

PLANNING FOR DEVELOPMENT OF RAMTEK AS A TOURIST TOWN

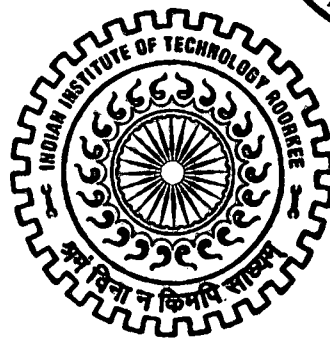
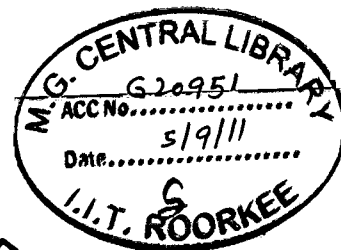
A DISSERTATION

*Submitted in partial fulfillment of the
requirements for the award of the degree
of*

MASTER OF URBAN AND RURAL PLANNING

By

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JUNE, 2011

CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in this thesis entitled "**PLANNING FOR DEVELOPMENT OF RAMTEK AS A TOURIST TOWN**" in partial fulfillment of the requirement of the award of the Degree of Master of Urban and Rural Planning submitted in the Department of Architecture and Planning, Indian Institute of Technology, Roorkee, is an authentic record of my own work carried out during the period of July 2010 to June 2011 under the supervision of Prof. R.K. Jain, Assoc. Professor, Department of Architecture and Planning, Indian Institute of Technology, Roorkee.

The matter embodied in the thesis has not submitted by me for the award of any other degree.

Dated: 30 June 2011

Place: Roorkee


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CERTIFICATE

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.


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I would like to express my gratitude to all those who gave me the possibility to complete this thesis.

“|| Guru brahma gurur Vishnu guru devo maheshwaraha
guru saakshat para brahma tasmai sree guravae namaha ||”

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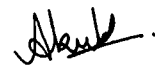
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Asmita A. Kukde

ABSTRACT

Tourism is one of the fastest growing industries in the world, generating economy as well as employment opportunities for the local people. Many small and large scale industries are dependent on tourism. People travel to various places for various reasons, hence generated many different forms of tourism.

This report presents the study and analysis of one of such place which requires to be developed as a tourist place to increase the tourist inflow and in turn contribute to the conservation off the heritage sites, the water bodies and overall development of the town.

Review of literature related to tourism has been done, inferences brought out from the same is given in this chapter. The case studies with similar characteristics as that of the study area, Ramtek had been studied. Introduction to tourism planning in these areas has been given in this chapter and inferences from the same have been sorted out. These inferences will help in planning for the tourism of the concerned case study-Ramtek.

Development plan of Ramtek has been studied to find out the present condition of infrastructure, demography, landuse and overall development. To find out the overall demand and supply to the town of various infrastructure, and dependency of tourism upon this infrastructure, analysis of the same has been done and inferences has been worked out which will help in further process of planning for the development of the town as a tourist destination.

Forth chapter includes tourist places having potential to attract inflow of tourists if developed, in and around Ramtek. There are 4 tourist spots within Municipal limit of Ramtek and 3 others outside Ramtek. These 3 are taken into consideration as tourists coming to Ramtek may cover these spots as well on the way. The water bodies present within the municipal limit of Ramtek can be conserved, rejuvenated and developed to be a tourist spots as

most of them are on the way to Garh Mandir, the tourist spot of prime importance.

Fifth chapter of Analysis throws light upon the analysis of the data collected. 100 tourist surveys have been done, 40 at Garh mandir, and 20 each at Jain Temple, Kalidasa Memorial and Ambala Lake. Based on the survey done, and secondary data collected, analysis has been done to find out the present condition of infrastructure provision, supply and demand of the present and future. Demand has been projected to year 2021 and 2031.

The proposal has been made on the basis of data collected and analyzed in the previous chapters. A comprehensive solution has been found out to give a solution to the development plan for year 2021 and 2031.

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CHAPTER 1.

INTRODUCTION

1.1. Introduction:

1.1.1. Tourism:-

Tourism is an increasingly widespread and complex activity, which requires sophisticated management to realize its full potential as a positive and sustainable economic, environmental, social and cultural force. The economic impact of tourism places tourism roughly at the same global order of magnitude as agriculture or mining. According to World Tourism and Travel Council (WTTC), the major organization representing the global tourism industry, 215 million jobs were dependent on the Tourism economy in 2004. As tourism has become an integral part of modern society, its study and analysis becomes imperative if its potential economic and social benefits are to be maximized and developed in a manner consistent with society goals.

In most of the countries in the region, tourism is a sector that is not very well defined and whose activities are often included under other sectors in national accounts. However, in countries which are frequently affected by disasters, tourism is a significant sector of the economy because of the foreign currency earnings and employment it generates.

The substantial growth of the tourism activity clearly marks tourism as one of the most remarkable economic and social phenomena of the past century. The number of international arrivals shows an evolution from a mere 25 million international arrivals in 1950 to an estimated 806 million in 2005, corresponding to an average annual growth rate of 6.5%.

According to the World Travel & Tourism Council, India is poised to emerge as the second fastest growing (8.8%) tourism economy in the world over 2005-14. In 2007, around 5 million tourists arrived in India and spent nearly \$11 billion.

Tourism plays a role of a major growth engine in India. Travel & Tourism investment is estimated at 7.2% of total investment in 2010 & 7.7% of total investment, by 2020.

Over the years, India is showing a phenomenal increase in international tourist arrivals. Out of a global total of 903 million tourists in 2007, India was the 41st most visited with 5 million international tourist visits, according to a survey conducted by United Nations World Tourism Organizations.

There are many tourist places in India, particularly in Maharashtra, like Ajanta, Ellora, Shirdi, Shegaon, Konkan; etc. In the eastern part of Maharashtra (East Vidarbha) Ramtek is a famous tourist place.

1.1.2. Report:-

The report is enhancing about the study area profile, the tourist spots, existing infrastructure and the deficiency of the same, the topography, landuse pattern, problem identification, analysis of findings, results of studies and conclusion.

The Aim, Objectives formulation, methodology have already been derived by the author, the case studies included Rishikesh, of Uttarakhanda state, the capital of adventurous, cultural, medical, spiritual tourism and Katra, the base camp for Vaishno-Devi Temple at Jammu. Literature studies dealt about various research papers, national and Maharashtra tourism policies, case study of Uttarakhand and kerala tourism done by National tourism Development Board, Books written by various authors on tourism and related topics; etc.

Survey had been carried out taking 100 samples, 40 from the main attraction of Ramtek i.e. Garh Mandir (Lord Rama Temple), and 20 each from other tourist spots of Kalidasa Memorial Ambala Lake and Jain

Temple. The findings, analysis and Results have been included in this report.

1.2. Aim:

“To propose a development plan for Ramtek town emphasizing on the tourism potential of the region.”

It aims at developing Ramtek as a Tourist town and bringing it on the tourist map of Maharashtra as a one of the fastest developing tourist town. By increasing the tourist inflow and developing tourist infrastructure in Ramtek, the aim can be successfully fulfilled.

1.3. Objectives:

- ✓ To study the existing and proposed development plan and the present conditions of the tourist places of Ramtek and propose development for the same.
- ✓ To study and identify the infrastructural requirements of the town as a tourist-cum-regional centre and give proposal for the same.

1.4. Scope and Limitations:

- ✓ The study is limited to the Ramtek municipal council area only.
- ✓ The development plan shall emphasize on development of tourism infrastructure.

1.5. Need of the Study:

Ramtek is a place with enormous natural beauty, numerous historical evidences told by the historical monuments, cultural heritage and water bodies. Ramtek is a religious place, famous due to the evidence of Lord Rama's visit there, the Rama Temple locally known as Garh Mandir, it is a cultural center because of the Great poet Kalidasa wrote his Greatest epic there on the hills of Ramgiri. Due to its natural beauty filled

with the forest area, hills and the water bodies, it becomes a place for spending weekends by the citizens of nearby villages and cities. But all this and many more that is there in Ramtek has been losing its existence day by day due to negligence and lack of infrastructure. Therefore the development of Ramtek as a tourist town is need of the time.

1.6. Methodology:

The methodology of the study contains selection of the topic and formulating its aim and objectives. The scope and limitations of the study had been decided and data was collected for proceeding further with the study.

The data was collected from the local municipal body, the development plan and the various documents written by various authors and government bodies and studied. Tourism development of cities Katra and Rishikesh has also been studied. The inferences helped in planning process of Tourism development in Ramtek.

Analysis of the data collected and the tourist survey has been done to find out the future demand of tourism in Ramtek. Total 100 surveys were carried out on 4 different tourist spots coming under the Ramtek municipal area.

The proposal was made keeping in mind all of the inferences, analysis results and potential of the tourist spots.

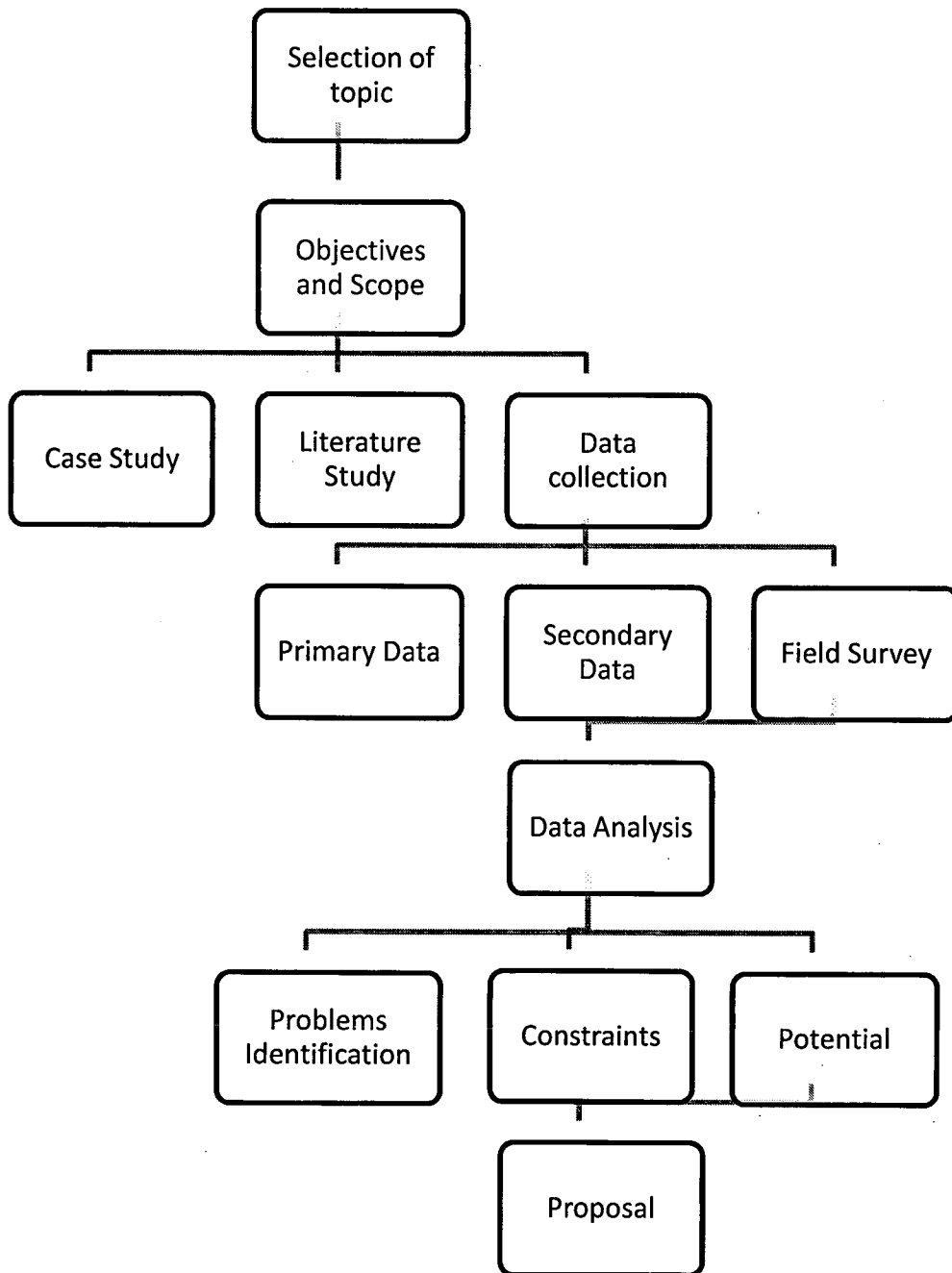


Fig. 1. 1: Methodology

CHAPTER 2.

LITERATURE REVIEW AND CASE STUDIES

Review of literature related to tourism has been done, inferences brought out from the same is given in this chapter. The case studies with similar characteristics as that of the study area, Ramtek had been studied. Introduction to tourism planning in these areas has been given in this chapter and inferences from the same have been sorted out. These inferences will help in planning for the tourism of the concerned case study-Ramtek.

2.1. Literature Study:

2.1.1. Definition of tourism:

The term 'Tourism' appeared in 1811 and 'Tourist' by 1840 by League of Nations, whose successor is now United Nations Organization.

The World Tourism Organization defines tourists as people who "travel to and stay in places outside their usual environment for more than twenty-four (24) hours and not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited."

One of the earliest definitions of tourism was provided by the Austrian economist in 1910, who defined it as, "sum total of operators, mainly of an economic nature, which directly relate to the entry, stay and movement of foreigners inside and outside a certain country, city or a region."

Hunziker and Krapf, in 1941, defined tourism as "the sum of the phenomena and relationships arising from the travel and stay of non-residents, insofar as they do not lead to permanent residence and are not connected with any earning activity."

In 1976 Tourism Society of England defined it as "Tourism is the temporary, short-term movement of people to destination outside the places where they normally live and work and their activities during the stay at each destination. It includes movements for all purposes."

In 1981 International Association of Scientific Experts in Tourism defined Tourism in terms of particular activities selected by choice and undertaken outside the home environment.

The United Nations classified three forms of tourism in 1994 in its Recommendations on Tourism Statistics: Domestic tourism, which

involves residents of the given country traveling only within this country; Inbound tourism, involving non-residents traveling in the given country; and Outbound tourism, involving residents traveling in another country.

The UN also derived different categories of tourism by combining the 3 basic forms of tourism: Internal tourism, which comprises domestic tourism and inbound tourism; National tourism, which comprises domestic tourism and outbound tourism; and International tourism, which consists of inbound tourism and outbound tourism.

2.1.2. Forms of Tourism:

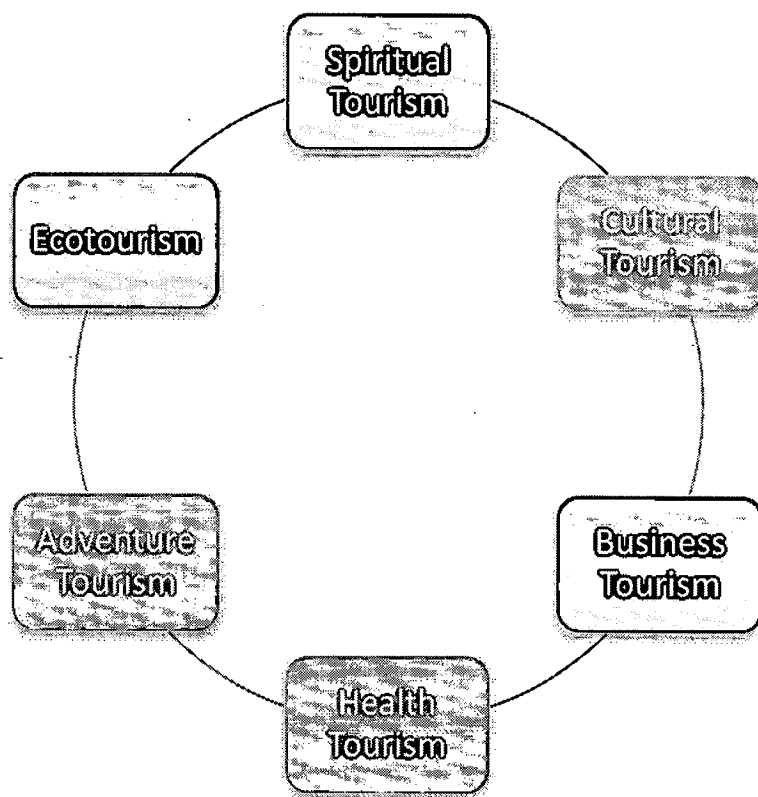


Fig. 2. 1: Forms of Tourism

Following are few of the various forms of tourism listed:-

i. Spiritual Tourism

Spiritual tourism includes tourism activities related to a pilgrimage center or a place of worship. Spiritual Tourism can be defined as a form of Tourism whereby people of faith travel individually or in groups for pilgrimage, missionary, or leisure (fellowship) purposes. According to the World Tourism Organization, an estimated 300 to 330 million pilgrims visit the world's key religious sites every year.

ii. Cultural Tourism

Cultural tourism is the subset of tourism concerned with a country or region's culture, specifically the lifestyle of the people in those geographical areas, the history of those peoples, their art, architecture, religion(s), and other elements that helped shape their way of life. Cultural tourism includes tourism in urban areas, particularly historic or large cities and their cultural facilities such as museums and theatres. It can also include tourism in rural areas showcasing the traditions of indigenous cultural communities (i.e. festivals, rituals), and their values and lifestyle.

iii. Adventure tourism

Adventure tourism includes activities of thrills and excitement in natural setting like mountain, river, snow; etc. Adventure travel is a type of tourism, involving exploration or travel to remote, exotic and possibly hostile areas. Adventure tourism is rapidly growing in popularity, as tourists seek different kinds of vacations. Adventure travel may be any tourist activity, including two of the following three components:

- a physical activity
- a cultural exchange
- Interaction and engagement with nature

iv. Business Tourism

Business tourism is travelling for business activity. It is a convention, in the sense of a meeting, is a gathering of individuals who meet at an arranged place and time in order to discuss or engage in some common interest. The most common conventions are based upon industry, profession, and fandom.

v. Medical/ Health Tourism

Medical Tourism is a term initially coined by travel agencies and the mass media to describe the rapidly-growing practice of travelling across international borders to obtain health care. It also refers pejoratively to the practice of healthcare providers travelling internationally to deliver healthcare. Medical Tourism also includes visit to natural places like hill station, mountain spring; etc. for medical benefit.

vi. Ecotourism

Ecotourism is tourism directed toward exotic, often threatened, natural environments, esp. to support conservation efforts and observe wildlife. Ecotourism is responsible travel to natural areas supporting the fauna, flora, and local economy. Ecotourism includes tourism activities in national parks, wildlife sanctuaries, sea beaches; etc.

