	42%	48%
	0%	13%	16%	19%	22%	25%	29%	33%	38%	43%
	5%	12%	15%	17%	20%	23%	27%	31%	35%	39%
	10%	11%	14%	16%	19%	22%	25%	28%	32%	36%
	15%	10%	13%	15%	18%	20%	23%	26%	30%	33%
	20%	10%	12%	14%	17%	19%	22%	25%	28%	31%

Scenario Analysis - Site 3: Anekal

Variation in Project IRR with respect to Landed Cost of Project and Revenue from the Project

Variation in Project IRR		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	22%	22%	23%	23%	24%	24%	25%	25%	26%
	-15%	21%	21%	22%	22%	23%	23%	24%	24%	25%
	-10%	20%	20%	21%	21%	22%	22%	23%	23%	24%
	-5%	19%	19%	20%	20%	21%	21%	22%	22%	23%
	0%	18%	19%	19%	20%	20%	20%	21%	21%	22%
	5%	17%	18%	18%	19%	19%	20%	20%	21%	21%
	10%	17%	17%	18%	18%	19%	19%	19%	20%	20%
	15%	16%	17%	17%	18%	18%	18%	19%	19%	20%
	20%	16%	16%	17%	17%	17%	18%	18%	19%	19%

Variation in Equity NPV with respect to Landed Cost of Project and Revenue from the Project

Variation in Equity NPV		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	-0.97	0.11	1.18	2.26	3.34	4.41	5.49	6.57	7.65
	-15%	-1.42	-0.34	0.73	1.81	2.89	3.96	5.04	6.12	7.20
	-10%	-1.87	-0.79	0.28	1.36	2.44	3.51	4.59	5.67	6.74
	-5%	-2.32	-1.24	-0.17	0.91	1.99	3.06	4.14	5.22	6.29
	0%	-2.77	-1.69	-0.62	0.46	1.54	2.61	3.69	4.77	5.84
	5%	-3.22	-2.14	-1.07	0.01	1.09	2.16	3.24	4.32	5.39
	10%	-3.67	-2.59	-1.52	-0.44	0.64	1.71	2.79	3.87	4.94
	15%	-4.12	-3.05	-1.97	-0.89	0.19	1.26	2.34	3.42	4.49
	20%	-4.57	-3.50	-2.42	-1.34	-0.27	0.81	1.89	2.97	4.04

Figures are in INR Crore

Variation in Equity IRR with respect to Landed Cost of Project and Revenue from the Project

Variation in Equity IRR		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	16%	20%	25%	30%	35%	41%	47%	54%	61%
	-15%	15%	19%	23%	27%	32%	37%	43%	49%	55%
	-10%	14%	17%	21%	25%	29%	34%	39%	44%	50%
	-5%	13%	16%	19%	23%	27%	31%	36%	40%	46%
	0%	12%	15%	18%	21%	25%	29%	33%	37%	42%
	5%	11%	14%	17%	20%	23%	27%	30%	34%	39%
	10%	11%	13%	16%	19%	22%	25%	28%	32%	36%
	15%	10%	12%	15%	18%	20%	23%	27%	30%	34%
	20%	9%	12%	14%	17%	19%	22%	25%	28%	31%

Scenario Analysis - Site 4: Kere Tonnur

Variation in Project IRR with respect to Landed Cost of Project and Revenue from the Project

Variation in Project IRR		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	16%	18%	20%	22%	23%	25%	27%	29%	31%
	-15%	15%	17%	19%	21%	22%	24%	26%	27%	29%
	-10%	14%	16%	18%	20%	21%	23%	25%	26%	28%
	-5%	13%	15%	17%	19%	20%	22%	24%	25%	27%
	0%	13%	15%	16%	18%	20%	21%	23%	24%	25%
	5%	12%	14%	16%	17%	19%	20%	22%	23%	25%
	10%	12%	13%	15%	17%	18%	20%	21%	22%	24%
	15%	11%	13%	14%	16%	17%	19%	20%	21%	23%
	20%	11%	12%	14%	15%	17%	18%	19%	21%	22%

Variation in Equity NPV with respect to Landed Cost of Project and Revenue from the Project

Variation in Equity NPV		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	-0.68	0.02	0.73	1.44	2.14	2.85	3.55	4.26	4.96
	-15%	-1.00	-0.30	0.41	1.11	1.82	2.52	3.23	3.93	4.64
	-10%	-1.33	-0.62	0.08	0.79	1.49	2.20	2.90	3.61	4.32
	-5%	-1.65	-0.95	-0.24	0.46	1.17	1.88	2.58	3.29	3.99
	0%	-1.97	-1.27	-0.56	0.14	0.85	1.55	2.26	2.96	3.67
	5%	-2.30	-1.59	-0.89	-0.18	0.52	1.23	1.93	2.64	3.34
	10%	-2.62	-1.92	-1.21	-0.51	0.20	0.91	1.61	2.32	3.02
	15%	-2.95	-2.24	-1.53	-0.83	-0.12	0.58	1.29	1.99	2.70
	20%	-3.27	-2.56	-1.86	-1.15	-0.45	0.26	0.96	1.67	2.37

Figures are in INR Crore

Variation in Equity IRR with respect to Landed Cost of Project and Revenue from the Project

Variation in Equity IRR		Revenue Variation								
		-20%	-15%	-10%	-5%	0%	5%	10%	15%	20%
Cost Variation	-20%	16%	20%	24%	29%	35%	41%	47%	55%	62%
	-15%	15%	18%	22%	27%	31%	37%	42%	49%	56%
	-10%	14%	17%	20%	24%	28%	33%	38%	44%	50%
	-5%	13%	16%	19%	22%	26%	30%	35%	40%	45%
	0%	12%	14%	17%	21%	24%	28%	32%	36%	41%
	5%	11%	13%	16%	19%	22%	26%	29%	34%	38%
	10%	10%	13%	15%	18%	21%	24%	27%	31%	35%
	15%	9%	12%	14%	17%	20%	22%	25%	29%	32%
	20%	9%	11%	13%	16%	18%	21%	24%	27%	30%

7.4.4 Value for Money Analysis

Value for Money analysis is done by comparing the financial outputs of two Models as mentioned below:

- **PPP Model:** When the project is being financed, owned and implemented by Private Sector Player
- **PSC Model:** When the project is being financed, owned and implemented by Government.

Public Sector Comparator (PSC) is used to make decisions by testing whether a private investment proposal offers value for money in comparison with the most efficient form of public procurement. The PSC estimates the hypothetical risk-adjusted cost if a project were to be financed, owned and implemented by government.

