

CHHOTUBHAI GOPALBHAI PATEL INSTITUTE OF TECHNOLOGY
CIVIL ENGINEERING DEPARTMENT



A
REPORT
ON

"Academic tour of Goa (12-10-2015 to 16-10-2015)"

B.Tech (7th Semester)

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1. Introduction

The phenomenal growth of tourism in the past five decades has dramatically changed global lifestyles to include tourism, and the impetus for still greater growth is rooted in globalisation and the expanding economies of Asia. Today, tourism is the fastest-growing foreign income earner worldwide with the major tourist generating countries situated in Western Europe and North America.

1.1 Significance of Tourism

Tourism is a multi-disciplinary sector and is interlinked with several different industries and service sectors. It is an activity, which affects societies in different ways and has certain impacts on their socio-economic and cultural development. The various fields that tourism can contribute to our stated as follows:

- Regional development
- Employment,
- Travel industry,
- Entertainment activities,
- Culture and other hospitality services,
- Environmental protection,
- Infrastructure
- Transportation
- Health
- Education

1.2 Forms of Tourism

Domestic tourism: This sort of tourism involves the visits by residents of a country to their own country,

Inbound tourism: This is the sum of visits to a country by non-residents,

Outbound tourism: Such an activity contains the visits by residents of a country to another country.

All definitions stated above indicate that, tourism is a broad concept referring to the people's activities of leisure time within or out of their countries regardless of routine travels i.e. from home to work place.

India follows the UN recommendation dividing tourists into two groups namely

1. **Leisure** (recreation, holiday, health, study, religion and sport) and
2. **Business** (family, mission or meeting)

2. Definition of a Tourist

World Tourism Organization “Tourism comprises the activities carried out by people during their holidays and their visit to places different from their usual environment or residence, for a consecutive period of time less than a year, with leisure, business or other purposes.”

The definition of a tourist adopted by the UNO is as follows:

“Any person visiting a country, other than that in which he usually resides, for a period of at least 24 hours”.

India has adopted the following definition to recognize a tourist

“A person who travels to a country other than that in which he has his usual residence, the main purpose of whose visit is other than the exercise of an activity remunerated from within the country visited and is staying for a period of at least one night but not more than one year in that country”.

3. Tourism In Goa

Some of the types of tourism are as follows

1. Beach Tourism: As Goa has a 105 km coast line, the beaches of Goa are a very important tourist attraction. From Keri in the north to Palolem in the south, Goa has many world famous beaches like Arambol, Colva (longest beach in Goa), Anjuna (known for its flea market), Calangute (most popular and crowded), Palolem and many other small lesser known beaches where the tourists can relax, soak up the sun and feast on the local cuisine

2. Adventure Tourism: It has recently become very popular in India. It involves the exploration of remote areas and exotic locales and engaging in various activities like trekking, white water rafting, camel safaris, paragliding, rock climbing etc. Goa has a very good potential for activities like trekking, paragliding, dolphin sighting boating, and mountain climbing.

3. Wildlife Tourism: India has a rich forest cover, where we find some very beautiful and exotic species of wildlife. Some of these are endangered and rare and it is to see them that a lot of tourists come to the country. Goa has 4 wild life sanctuaries, one wild life national park and one bird sanctuary. Almost 60% of the Goa area is protected area. Around 1.25 lakhs tourist visit these sanctuaries every year. Goa has a variety of flora and fauna which could be used to attract tourists to these places. Goa also has two beautiful lakes, at Mayem and Carambolim, where migratory birds are sighted in large numbers.