2.1.3. History of Tourism Planning in India:-

The first public milestone in the history of tourism was the creation of the Indian Tourism Development Corporation (ITDC), in 1966. This federal organization was meant to develop tourist infrastructure and services.

Tourism planning in India started quite late with the first tourism policy being announced by the Government of India in November, 1982

after tourism was recognized as an industry by the Planning Commission of India in June, 1982.

In July, 1986 the Planning Commission of India set up the National Committee on Tourism in order to formulate plans for this sector. The government's initiatives of incorporating a planned tourism sector in India went a long way in boosting Indian tourism.

In May, 1992 the National Action Plan for tourism was announced. The objectives of this landmark plan for tourism planning in India were:

- To improve the economy category domestic tourism
- To develop the tourist areas socially and economically
- To preserve the environment and the national heritage
- To encourage international tourism
- To improve in world tourism India's share
- To increase opportunities for employment in this sector

India tourism planning increased with the seventh five year plan India (1985-1989). The various policies advocated by the seventh plan for tourism planning in India are:

- To promote aggressively domestic tourism
- It laid stress on creating more beach resorts
- To conduct conferences, trekking, conventions, and winter sports so that various options are available to the foreign tourists

These policies of the seventh five year plan gave a boost to the tourism planning India. To further encourage tourism planning in India, the eighth five year plan (1992- 1997) mentioned that the private sector

should increase its participation in the sector. The various policies advocated by the eighth plan for tourism planning in India are:

- To develop the tourists places
- To develop winter sports, beach resort, and wildlife tourism
- To restore the projects of national heritage
- To provide in tourists centers economy class accommodation

Tourism planning in India has increased by leaps and bounds in the last few years and the government and Department of Tourism needs to make continuous efforts to ensure that tourism planning in India takes the tourism sector of the country to greater heights on a sustainable basis.

2.1.4. Travel and Tourism Economic impact, India, 2010:

The contribution of Travel and Tourism to Gross Domestic Product (GDP) is expected to rise from 8.6% (INR 5,532.5 bn) in 2010 to 9.0% (INR 18,543.8 bn) by 2020.

Real GDP growth for the Travel & Tourism Economy is expected to be 6.7% in 2010 and to average 8.5% per annum over coming 10 years. The contribution of the Travel & Tourism Economy to employment is expected to rise from 10.0% of total employment, 49,086 jobs or 1 in every 10 jobs in 2010, to 10.4% of total employment, 58,141 jobs or 1 in every 9.6 jobs by 2020.

Export earnings from international visitors are expected to generate 3.8% of total exports (INR 519.7bn) in 2010, growing (nominal terms) to INR 1,886.2 bn (2.4% of total) in 2020.

Table 2. 1: India’s Ranking in World/ S. Asia in Travel and Tourism

India’s Ranking in World/S. Asia	Size	Contribution to National Economy	Forecast
World Ranking (181 countries)	12	90	4
Ranking in S. Asia (6 countries)	1	2	1

2.1.5. The ‘Six S’ framework of India’s National Tourism Policy:

Kerala has been significantly successful in its tourism efforts, in creating a key tourism platform for the state and positioning itself competitively in the international tourist market. The analysis of developmental initiatives and their impact has been done through the ‘Six S’ framework of India’s National Tourism Policy that comprehensively captures all various dimensions of tourism initiatives.

- SWAGAT – (Welcome) – (Facilitation on arrival, memorable Experience)
- SOOCHNA (Conveying of Information) – (Marketing & Promotion, Information dissemination)
- SUVIDHA (Facility) - (Accommodation & Stay, Facilities & Conveniences)
- SURAKSHA (Security) – (Tourist safety, Risk Management & Environment Management)
- SAHYOG (Cooperation) – (Coordination, Quality control & Assurance)
- SANRACHNA (Orderly Creation/ Infrastructure) –

2.1.6. Methodology for assessment of Tourism potentials:

Old settlements, with several historic precincts and structures attract domestic and international tourists visiting those areas. Lack of

maintenance, inadequate amenities, weak linkages, poor publicity, ignorance of local communities, apathy of policy makers; act as deterrents to the development of these centers. Therefore an objective assessment of tourism potential and related infrastructure is necessary to address the strengths and weaknesses of different tourist spots. Methods like strength and weakness analysis, Delphi method, weighted index method are used for analysis of the state of tourist infrastructure in a region.

Two major components which affect tourism potential of any area or region, are the tourist flow and tourist infrastructure. The historic and heritage spots also attract significant number of tourists. Based on number of tourist influx, the settlements can be classified as high, medium and low profile centers. There are seven different components of tourist infrastructure; which are, Accommodation/ day shelter (for short tours), communication system, market, travel mode, tourist products and utility system and information services.

2.1.7. Redevelopment of Lakes:

Lakes and water bodies had always been an integral part of any civilization to flourish, but in modern era these are totally neglected sites. Growing pressure of densification activities, due to increasing population, increasing commercialization, rapid economic development of the cities resulted into the decline in its environment.

Urban water bodies play a multifunctional role, as it serves as a natural element in an urban concrete jungle, providing natural balance, recharging ground water, serving as a place for social activities. Its importance further increases seeing the hot and dry climate of the country. The unchecked and unauthorized water withdrawal has led to severe problems of its fast depleting ground water resource.

To prevent the nuisance of water-logging during rains and to check depleting water table, the lakes shall be redeveloped. The area outside the

lake shall be developed with the provision of sewer lines in surrounding area, lying of drainage lines to bring surrounding rain water in lake. The lake area itself shall be developed to attract tourists.

2.1.8. Integrating Entertainment, Tourism, Heritage and Culture:

Entertainment and Tourism are becoming more important sectors of revitalization and reinforcement of economic activities and thereby generating economic growth as well as employment. Tourism is one of the oldest industries across the world. Tourism can have large spin-over effect on local economy and shall improve economic growth as well as the quality of life of the local community as well as the host nation/city.

The tourist visit countries/places not only for sheer want of pleasure but also in pursuit of understanding and exploring the cultural diversity and heritage. Management of tourism is sustainable from an economic, environmental and socio-cultural point of views as it contributes to heritage conservation. The sustainable and well preserved heritage sites & objects can provide endless source of raw material to Tourism to return to its origin and becomes sustainable in long term.

As tourism flourishes, the new avenues like the modern entertainment places and entertainment amenities become more important. Entertainment becomes an important source for attracting tourists for visiting short term but is more useful for retaining them for longer period. This makes contribution to the local economy, higher and affection with the place, warmer.

It is also necessary to strengthen conservation efforts at cultural heritage sites and to establish better regulations for visiting existing cultural heritage site and its strict enforcement.

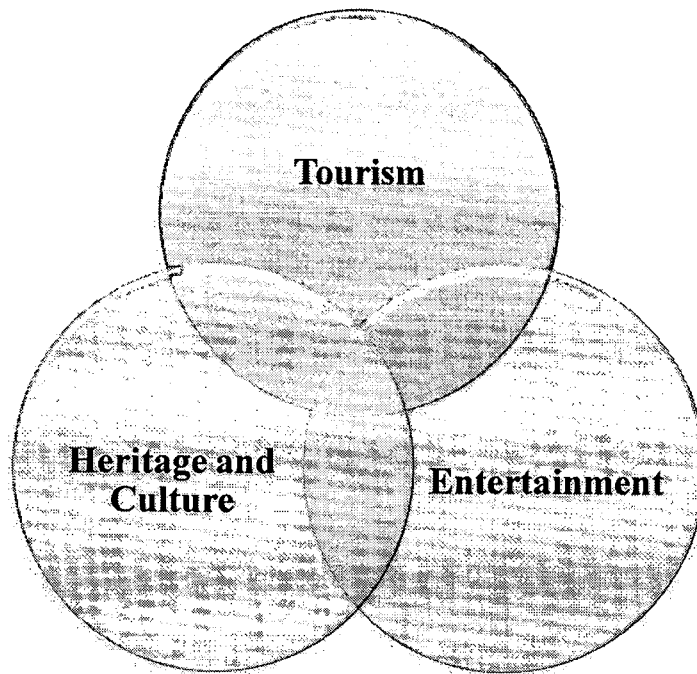


Fig. 2. 2: Integrating Entertainment, Tourism, Heritage and Culture

2.1.9. Conservation of Heritage:

In India, master plans, urban development schemes, urban renewal schemes, etc; have been prepared under urban, regional, town planning acts, development authority acts and municipal acts. Most of these statutes recognize conservation of heritage as a part of such schemes. In Maharashtra, a heritage committee was constituted under urban and planning legislation in order to conserve the heritage buildings and precincts in cities.

Though the conventional planning approaches recognize conservation as an term to be considered in preparation of town planning scheme, it was never given the priority deserved. While the conventional town planning schemes aim at 'Planning for Future', the objective of conservation is to ensure 'Future for the Past'.

For conservation of the heritage buildings, heritage precincts and natural heritage, following measurements are suggested:

- Comprehensive listing and grading of Heritage shall be done in first phase, and it should be a continuous process.
- New construction activities shall be regulated in heritage precincts and alterations to the heritage buildings shall be restricted.
- For heritage properties, hard line conventional zoning shall give way for lenient but careful adaptive use/reuse zoning.
- Sustainable Heritage tourism shall be promoted as the market forces will take care of the conservation of heritage properties due to the economic value specifically attached to them.
- Role of local self government shall be awareness creation, imparting competence and enhanced involvement. A state level agency shall be formulated to render advice for them.
- A fund mobilization of mechanism encompassing national culture fund, cease of property tax, funds from national and international institutions, etc; shall be given promotion.
- The city master plan shall be revised for the purpose of adoption of techniques such as Transferable Development Rights (TDR), etc.
- Policies shall be decided to give incentives for the promotion of heritage building conservation such as exemption on tax duties, property taxes, building construction fees, etc.

2.2. Case Studies:

2.2.1. Study One: RISHIKESH

Rishikesh is a city and a municipal board located in Dehradun district of the state of Uttarakhand in India. The city is the starting point for traveling to the "Char Dham" pilgrimage, which comprise Badrinath, Kedarnath, Gangotri, and Yamunotri, and thus of immense importance to pilgrims. The meaning of Rishikesh is 'he who has conquered his senses'.

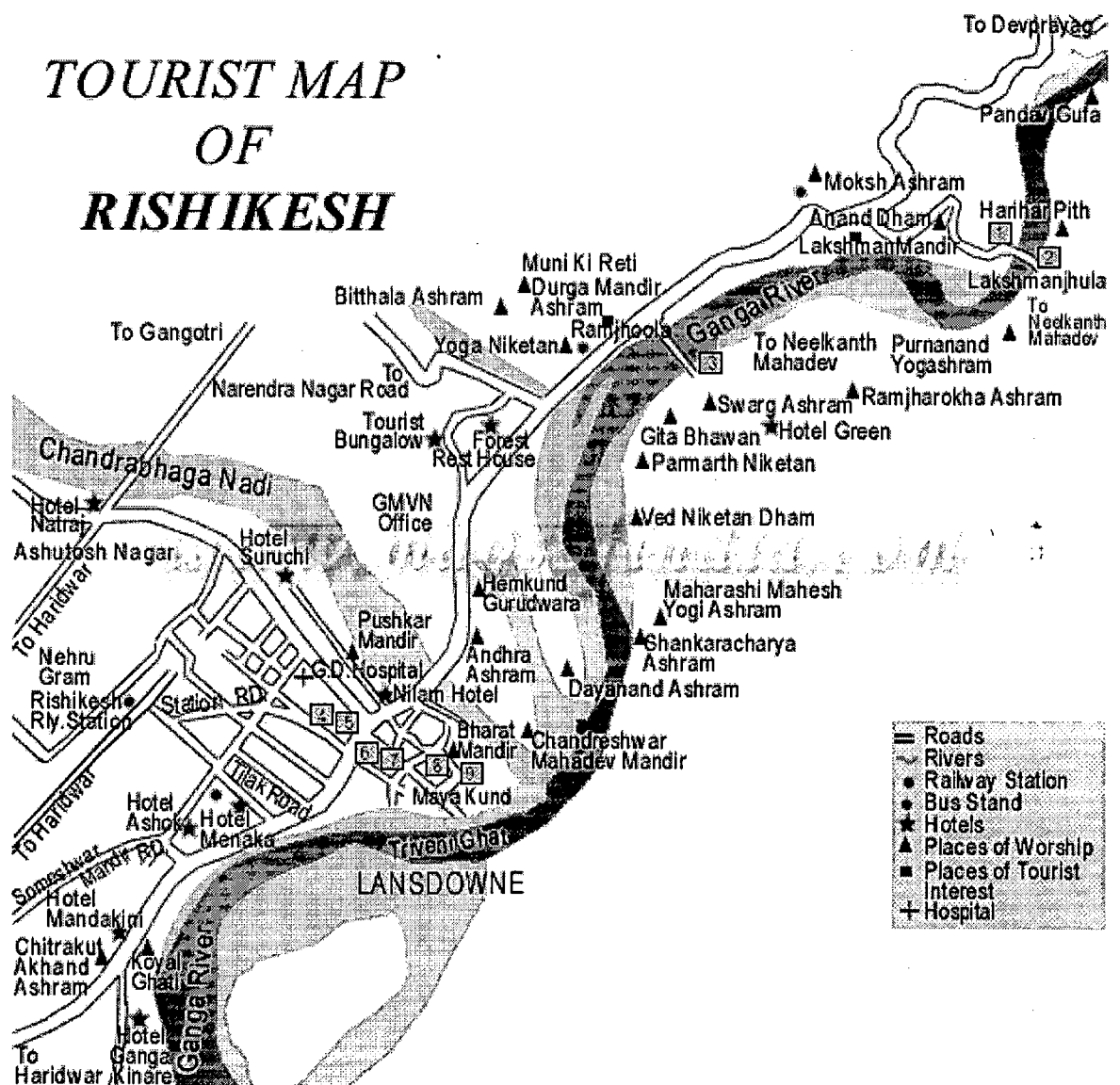


Fig. 2. 3: Rishikesh Map

i. Statistical Figures:-

Population of Rishikesh is 59,671 (2001). The literacy Rate is 75%.

Table 2. 2: Tourist arrivals and accommodation, Rishikesh, 2006

Domestic Tourists	Foreign Tourists	Total Tourists
150	240	390
Total Hotels	Total Rooms	Total Beds
64	1310	2619

Table 2. 3: Domestic and Foreign Tourist arrivals, Rishikesh, 2006

No. of Domestic Overnight Visitors	No. of Foreign Overnight Visitors	Total Overnight Visitors	Estimated No. of Day Visitors	Total Visitors+ Day Visitors
137999	24818	162817	472334	635151

Table 2. 4: Domestic overnight tourists, Month wise, Rishikesh, 2006

Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
3457	4698	36801	13442	12256	9167	9600	7857	12153	9542	8852	10174

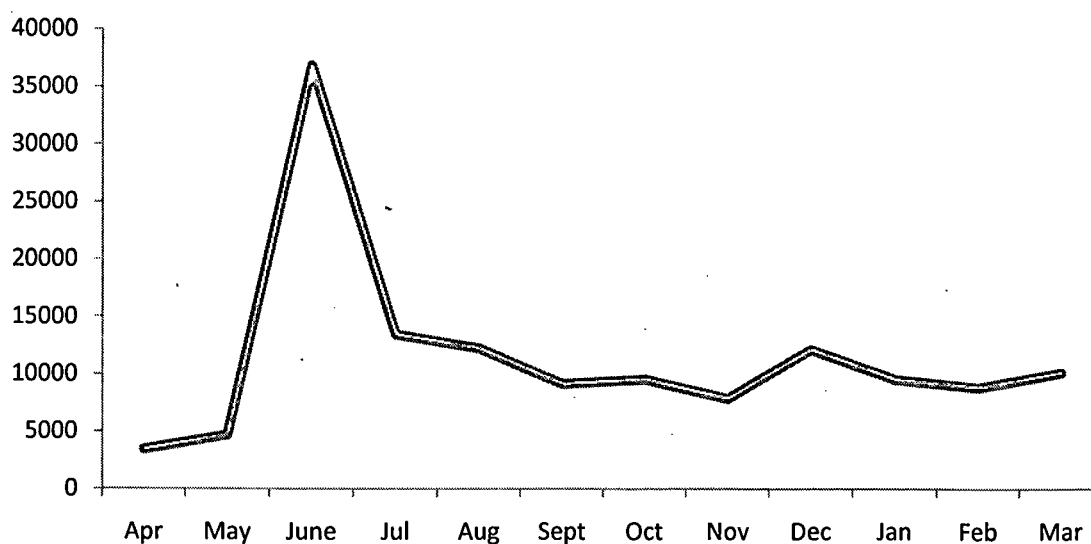


Fig. 2. 4: Domestic Overnight Tourists, Month wise, Rishikesh, 2006

Table 2. 5: Domestic overnight tourist, Accommodation Trend, Rishikesh, 2006

Accommodation Units	Friends & Relatives	Domestic Overnight Visitors
134508	3491	137999

ii. Pilgrimage and Tourism:-

Rishikesh offers tourists with many adventurous activities, such as white water rafting, camps, trekking, skiing, and wild life safari in national parks.