The assumptions considered for developing the PPP model and the summary of the respective financial indicators have been presented in the previous section. For developing the base PSC model, the following assumptions were made:

Assumptions: Base PSC Model

Particulars	Assumptions	Comments
Cost of Capital	12%	Estimated cost of market borrowings for the Government of Karnataka
Tax rate	20%	Although no tax is payable by government authorities, but for the sake of comparison with PPP model and considering competitive neutrality, the tax rate has been assumed as 20%,

Other assumptions remain identical to the PPP reference model in order to meaningfully compare the PPP and Public sector models.

Optimum allocation of risks associated with the project is perhaps the single most important step towards developing the contractual framework for any PPP project. The principle of allocating risk to the party best placed to handle the risk is presented below.

Quantitative Risk Matrix

Risks		Financial Impact	Risk Allocation (%) as per PPP Model	
			Concessionaire	Authority
Construction Phase	Construction Cost Overrun	Cost overrun of 15%	100%	0%
	Construction Time Overrun	Time overrun of 50% of the Construction Period	100%	0%
Operation Phase	Revenue Shortfall	Decrease in revenue by 15%	100%	0%
	Opex risk	Increase in O&M Cost by 15%	100%	0%

7.4.4.1 NPV of all Risks to be added onto the base PSC Model

Based on the quantitative risk analysis described previously, NPV of all risks has been calculated and has been added to the base PSC model developed for the project. This is to facilitate comparison between the PPP reference model and the PSC model so as to decide upon the appropriate development model for the project.

NPV of Risks to be added onto base PSC model – Site 1: Shantisagar

Based on the above framework, NPV of cash flows to the public sector is calculated as INR 5.27 Crore. NPV of risks to be added back is as follows:

Risks		Financial Impact	NPV at Risk (INR Crore)	NPV of Risk to be added back (INR Crore)
Construction Phase	Construction Cost Overrun	Cost overrun of 15%	4.26	-1.01
	Construction Time Overrun	Time overrun of 50% of the Construction Period	3.88	-1.39
Operation Phase	Revenue Shortfall	Decrease in revenue by 15%	1.98	-3.29
	Opex risk	Increase in O&M Cost by 15%	3.58	-1.69
NPV of all transferred Risks to be added back to base PSC model				-7.38

Therefore INR (-) 7.38 Crore is the NPV to be added back to the base PSC model. The risk adjusted PSC reference therefore comes out to be INR (-) 2.11 Crore, i.e., the net cost to the government for implementing the project through DoT is INR 2.11 Crore.

NPV of Risks to be added onto base PSC model – Site 2: Trasi

Based on the above framework, NPV of cash flows to the public sector is calculated as INR 5.65 Crore. NPV of risks to be added back is as follows:

Risks		Financial Impact	NPV at Risk (INR Crore)	NPV of Risk to be added back (INR Crore)
Construction Phase	Construction Cost Overrun	Cost overrun of 15%	4.58	-1.07
	Construction Time Overrun	Time overrun of 50% of the Construction Period	4.10	-1.55
Operation Phase	Revenue Shortfall	Decrease in revenue by 15%	2.13	-3.52
	Opex risk	Increase in O&M Cost by 15%	3.89	-1.76
NPV of all transferred Risks to be added back to base PSC model				-7.90

Therefore INR (-) 7.90 Crore is the NPV to be added back to the base PSC model. The risk adjusted PSC reference therefore comes out to be INR (-) 2.25 Crore, i.e., the net cost to the government for implementing the project through DoT is INR 2.25 Crore.

NPV of Risks to be added onto base PSC model – Site 3: Anekal

Based on the above framework, NPV of cash flows to the public sector is calculated as INR 12.32 Crore. NPV of risks to be added back is as follows:

Risks		Financial Impact	NPV at Risk (INR Crore)	NPV of Risk to be added back (INR Crore)
Construction Phase	Construction Cost Overrun	Cost overrun of 15%	10.39	-1.93
	Construction Time Overrun	Time overrun of 50% of the Construction Period	9.39	-2.93
Operation Phase	Revenue Shortfall	Decrease in revenue by 15%	4.66	-7.66
	Opex risk	Increase in O&M Cost by 15%	8.11	-4.21
NPV of all transferred Risks to be added back to base PSC model				-16.72

Therefore INR (-) 16.72 Crore is the NPV to be added back to the base PSC model. The risk adjusted PSC reference therefore comes out to be INR (-) 4.40 Crore, i.e., the net cost to the government for implementing the project through DoT is INR 4.40 Crore.

NPV of Risks to be added onto base PSC model – Site 4: Kere Tonnur

Based on the above framework, NPV of cash flows to the public sector is calculated as INR 6.71 Crore. NPV of risks to be added back is as follows:

Risks		Financial Impact	NPV at Risk (INR Crore)	NPV of Risk to be added back (INR Crore)
Construction Phase	Construction Cost Overrun	Cost overrun of 15%	5.33	-1.38
	Construction Time Overrun	Time overrun of 50% of the Construction Period	5.78	-0.93
Operation Phase	Revenue Shortfall	Decrease in revenue by 15%	2.07	-4.64
	Opex risk	Increase in O&M Cost by 15%	4.21	-2.50
NPV of all transferred Risks to be added back to base PSC model				-9.45

Therefore INR (-) 9.45 Crore is the NPV to be added back to the base PSC model. The risk adjusted PSC reference therefore comes out to be INR (-) 2.74 Crore, i.e., the net cost to the government for implementing the project through DoT is INR 2.74 Crore.

7.4.4.2 NPV of all retained Risks to be added onto the PPP Reference Model

Based on the above risk assessment framework, the NPV of risks to be added back to the PPP reference model is as follows:

NPV of Risks to be added to PPP reference model – Site 1: Shantisagar

Risks		Financial Impact	NPV at Risk (INR Crore)	NPV of Risk to be retained by DoT (INR Crore)
Construction Phase	Construction Cost Overrun	Cost overrun of 15%	4.26	0.0
	Construction Time Overrun	Time overrun of 50% of the Construction Period	3.88	0.0
Operation Phase	Revenue Shortfall	Decrease in revenue by 15%	1.98	0.0
	Opex risk	Increase in O&M Cost by 15%	3.58	0.0
NPV of all retained Risks to be added back to base PPP Reference model				0.0

NPV of Risks to be added to PPP reference model – Site 2: Trasi

Risks		Financial Impact	NPV at Risk (INR Crore)	NPV of Risk to be retained by DoT (INR Crore)
Construction Phase	Construction Cost Overrun	Cost overrun of 15%	4.58	0.0
	Construction Time Overrun	Time overrun of 50% of the Construction Period	4.10	0.0
Operation Phase	Revenue Shortfall	Decrease in revenue by 15%	2.13	0.0
	Opex risk	Increase in O&M Cost by 15%	3.89	0.0
NPV of all retained Risks to be added back to base PPP Reference model				0.0