4. Medical Tourism: Medical tourism is a recent phenomenon in Goa. Many world class medical hospitals like Apollo and Vivus have been started in Goa, which provide world class facilities at a fraction of the corresponding cost abroad. Foreigners from many developed countries prefer to come to Goa for a variety of treatment ranging from dental surgery, hearing problems, knee replacements to even heart surgery. (Photos will be shown during the presentation). This is a market where Goa has potential for further development and the government should take steps to see that this market can be sustained and increased medical tourism can be promoted in the future

5. Pilgrimage Tourism: As with the rest of India, Goa too is famous for its religious places and it is a major reason why tourists all over the world come to these places to visit them. The World Heritage Site at Old Goa is a major tourist attraction with a large number of churches such as St Cajetan, Our Lady of the Mount, St Francis of Assisi Church and Convent, Basilica of Bom Jesus, Se Cathedral, Church of Our Lady of Rosary, the Archaeological Museum, the Christian Art Museum, the ruins of the Church and Monastery of St Augustine, The Chapel of St Catherine, the Viceroy's Arch, Chapel of St Anthony (opposite the ruins of the Church of St Augustine) Convent of Santa Monica. Besides this there are many other beautiful churches and temples all over Goa. A few kilometers away from Old Goa, we have the famous Mangueshi and Mardol temples as well as the Saptakoteshwar temples at Narve.

6. Cultural Tourism: Goa is a land of rich and diverse culture and people of different religions (Hindus, Muslims and Christians) live peacefully together in

harmony and they are famous for their own traditions and culture. Goa is famous for the Carnival and the IFFI. Besides, Bonderam (Divar), Sangodd (Boat festival) and Taranga are also famous. Goa is known for traditional cultural dances and songs (Mandos, Fugddies, Goff, Godemodni and many others)

7. Architectural Tourism: India has a rich amalgamation of various architectural styles where the influence of many dynasties and many cultures can be seen. Some of the important places include Dilwara temples at Rajasthan, Taj Mahal at Agra, Victoria terminus and Fort Area in Mumbai, Red Fort at Delhi, etc. Goa too has an architecturally rich heritage which could be projected by the government as tourist places. Goa has many forts like Chapora, Teracol and Alorna which can be used to attract the tourists.

3.1 Back Ground

Since the tourism industry of Goa is a major engine for the economic growth of the state, it demands utmost urgency to modernize the industry in the perspective of the national tourism policy 2002. A guaranteed multiplier effect is expected by the appropriate planned development of the tourism sector on the employment generation, economic development and impetus for rural regeneration. Given the potential of attracting tourists the development of tourism is an obvious choice for the state Goa. The emphasis on domestic tourism as a major driver of tourism growth is focused in the national tourism policy and also in the policy of the state of Goa. Goa is the only state after Kerala where beaches are the focal points of the tourism industry. It is for this reason that Goa is known as the beach country of India.

By the development of hospitality industry and better infrastructure, Goa could be a more focused international tourist spot and could be seen as a global brand in the tourism map of the world. Many international festivals like international film festivals of India, which has been held since last year made Goa as an international hotspot in the world of Cinema. Situated in the Malabar Coast, Goa is known for its Gothic churches, crumbling forts, palm- fringed beaches, coconut groves, ferry rides, and bubbly folk music! With its 131-km-long coastline, Goa is an important locale in every tourist's itinerary in India and the world. Sun, sand and sea being the major attractions, Goa is a perfect heaven for

those who need and want relaxation. In 2004, 3,63,230 foreign tourists visited Goa. The foreign tourist visit during 2004 was higher by 14.4 % than the previous year. During 2004, the number of domestic tourists who visited Goa was 8,76,778. The study involved identification of major tourist places, place wise accommodation units with number of hotel rooms and beds, employees in these hotels, number of tourist (both domestic and foreign), time of stay and places they visited in Goa. This study also focuses on Government of Goa's role in the development of tourism and their total investment in previous plans.

3.2 Goa Tourism: A Perspective

"The pearl of the east," GOA is situated on the Malabar Coast endowed with sandy beaches and a tropical climate. Inland Goa is hilly, stretching to part of the Western Ghats. It is bounded by the states of Maharashtra on the north and Karnataka on the east and south, and by the Arabian Sea on the west. The total area is 3,702 square kilometers.