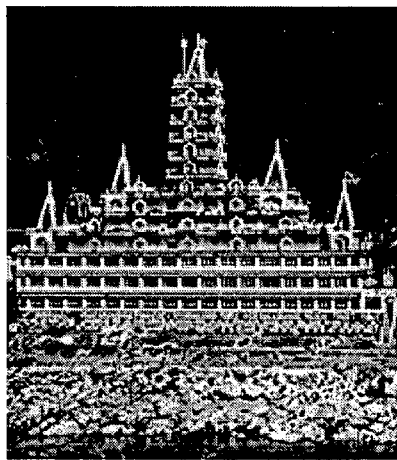


Fig. 2. 5: Tera Manzil Temple, Rishikesh

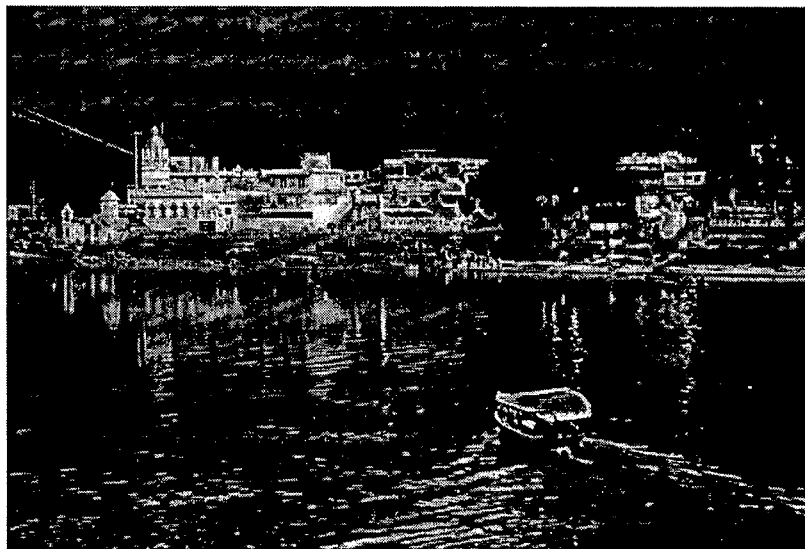


Fig. 2. 6: Ghat and riverside development at Rishikesh

Rishikesh is blessed with natural heritage. Even after hosting such a huge amount of tourist inflow every year, Rishikesh has maintained its natural heritage and culture. Following are the tourist where Pilgrims and general tourists can visit:

a. Bharat Mandir:

Bharat mandir is the oldest temple of Rishikesh, which lies in the center of the old town on the Banks of the Ganges. Details of the temple are described in ancient records of 'Kedarkhand'. The Inner sanctum of the temple has an idol of lord Vishnu, which is carved out of a single 'Saligram'.

b. Rishikund:

Rishikund lies close to Trivenighat, and is the most ancient place of Rishikesh. Legends relate it to Kubz Saint, who was blessed by Goddess Yamuna by saturating the pond through its water. The pond reflects the temple of Ragunath, which is dedicated to lord Sri Rama and his soulmate Sita.

c. Triveni Ghat:

It is the main 'ghat' in the town area where pilgrims take a holy dip. Every evening hundreds of pilgrims attend the Ganga Arti at the Ghat.

d. Geeta Bhawan:

It is one of the oldest temple complexes in the Rishikesh. The famous Indian epic Ramayana and Mahabharata are described on the walls of Geeta Bhawan.

e. Parmarth Niketan:

It is one of the most renowned temple complex and ashram in the area which is known for its great work on Hinduism. The ashram organises 'Ganga Arti' and Hawan on the Parmarth Ghat every evening.

f. Tera Manzil Temple:

It is a multistory temple, which comprises idols of hindu Gods, and Goddesses. It is very popular among pilgrims as one can have an excellent view of the entire zone from the top floor of the temple.

2.2.2. Study Two: KATRA

i. **Location & Statistical data:**



Fig. 2. 7: Katra Town

In order to visit the Holy Shrine of Mata Vaishno Devi, one has to reach Katra, a small town situated around 50 kms. from Jammu, the winter capital of the state of Jammu & Kashmir. Katra serves as the base camp for the yatra. Katra is well connected to Jammu and Jammu, in turn, is well connected to the rest of the country by Air, Rail, and Road.



Fig. 2. 8: Location of Jammu

Jammu is well connected to the rest of India by air. Both Indian Airlines and Jet Airways operate daily flights to Jammu. The average flying time from New Delhi is about 80 minutes.

One can also reach Jammu by rail. Jammu is connected to other parts of country on broad gauge and numerous passenger trains ply from various parts of the country to Jammu.

Jammu is well connected through road also to rest of India. National Highway No. 1A passes through Jammu towards Srinagar. Regular bus services from all major North Indian cities are available for Jammu as well as Katra.

Table 2. 6: Distances, Altitudes and Temperatures of different tourist spots from Katra

Distances from Katra, Altitude w.r.t. Mean Sea Level & Average Temperature						
Location	Distance from Katra	Altitudes	Temperature °C			
			Winter		Summer	
			Min.	Max.	Min.	Max.
Katra	00 Km	2500	03	15	20	41
Banganga	01 Km	2800				
Charan Paduka	02.5 Km	3380				
Adhkuwari	06 Km	4800	01	14.5	16	33
Himkoti	08.5 Km	5120				
Sanjichhat	09.5 Km	6200				
Bhawan	13.0 Km	5200	- 02	13	15	30
Bhairon Ghati (Via Bhawan)	14.5 Km	6619	- 03	11	12	26

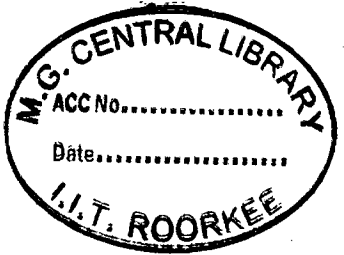
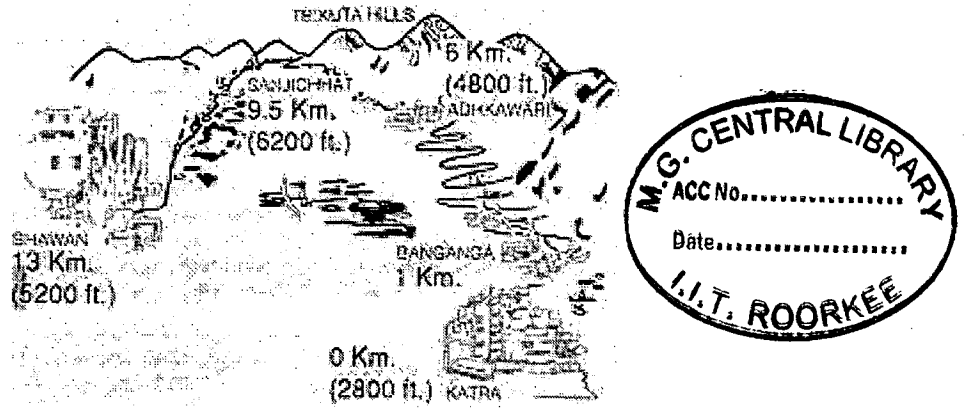


Fig. 2. 9: Location of Tourist spots from Katra

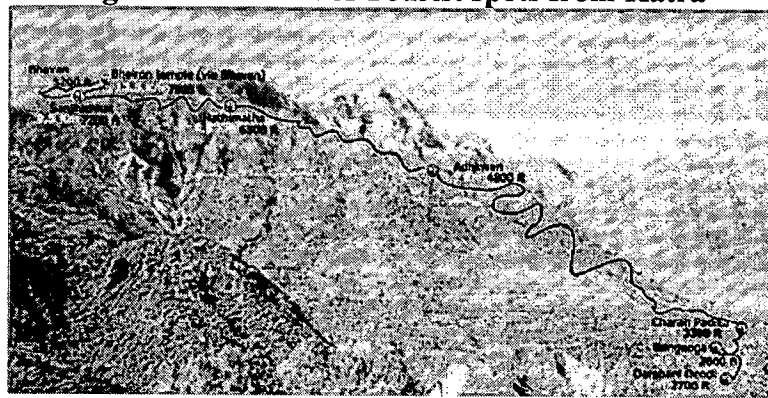


Fig. 2. 10: Height of various tourist places from Katra

The Yatra that stood at 13.96 Lakhs in the year 1986, increased to 87.49 lacs (8.7 Million) in the year 2010. The increase in the Yatra has been possible due to the efficient and pilgrim oriented management of the Shrine Board. The following table depicts the annual Yatra figures over the years from 1986 to 2010:

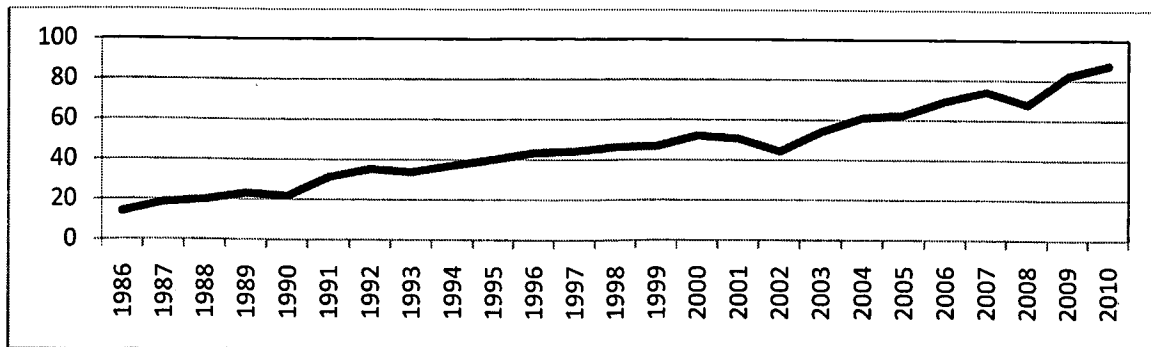


Fig. 2. 11: No. of Tourists per year

Table 2. 7: No. of Tourists per Year

S. No.	Year	No. of Yatries (In Lakhs)
1	1986	13.96
2	1987	18.58
3	1988	19.92
4	1989	23.12
5	1990	21.69
6	1991	31.15
7	1992	35.16
8	1993	33.69
9	1994	37.05
10	1995	40.11
11	1996	43.35
12	1997	44.34
13	1998	46.22
14	1999	46.70
15	2000	52.17
16	2001	50.57
17	2002	44.32
18	2003	54.00
19	2004	61.00
20	2005	62.52
21	2006	69.50
22	2007	74.17
23	2008	67.92
24	2009	82.35
25	2010	87.49

The graph and the table given below reflect the month wise break-up of Yatra for the year 2010-2011.

Table 2. 8: Month wise tourist inflow in Katra

S. No.	Month	No. of Yatrees
1.	May 2010	9,14,522
2.	June 2010	9,66,295
3.	July 2010	8,70,615
4.	August 2010	8,29,912
5.	September 2010	6,28,698
6.	October 2010	8,14,617
7.	November 2010	6,64,425
8.	December 2010	6,82,773
9.	January 2011	4,21,231
10.	February 2011	3,69,755
11.	March 2011	7,55,799
12.	April 2011	10,32,316
13.	May 2011	9,37,275

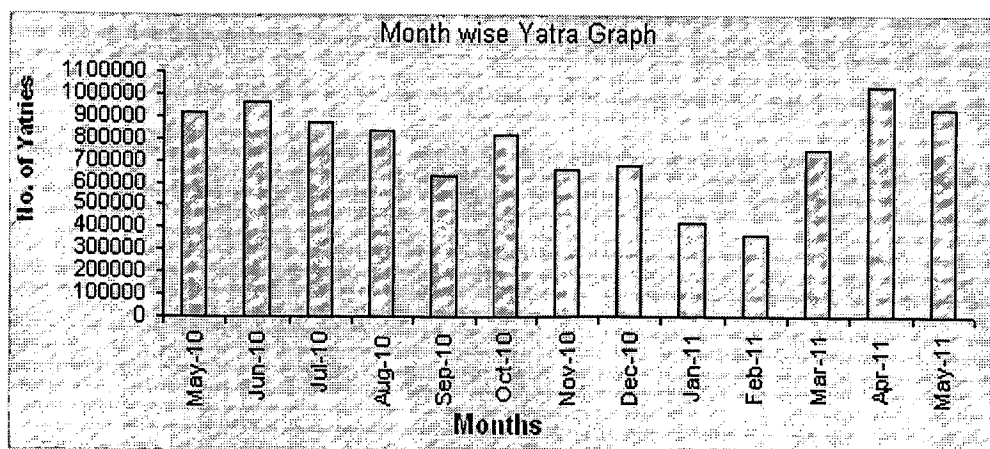


Fig. 2. 12: Month wise tourist inflow in Katra

ii. Facilities available at Katra:-**a. Accommodation:**

For the convenience of the pilgrims, the Shrine Board offers Free as well as Rented Accommodation at Jammu, Katra and also along the Holy Track. At Jammu, accommodation is available at Vaishnavi Dham and Saraswati Dham complexes located right next to Jammu Tawi Railway Station. At Katra, accommodation is available, situated next to the main Bus Stand.

Free accommodation is also made available for pilgrims at big halls where toilet facility has also been provided. For the convenience of the pilgrims, Blanket Stores, Toilet Blocks, Bhojanalayas & Catering Units and a Medical Aid Centre have been opened up in the near vicinity of these accommodations units.

The Shrine Board has constructed Shelter sheds at various places along the track. However, in other portions of the track, the sheds have been provided at a distance of about 500 meters from one another. There are 70 shelter sheds with a total length of over 4 km have been constructed.

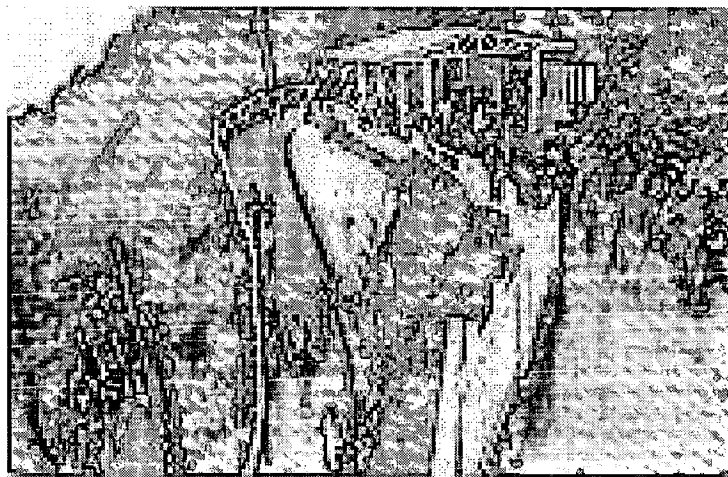


Fig. 2. 13: The Shelter shed along the Track

b. Refreshment Units:

Nearly all of these units are located at carefully selected locations from where one can have a panoramic view of the valley. Therefore, they are also known as View Points. There are a total of 12 such view points. 9 of these refreshment units (or view points) are located on the old track. All the items offered at these view points are on a no-profit basis thus ensuring proper quality and value for the money paid by the pilgrims.

While the 12 viewpoints or refreshment units cater to the refreshment and light snack needs of the yatris, the Shrine Board also runs full-fledged Bhojanalyas to provide wholesome and hygienic food to the pilgrims on no-profit basis. Because of the Board's policy of running all its units on a no-profit basis all the items are available at very cheap and affordable rates.

c. Medical Facility:

To cater to the medical needs of the yatris there is a block hospital at Katra as well as a 24 hours charitable dispensary run under the aegis of the Shrine Board. Oxygen cylinders and emergency drugs are also available. A dispensary and 24-hr ICU is also available at Bhawan.

d. Shopping:

There are traditional Offering shops and souvenir shops provided by the Shrine board. A computerized Railway Reservation Counter at Katra is there provided by the Shrine board for the pilgrims.

e. Security Arrangements:

In order to regulate the yatra and strengthen security in the area, the State administration has made elaborate arrangements including deployment of sufficient troops of the local police as well as the paramilitary forces. Regular patrolling of the track, monitoring, vigilance and necessary action with regard to suspicious elements are part of the

security drill. The security staff of SMVDSB (Shrine Board) is utilized for regulation of Yatra and adds to general area vigilance.

In addition, X-Ray Baggage Inspection Systems and Door Frame Metal Detectors have been provided to ensure foolproof security of the pilgrims and the Shrine. Close Circuit TVs are installed at all vital locations. The services of the local police can be availed of through Police Stations/Police Posts at Katra, Banganga, Adkuwari, Sanjichatt and and at Bhawan. A police assistance booth is also functional at the main Bus Stand at Katra.

f. Post and Telegraph:

Post and Telegraph facility is there at Katra. STD/ISD/PCO booths function all over Katra and along the track.

g. Banks:

Many nationalized and private banks have their branches at Katra. The State Bank of India, Bank of Punjab and J&K Bank also provide ATM facilities at Katra. Many more banks including ICICI Bank, UTI Bank are in the process of installing their ATMs here. Many private sector banks which do not have an office at Katra, do have offices at Jammu. These include UTI Bank, HDFC Bank and ICICI Bank (being opened shortly).

h. Information Counters:

To help the yatries and offer assistance during the pilgrimage, the Shrine Board has operationalised information booths at various locations. These are 24-hour information cum inquiry counters. Yatries can use them to obtain important information about various aspects of the Yatra. This inquiry, assistance and announcement booths are located at prominent locations. The counter at Katra is located near the main Bus Stand.

Information Counters are also operational at General Bus Stand, Jammu and Jammu Tawi Railway Station. An Information Counter is also proposed to be set up at the Jammu Airport.

2.3. Inferences from Literature Review and Case Studies

Tourism is one of the fastest growing industries in all over the world generating enormous economy and providing with abundant employment opportunities to the local people.

India is a famous destination for all types of tourists as it hosts all forms of tourism.

The “six S” strategy of National tourism policy ensures overall development of the place as a tourist center which includes SWAGAT SOOCHNA SUVIDHA SURAKSHA SAHYOG and SANRACHNA.

Methodologies used for assessment of a tourist place make it possible to achieve an integrated and successful planning of the place as a tourist town.

Natural water bodies in an urban area especially shall be rejuvenated and maintained as they perform an important role in maintaining the microclimate of the place and become an important element of the life of the urban area as a mode of entertainment.

Entertainment, Tourism, Culture and Heritage are interdependent elements of any place, and shall be integrated and developed to improve the quality of life of the area.

Heritage structures shall be brought on the list of Archeological survey of India of INTACH and conserved as they form an important part depicting the past, linking the past to the present.

Keeping the natural heritage as it is, the development shall be done to enhance tourism activity in any area.

In case of pilgrimage sites, comfort of the pilgrims is one of the main motive and second is the maintenance of the pilgrim site itself, for which required infrastructure shall be implanted.

CHAPTER 3.

STUDY AREA PROFILE: RAMTEK

Development plan of Ramtek has been studied to find out the present condition of infrastructure, demography, landuse and overall development. To find out the overall demand and supply to the town of various infrastructure, and dependency of tourism upon this infrastructure, analysis of the same has been done and inferences has been worked out which will help in further process of planning for the development of the town as a tourist destination.

3.1. Introduction:

Ramtek is a very old town with historical and mythological background is a Tehsil administrative center of Ramtek Tehsil which is in Nagpur district of state of Maharashtra. Ramtek is located 21.4°N 79.33°E and 345 mt. above mean sea level.



Fig. 3. 1: Location of Ramtek

Ramtek is 48km from Nagpur city in North-Eastern direction, well connected through a national highway (NH7) and also accessed by rail route. Nearest airport is in Nagpur city which is just 60 kms away from Ramtek, where as its railway station from south-central railway is just 50 km away.