NPV of Risks to be added to PPP reference model – Site 3: Anekal

Risks		Financial Impact	NPV at Risk (INR Crore)	NPV of Risk to be retained by DoT (INR Crore)
Construction Phase	Construction Cost Overrun	Cost overrun of 15%	10.39	0.0
	Construction Time Overrun	Time overrun of 50% of the Construction Period	9.39	0.0
Operation Phase	Revenue Shortfall	Decrease in revenue by 15%	4.66	0.0
	Opex risk	Increase in O&M Cost by 15%	8.11	0.0
NPV of all retained Risks to be added back to base PPP Reference model				0.0

NPV of Risks to be added to PPP reference model – Site 4: Kere Tonnur

Risks		Financial Impact	NPV at Risk (INR Crore)	NPV of Risk to be retained by DoT (INR Crore)
Construction Phase	Construction Cost Overrun	Cost overrun of 15%	5.33	0.0
	Construction Time Overrun	Time overrun of 50% of the Construction Period	5.78	0.0
Operation Phase	Revenue Shortfall	Decrease in revenue by 15%	2.07	0.0
	Opex risk	Increase in O&M Cost by 15%	4.21	0.0
NPV of all retained Risks to be added back to base PPP Reference model				0.0

7.4.4.3 Risk-adjusted PPP Reference and Statement of Value for Money

Site 1: Shantisagar

Indicator	INR Crore
NPV of cash flows to Government (PPP Reference)	0.85
NPV of retained risks to be added back to PPP reference	0.0
Risk Adjusted PPP Reference (A)	0.85

NPV of cash flows to Government (Base PSC Model)	5.27
NPV of Transferred risks to be added back to base PSC model	(-) 7.38
Risk Adjusted PSC (B)	(-) 2.11
Value for Money (A-B)	2.96

Therefore, based on the statement for value for money, it can be stated that implementing the project through PPP is more viable than the public sector option. The government stands to gain INR 2.96 Crore in present value terms if it chooses the PPP option over the public sector alternative. This shows that the private sector is better equipped to manage the risks associated with the project.

Site 2: Trasi

Indicator	INR Crore
NPV of cash flows to Government (PPP Reference)	0.81
NPV of retained risks to be added back to PPP reference	0.0
Risk Adjusted PPP Reference (A)	0.81
NPV of cash flows to Government (Base PSC Model)	5.65
NPV of Transferred risks to be added back to base PSC model	(-) 7.90
Risk Adjusted PSC (B)	(-) 2.25
Value for Money (A-B)	3.06

Therefore, based on the statement for value for money, it can be stated that implementing the project through PPP is more viable than the public sector option. The government stands to gain INR 3.06 Crore in present value terms if it chooses the PPP option over the public sector alternative. This shows that the private sector is better equipped to manage the risks associated with the project.

Site 3: Anekal

Indicator	INR Crore
NPV of cash flows to Government (PPP Reference)	1.78
NPV of retained risks to be added back to PPP reference	0.0
Risk Adjusted PPP Reference (A)	1.78
NPV of cash flows to Government (Base PSC Model)	12.32
NPV of Transferred risks to be added back to base PSC model	(-) 16.73
Risk Adjusted PSC (B)	(-) 4.40
Value for Money (A-B)	6.18

Therefore, based on the statement for value for money, it can be stated that implementing the project through PPP is more viable than the public sector option. The government stands to gain INR 6.18 Crore in present value terms if it chooses the PPP option over the public sector alternative. This shows that the private sector is better equipped to manage the risks associated with the project.

Site 4: Kere Tonnur

Indicator	INR Crore
NPV of cash flows to Government (PPP Reference)	0.85
NPV of retained risks to be added back to PPP reference	0.0
Risk Adjusted PPP Reference (A)	0.85
NPV of cash flows to Government (Base PSC Model)	6.71
NPV of Transferred risks to be added back to base PSC model	(-) 9.45
Risk Adjusted PSC (B)	(-) 2.74
Value for Money (A-B)	3.59

Therefore, based on the statement for value for money, it can be stated that implementing the project through PPP is more viable than the public sector option. The government stands to gain INR 3.59 Crore in present value terms if it chooses the PPP option over the public sector alternative. This shows that the private sector is better equipped to manage the risks associated with the project.

7.5 CONCLUSION

Financial Analysis of the project shows that the with a concession period of 30 years, envisaged projects at Shantisagar, Trasi, Anekal and Kere Tonnur have potential to generate INR 85 Lakh, INR 81 Lakh, INR 154 Lakh and INR 85 Lakh respectively, which indicates the present value of the likely receivables for the DoT from the projects.

CHAPTER

8

STATUTORY AND LEGAL FRAMEWORK

8.1 APPLICABLE LAWS & ACT AND LEGAL & REGULATORY FRAMEWORK

8.1.1 The Karnataka Town and Country Planning Act, 1961

Main objective of this Act is to provide for the regulation of planned growth of land use and development and for the making and execution of town planning schemes in the state of Karnataka.

This Act provides for various circumstances under which change of land use could be permitted. It also provides for making and execution of town planning schemes in the State of Karnataka.

- **Planning and Development**

The Planning Authority constituted under the Karnataka Town and country Planning Act, 1961(hereinafter referred to as the "Planning Authority") formulates a Master Plan, regulates development and improvement of entire planning area and is empowered with making of town planning schemes.

- **Revenue and Taxation**

The Act provides for levy and collection of cess, surcharges. The Planning authority is entitled to recover fees in case permission of change in land use is sought for by the land owners.

- **Land Acquisition**

By virtue of Section 69 of the Act the Planning Authority may acquire any land designated in the Master Plan for any public purpose specified in the Act. Further section 70, provides that land needed for the purpose of a scheme of development shall be deemed to be needed for public purpose.

Section 71 confers power on the State Government to acquire land included in a town planning Scheme for public purpose.

8.1.2 The Environment (Protection) Act, 1986 (EPA)

According to EPA, "Environment" includes water, air and land and the inter- relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.

Section 3 of the EPA states, that Central Government shall have the power to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing controlling and abating environmental pollution.