The two largest rivers are the Mandavi and Zuari, between the mouths of which lies the island of Goa. The island is triangular, the apex (called the cape) being a rocky headland separating the harbor of Goa into two anchorages. There are three principal cities in Goa, namely Marmagao, Madgaon (Margao), and Panaji. About one-quarter of the state is covered by forest. The climate is generally warm, with average January temperatures ranging from 19° to 29° C (66° to 84° F), and average June temperatures ranging from 25° to 33° C (77° to 91° F). Goa experiences a monsoon season from June through September; accounts for four-fifths of the state's average annual rainfall. Panaji is the capital of Goa. The state has two districts and divided into 11 talukas Goa has an airport (Dabolim Airport) and is connected by all private and public airlines of India. The nearest international airports for Goa are Mumbai and Bangalore. The Railhead is up to Vasco-da-Gama and Margoa and is connected by train with Bangalore, Belgaum, Hospet, Hubli and Hyderabad and via Miraj to Bombay, Delhi and Agra. The road to Panaji, the capital of Goa, is connected to Bangalore (598 kms) Belgaum (157 km), Bombay (594 kms), Gokarn (154 km), Hospet (315 km), Hubli (184 km), Karwar (103 km), Kolhapur (246 km), Malwan (150 km), Mangalore (371 kms), Mysore (696 kms), Pune (458 kms), Ratnagiri (263 kms), Vengurla (73 kms) etc. Kadamba Transport Corporation provides the Bus Services,

Maharashtra State Road Transport Corporation (MSRTC) and Karnataka State Road Transport Corporation (KSRTC) which operate frequent bus services between Panaji, Vasco, Margao and to Bangalore, Belgaum, Gokarn, Hubli, Karwar, Kolhapur, Malwan, Mangalore, Miraj, Mysore, Pune, Ratnagiri and Vengurla. The ship services also ply between Bombay and Goa organized by private groups. English is widely spoken and understood in urban areas and to a lesser extent in the rural areas. Konkani, the official language, is most commonly used in day-to-day life. Marathi and Hindi, the other national languages are also understood by most of the population. Portuguese is also spoken among the old Goan people. Till the end of May 2005, there were 468 hotels in the state of Goa. Among them 5 star deluxe hotels are 9, 5 star hotels are 2, 4 star hotels are 2, 3 star hotels are 14, 2 star hotels are 27, 1 star hotels are 19, guesthouses are 44. There are 351 resorts or other hotels in entire Goa state.

Most of the tourism in Goa is concentrated in the coastal stretches of Bardez, Salcete Tiswadi and Marmagao. Over 90 percent of domestic tourists and over 99 percent of the international tourists frequent these areas. Two types of tourists visit Goa; the first is the domestic tourists, who comprise 80 percent of all tourists. Curiosity with the Goa's image, which holds a degree of mysticism, a sense of freedom and western lifestyle, many people of the rest of India, visited Goa. The second is the international tourists who visit Goa purely for the natural environment of tropical climate. Within the category of international tourists there are two sub-categories: backpackers and charter tourists. The domestic and international both categories of tourists visit Goa for the beaches, they stay away from each other. The backpackers are not found in areas of charter tourists; they prefer to mingle and live with the local communities. Whereas, the charter tourists tend to stay in the luxury starred hotels. Domestic and international tourists also differ in terms of the areas they frequent. For the domestic tourist, the beaches hold limited appeal, so domestic tourists remain away from the places frequented by the international tourists. The timings of visits are clearly different for the domestic and the international tourists. In previous decades, a clear off-season for all tourists could be identified. Today this is not so since the domestic tourists come throughout the year albeit in larger numbers in the non-

monsoon months. Conversely, international tourists avoid the monsoon months; as for them the use of the beach is the prime attraction to come to Goa.

3.3 Places to be visited in Goa

❖ **Basilica of Bom Jesus:**

Built in 16th century is the most popular and famous of all churches in Goa. The mortal remains of St. Francis Xavier, kept in a silver casket, are enshrined here. This church dedicated to Infant Jesus is now a World Heritage Monument.

Timings: Sunday: 10.00 to 18.30 hrs. Weekdays: 09.00 to 18.30 hrs. Masses: Sunday: 08.00 & 09.15 hrs. Weekdays: 07.00 & 08.00 hrs.