Ramtek is blessed with natural beauty, hills, river and lakes & with a catchment area of 213.67 square kilometers [Sheet 1]. A dam was built by Britishers on Sur River which flows down through the hills of Ramtek to meet the Wainganga River.

The southern end of the Satpura range concludes in the Pench on Madhya Pradesh and Maharashtra border, which extends further to form the Ramtek hills.

The total area of Ramtek Tehsil is 56,701.55 hectare out of which Ramtek municipal council limit covers just 1% of it i.e. 570.04 hectare. There are 6 revenue villages that the Ramtek municipal limit covers:

Table 3. 1: Revenue villages included in Ramtek Municipal Limit

1	Ramtek (part)	474.96 Ha
2	Pipariya (part)	60.06 Ha
3	Kawadak (Part)	39.98 Ha
4	Amgaon (Part)	3.70 Ha
5	Songhat (Part)	0.95 Ha
6	Shitalwadi (Part)	0.39 Ha

3.2. History of Ramtek:

Ramtek is a well known center of pilgrimage in Vidarbha region. The temple (Garh Mandir) has existed on the Ramgiri hill for centuries. A stone inscription dated to the 14th century A.D. supports this fact. In the 17th century A.D. Raje Raghuji-I of the Royal Bhonsla family of Nagpur reconstructed the temple and initiated the growth and development of the town. The temples along Ambala lake, the ghats and the flight of steps were also constructed in the same period. He also laid the foundation of a settlement at the foot of Ramgiri hill. The town was thus composed of three distinct scattered settlements.

Ramtek slowly started growing as its importance increased during Bhonsla regime. The town became an important market center for agricultural produce of the hinterland. Slowly the distinction between the three settlements decreased. The settlement around the Shantinath (Jain) temple and the settlement around the weekly market slowly merged into one. The settlement at Ambala lake maintained its separate identity and is even today the same. This is because of the peculiar location and intervening topographical features. The Ambala lake has great religious

significance. The people of the region believe that the water of the lake is as pure and sacred as the Ganga.

The great fairs are held in Ramtek every year. One at the time of Ram Navmi and another at the time of Tripuri Purnima.

3.3. Topography :

The slope is towards South, West and North-West direction. The agricultural area is in the South side. The town has a very picturesque topographical setting. The settlement has evolved along the foothills of the Ramgiri and Kaikai hills. The Ramgiri hill rises about 152.4mt above town level and Kaikai hill about 91.4mt above town level.

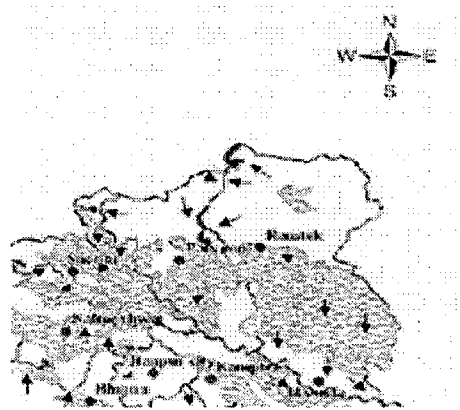


Fig. 3. 2: Slope direction

The town gradually slopes towards South. The soil is Alluvial and rich in Manganese di-oxide and Alumina. There are about 27 lakes in and around Ramtek, most of which are located in the South forming a chain. The town is thus encircled by the hills to the North, East and West and by the lakes in the South.

Medium to dense reserve tropical forest lie to the North of the town. The surrounding agricultural areas are rich in production of rice which is a major item of export. Also the surrounding areas are rich in Manganese Ore. Extensive mining operations are underway in the surrounding areas.

3.4. Climate:

The climate of Ramtek is characterized by a Hot Summer, fairly heavy monsoon and relatively cold winter. The main source of the rainfall is the South-West monsoon which lasts from July to October. The maximum rainfall is in the month of July (recorded 320 mm)

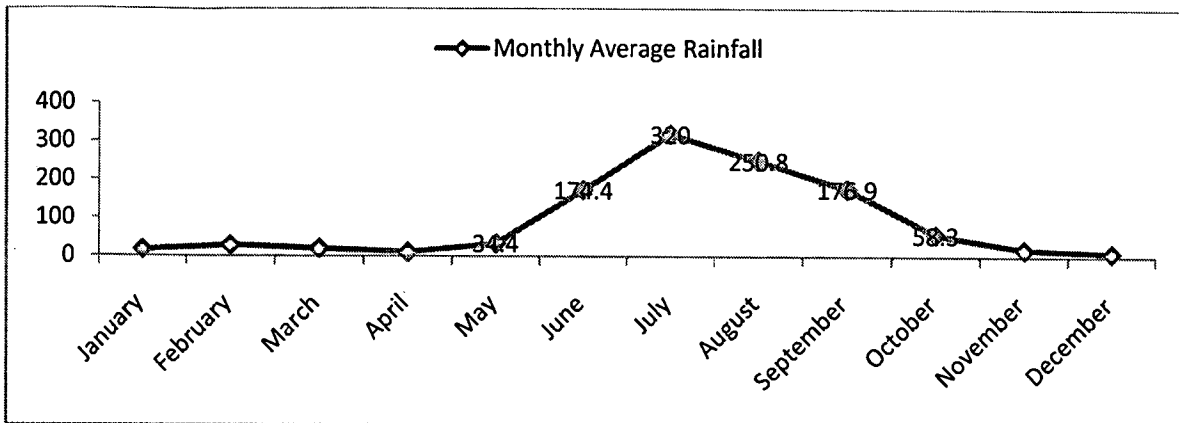


Fig. 3. 3: Monthly Average Rainfall in Ramtek

The winds are light to moderate. The prevailing wind direction is from the North-West to North-East in the period of September to May and fro West and South-west during June to August.

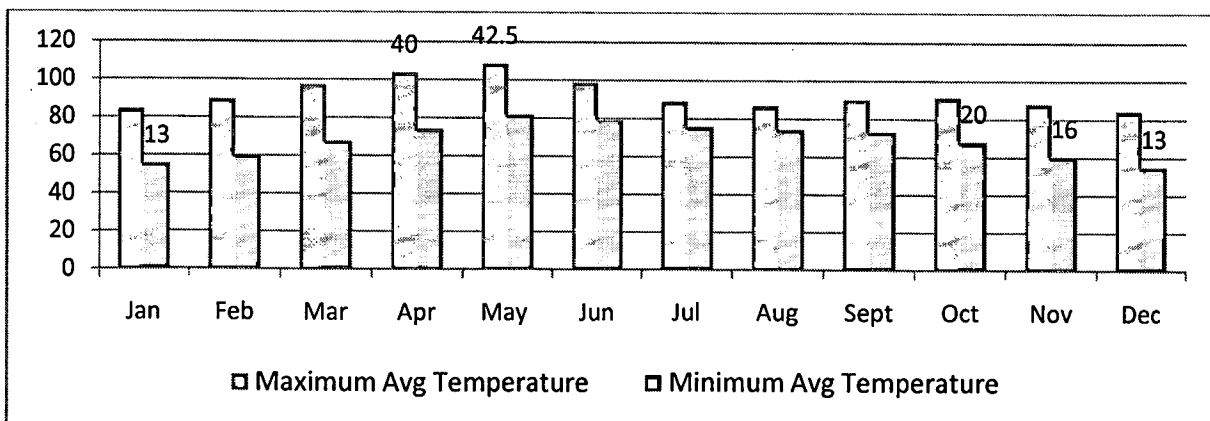


Fig. 3. 4: Maximum and minimum Average Temperature

The maximum temperature is in the month of May that reaches to 108.5⁰f (42.5⁰ C). The minimum temperature is in the month of December and January that goes down to around 13⁰ C.

3.5. Demography:

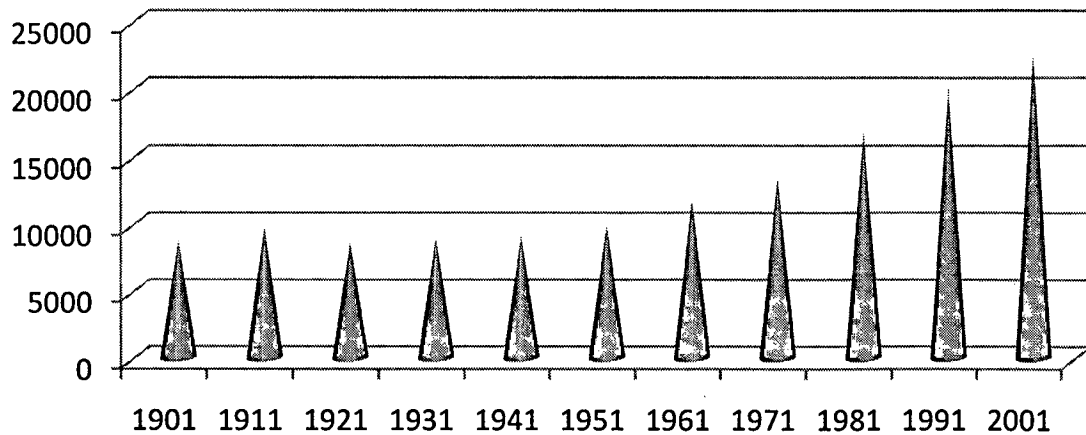


Fig. 3. 5: Population projection from 1901 to 2001

The total population according to 2001 census of India is 22,517. The male population is 11,537 and females were 10,980. The sex ratio was 952 female per 1000 males. The literacy rate is 65.04% whereas literacy in males and females is 73.90% and 55.44% respectively.

Table 3. 2: Population Projection from year 1901 to 2001

Sr No.	Year	Population	Increase in Decade	Percentage increase/decrease
1	1901	8732		
2	1911	9806	+1074	+12.30
3	1921	8580	-1226	-12.50
4	1931	8939	+359	+4.18
5	1941	9040	+101	+1.13
6	1951	9861	+821	+9.08
7	1961	11,758	+1897	+19.24
8	1971	13,440	+1682	+14.31
9	1981	16,792	+3354	+24.96
10	1991	20,072	+3278	+19.52
11	2001	22,517	+2445	+12.18

3.6. Landuse

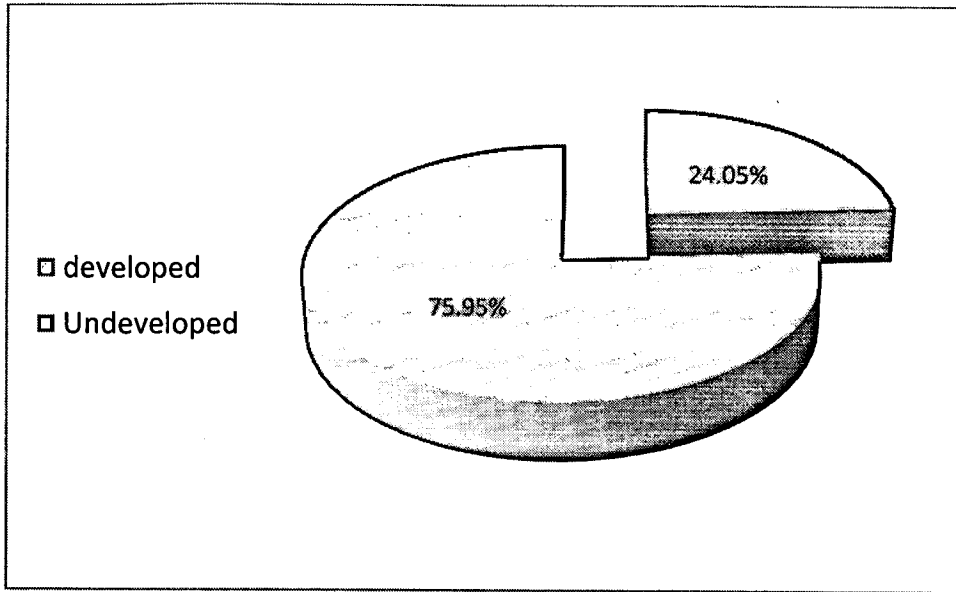


Fig. 3. 6 Landuse Area Distribution

The total area under Ramtek Municipal Council limit is 570.04 Hectares. 24.05% of the total area of 570.04Ha is developed one whereas, 75.95% of the total area is still undeveloped. The undeveloped area includes agriculture, hills & hillocks, forest area, water bodies and vacant land. The Hills and water bodies together constitutes 51.47% of the total area.

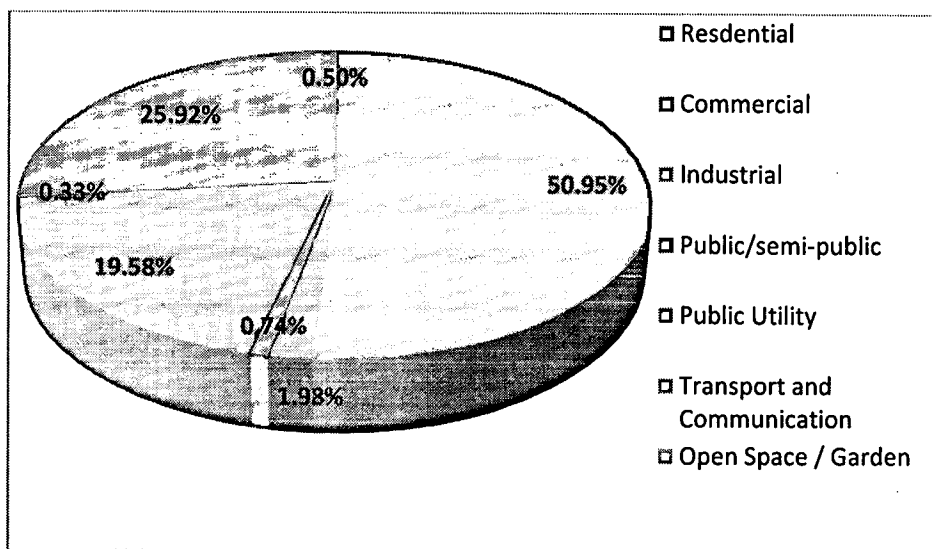


Fig. 3. 7: Landuse Distribution

Table 3. 3: Landuse Distribution

Landuse	Area in Hectares
Residential	70.14
Commercial	2.73
Industrial	1.02
Public / Semi - Public	26.95
Public Utility	0.46
Traffic & Transportation	35.68
Open Space / Garden	0.69

The developed area’s major share includes Residential area which is 50.95% of the total developed area. 19.58% of the total developed area is under Public/Semi-public landuse whereas, commercial and industrial constitutes 1.98% and 0.94% respectively. 0.50% of the area is under open spaces whereas; public utility has constituted just 0.33% of the total developed area. The rest of the share is under transport and communication which is 25.92% of the total developed area.

3.1.1. Residential landuse:

The existing residential area is mostly old and dilapidated ‘wadas’ and houses. There are total 4503 households occupied in 4154 residential houses. The shortfall of dwellings units is found out as 349.

3.1.2. Education:

There are total 2 pre-primary schools, 9 primary schools, 5 secondary schools and 2 colleges. The total strength of students in primary, secondary and college education is 2465, 3616 and 1858 respectively. The students from adjoining villages seek admission in the schools located at Ramtek.

3.1.3. Health:

There is one rural cottage hospital run by Zilla Parishad as well as Municipal hospital run by municipal council. These provide 40 beds for indoor patients. Other than this there are 4 private hospitals and one government veterinary hospital.

3.1.4. Commercial:

There are commercial facilities like weekly market, grain market, timber market, vegetable market and mutton market and general shops. The municipal council looks after the provision of shops.

3.1.5. Transport & Communication:

Ramtek being religious and tourist centre, it is well connected by rail and regional roads. There are two main state highways passes through the town, i.e. a branch road from Nagpur-Jabalpur National highway from Mansar to Tumsar via Ramtek classified as state highway number 249. This 10.68 mt wide road enters to the town from the West and runs through the town and further upto municipal limits. As the road is being too narrow to pass the state transport through the town, a biypass has been constructed of 24 mt wide. Ramtek is also well connected to th industrial town nearby, Mauda which is also an important industrial growth centre and a tehsil head quarter of Nagpur district, by Ramtek - Mauda state highway number 253.

A branch of broad gauge railway line of the South-Western Railway extends from Kamptee to Ramtek. The railway station of Ramtek is situated outside the municipal limit at a distance of 3kms. Three passenger trains run throughout the day between Nagpur and Ramtek.

3.1.6. Water Supply:

The source of water supply to Ramtek town is from Ram Sagar Lake also known as Khindsi lake which comes under irrigation department's pilot project as its area is more than 250 hectare. The water is then taken to the two reservoirs namely Ambala (2,25,000 litres capacity) and another one to the South of Ramgiri hill (22,500 litres capacity). A filtration plant has also been provided to support a population of 30,000 with 66 litres per capita per day and 22.5 litres per capita per day for pilgrims. The water survey scheme is under the management of Maharashtra Water supply and Sewerage Board. The charge of collection of tax is under Municipal Council.

3.1.7. Power Supply:

The Source is Koradi Thermal Power Station, through which Maharashtra State Electricity Board supplies the electricity to each and every household. The Substation is at 7kms outside the municipal limit of Ramtek on state highway no. 249.

3.1.8. Drainage and Sewerage:

There is NO provision of Underground drainage. Pucca Covered Drains are only along 7 main roads. Open Drains are there for rest of the houses along the roads.

Houses have latrines with septic tanks. Public toilets are there at different locations for poor section of the society constructed by Municipal Council of Ramtek.

3.1.9. Disposal of Solid Waste:

Solid Waste is being dumped in the land earmarked by municipal council for compost depot. Waste bins have been provided, located at different places.

Table 3. 4 : Social Infrastructure available in Ramtek

Education	
Pre-primary school	2
Primary school	9
Secondary school	5
Colleges	2
Health	
Government Hospitals	2 (40 beds)
Private hospitals	4 (60 beds)
Government Veterinary hospital	1
Commercial	
Weekly Market	1
Grain Market	1
Timber Market	1
Vegetable Market	1
General shops (Government)	146
General shops (private owner)	11

3.7. Economic Base: Growth Potential

Following are the type of small scale industries that exists in the Town. Secondary and tertiary sectors have also been growing alongwith the primary sector. Though still the share at primary sectore is more than that of the secondary and tertiary. Due to set up of nationalized banks and other offices, the population working at tertiary sector is rising. But being a tourist centre there is not seen any rise in the tourism industry. There is no direct employment from tourism in Ramtek. Though some of the encroacher sale goods at the tourist spots, but shopping is not legal there.