8.1.3 National Environment Policy, 2004

The National Environment Policy (NEP, 2004) is a response to the national commitment to a clean environment, mandated in the Constitution in Articles 48A and 51 A (g), strengthened by judicial interpretation of Article 21. The Objective of NEP 2004 is:

- Conservation of Critical Environmental Resources
- Intra-generational Equity: Livelihood Security for the Poor

8.1.4 The Water (Prevention and Control of Pollution) Act, 1974

The Water (Prevention and Control of Pollution) Act, 1974 suggest that only State Governments can enact water pollution legislation. Article 252 empowers Parliament to enact laws on state subjects for two or more states, where the State Legislatures have consented to such legislation. Under this Act, the State Boards were vested with the regulatory authority and were empowered to establish and enforce effluent standards for factories discharging pollutants into water bodies. A Central Board performs the same functions for union territories and coordinates activities among the states.

The PCBs established under the Water Act, control sewage and industrial effluent discharges in the water bodies by approving, rejecting or conditioning applications for consent to discharge.

8.1.5 The Water (Prevention and Control of Pollution) Cess Act of 1977

The main object of this Act is to meet the expenses of the Central and State water boards. Economic incentives are provided for control of pollution by differential levy of tax structure. The local authorities and certain designated industries are required to pay a cess for water consumption. The revenues accruing thus are in turn used for implementation of the Water (Prevention and Control of Pollution) Act, 1977. The Central Government, after making deductions for collection expenses, pays the Central board and the States such sums as it deems necessary to enforce the provisions of The Water (Prevention and Control of Pollution) Act, 1974. On the installation of effluent treatment equipment and meeting the applicable norms the polluter is entitled to get a rebate of 25% on applicable cess.

8.1.6 The Coastal Regulation Zone Notification, 1991

Following are the guidelines for development of beach resorts/hotels in the designated areas of CRZ-III for temporary occupation of tourist/visitors, with prior approval of the Ministry of Environment & Forests:

- 1) Construction of beach resorts/hotels with prior approval of MEF in the designated areas of CRZ-III for temporary occupation of tourists/visitors shall be subject to the following conditions:
 - a) The project proponents shall not undertake any construction (including temporary constructions and fencing or such other barriers) within 200 metres (in the landward wide) from the High Tide Line and within the area between the Low Tide and High Tide Line;

- live fencing and barbed wire fencing with vegetative cover may be allowed around private properties subject to the condition that such fencing shall in no way hamper public access to the beach;
- no flattening of sand dunes shall be carried out;
- no permanent structures for sports facilities shall be permitted except construction of goal posts, net posts and lamp posts;
- construction of basements may be allowed subject to the condition that no objection certificate is obtained from the State Ground Water Authority to the effect that such construction will not adversely affect free flow of ground water in that area. The State Ground Water Authority shall take into consideration the guidelines issued by the Central Government before granting such no objection certificate.

Explanation:

Though no construction is allowed in the No Development Zone for the purposes of calculation of FSI, the area of entire plot including 50% of the portion which falls within the no development zone shall be taken into account.

- b) The total plot size shall not be less than 0.4 hectares and the total covered area on all floors shall not exceed 33 per cent of the plot size i.e. the FSI shall not exceed 0.33. The open area shall be suitably landscaped with appropriate vegetal cover;
- c) The construction shall be consistent with the surrounding landscape and local architectural style;
- d) The overall height of construction upto highest ridge of the roof, shall not exceed 9 metres and the construction shall not be more than 2 floors (ground floor plus one upper floor);
- e) Ground water shall not be tapped within 200m of the HTL; within the 200 metre - 500 metre zone, it can be tapped only with the concurrence of the Central/State Ground Water Board;
- f) Extraction of sand, levelling or digging of sandy stretches except for structural foundation of building, swimming pool shall not be permitted within 500 metres of the High Tide Line;
- g) The quality of treated effluents, solid wastes, emissions and noise levels, etc. from the project area must conform to the standards laid down by the competent authorities including the Central/State Pollution Control Board and under the Environment (Protection) Act, 1986;
- h) Necessary arrangements for the treatment of the effluents and solid wastes must be made. It must be ensured that the untreated effluents and solid wastes are not discharged into the water or on the beach; and no effluent/solid waste shall be discharged on the beach;
- i) To allow public access to the beach, at least a gap of 20 metres width shall be provided between any two hotels/beach resorts; and in no case shall gaps be less than 500 metres apart; and
- j) If the project involves diversion of forest land for non-forest purposes, clearance as required under the Forest (Conservation) Act, 1980 shall be obtained. The requirements of other Central and State laws as applicable to the project shall be met with.

- k) Approval of the State/Union Territory Tourism Department shall be obtained.
- 2) In ecologically sensitive areas (such as marine parks, mangroves, coral reefs, breeding and spawning grounds of fish, wildlife habitats and such other areas as may notified by the Central/State Government/Union Territories) construction of beach resorts/hotels shall not be permitted.

8.2 INITIATIVES BY CENTRAL GOVERNMENT

8.2.1 Scheme for Support to Public Private Partnerships in Infrastructure

The Government of India recognizes that there is significant deficit in the availability of physical infrastructure across different sectors and that this is hindering economic development. The development of infrastructure requires large investments that cannot be undertaken out of public financing alone, and that in order to attract private capital as well as the techno-managerial efficiencies associated with it, the Government is committed to promoting Public Private Partnerships (PPPs) in infrastructure development. The Government of India recognizes that infrastructure projects may not always be financially viable because of long gestation periods and limited financial returns, and that financial viability of such projects can be improved through Government support. Therefore, the Government of India has decided to put into effect the following scheme for providing financial support to bridge the viability gap of infrastructure projects undertaken through Public Private Partnerships.

Guidelines of the Scheme - Government Support (Viability Gap Funding)

- 1) The total Viability Gap Funding under this scheme will not exceed 20% of the Total Project Cost; provided that the Government or statutory entity that owns the project may, if it so decides, provide additional grants out of its budget, but not exceeding a further 20% of the Total Project Cost.
- 2) Viability Gap Funding under this scheme will normally be in the form of a capital grant at the stage of project construction. Proposals for any other form of assistance may be considered by the Empowered Committee and sanctioned with the approval of Finance Minister on a case-by-case basis.
- 3) Viability Gap Funding up to Rs. 100 crore (Rs. One hundred crore) for each project may be sanctioned by the Empowered Institution subject to the budgetary ceilings indicated by the Finance Ministry. Proposals up to Rs. 200 crore (Rs. Two hundred crore) may be sanctioned by the Empowered Committee, and amounts exceeding Rs. 200 crore may be sanctioned by the Empowered Committee with the approval of Finance Minister.
- 4) Unless otherwise directed by the Ministry of Finance, the Empowered Institutions may approve project proposals with a cumulative capital outlay equivalent to ten times the budget provisions in the respective Annual Plan.