❖ **National Institute of Oceanography:**

The National Institute of Oceanography (NIO) with its headquarters at Dona Paula, Goa, and regional centers at Kochi, Mumbai and Visakhapatnam, is one of the 38 constituent laboratories of the Council of Scientific & Industrial Research (CSIR), New Delhi. NIO was established on 1 January 1966 following the International Indian Ocean Expedition (IIOE) in early 1960s. The institute has grown today into a large oceanographic laboratory of international repute. The focus of research has been on observing and understanding the special oceanographic features that the North Indian basin offers. The inferences from this research have been reported in about 5000 research articles so far.

The institute has about 200 scientists (more than half of them hold doctoral degree) and 100 technical support staff. The major research areas include the four traditional branches of oceanography-biological, chemical, geological/geophysical, and physical - and some other areas such as marine instrumentation and archaeology. The institute has well equipped laboratories to conduct research in these and multidisciplinary areas. The institute also operates a coastal research vessel CRV Sagar Sukti, a 23 m vessel equipped for multidisciplinary oceanographic observations. NIO's scientists also have access to the ocean going research vessel ORV Sagar Kanya, operated by the Ministry of Earth Sciences. The institute has a library with 15,000 books and 20,000 back volumes of research journals, making it the best collection of printed literature on ocean sciences in the country.

In addition to basic research, the institute also carries out applied research

sponsored by the industry. These studies include oceanographic data collection, environmental impact assessment, and modeling to predict environmental impact. The institute also provides consultancy on a number of issues including marine environmental protection and coastal zone regulations.

With the largest collection of ocean scientists in the country, and equipped with suitable ocean research infrastructure, NIO serves as an advanced center of education in ocean sciences. Many universities have recognized the institute for carrying out doctoral research, and a number of NIO scientists have been recognized as doctoral research guides. There are at present over 60 Junior/Senior Research Fellows (qualified through CSIR/UGC eligibility criterion) pursuing their doctoral studies in the institute. In addition, over 240 undergraduate and postgraduate students pursue their project research at this institute every year. About 5% of them come from foreign countries.

More information about ongoing research programmes, student opportunities, research publications and seas around India is available on this website. Use different menu options to explore the world of NIO.

❖ **Salaulim Dam**

The Salaulim Dam (also spelled Selaulim, Saluli) located on the Salaulim River, a tributary of the Zuari River in Goa, India, is an integral component of the Salaulim Irrigation Project which envisages benefits of irrigation and drinking water supply. The dam is a composite earth-cum-masonry dam of 42.7 metres (140 ft) height with a water spread area of 24 km² (9.3 sq mi). It was initially planned to provide irrigation to an ultimate potential of 14,326 hectares (35,400 acres) and water supply of 160 million litres per day (MLD) to South Goa; the water supply component for domestic and industrial use is now increased to 380 MLD. The initial cost of the project when approved in 1971 was Rs. 9.61 crore, which, as of 2007, is estimated to cost Rs 170 crores. Construction of the project was however started in 1976, the dam was completed in 2000 and the irrigation component is under final stages of completion having achieved an irrigation potential of 9,537 ha, as of 2007.

The project is located at Sirga about 5 km from the Sanguem town, in the Zuari River Basin, which is drained by the Zuari River which in turn is formed

after the confluence of Selaulim (also spelled Salaulim) and Uguem Rivers in Sanguem Taluk. The Salaulim dam is located on the Selaulim River (also known as Sanguem) near the Sanguem town. The river drains a catchment area of 227 km²(88 sq mi).

❖ **Mormugoa Port Trust**

At the time of its commissioning in 1888, the Mormugao Port comprised of 3 berths along with a breakwater having a length of 358 meters. As the years rolled by, the infrastructure slowly kept growing. By 1922, Berths 4 and 5 were built and the breakwater was extended to its present length of 522.40 meters. A mole of 270 meters was added.

With the emergence of mining as a major industry in Goa, a Master Plan was evolved by the Portuguese for the development of Mormugao Port as an iron ore terminal, envisaging "dedicated berth fitted with Mechanical Ore Loading Plants, provided and financed by various iron ore exporters." In accordance with this, in 1959 M/s Chowgule & Co. Pvt. Ltd., was permitted to set up Asia's very first Mechanical Ore Handling Plant at Berth No.6, with a capacity of 1000 tph. Berth 7 was constructed as an adjunct to it. The Liberation of Goa on December 19, 1961 marked the end of an epoch in Goan history.