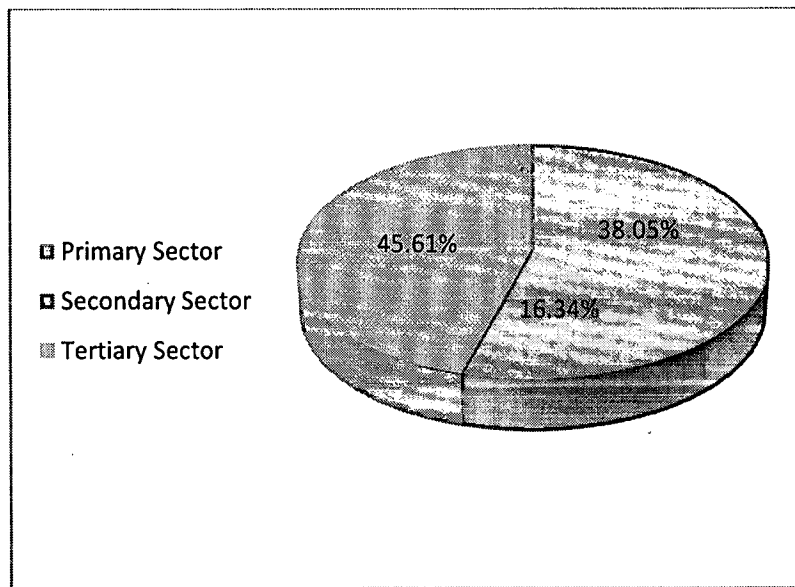


Fig. 3. 8: Occupational Structure of Working Population

Table 3. 5: Industries, Trade and commerce at Ramtek

Industries	
Saw Mills	4
Rice Mills	1
Murmura Mills	3
Cement Pipe Manufacturing unit	1
Trade & Commerce	
Agriculture Produce Market Committee Yard (marketing of Paddy, Soyabin, Sunflower, Jowar brought b agriculturists from 402 villages)	1
Nationalised Banks	2
Co-operative Banks	3

The inducement of tourist infrastructure to catch more tourist population will in turn provide employment to local people and generate income. The drawback is that the population will increase in turn will increase the need of water and land resource. This is why we need to study the undeveloped area landuse.

3.8. Undeveloped Area Landuse:

Hills and Hillocks contribute to the major share of undeveloped area landuse which is almost 240.28 ha. i.e. 42% of the total undeveloped area. Vacant developable land is 44.90 ha.

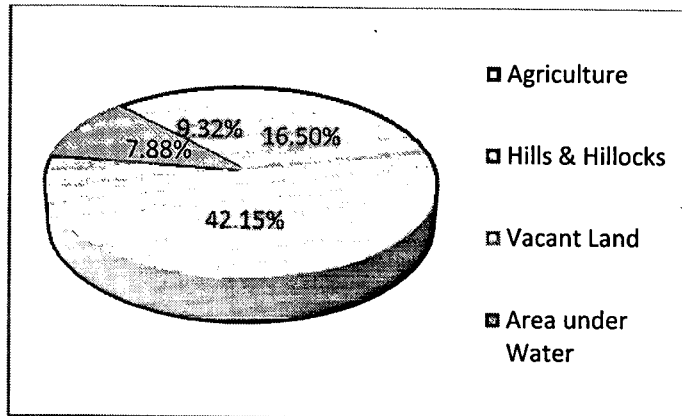


Fig. 3. 9: Undeveloped Area Landuse

Table 3. 6: Undeveloped Area Landuse

Landuse	Area in Hectare
Agriculture	94.05
Hills & Hillocks	240.28
Vacant Land	44.90
Area under Water	53.14
Developed Area	137.67

3.9. Inferences:

- Maximum working population of Ramtek is engaged in Tertiary sector.
- There is no prominent employment generation in tourism industry in Ramtek as such.
- Only 24% of the total area of Ramtek is developed, rest is all undeveloped area.
- Major portion of the undeveloped land is hills and hillocks.
- The Ramgiri hill rises about 152.4mt above town level and Kaikai hill about 91.4mt above town level.
- Almost 43 ha of developable land is vacant and not developed in Ramtek.
- Ramtek is blessed with 10 small and medium sized ponds in the town limit itself which are in a neglected state.

CHAPTER 4.

POTENTIAL TOURIST ATTRACTION IN AND AROUND RAMTEK

This chapter includes tourist places having potential to attract inflow of tourists if developed, in and around Ramtek. There are 4 tourist spots within Municipal limit of Ramtek and 3 others outside Ramtek. These 3 are taken into consideration as tourists coming to Ramtek may cover these spots as well on the way. The water bodies present within the municipal limit of Ramtek can be conserved, rejuvenated and developed to be a tourist spots as most of them are on the way to Garh Mandir, the tourist spot of prime importance.

4.1. Introduction of Tourist Places in and Around Ramtek:

1. Ram Temple (Garhmandir)
2. Kalidasa Smarak
3. Ambala Lake
4. Jain Temple
5. Khindsi Lake
6. Mansar excavation site
7. Nagardhan Fort
8. Lakes

4.1.1. Garh Mandir (Rama Temple)

History of Ramtek dates back to the period of lord Rama and has derived its name from lord Rama. It is believed that Ramtek was the place where lord Rama, rested while he was in exile.

It has got a historical Rama temple situated at the hill top having 27 Brahmanical style temples said to be 600 years old. The temple remains as a place of tourist attraction almost for whole of the year. It holds two festivals every year, Ramnavmi and Tripuri Purnima; which attracts as many as 25000 tourists daily, during the season.

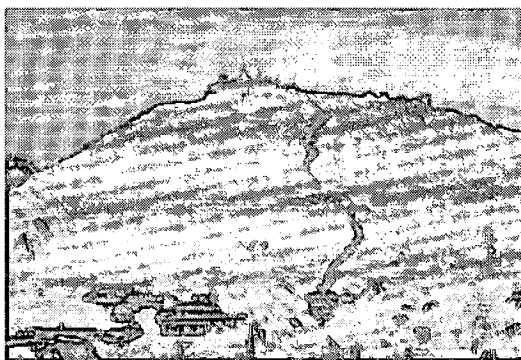


Fig. 4. 1: Garh Mandir, Ramtek

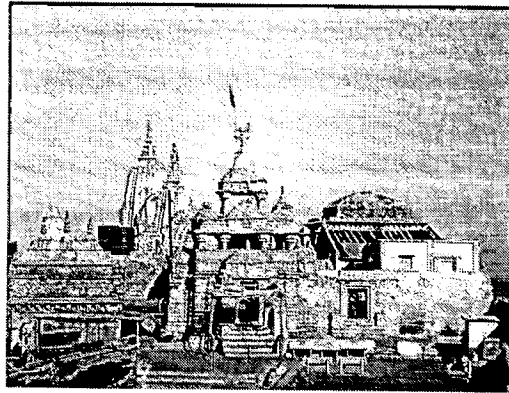


Fig. 4. 2: Temple Complex, Garh Mandir, Ramtek

4.1.2. Kalidasa Smarak

This place is also famous for its relation with Great poet Kalidasa. Kalidasa has written Meghdootum in hills of Ramtek. The town serves as the venue of the Kalidasa Festival, held every year in the month of November. A fortnight-long festival, it boasts of performances by virtuosos in the field of music, dance and drama.



Fig. 4. 3: Kalidasa Memorial



Fig. 4. 4: Entrance of Kalidasa Memorial

4.1.3. Ambala Lake

The Ambala lake is found at the foot of the Ram Temple in Ramtek. 25 small and big temples have been built around the Lake. The tank is also important because the ashes of the dead are immersed here.

The tank has an area of 14 Ha and steps throughout. Almost 2500-3000 Pilgrims take bath in this holy tank on the occasion of full moon day and no moon day.

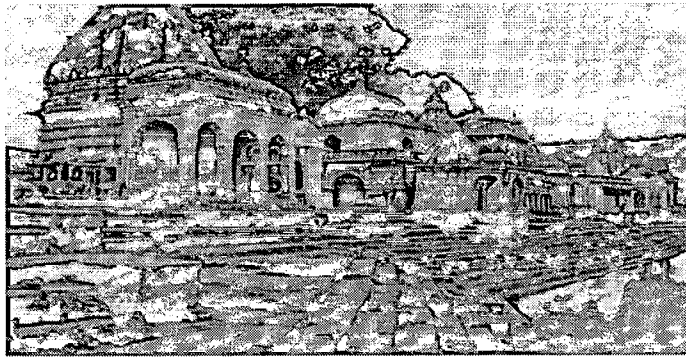


Fig. 4. 5: Temples at Ambala Lake

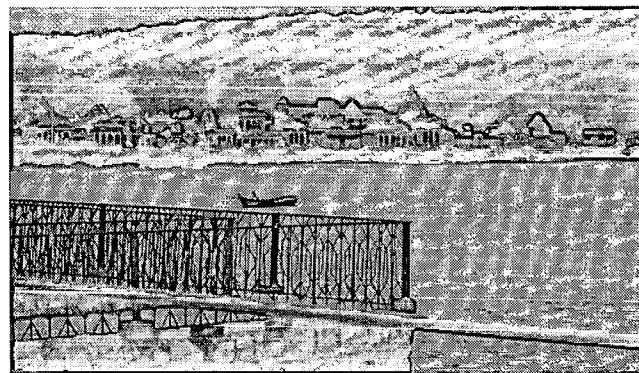


Fig. 4. 6: Lake View of Ambala Lake

4.1.4. Jain Temple :

Nearly 304 cms high, golden coloured idol of Bhagawan Shantinath in the Kayotsarya posture. The history of this tirth is believed to belong to the times of Bhagawan Munisuvrat, the 20th century according to the very ancient Jain puranas or it belongs to the pre-historical times. it is stated that Ramchandrajai built a number of Jain temples. This vanshagiri is named Ramtek.

The idol of Bhagawan Shantinath installed in Ramtek is believed to fulfill heart's desires. On account of exaggerated influence of the idol, this is also called Atishaya Kshetra.

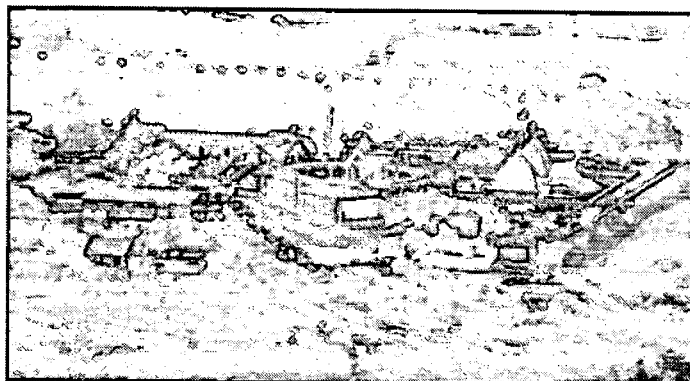


Fig. 4. 7: Jain Temple complex view

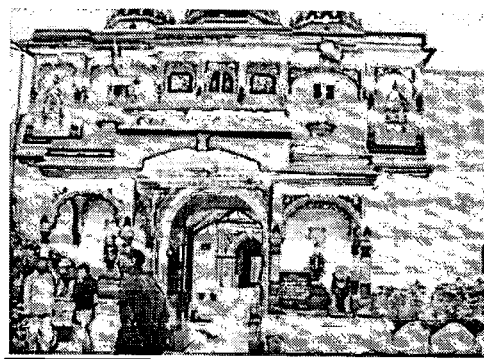


Fig. 4. 8: Entrance to Temple Complex, Jain Temple, Ramtek

4.1.5. Khindsi lake:

Khindsi lake, a fascinating tourist destination with a view of beautiful lake and greenery around is just 3kms away from Ramtek town. The current tourist traffic gets attracted towards it because of the boating facilities and various events organized here. This particular part of the lake is currently under the maintenance of Maharashtra Tourism Development Corporation.



Fig. 4. 9: Lake View at Khindsi Lake

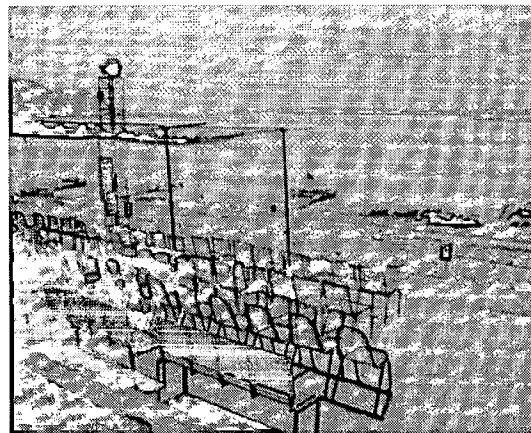


Fig. 4. 10: Sitting area at Khindsi Lake

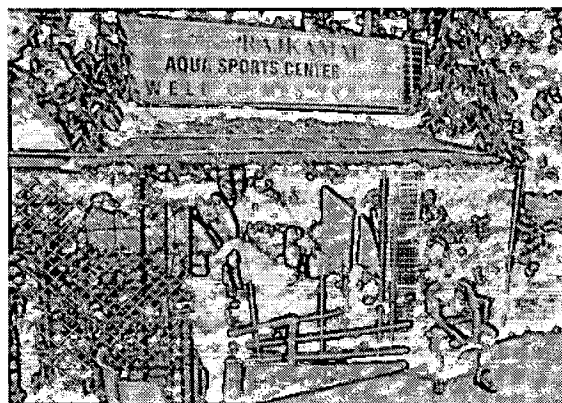


Fig. 4. 11: Entrance to Khindsi Lake

4.1.6. Nagardhan Fort

Nagardhan Fort has its own adventurous history lying beneath the remains of walls of this fort which has left with impressions of Gupta

dynasty, Mughals, Britishers and the bhosalas, now maintained archeological survey of india.

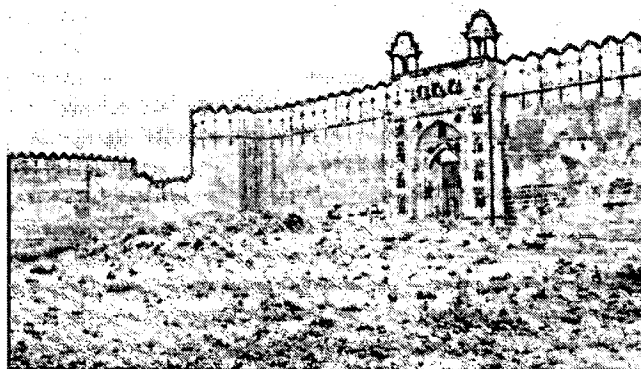


Fig. 4. 12: Nagardhan Fort View

4.1.7. Mansar excavation site:

Mansar excavation site, which is just 7kms from Ramtek town, is currently under the maintenance of Archeological Survey of India. The excavated site reveals the story behind the great architecture of Vakatakas- the Gupta dynasty (395-419 AD). The various archeological findings are kept in the museum at the site itself. There are 3 manganese ore mines behind this site, 7 kms away from Ramtek town.

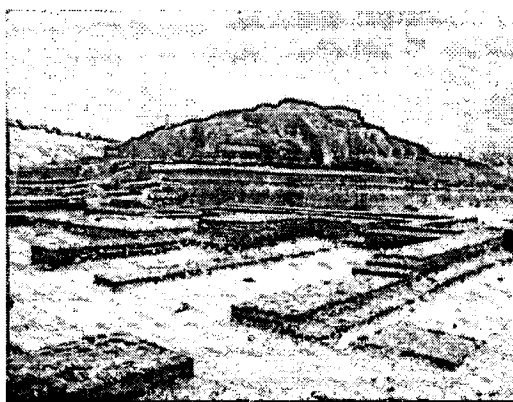


Fig. 4. 13: Mansar Excavation site at Ramtek – Mansar road

4.1.8. Lakes:-

There are 10 small and medium lakes inn Ramtek. Depending on the locations of these, following are having potential to be developed as a tourist spot.

Tank:-

Area is 43,518.66 sq. mt. this tank is under the jurisdiction of Irrigation Department of Maharashtra for 0 to 100 Ha area Lakes. The developable vacant land around this lake is 24,149.45 sq.mt.

Chambar Tank and Mathura Das Tank:-

Tank area is 33,561.89 sq.mt. the developable land area around the lake is 69,566.83 sq.mt. the vacant developable land around the lake is 58,909.95 sq.mt.

Navin Tank:-

Tank area is 19,865.50 sq.mt. the vacant developable area surrounding the lake is 46,626.93 sq.mt.

CHAPTER 5.

ANALYSIS

This chapter throws light upon the analysis of the data collected. 100 tourist surveys have been done, 40 at Garh mandir, and 20 each at Jain Temple, Kalidasa Memorial and Ambala Lake. Based on the survey done, and secondary data collected, analysis has been done to find out the present condition of infrastructure provision, supply and demand of the present and future. Demand has been projected to year 2021 and 2031.

5.1. Tourist Inflow Analysis:

The tourist arrivals in Ramtek are taken from year 2001 and tourist projections for year 2021 and 2031 are made. The tourist arrival expected to reach 4.3 lakh by 2021 and 5.3 lakh by 2031 [Table5.2].

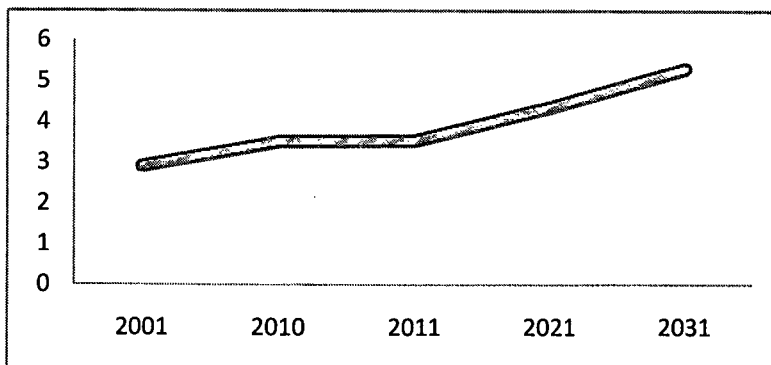
Table 5. 1: Tourist Inflow

S. No.	Year	Ramtek
1	2001	2,90,000
2	2002	2,95,800
3	2003	3,01,720
4	2004	3,07,750
5	2005	3,13,910
6	2006	3,20,190
7	2007	3,26,590
8	2008	3,33,120
9	2009	3,39,790
10	2010	3,50,000

Source: Primary and Secondary data from the site and Maharashtra Tourism Development Corporation

Table 5. 2: Tourist Projections

S. No.	Year	Tourist population
1	2001	2,90,000
2	2010	3,50,000
3	2011	3,53,510
4	2021	4,35,200
5	2031	5,30,500



Projection: $P_n = P_o (1+r)^n$

Fig. 5. 1: Projection of the Tourist population for 2021 and 2031 (in lakhs)

5.2. Seasonal Variation in Tourist Inflow:

There is a huge impact of the Ram Navmi and Tripuri Pournima utsav at Garh Mandir on tourist inflow [Table 5.4]. From 2001 onwards there is a great change in tourists inflow due to Government policies and development of infrastructure like:

- Construction and widening of Roads reaching to the tourist spots.
- Declaration of Ramtek as a tourist spot on Maharashtra Tourism Development Corporation’s Tourist spot List.
- Construction of government hotels and guest houses by Maharashtra Tourism Development Corporation and Forest Department of Maharashtra Government.