8.3 INITIATIVES BY STATE GOVERNMENT

8.3.1 Karnataka Tourism Policy 2009-14

Classification of Tourism Zones for providing Incentives and Concessions

For development purposes and for providing incentives and concessions for tourism projects Karnataka is classified into 4 tourism zones as follows:

- 1) Zone 1: Within Local Planning Area limits (BDA). This zone will be a low priority zone with few tax benefits.
- 2) Zone 2: B.M.R.D.A. limits. This zone will be a priority zone for attracting destination projects and act as a national hub for global events and activities. Extensive Government support, including large project-specific clearances and tax breaks, etc. will be available.
- 3) Zone 3: Mysore, Coorg, Hampi, Pattadakal – Badami – Aihole, Bijapur, Bidar, other heritage centres and the coast from Ullal to Karwar. This zone will be notified for priority development in an integrated manner with Integrated Tourism Development Master plans (ITDM). Comprehensive tax breaks and benefits, including comprehensive clearances for large projects will be made available.
- 4) Zone 4: All other tourist destinations in Karnataka and wayside facilities in approved locations on National and State Highways. This zone will enjoy benefits and tax incentives as specified.

Authorities for approving Tourism Projects

- a) Tourism Projects with investment up to Rs.3 Crores (Rupees Three Crores): Department of Tourism, Government of Karnataka
- b) Tourism Projects with investment up to Rs.50 Crores (Rupees Fifty Crores): The state-level Single-Window Agency under the Chairmanship of Hon'ble Minister for Industries to Government of Karnataka and Karnataka Udyog Mitra shall be the nodal agency.
- c) Tourism Projects with investment of more than Rs. 50 Crores (Rupees Fifty Crores): The High Level Committee chaired by the Hon'ble Chief Minister of Karnataka. Karnataka Udyog Mitra shall be the nodal agency.

Incentives and Concessions - Stamp duty / Registration charges

- 1) 50% exemption on stamp duty for investment below Rs. 50 Crores.
- 2) 75% exemption on stamp duty for projects of Rs. 50 Crores and above.
- 3) 75% exemption on stamp duty for projects of over Rs. 10 Crores in Zone 3 and Zone 4.
- 4) Registration charges shall be allowed as provided in the Industrial Policy 2009 -14.

Investment Subsidy

The taluks in all the districts of the state have been classified in five categories for providing investment subsidies for Tourism Projects:

- Category A: 10% of the fixed assets subject to a maximum of Rs.10 lakhs
- Category B: 15% of the value of fixed assets subject to a maximum of Rs.15 lakhs
- Category C: 25% of the value of fixed assets subject to a maximum of Rs.25 lakhs
- Category D: 35% of the value of fixed assets subject to a maximum of Rs.35 lakhs
- Category E: 30% of the value of fixed assets subject to a maximum of Rs.30 lakhs

**CHAPTER
9**

**INDICATIVE ENVIRONMENT & SOCIAL
IMPACTS**

The impact of tourism on local communities can be both positive and negative, whether it comes to economic, social, or environmental effects. It depends to which extent tourism is developed in a particular region. Every region has its bearing capacity, that is to say the limit of the incoming influence that does not harm the host community. If we overcome that limit negative impacts of tourism will follow. Following section presents an indicative analysis of environmental and social impacts of the proposed project and measures to mitigate the same.

9.1 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table below presents the general environmental impacts during construction and operation phases of the project and suggested mitigation measures:

Activity	Possible Environmental Impact	Suggested Mitigation Measure
<ul style="list-style-type: none"> Pre-construction Stage - Cutting of trees, clearing of shrubs 	May affect the micro-habitat and distress the natural fauna.	Cutting of trees shall be avoided to the extent possible and the natural vegetation present on the site shall be kept in mind while preparing the architectural concepts and the same shall be incorporated in architectural and landscape design for the project.
<ul style="list-style-type: none"> Construction Stage - Construction activities for development of the project 	Deterioration of air quality due to earth work excavation.	Frequent watering of construction sites to suppress dust emission and transport of earth in covered vehicles
	Disturbance to the natural drainage.	Natural course of the drainage should be restored during any construction activity.
	Soil contamination.	No spillage of oil/ diesel from the construction equipments.
	Water contamination.	Any construction activity should ensure that the water bodies are not contaminated.
	Disposal of excess earth.	The excess earth should be transported to designated place and

Activity	Possible Environmental Impact	Suggested Mitigation Measure
		shall be used for filling and covers.
	Disturbance to other services.	Any shifting of cable / utility lines should be attended with minimum period of disturbance.
	Safety of road users in the implementation area.	Provision of temporary crossings / bridges wherever necessary to facilitate normal movement.
	Noise pollution due to the use of machinery and movement of traffic.	Use of less noise generating equipment and avoiding activities during night.
<ul style="list-style-type: none"> Operation & Maintenance Stage - O&M activities of the machinery and equipments 	Noise pollution due to the use of machinery.	Use of less noise generating equipment and avoiding activities during night.
	Water contamination due to release of effluent waste.	Proper arrangements for effluent handling should be done and should not be dumped in any natural water bodies.

9.2 SOCIAL IMPACTS

The following section demonstrates that prima facie there are no major social impacts of the envisaged project on the communities abutting the site:

- Financial benefits and empowerment for local people - Generation of employment for local labour during construction stage as well as operation stage.
- No impairment to the safety of the community.
- No affect on the local culture and minimal influence on the character of the local community.
- No relocation and rehabilitation required.
- No harm to the tangible and intangible assets of the local community.

9.3 CONCLUSION

It is a great challenge to make a profitable business running tourism in an area without some negative effect to the local communities. It is possible for the tourism industry to cooperate with other industries and bring benefits to both the tourism organizations and local businesses. The first step to achieve it is to understand the needs and desires of both the host community and the tourists.

In order to decrease the negative effects on local societies and environment, the following points will have to be kept in mind while implementing the project:

- Local people to be involved as employees.
- To cooperate with the local businesses.
- To have a respectful attitude towards the local culture.
- To respect to the natural resources and to protect them.

CHAPTER

10

OPERATING FRAMEWORK

10.1 RISKS AND MITIGATION

Risks are inherent in all PPP projects as in any other infrastructure projects. They arise due to uncertain future outcomes which may have direct effect on the provision of services by the project, and/or the commercial viability of the project. The risk allocation to parties in contract and the management of risks are, therefore, at the heart of a PPP design. This is also an important element in establishing the business case for a PPP project.

The risk analysis, allocation and management involve the following activities:

- Identification of all possible risks and assessing their likelihood;
- Examining the likely effects of the risks in quantitative and qualitative terms;
- Consideration of suitable mitigation measures that may be available; and
- Allocation of risks to parties.