Mormugao Port, went through a fair amount of change as the emphasis shifted to development of infrastructure. A couple of years after liberation, the port was delinked from the Railway management. The main railway section from Vasco da Gama to the border of Goa was transferred to the Southern Railways. The Port however, operated its own railway system between Vasco da Gama interchange point and the harbour area.

From 1948 onwards the iron ore traffic gained importance. The Japanese were rebuilding their nation and Goan iron ore was fated to play a key role in the Japanese industrial renaissance. Japan preferred Goan Iron ore for its expanding steel industry on account of price consideration and other logistics. The Port of Mormugao was now poised for a dramatic growth. It would no more be a sleepy port importing table wines from Portugal and exporting oil cakes from Hubli.

Others avenues had earlier been opened by enterprising foreigners. Josephine Hougaz was one such an ethnic Syrian holding a US passport. She introduced Goan cashew nuts to American chocolate makers. Wall Street had

crashed. The year was 1929, for almonds and walnuts, until then the preferred fillings for American chocolate and pastry makers, had reached levels that were beyond most of their consumers. But cashew nuts, though subject to considerable sea freight additional for importers, were in comparison cheap but nutritious and tasty American confectioners took to Goan cashew nuts in the year of the wall street crash.

The exploitation of iron ore mines in Goa on a commercial scale since 1947, brought about revolutionary changes in the pattern of Mormugao Port traffic. The level of traffic at the port rose to over 2.78 lakhs tonnes in the year 1953. In the years that followed, the traffic grew by leaps and bounds reaching the mark of 6.4 lakh to 14.8 million tonnes in 1973-74. Today, the iron exported through Mormugao constitutes 39 per cent of the total iron ore exports from India, and the port occupies a prestigious position amongst the Major Ports of the country.

The growth of traffic accentuated the inadequacy of the available port facilities but it offered new opportunities to daring entrepreneurs.

In 1959, Chowgule & Co. Pvt. Ltd., obtained a concession from the Portuguese government and set up a Mechanical Ore Handling Plant with a handling capacity of 10,000 tonnes per day. It was, it is claimed, the first of its kind in Asia.