Table 5. 3: Tourist influx in Ramtek during January to December – 2010

S.No.	Month	Tourist Population
1	January	20,500
2	February	19,000
3	March	20,500
4	April	79,000
5	May	23,000
6	June	20,000
7	July	20,500
8	August	20,500
9	September	20,000
10	October	60,000
11	November	29,500
12	December	20,500

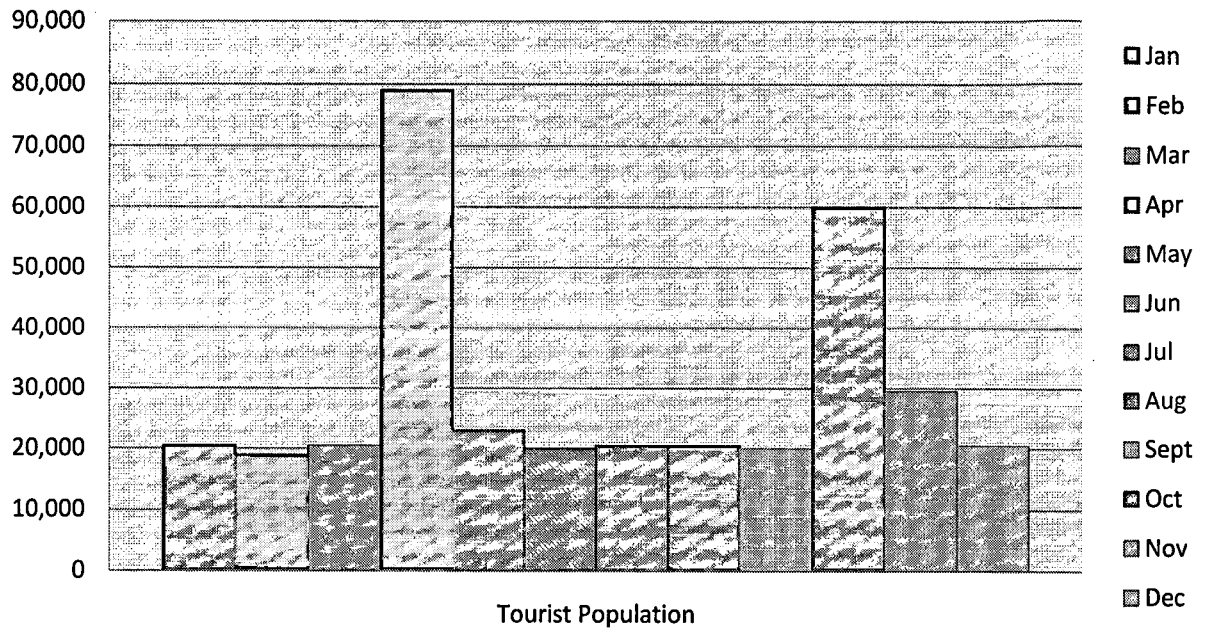


Fig. 5. 2: Tourist influx in Ramtek during January to December - 2010

5.3. Origin of Tourists:-

The physical distance is the main reason behind tourist influx from different cities and states. The maximum number of tourist inflow is from neighboring districts. The neighboring states include Madhya Pradesh, Andhra Pradesh, Chhattisgarh, Karnataka and Gujarat. Apart from these, some of the tourists come from Orissa and West Bengal states as well.

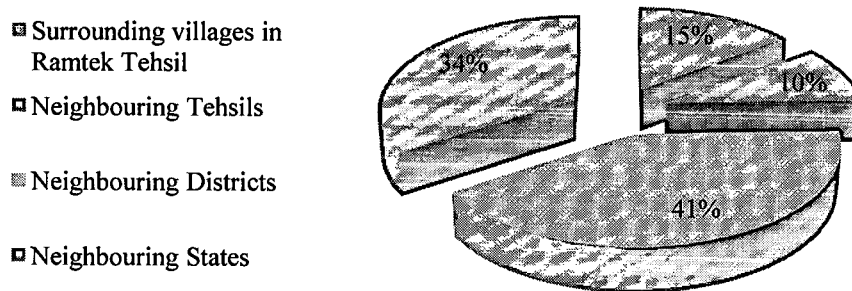


Fig. 5. 3: Origin of Tourists

5.4. Number of Visitors based on Tourist Visits:-

This shows that a person visiting for the first time would visit the place again and again. Depending on the awareness of the tourist spots, the tourists would visit one or multiple possible spots at his first visit. In the gradual visits thereon, the tourists would intend to cover all the tourist spots.

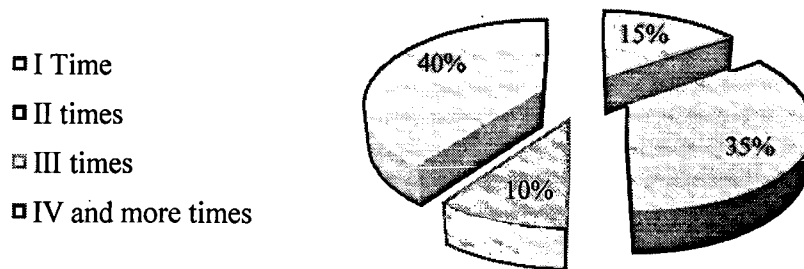


Fig. 5. 4: Number of visits of Tourists

5.5. Duration of Stay:-

Maximum number of tourists visits for one day.

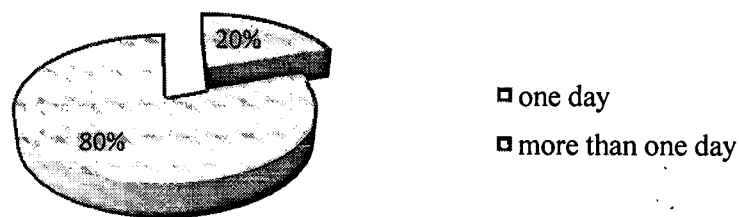


Fig. 5. 5: Duration of stay

5.6. Awareness of the Tourist Spots:-

The awareness of the tourists spots to the tourists are surveyed in Ramtek through a 100 sample surveys. It is found that 40% of the tourist spots are less known and visited by 7% of the tourists.

Table 5. 4: Awareness of the Tourist Spots

S.No.	Tourist Places	Awareness (%)
1	Places outside Municipal limit	89
2	Jain Temple	52
3	Ambala Lake	25
4	Kalidasa Memorial	27
5	Garh Mandir	45

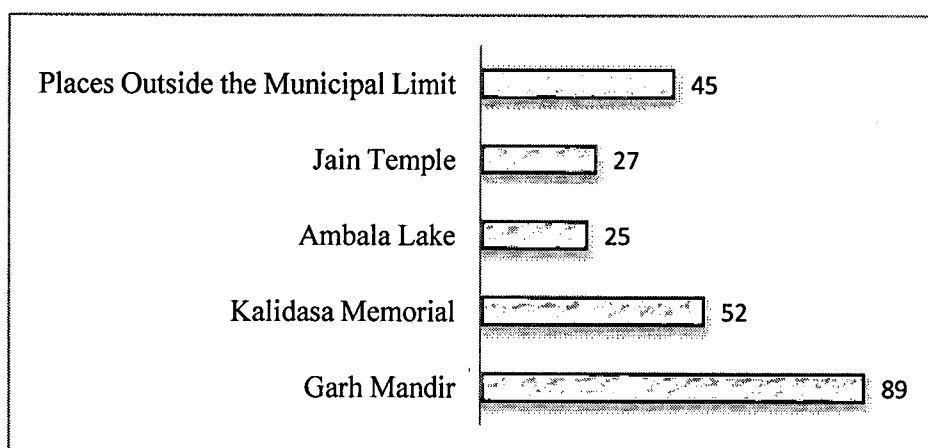


Fig. 5. 6: Awareness of the Tourist Spots

5.7. Infrastructure:-

Physical Infrastructure:

5.7.1. WATER SUPPLY -

i. Existing:

The source of water supply to Ramtek town is from Ram Sagar Lake also known as Khindsi lake which comes under irrigation department's pilot project as its area is more than 250 hectare. The water is then taken to the two reservoirs namely Ambala (2,25,000 litres capacity) and another one to the South of Ramgiri hill (22,500 litres capacity). A filtration plant has also been provided for purification of water. Water supply is 22.5 litres per capita per day for pilgrims. The water survey scheme is under the management of Maharashtra Water

supply and Sewerage Board. The charge of collection of tax is under Municipal Council.

Table 5. 5: Source of Water in Ramtek

Name of the Source	Capacity in MLD	Daily Drawl in MLD
Ambala Reservoir	2.25	2.25
Ramgiri Reservoir	0.225	0.225

- Other sources of drinking water in Ramtek are wells, tube wells and tanks.

Table 5. 6: Water Supply in Ramtek

Ramtek municipal Council	Domestic and Industrial Demand (MLD)	Tourism (MLD)	Total Demand (MLD)	Total Supply (MLD)	Deficiency (MLD)
Total	16.89	0.20	17.09	2.48	14.61

ii. Projection and Deficiency:

Considering the hotel occupancy rates and assuming tourist arrivals per day as 500 and the domestic population, as per the standards of water supply with respect to demand for 2001 shows that there is a deficiency of 14.61 MLD in supply in Ramtek [Table 5.7].

Water demand projection for 2021 is 78.974 MLD (including 78.71 MLD for domestic use) and 170.216 MLD (including 169.88 MLD for domestic use) for year 2031.

5.7.2. SEWERAGE –

i. Existing:-

The sewerage generation from domestic use in year 2001 is 13.512 MLD and that from tourism is 0.16 MLD.

There is NO provision of Underground drainage. Pucca Covered Drains are only along 7 main roads. Open Drains are there for rest of the houses along the roads.

Houses have latrines with septic tanks. Public toilets are there at different locations for poor section of the society constructed by Municipal Council of Ramtek.

ii. Projection and Deficiency:-

Sewage generation projected for the year 2021 is 63.1792 (including domestic demand of 62.968 MLD) and 136.1728 MLD for year 2031 (including the domestic demand of 135.904 MLD).

5.7.3. SOLID WASTE -

i. Existing:-

Solid waste is dumped in the land earmarked by municipal council for compost depot. Waste bins are located at every tourist spots. The generation of Solid waste in Ramtek is 7MT MSW/day.

5.7.4. Projection and Deficiency:-

Solid waste generation projected for year 2021 is 32.63Mt /day and 70.44 Mt/day for year 2031.

5.7.5. POWER SUPPLY -

i. Existing:-

The Source for power supply is Koradi Thermal Power Station with a capacity of 1080 MW. It is supplied by Maharashtra State Electricity Board (MSEB) to each and every tourist spot. The substation is 7kms outside the municipal limit of Ramtek on state highway no. 249.

ii. Projection and Deficiency:-

The projected power demand for Ramtek is estimated to be 36.01 KV in 2021 and 50.472 KV in 2031.

5.7.6. TRANSPORT SYSTEM –

i. Roadways:

There is a space for only 35 cars/taxi, 4 buses and 20 two-wheelers at Garh Mandir. There is a parking space for 8 4-wheelers (taxi and car) 1 bus, and 20 2-wheelers at jain temple. No parking space is allotted at Ambala lake.

Table 5. 7: Major Roads and Railway at Ramtek

Major Roads	
State Highways (No. 249)	Mansar-Tumsar highway
State Highways (No. 243)	Ramtek-Mauda Highway
Major District Road (No. 22)	1
Railway	
Branch of Broad Gauge	3kms Outside Municipal limits
Railway	

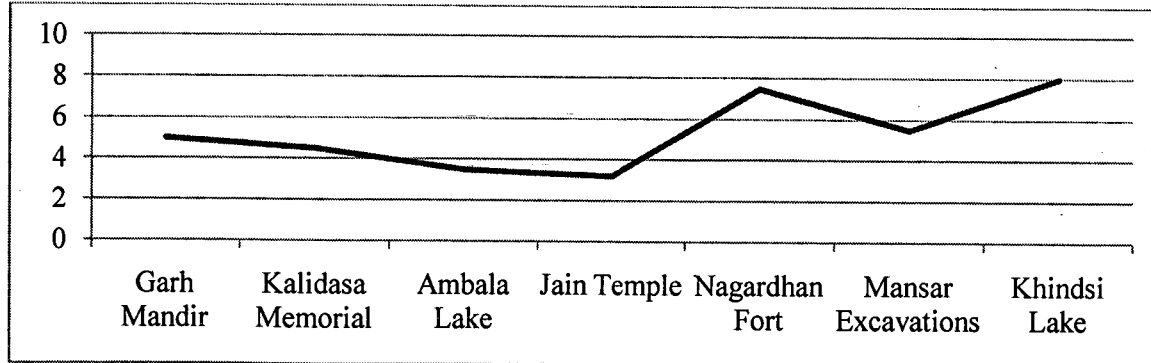


Fig. 5. 7: Distance of Tourist places from Railway station

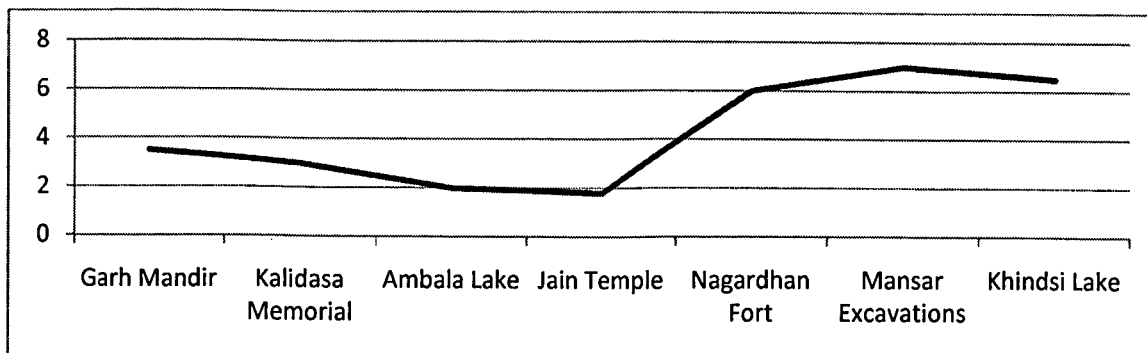


Fig. 5. 8: Distance of Tourist Places from Bus Stand

ii. Mode of Transport:

Maximum number of tourists use private vehicle as a mode of transport to reach the tourist spots. Very few tourists living in the surrounding villages visit the tourist places walking. At the time of Ram Navmi or Tripuri Purnima Utsav, tourists visit Ramtek by walk. 74% (350 daily and 44,400 in the peak time) of the tourists visit Ramtek by private vehicles.

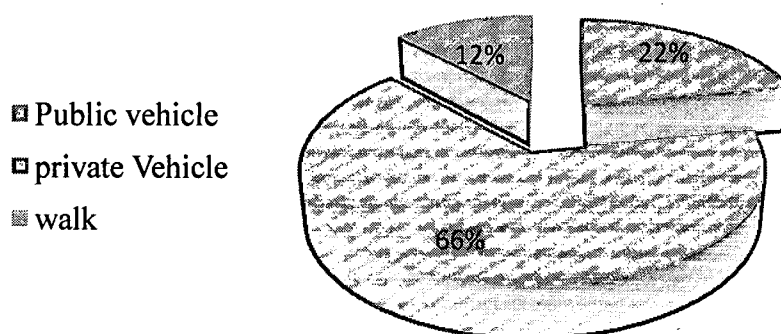


Fig. 5. 9: Mode of Transport

Maximum number of Tourists using private vehicles makes use of Bus or Taxi to reach the tourist spots. Tourists find it comfortable to use their private ehicle to cover all the tourist spots in a day as there is no proper Public Transportation available to the tourist places.

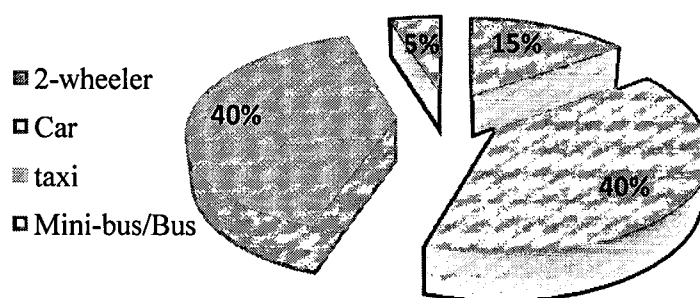


Fig. 5. 10: Vehicles used by Roadway Tourist Traffic

Table 5. 8: Daily Floating population by Bus

Daily floating population by bus (200 daily)		12000 (approx./avg.)	
Purpose of their visit:			
School/College	Offices/Buisness	Personal	Tourism
Number of population:			
65% (7800) (Pass Holders)	10% (1200) (Pass Holders)	22% (2600)	3% (400)

Source: Depot in-charge, Ramtek Bus Depot, Ramtek

iii. Railways:

A branch Broad Gauge railway line of the South-Eastern railway extends to Ramtek. Ramtek railway station is situated just outside the Municipal limits at 3 kms distance towards South-West from Ramtek. Three passenger trains run throughout the day between Nagpur (District Headquarter) and Ramtek.

Table 5. 9: Daily Floating population by Train (2010)

Daily floating population by Train (3trains a day)		1000-1200 (approx./avg.)	
Purpose of their visit:			
School/College	Offices/Buisness	Personal	Tourism
Number of population:			
9% (90-110) (Pass holders)	50% (500-600) (Pass holders)	33% (300-400)	8% (80-100)

Source: Station in-charge, Ramtek railway station, Ramtek

5.7.7. Tourist Transport Circuit Network in Ramtek

Different groups of tourists visit various Tourist spots in Ramtek with a priority for various reasons.