10.1.1 Risks in PPP Projects

Typically the main categories of risks associated with PPP projects include the following:

- Construction and Completion Risks (delays in construction or cost overruns);
- Technology risk (new and untried technology, whose performance cannot be checked against existing references);
- Sponsor Risk (ability of private sponsor(s) to deliver the project);
- Environmental Risk (environmental constraints in construction and operation);
- Commercial Risk (lower demand and/or revenues than the ones projected);
- Operating Risk (inefficiency in operation leading to higher operating cost);
- Financial Risks (change in interest and currency exchange rates, and tax laws);
- Legal Risk (change in legal regime);
- Regulatory Risk (change in regulatory regimes);
- Political Risk (change in government policy or action that affects the business case of the project); and
- Force Majeure (risks due to unpredictable natural and man-made events such as earthquake, flood, civil war, etc.).

10.1.2 Identification of Possible Risks and Mitigation Measures

The following risk matrix demonstrates the risks associated with the Project and suitable mitigation measures. These consideration needs to be reflected in contract design and negotiation, and later on in designing a contract management process to address the risks during the construction and operation periods.

Table 10.1: Risk Identification and Mitigation Measures

Category of risk	Description and Likely Effect	Mitigation Measures
Construction and Completion Risk	Various factors can lead to delays in completion.	Effective clauses in the Concession Agreement and ensuring timely clearances and handing over of sites are some ways of mitigating this risk.
Demand Risk	These risks arise from the project if there is no established demand for the Project.	A Pre-feasibility has been carried out to assess the viability of the project based on the demand for the revenue generating components for the project. Thus partial risks are eliminated on the basis of the results & findings of the Pre-feasibility study.
Commercial Risk/ Revenue Risk	These risks arise from existing and future competition, effectiveness in utilizing space and management of facilities.	With the involvement of Private Sector in marketing, O&M and management and attractive incentives structures linked with Project success, risk would be transferred to the Developer.
Financial Risks	Changes in tax law or policy that have negative effect on the private party, its assets, or the project	Sensitivity analysis has been conducted in the Preliminary Feasibility Study to test the robustness of financial return. However if such effects are discriminatory, then Contractual provisions can be made for devising appropriate mechanism to provide compensation.
Political Risk	Change in law, expropriation, revocation of licenses, permits etc, civil disturbance, war, non-default termination of contract.	These can be mitigated by effective legal documentation and insurance.
Force Majeure Natural Events	Flood, earthquake, cyclone etc; closure of operation and negative effects on assets and project	Contractual provisions to withstand effect of such periods.

10.2 PROJECT STRUCTURING AND PAYMENT OPTIONS

This section presents an analysis of various options available for structuring the project on PPP and evaluation of pros and cons of the same.

10.2.1 Project Structuring Options

Based on structuring options having been successfully tested for PPP projects by various Government agencies in recent years, by Consultants own experience of assisting many Government bodies and based on further innovative iterations following broad options are being analyzed below:

- **Option 1 : Land on lease**

In this kind of PPP arrangements, the Government leases the land to the Concessionaire. The concessionaire makes investments and operates the envisaged facility for a pre-determined concession period after which the ownership reverts back to the public sector. In this model, operational and investment risks can be substantially transferred to the concessionaire. By retaining ultimate ownership, the government controls the policy and can allocate risks to parties that are best suited to assume or remove them. Typically concession periods range between 5 to 60 years based on the investments size of the project and to give the private player a reasonable amount of time to earn a decent rate of return on his investment.

- **Option 2 : Incorporated Joint Venture**

In recent times there have been some contextual isolated innovative cases of JV structure between government bodies and private sector players. The first category of JV is an incorporated JV in form of an SPV and this is more prevalent in concessioning of infrastructure projects in India. The advantage of Incorporated JV is better oversight and control over the lessee / concessionaire. The main disadvantage of the structure is that it is a pain-gain sharing arrangement and as has been evidenced in the case of Delhi Airport modernization, AAI has been forced to infuse higher equity.

- **Option 3 : Unincorporated Joint Venture**

The Unincorporated JV structure is a form of project structure in which the Leasing/Concessioning Authority does not hold any equity stake in the SPV but it does have the provision of sharing revenue from the SPV according to the JV agreement signed between the Leasing/Concessioning Authority and the SPV or the developer.

10.2.2 Payment Options

- **Upfront Payment only** – This is the option where the developer gives an upfront amount in consideration for the lease/concession/outright sale right and is the most prevalent mechanism for land development projects.
- **A combination of Upfront and Recurring** – This mechanism is used mainly in the lease type model of land development projects, where a recurring source of revenue is available to the developer. The developer gives an upfront amount to the leasing/concessioning authority and follows it with either Quarterly /Annually Recurring Payment. In such option, the Upfront amount is generally decided upfront by the leasing/ concessioning authority and the

recurring payment is the bid variable. There may be an inbuilt provision for annual escalation in the recurring payment to take care of the inflation or upside.

- **A combination of Upfront, Recurring and fixed Revenue Share** - This mechanism is also used mainly in the lease type model of land development projects, where a recurring source of revenue is available to the developer. The developer gives an upfront amount to the leasing/concessioning authority and follows it with either Quarterly / Annually Recurring Payment. In addition to this the developer also shares a fixed percentage of the revenue with the authority. This prototype model was used as early as five decades back for initial seven super discount malls of Wal Mart in USA. However, it has been seen in many cases that due to administrative and audit hassles involved, a very small percentage of revenue sharing is not worth the pain.
- **Annuity Payment** - This structure is frequently used for road projects. This is generally used in the projects, where government body is required to make annual payments to the concessionaire in exchange for creation of infrastructure and operations and management of the facility. The decision on accrual of user charges if any is with the authority, i.e., the income for the concessionaire can be either (user charges + annuity payments) or only annuity payments with user charges flowing to the Authority.
- **EPC and O&M Agreement** - This structure is used, where Government body is willing to do the required capital investment and also willing to keep the higher degree of control over construction and development quality. There are many possible payment modes like upfront, recurring or revenue share for such structure.
- **Grant** - Grant is provided in the PPP projects, which are not viable on their own. In the projects having grant structure may have grant amount as bid variable or it may be clubbed with other recurring receivable.

10.3 INDICATIVE PROJECT STRUCTURE

Based on the preliminary financial analysis carried out for proposed product mix, the probable and realistic receivables from the project are identified for the Department of Tourism (Government of Karnataka) and a suitable project structure is suggested to implement the project on PPP.

10.3.1 Proposed Operational Framework

Concession Period	30 years with RoFR to the Concessionaire at the end of Concession Period.
Payment Option	Annual Concession Fee with periodic enhancements.
Role of Private Sector Partner (PSP)	<ul style="list-style-type: none"> • Plan, design, finance, engineer, construct, develop and equip the envisaged project facilities.