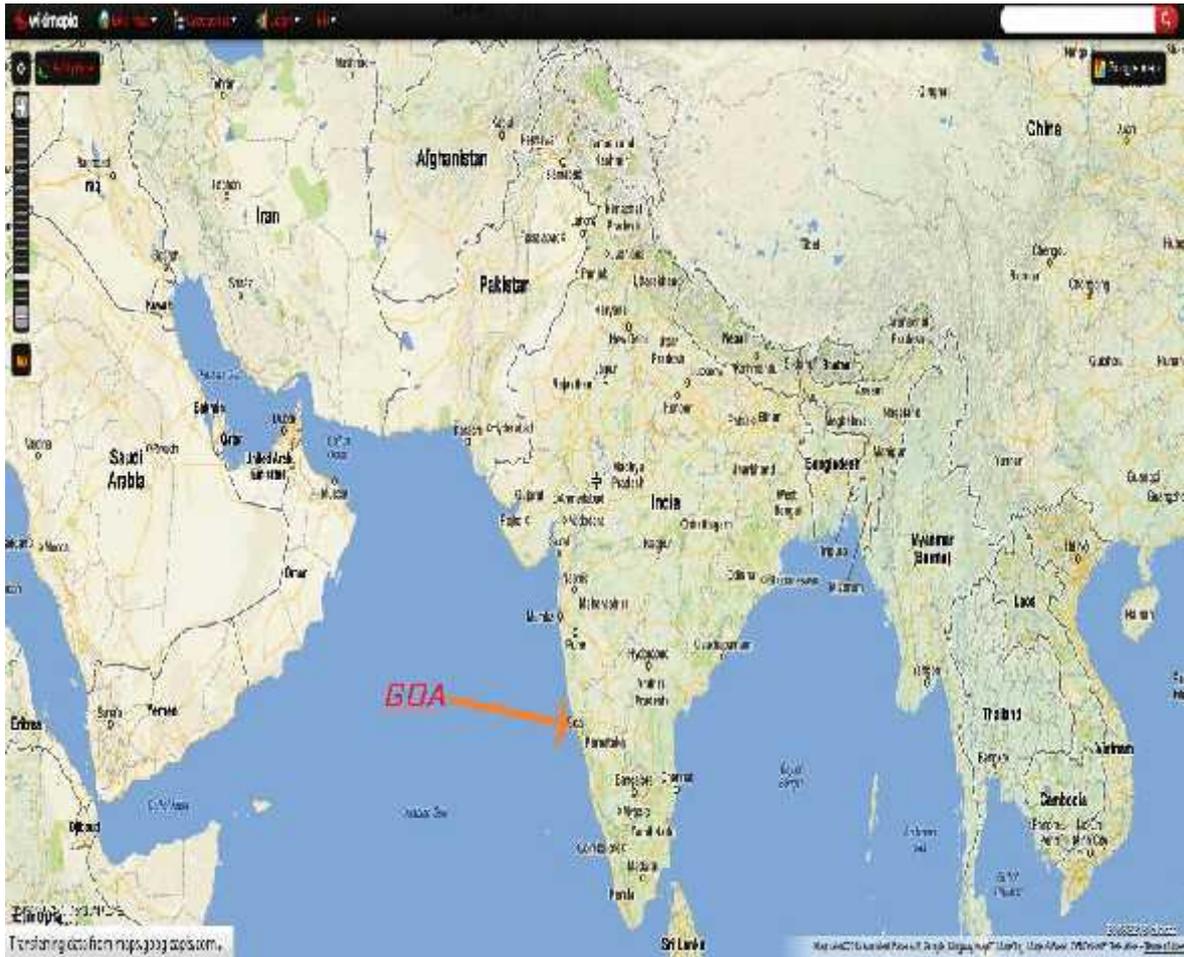
The declaration of Mormugao as a Major Port in 1964 was a milestone in the annals of its history as it joined the ranks of the country's ten major Ports. The Port administration could now embark upon a sustained development programme as its newly formed Board of Trustees was empowered to take major decisions financial or otherwise.

With the rise of Brazil and Australia in recent times as aggressive ore exporters, the mineral ore industry today was seeing a sea of changes in iron ore market.

In 1965 therefore, a Perspective Plan was drawn up by a reputed firm of consulting engineers, seeking to develop Mormugao Port systematically for providing deep waters and high capacity loading, particularly in relation to iron ore exports, which needed to be competitive in the international arena by reducing the transportation cost.

As a first step in that direction, a 20-year perspective plan for the port development was prepared in February 1965, by the consulting engineering firm of Randal, Palmer & Tritton. Thereafter, in February 1968, HOWE (India) Pvt. Ltd. were appointed to prepare the design study for the establishment of a modern mechanical ore handling facility for the port within the framework of the perspective plan. As a follow-up on the report by HOWE (India) Pvt. Ltd. a mechanized ore handling facility for receiving, stockpiling, reclaiming, weighing, sampling, and ship-loading of 12 million tons of iron ore annually was installed and commissioned in 1979. The rated loading capacity of the ore handling system was of the order of 8,000 tonnes per hour. The dredging of the channel and berths was carried out to permit the loading of 60,000 dwt. ore carriers initially. Barge unloaders and rail wagon tippers were provided for quicker and more efficient handling of incoming ore.

Major developments of the Port were taken up only after it became a Major Port. A number of developmental projects were implemented under the various Five Year Plans of the Government of India. Consequently, a dedicated mineral oil berth, berth No. 8 was constructed in 1976. Later on as the general cargo traffic was gradually picking up in the Port, a number of schemes were implemented with a view to augment the general cargo handling facilities at the Port. Two multi-purpose general cargo berths, berth No.10 and No. 11 having draft of 11.00 mts and 12.50 mts were constructed and commissioned in 1985 and 1994 respectively. Meanwhile the Mechanical Ore Handling Plant installed in 1959 at Berth No. 6 was de-commissioned in 1992 due to obsolescence. The age old berths 1 to 3 were leased out to a private company, Western India Shipyard Ltd, for installing a modern ship repair facility, which was commissioned in 1995. In 1997, the metre gauge railway of the Port linking to the south Central Railway was converted to broad gauge. By this, the Mormugao Port is now accessible for any part of the country through the broad gauge railway system.