Tourist visiting Garh Mandir intend to visit it first for the sake of pilgrimage. The transport circuit map of tourists visiting Garh Mandir choosing it as the priority tourist spot can be seen in [Sheet no. 1].

Out of the total tourists visiting Garh Mandir, more than 50% visit Kalidasa Memorial, 70% tourist places outside Garh Mandir, 12.5% and 5% respectively visit Jain temple and Ambala lake after visiting Garh Mandir.

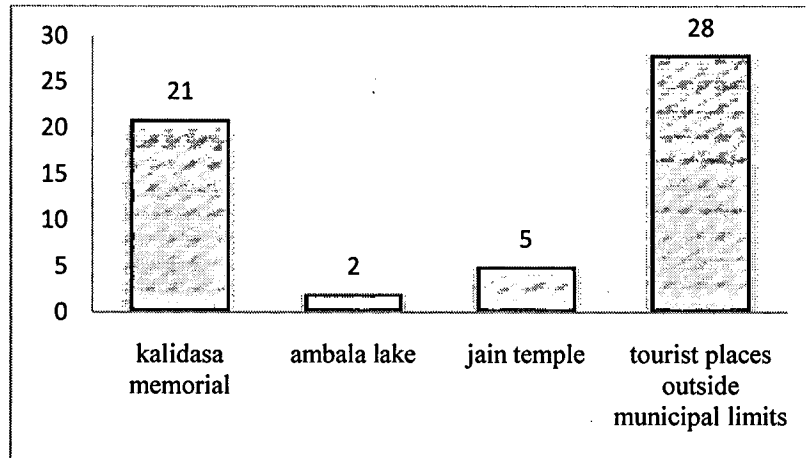


Fig. 5. 11: Tourists visiting other tourist spots after visiting Garh mandir

Tourist visiting Ambala Lake as a priority tourist spot mainly visit the place for the reason of cultural tourism as presently it mainly carry out the after death rituals of Hindu religion. The transport circuit of tourists visiting Ambala lake choosing it as the priority tourist spot is illustrated in [Sheet No. 1].

85% of the tourists visit Garh Mandir, 15% and 5% visit Kalidasa Memorial and Jain Temple and 35% visit tourist places outside municipal limit after visiting Ambala lake.

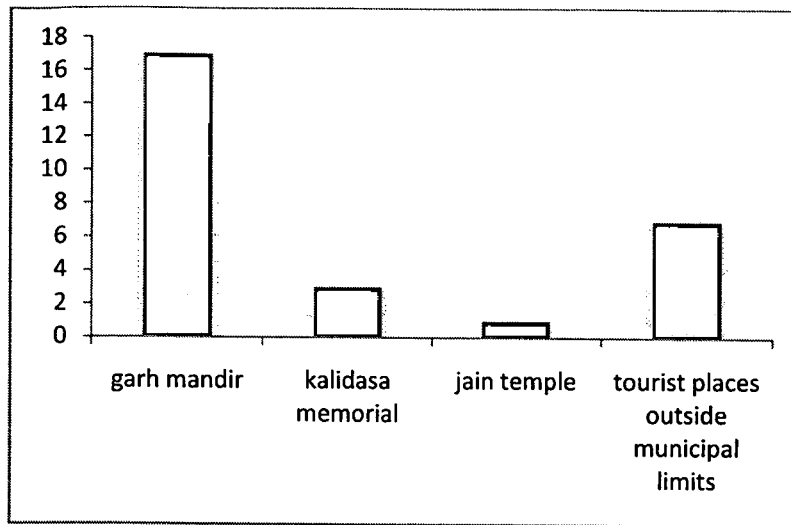


Fig. 5. 12: Tourists visiting other Tourist spots after visiting Ambala Lake

Tourists visiting Jain Temple, choosing it as the priority tourist spot, visit it for the reason of pilgrimage and performing various rituals of the Jain community mainly. The travel circuit map is illustrated in [Sheet no. 1].

60% of the total tourists visiting Jain Temple visit Garh Mandir, 40% visit Kalidasa Memorial, 10% and 30% respectively, visit, Ambala Lake and tourist places outside the municipal limit after visiting Jain Temple.

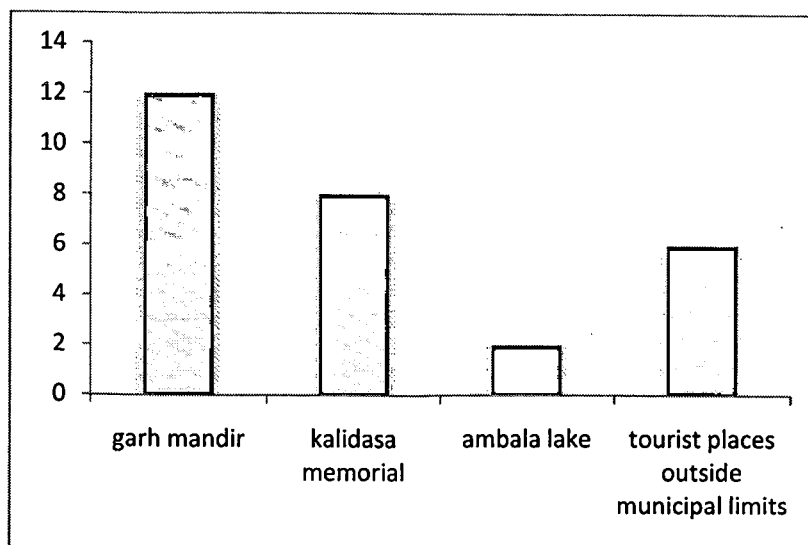


Fig. 5. 13: Tourists visiting other Tourist spots after visiting Jain Temple

Social Infrastructure:

5.7.8. ACCOMODATION –

i. Existing:-

20% (175) of the tourists visit Ramtek for more than one day [Fig. 3]. Maximum numbers of tourists prefer to stay in the town. 45% (79) tourists avail accommodation facilities available at the town daily. 27% (48) tourists prefer to stay in the premises of Jain Temple.

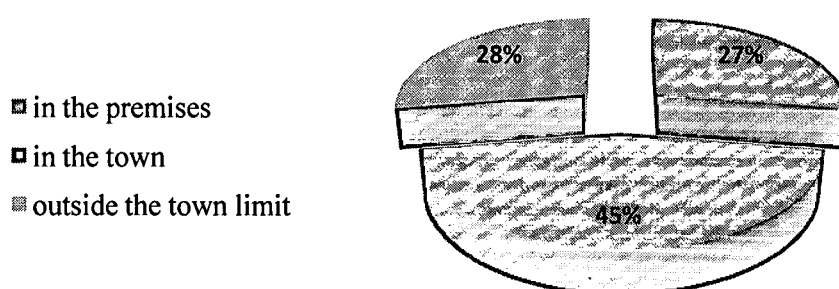


Fig. 5. 14: Accommodation preferred by Tourists

There are 2 government hotels (45 double bed and 25 four bed rooms, i.e. 190 beds) and 4 dharmashalas (205 rooms, 660 beds) in Ramtek.

Table 5. 10: Type of Accommodation

S.No.	Accommodation	Numbers	Number of Beds
1	Government Guest House	2	190
2	Dharmashalas	4	600

Source: Development Plan Report, Ramtek, Nagpur District Planning Authority

ii. Projection and Deficiencies:-

132 tourists per day will be availing the accommodation facilities available at Ramtek in year 2021. The projected population for tourists availing the accommodation facilities at Ramtek in year 2031 will be 168.

5.7.9. CATERING –

i. Existing:-

There are 2 restaurants (80) and 2 mess (in Ramtek with a capacity of (50). There is one mess in the Jain temple premises with a capacity of 60 chairs.

Majority of the tourist population do not depend upon the available catering facilities in the premises or in the town as they are very few in number.

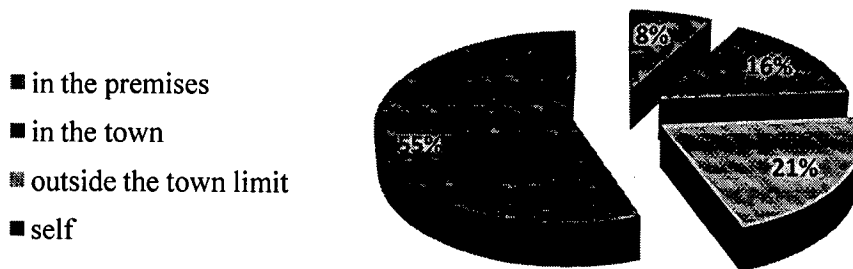


Fig. 5. 15: tourists availing catering facilities

ii. Projection and Deficiency:-

The deficiency for catering facility in Ramtek is 190 chairs. The projection of deficiency for tourists requiring catering facilities in will be 2021 is 350 chairs and 530 chairs for year 2031.

5.7.10. RECREATION –

i. Water Bodies:

There are 10 small and large ponds including Ambala Lake inside the municipal limit which can be developed as a tourist spot. Out of these, 2 ponds have been taken up as a tourism project by Maharashtra Tourism

Development Corporation on which the restoration work is going on. The rest of the ponds have not been considered in the development plan yet, which should also be developed.

ii. Hills and hillock:

The Ramgiri hill is the last peak of Satpura Ranges, is 152.4 mt rising above the town level. The other hills named Kaikai hill is raising to a height of 91.4 mt above the town level. These can be developed for rock climbing and trekking.

5.7.11. SHOPPING –

There are no commercial facilities or shopping places available at the tourist centers where local produce is available. A local market of the town is there. Illegal shops have been constructed at the Garh Mandir area which contributes in the earning of a very few of the local population.

5.7.12. MEDICAL FACILITIES –

i. Existing:

There are 2 government hospitals (40 beds) and 4 nursing home, child welfare and maternity centre i.e. 60 beds in the town.

ii. Gap in medical facility:

According to UDPFI guidelines, there should be 1 bed for almost 833 population, so accordingly, for total population of 30000 (22,517-town population+8000 tourist population), there is a deficiency of 36 beds. There is a demand of 66 beds in 2021 and 213 beds in 2031.

5.7.13. TOURIST INFORMATION CENTER –

There is no Tourist Information Centre available at Ramtek Bus Station or Railway station or at any of the tourist places.

5.8. Tourist Infrastructure Assessment for individual Tourist spots and for Ramtek Town:-

Based on the surveys, the infrastructure provisions in each tourist spots are quantified by rating them as:

1-very poor, 2-poor, 3-average, 4-good, 5-Excellent

Table 5. 11: Infrastructure Analysis

Tourist Spots →	Garh Mandir		Kalidasa Memorial		Ambala Lake		Jain Temple		Lakes	Average
	Garh	Mandir	Kalidasa	Memorial	Ambala	Lake	Jain	Temple		
Pucca Approach Road	5		5		4		2		2	3.6
Public Transport facility	3		3		2		2		2	2.4
Signage	2		3		2		3		1	2.2
Drinking Water	3		3		2		3		1	2.4
Toilets	2		3		1		4		1	2.2
Electricity	3		3		2		4		1	2.6
Accommodation	1		1		2		5		1	2
Catering	1		1		2		4		1	1.8
Recreation	1		4		2		3		1	2.2
Conservation	2		3		4		3		2	2.8
Electronic Communication Facility	1		1		1		3		1	1.4
Shopping Facility	2		1		2		2		1	1.6
Parking	4		3		2		3		1	2.6
Guides	1		1		3		3		1	1.8
Security	3		3		1		4		1	2.3
Average	2.27		2.53		2.13		3.2		1.2	

Rating of the infrastructural facilities is as follows:

LEGEND:

- Excellent
- Good
- Average
- Poor
- Very Poor

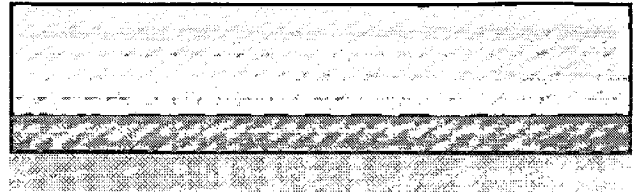


Table 5. 12: Comparative Analysis of Tourist spots

Tourist Spots	Garh	Mandir	Kalidasa	Memoria	Ambala	Jain	Lakes
Infrastructure							
Pucca Approach Road							
Public Transport facility							
Signage							
Drinking Water							
Toilets							
Electricity							
Accommodation							
Catering							
Recreation							
Conservation							
Electronic Communication Facility							
Shopping Facility							
Parking							
Guides							
Security							

All the infrastructural factors have been quantified and ranked accordingly; which gives the capability of the tourist centers to attract tourists. The tourist centers with lower rank need to be developed to attract more tourists.

It can be seen that social infrastructure like accommodation, catering, electronic communication facility, shopping, guides; etc are not available at majority of the Tourist spots. Public Transport system and signage are poor at most of the tourist spots. Only Garh mandir and Kalidasa Memorial have access by a pucca approach road, rest of the tourist spots has poor or average accessibility.

Table 5. 13: Rating for the Infrastructure facilities at the tourist spots

Tourist Spots	Rating for Infrastructural Facility
Garh Mandir	[Rating]
Kalidasa Memorial	[Rating]
Ambala Lake	[Rating]
Jain Temple	[Rating]
Lakes	[Rating]

Table 5. 14: Rating for Infrastructural facilities for Ramtek Town

Infrastructure	Rating for Infrastructural Facility
Pucca Approach Road	[Rating]
Public Transport facility	[Rating]
Signage	[Rating]
Drinking Water	[Rating]
Toilets	[Rating]
Electricity	[Rating]
Accommodation	[Rating]
Catering	[Rating]
Recreation	[Rating]
Conservation	[Rating]
Electronic Communication Facility	[Rating]
Shopping Facility	[Rating]
Parking	[Rating]
Guides	[Rating]
Security	[Rating]

The infrastructural facilities are poor in Garh Mandir and Ambala Lake. They are average at Kalidasa memorial and Jain Temple. The lakes are not developed at all in tourism point of view.

Considering tourism infrastructural facilities in Ramtek, electronic communication facility is very poor. Physical infrastructure like public transport system, drinking water, signage, toilets; etc and social infrastructure like accommodation, catering, recreation, shopping, guides and security are very poor in Ramtek.

Considering the above analysis findings, there is a need of development of all the infrastructural facilities in Ramtek for increasing the potential of attracting tourists.

5.9. Requirements:

Table 5. 15: Projected demand of the infrastructure for year 2021 and 2031

S. No.	Infrastructure	Requirements	
		2021	2031
1	Accommodation (Beds)	132	168
2	Catering (Chairs)	350	530
3	Tourist Information Centers (Booths)	6	7
4	Medical Facility (Beds)	66	213
7	Parking (Car)	217	277
8	Parking (Bus)	211	268
9	Parking (Taxi)	59	75
10	Parking (2-wheelers)	6	8
11	Solid Waste (MT)	79.2075	170.565
12	Sewerage (MLD)	63.1192	136.1728
13	Water Supply (MLD)	78.974	170.216
14	Power Supply (KV)	36.01	50.472

CHAPTER 6.

PROPOSALS

The proposal has been made on the basis of data collected and analyzed in the previous chapters. A comprehensive solution has been found out to give a solution to the development plan for year 2021 and 2031.

6.1. Proposals –

6.1.1. For Promoting Inflow of Tourists:-

i. Development of circuits outside Ramtek

The tourist places outside Ramtek should be developed with circuits connecting to Ramtek so that tourist inflow can be promoted.

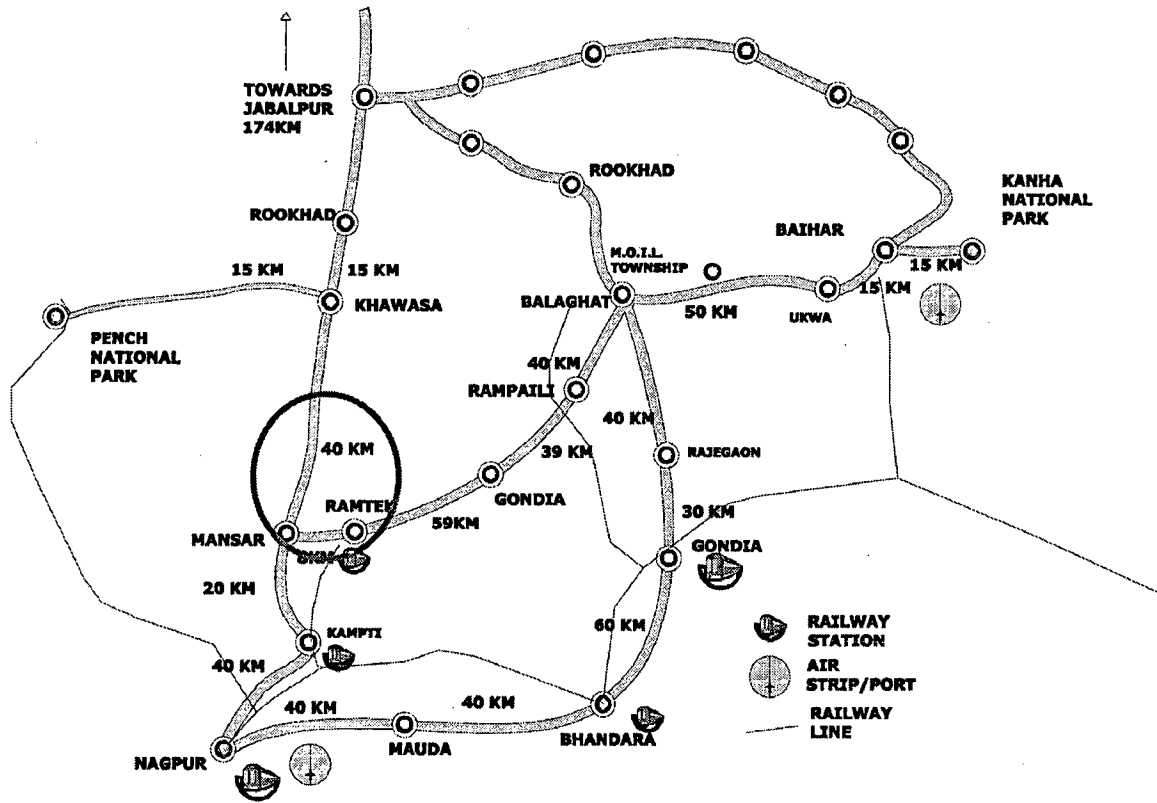


Fig. 6. 1: Development of circuits outside Ramtek

There are many other major tourist centers in close proximity of Ramtek like Pench National Park which is 55 kms from Ramtek, Kanha

National Park which is 241 kms from Ramtek by Roadway. Nagpur is another major center which is around 60 kms from Ramtek. Besides there is a broad guage extension Railway line goes to Ramtek which is just around 20 kms from the main South-Central Railway line connecting to all the nearby towns. If this line is extended to Ramtek, the inflow of population in general and tourist particularly can be increased, thereby connecting Ramtek to all the surrounding major tourist centers.

ii. e-Governance

E-governance or electronic governance may be defined as delivery of government services and information to the public via the electronic medium. Use of IT in government organizations facilitates an efficient, speedy and transparent process for disseminating information to the public and other agencies, and for performing government administration activities. With the help of e-governance, the tourism in Ramtek can be promoted throughout the globe. Accommodation booking, Information of Yatras and Festivals can be put on the website. This way, even foreign tourists or tourists not having any information about the place may also know and visit the place.

iii. Tourist Information Centers

Tourist Information shall be placed at railway station, bus stand of Ramtek and Nagpur (the district headquarter) as well as Nagpur airport, to guide tourists about the tourist spots at Ramtek. Tourist Information centers is also going online these days. These also offer accommodation booking and guides to the far away tourists who wish to visit the place.

iv. Festivals

Festivals and cultural activities shall be promoted at the tourist spots. Shopping activities, cultural exhibitions, would promote tourist inflow throughout the year.