	<ul style="list-style-type: none">• Operate , Maintain and Manage the Project facility throughout the Concession Period• Marketing of the Project.• Collection of Revenues from the project during the Concession Period.
Role of State Government (Department of Tourism)	<ul style="list-style-type: none">• Providing encumbrance free project site for the pre-determined Concession Period.• Facilitating various approvals / permits to run the smooth operations.• Setting up of Institutional Framework for review & monitoring

CHAPTER

11

WAY FORWARD

- **Capacity Building of PPP Cell Personnel**

Capacity Building Workshops will be conducted for officials who are identified as PPP Cell personnel by the department. These workshops will be conducted in order to enable these personnel in understanding the concept of PPP, model procedures and documents related to implementation of PPP projects, key issues related to PPP etc. Three training sessions will be organised as a part of capacity building. Various techniques of effective communication like audio-visual media in form of PowerPoint presentations, videos, notes, interaction dialogues, group activities quizzes etc will be used for these capacity building sessions.

- **Assistance in Global Inventors Meet 2012**

Assistance will be provided to the tourism department as the knowledge partner in Investor Meet for the sector. The assistance would aim showcasing tourism sector investment potential and bankable projects to attract Investors, the assistance may be in the form of preparing dockets of projects, information memorandums, brochures and presentations to provide information about major tourist destinations, Current & potential tourist inflow, Projects identified & investments required, Incentives & assistance given by the government, Investment procedure, etc.

- **Preparation of Model Documents for Selection of Consultants for the Tourism Projects**

The aforementioned PPP cell would be provided with the Model Tender documents. The model documents would give insights on the guidelines which are to be considered while selection of Consultants for tourism projects. Hence, these documents will assist PPP Cell personnel during the appointments and selection processes of Consultants for tourism projects.

The documents would include broad framework on the following:

- Detailed Scope of Work including deliverables and timelines for submission.
- Outlining the minimum eligibility criteria, which the bidders would necessarily have to meet before their bids are evaluated in detail.
- Description of Evaluation process elaborating the various evaluation parameters and their respective weightages.
- A draft Agreement which would spell out the following:
 - The Obligations and Scope of Work for the consultant
 - Progress Reporting Mechanism
 - Dispute Resolution Mechanisms

- Termination of Contracts by either of the parties
- Defining conditions and events leading up to a default in obligations
- Conditions construing Force Majeure
- Conditions leading up to a termination of Contract and invoking of the Performance Guarantee.