Location Map



Students at Panvel Railway Station (12-10-2015)



OKHA- ERNAKULAM Train (12-10-2015)



Goa State Map

3.1 Schedule For Tourism In Goa

UKA TARSADIA UNIVERSITY

CHHOTUBHAI GOPALBHAI PATEL INSTITUTE OF TECHNOLOGY
BARDOLI, SURAT

CIVIL ENGINEERING DEPARTMENT

B.Tech – 4th YEAR (7th SEMESTER)– GOA ACADEMIC TOUR

12/10/2015 – ONGOING JOURNEY by OKHA ERS EXPRES (Train No. 16337)

Reporting time – 3.00 pm at Surat Railway Station

(12/10/2015) 05:02 pm- Departure from Surat Rly Station

(13/10/2015) 08:30 am- Arrival at Thivam Rly Station

Bus pick up from railway station to staying hotel

Mr. Ramsing (+91 9850462443) Bus Manager

Mr. Kadam (+919879743770) Tour Manager

Stay at Goa

Maizons Lakeview Resort 502/1, Sankwadi Arpora, Bardez, Goa 403518

Tel: +91 (832) 226 9400

Proposed schedule of Visits

All the visits starts at 9.00 am in the morning. Bus will depart the venue sharp on time.

13/10/2015, Tuesday

- 1) Laxmi narayan temple (Historical Site in stone masonry)
- 2) Basilica of Bom Jesus Chrch, Old Goa (Historical Site in brick masonry)
- 3) Archeological survey of India, Old Goa (Expected)
- 4) Museum of Christian Art, Old Goa (Expected)
- 5) Aguwada Jail & fort (Historical site in stone masonry)
- 6) Ferry tourism

14/10/2015, Wednesday

- 1) Madgoan railway station (skybus – a public transportation mode initiative)
- 2) Selaulim dam (Concrete Spill way away from the dam axis)
- 3) Marmugao Port Trust (Port site, Harbour and Jetty)
- 4) Goa Airport (Parkway, taxi way, run way & other facilities)
- 5) Naval Aviation Museum (Ships and aviation in India)

15/10/2015, Thursday

- 1) Mapusa market (local products)
- 2) Old Goa City (Typical Portugal construction practices)
- 3) Panjim sightseeing
- 4) National institute of oceanography (NIO) (studies on coast line of Gujarat and Surat)
- 5) Dona Paula (Historical site)
- 6) Colungate-Baga Road bridge on stream

16/10/2015 RETURN JOURNEY by MAO HAPA SUP EXPRESS (Train No. 22907)

(16/10/2015) 08:05 am - Departure from Thivam Rly. Station

(17/10/2015) 00:55 am - Arrival at Surat Rly. Station



Hotel view of Maizons Lakeview Resort



Transportation Facility at Goa (2 X 2 Push back Seat bus)



Mormugao Port Trust visit



Archaeological Survey of India Office and its Museum



The Basilica of bom Jesus



Aguada Fort



Salaulim dam & unique Duckbill type (Morning Glory type) spillway







National Aviation Museum



Group Discussion with Caption





CSIR-National Institute of Oceanography (GOA)





Golden Memories of Bagha Beach

In conclusion

Goa state famous due to mix and multi functioning center as well as attraction of tourist nationally & internationally. Easiness and safety characteristics well known in Goa state. Per day or per week vehicles easy availability, accommodation facility and for tourist most important is road network with enough signage makes Goa unique. Street markets including handicrafts increase interest in Goa culture. Goa is well known as a leisure tourism (85 %) activity place in India as a spot.

I would like to put forth the submission that tourism has an important place in the economy of Goa, but this has to be carried out in a very systematic manner. Only when the Government and the local people come together, implement the policy, which has been framed, it in a vigorous manner, tourism will be a boon else it will be a burden to the tiny beautiful state of Goa.

Thank you...