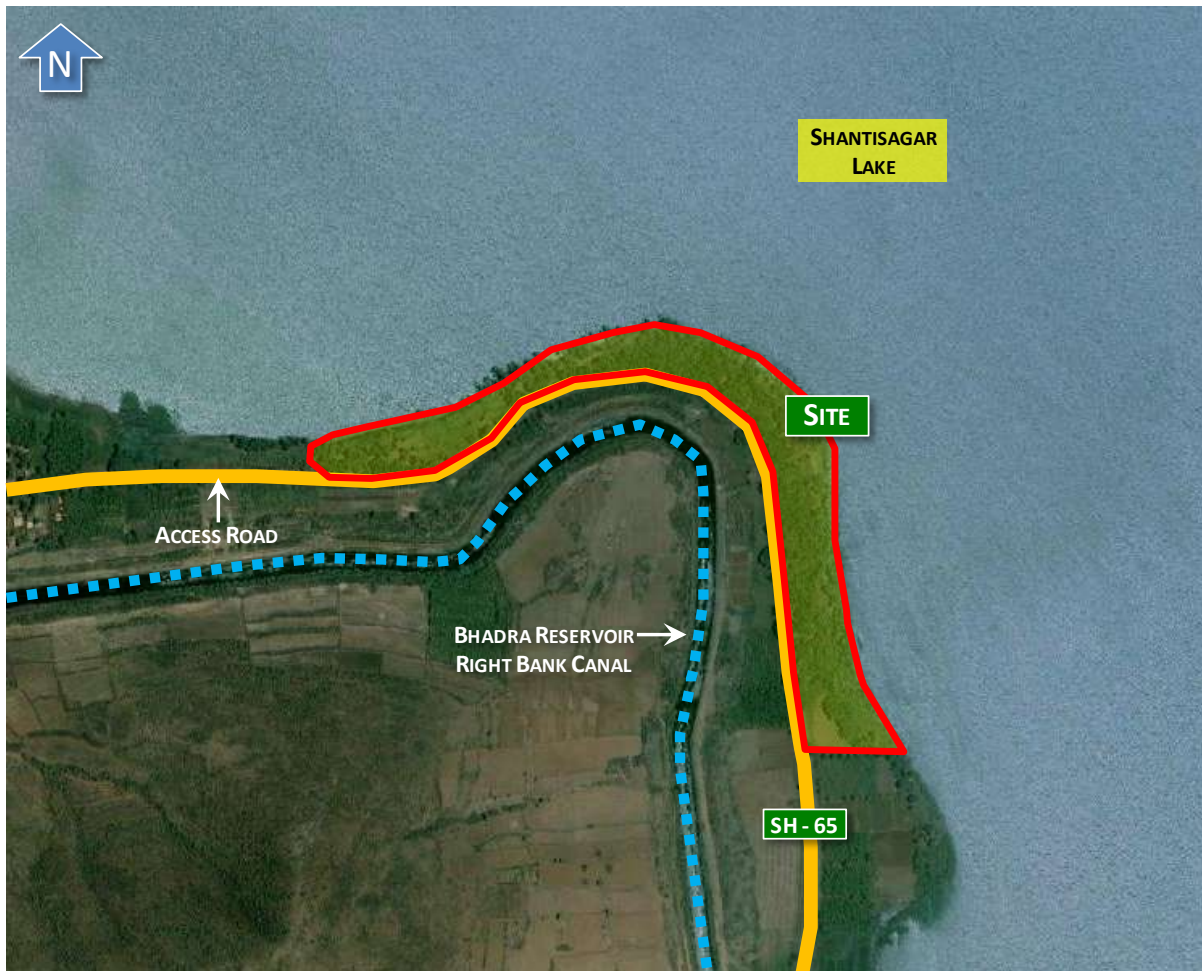
CHAPTER 12 ANNEXURE

12.1 ANNEXURE – A : MAP SHOWING LOCATIONS OF THE PROJECT SITES



12.2 ANNEXURE – B

12.2.1 Satellite Image Showing Site Structure – Site 1: Shantisagar



12.2.2 Site Pictures – Site 1: Shantisagar



Panoramic View of the Site



Approach Road to the Site



Shantisagar Lake Front

12.2.3 Satellite Image Showing Site Structure – Site 2: Trasi



12.2.5 Site Pictures – Site 2: Trasi

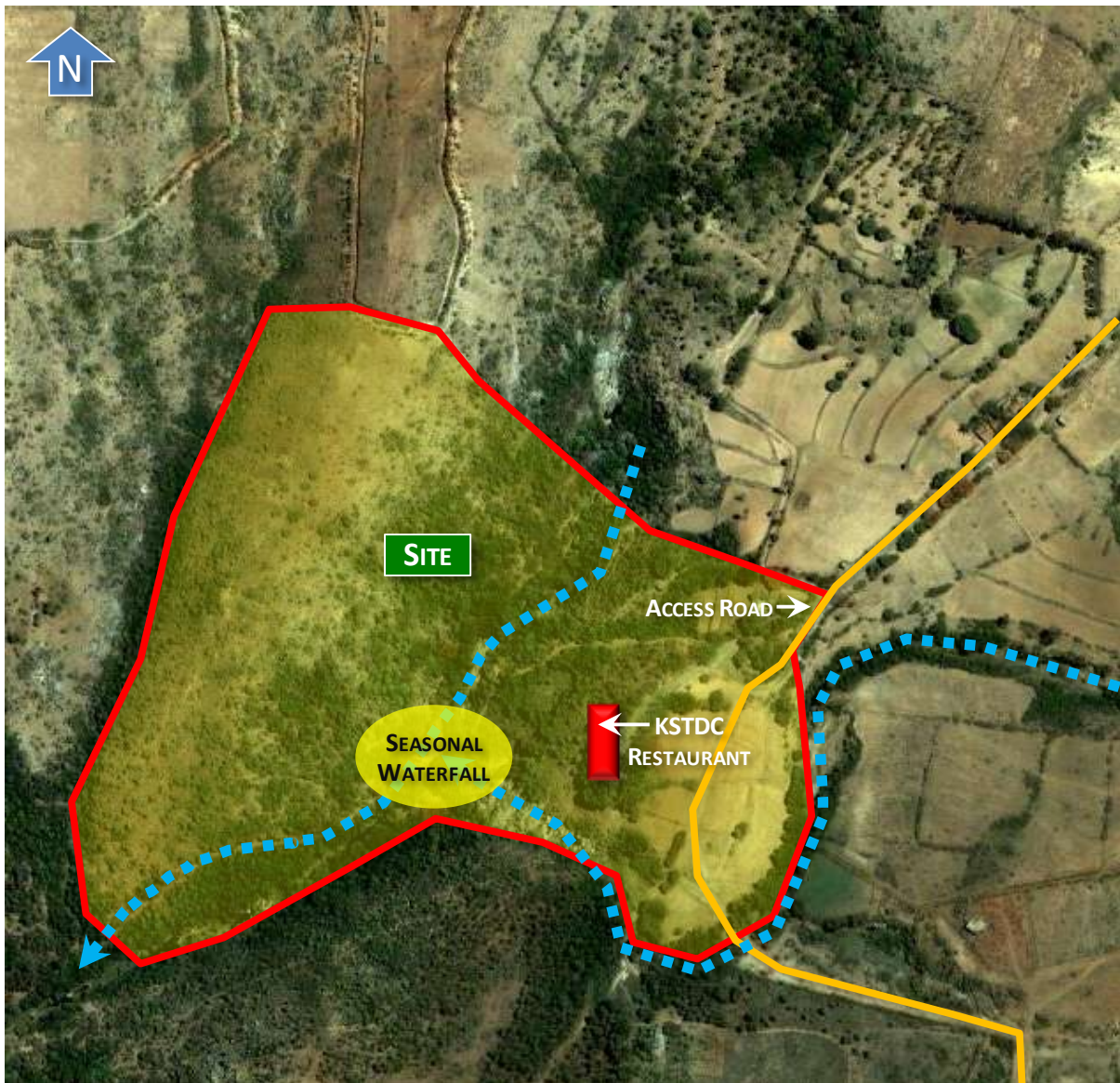


Vacant Land Parcel at the Site



Trasi Beach Abutting the Site

12.2.6 Satellite Image Showing Site Structure – Site 3: Anekal



12.2.7 Site Sketch – Site 3: Anekal

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(1mmk 20cm)
 Not to scale

Sketch
 13/2
 Tourism Officer
 Dept of Tourism

1) ಗಾ/LN01/K/CR/59/07-08 ರ ಮೇರೆಗೆ ಪಾನ್ಯ ವಿಕಿತ್ ಭೂಸ್ವಾಧೀನಗಳಲ್ಲಿ ಪ್ರವಾಸೋದ್ಯಮ ಇಲಾಖೆಗೆ 50=00 ಎಕ್ರೆ ಜಾಗ ಮಂಜೂರು ಮಾಡಿ ಸಹಾಯಕತೆಯು ವ್ಯಕ್ತಿಸಿರುವಂತೆ. 1) ತಮ್ಮನಾಯ್ಕನಾಯ್ಕಿ ಸ.ನಂ. 177 ರಲ್ಲಿ 28-14, 2) ಅಣ್ಣನಾಯ್ಕನಾಯ್ಕಿ ಸ.ನಂ.1 ರಲ್ಲಿ 13-10 ಮತ್ತು ಸ.ನಂ. 4 ರಲ್ಲಿ 3-36 ಹಾಗೂ 3) ಪಟ್ಟಣನಾಯ್ಕನಾಯ್ಕಿ ಸ.ನಂ. 18 ರಲ್ಲಿ 4-20 ಹೀಗೆ ಒಟ್ಟು 50=00 ಎಕ್ರೆ ಜಾಗವನ್ನು ಪ್ರವಾಸೋದ್ಯಮ ಇಲಾಖೆಗೆ ಸಹಾಯಕತೆಯು ವ್ಯಕ್ತಿಸುತ್ತದೆ.

2) ಮಂಜೂರಿನಂತೆ ಜಾಗವನ್ನು ಸರ್ಕಾರಕ್ಕೆ ಒತ್ತು ಬಂಧಿಸಿದ ಸುಲಭವಿದೆ.

(Signature)
 ಅಧಿಕಾರಿ ಸರ್ವೆಯಾ
 ಅಧಿಕಾರಿ

(Signature)
 Lakshmi
 11/14

12.2.8 Site Pictures – Site 3: Anekal



Panoramic View of the Site



Existing Restaurant on the Site



Toilet Block

12.2.9 Satellite Image Showing Site Structure – Site 4: Kere Tonnur



12.2.10 Site Pictures – Site 4: Kere Tonnur



Vacant Land Parcel at the Site



Water Front near the Site