Festivals:

- Ram Navmi
- Tripuri Purnima
- Kalidasa Festival
- Full Moon Day and no moon day
- Akshaya Tritiya
- Water sports
- Parachute gliding

With existing and adding new festivals to the list, Ramtek can attract many tourists. Many people do not know about these festivals. Therefore advertisement shall be given in newspapers, televisions, holdings and posters about the same. Special transport facilities like bus services, special trains to various places shall be started to enable tourists to visit Ramtek without any problem.

6.1.2. For Development of Tourist Attractions:-

Finding them with tourist potential, lakes shall be restored and developed. Beautification of the following lakes shall be done: there is a developable vacant land available at the surrounding of the lake. Development is not occurring here because of the high water table due to the close proximity of the lake. Taking advantage of this, gardens and low rise guest houses can be constructed here for meeting the demand of the tourists. [Sheet 4].

6.1.3. For development of Individual Tourist Spots:-

The tourist spots should be enforced with infrastructural facilities.

i. Ram Temple/ Garh Mandir:

There is only parking and toilet facility available at Garh Mandir which is not sufficient and not maintained properly. The parking is constructed by Ramtek Municipal Council on BOOT basis. Many of the old temples and structures are lying neglected at the proximity. Thus restoration of these structures and beautification of the area is suggested.

The site is perfect for having paragliding sports activity, for which the site has been suggested, keeping in mind the importance of the place as a religious center mainly.

ii. Ambala Lake:

Ambala lake does not have any infrastructure for the tourists except for the dilapidated structures of toilet blocks, changing rooms and resting rooms. Thus it needs accommodation places, catering places, resting rooms for day tourists, community hall and waiting room for boating. There are many small Brahmanikal style temples around the lake which need to be restored.

iii. Jain Temple:

The accommodation and catering facility at Jain temple is not enough. Other infrastructural facilities are also not enough to make tourists feel comfortable like transport facility, information tourist centres, parking; etc. thus land available for development can be acquired which is in the backside of the Jain Temple site and can be developed.

6.1.4. For Development of Infrastructure:-

i. Accommodation:

Accommodation facility is not enough for the daily as well as tourists visiting on occasions. Thus accommodation facility is provided in the land near the lakes to attract tourists. The accommodation facility is also provided at the individual tourist spots. Temporary structures have

been given the site in the close proximity of each of the tourist spots at the time of peak hours.

ii. Catering:

Catering Facility is not enough in the town. Thus it has been provided near the proposed accommodation facility and at each of the tourist spots. The catering facility is availed by daily tourists as well as tourists visiting for more than one day.

iii. Tourist Information Centers:

Tourist information centers should be there at each of the tourist spots and bus stand and railway station to guide tourists and provide them with valuable assistance.

iv. Medical Facility:

Medical facility is provided at Ambala Lake, Jain Temple and Garh Mandir for tourists.

v. Sewage Disposal Scheme:

There is no proper sewage disposal or sewage treatment plant at Ramtek. Hence it has been included in the proposal. The site is earmarked in the map behind the Bus stand, near the lake.

vi. Water Supply Scheme:

There is a great deficiency of treated water supply in Ramtek. Majority of the people uses bore-well or hand-pump. Thus a strong source is necessary to be found out and provide Ramtek with required water supply to meet the demand so that the ground water table would not decrease in level by drawing off the water from borewell.

6.2. General policy Guidelines –

- Implementation of Bread and Breakfast scheme
- e-governance shall be implanted to make the government and management to reach the tourists directly.
- To maintain all the historical structures under Archaeological Survey of India department or INTACH for their conservation and restoration.
- To formulate proper maintenance bodies or trusts for Garh Mandir and Ambala lake.
- Integrated management approaches- A branch office of Maharashtra tourism and Development Corporation at Ramtek associated with Ramtek Municipal Corporation and Maharashtra Irrigation Department, Ramtek branch and Archaeological Survey of India; for maintenance and development of tourist spots.
- Natural resources of the area shall be safeguarded maintaining a balance between economic activities and natural resources.
- To work on people's participation program basis for encouraging involvement of local people and primary stakeholders in projects.
- Solid waste management shall be done in Ramtek considering tourism as well.
- Water management schemes shall be run throughout the town also giving benefit to the tourism industry.

- Restoration of water bodies shall be done to conserve the water and water table shall be maintained. It can also be developed as a tourist spot.
- Rejuvenation of areas of town having slums shall be done so that living standards can be improved without affecting the tourism industry.
- Encouraging small scale industries and giving market to it through tourism development.

6.3. Regulations –

- FAR shall be increased of the houses giving them the opportunity to participate in the development process by providing accommodation to the tourist on pay basis.
- No construction of any manner shall be allowed in the premises of Garh Mandir temple complex.
- Agricultural and water bodies along with forest area shall be declared strictly as 'No Development Zone' area.
- Norms given by Maharashtra Tourism Development Corporation shall be followed.

6.4. Conclusion –

- Ramtek has been studied and analyzed and found having strong tourism potential.
- The demands have been projected to year 2021 and 2031 and proposals have been made on the basis of same.
- There is mainly religious and cultural tourism in Ramtek. By developing the lakes and adding sports activities like paragliding, it can also be brought as a place for adventurous tourism on the map.
- The provision of infrastructural facilities for the tourists will increase the inflow of tourists in Ramtek.
- There are backwash effects as well which have to be looked after, as in the case study of Rishikesh explained that a place with natural beauty shall be maintained and developed without touching its natural heritage.
- Provision and improvement of security and guides is also an important aspect to be considered in the development process.
- Tourism development in Ramtek results into development, conservation and preservation particularly of archeological remains. It also brings transformation in lifestyle of the local people. Tourism induced economy can bring a drastic change in overall economy and living standards of the place.

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APPENDIX A:-

Tourism Population Projection:-

Tourist Ppopulation in year 2001 = 2,90,000

Tourist Population in year 2010 = 3,50,000

Population Projection:-

1. Geometric Growth:-

$$P_n = P^0(1+r)^n$$

Projected Tourist Population in year 2021 = 4,35,200 (approx)

Projected Daily Tourist Population in year 2021 = 660 (approx)

Projected Tourist Population in year 2031 = 5,30,500 (approx)

Projected Daily Tourist Population in year 2031 = 840 (approx)

2. Exponential Growth:-

$$P_n = P^0 e^{rt}$$

Projected Tourist Population in year 2021 = 3,87,300 (approx)

Projected Daily Tourist Population in year 2021 = 570 (approx)

Projected Tourist Population in year 2031 = 4,24,600 (approx)

Projected Daily Tourist Population in year 2031 = 630 (approx)

3. Arithmetic Growth:-

$$P_n = P^0 + (n(P_o + P_m)/m)$$

Projected Tourist Population in year 2021 = 4,23,350 (approx)

Projected Daily Tourist Population in year 2021 = 620 (approx)

Projected Tourist Population in year 2031 = 4,90,000 (approx)

Projected Daily Tourist Population in year 2031 = 730 (approx)

APPENDIX B:-

National Tourism Policy:-

In order to develop tourism in India in a systematic manner, position it as a major engine of economic growth and to harness its direct and multiplier effects for employment and poverty eradication in an environmentally sustainable manner, the National Tourism Policy formulated in the year 2002. Broadly, the “Policy” attempts to:-

- Position tourism as a major engine of economic growth;
- Harness the direct and multiplier effects of tourism for employment generation, economic development and providing impetus to rural tourism;
- Focus on domestic tourism as a major driver of tourism growth.
- Position India as a global brand to take advantage of the burgeoning global travel trade and the vast untapped potential of India as a destination;
- Acknowledges the critical role of private sector with government working as a pro-active facilitator and catalyst;
- Create and develop integrated tourism circuits based on India’s unique civilization, heritage, and culture in partnership with States, private sector and other agencies; and
- Ensure that the tourist to India gets physically invigorated, mentally rejuvenated, culturally enriched, spiritually elevated and “feel India from within”.

i. Scheme for Product/Infrastructure and Destination Development:-

The focus under this scheme is on improving the existing products and developing new tourism products to world class standards. For infrastructure and product development, the Ministry of Tourism has been providing Central Financial Assistance to the State Governments during the 9th Five Year Plan which resulted in strengthening of the infrastructure and product development in the country. Master planning of these destinations is undertaken so as to develop them in an integrated holistic manner. The master plan is suppose to tie up all backward and forward linkages, including environmental considerations.

ii. Scheme for Integrated Development of Tourist Circuits:-

Under this Central Financial Assistance scheme the Ministry of Tourism Government of India has been extending assistance to States for development of tourism infrastructure. The objective of the scheme is to identify tourist circuits in the country on an annual basis, and develop them to international standards. The aim is to provide all infrastructure facilities required by the tourists within these circuits. The Ministry of Tourism aims at convergence of resources and expertise through coordinated action with States/UTs and private sector.

iii. Scheme for Support to Public Private Partnerships in Infrastructure (Viability Gap Funding):-

Development of infrastructure requires large investments that cannot be undertaken out of public financing alone. Thus, in order to attract private capital as well as techno-managerial efficiencies associated with it, the government is committed to promoting Public-Private Partnerships (PPPs) in infrastructure development. This scheme has been put into effect for providing financial support to bridge the viability gap of infrastructure projects undertaken through Public Private Partnerships.

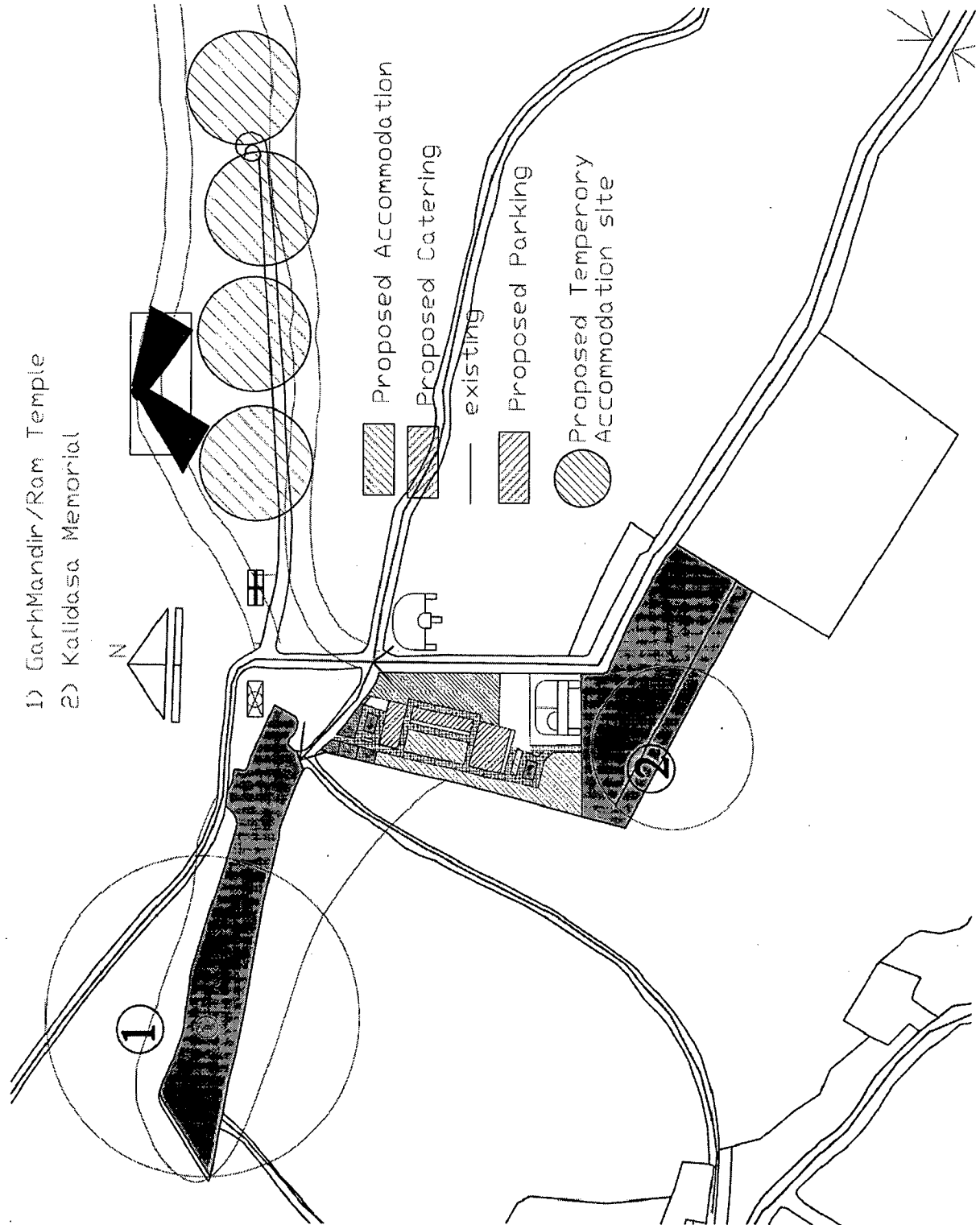
iv. Scheme for Market Development Assistance (MDA):-

The Marketing Development Assistance Scheme (MDA), administered by the Ministry of Tourism, Government of India, provides financial support to approved tourism service providers (i.e. hoteliers, travel agents, tour operators, tourist transport operators etc., whose turnover include foreign exchange earnings also) for undertaking the following tourism promotional activities abroad:

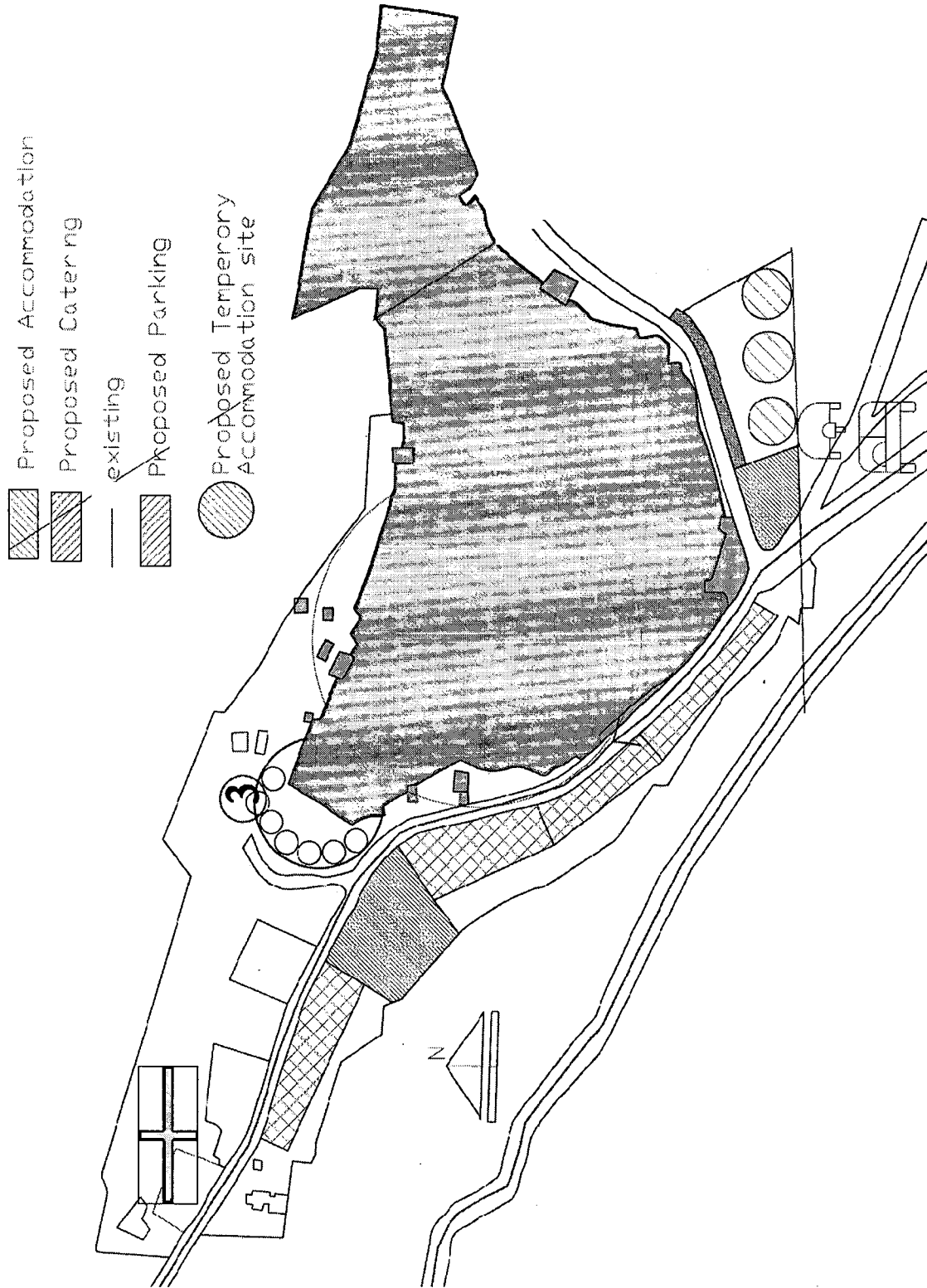
- Sales-cum-study tour
- Participation in fairs/exhibitions
- Publicity through printed material

APPENDIX C:-

Proposal at Garh Mandir:-

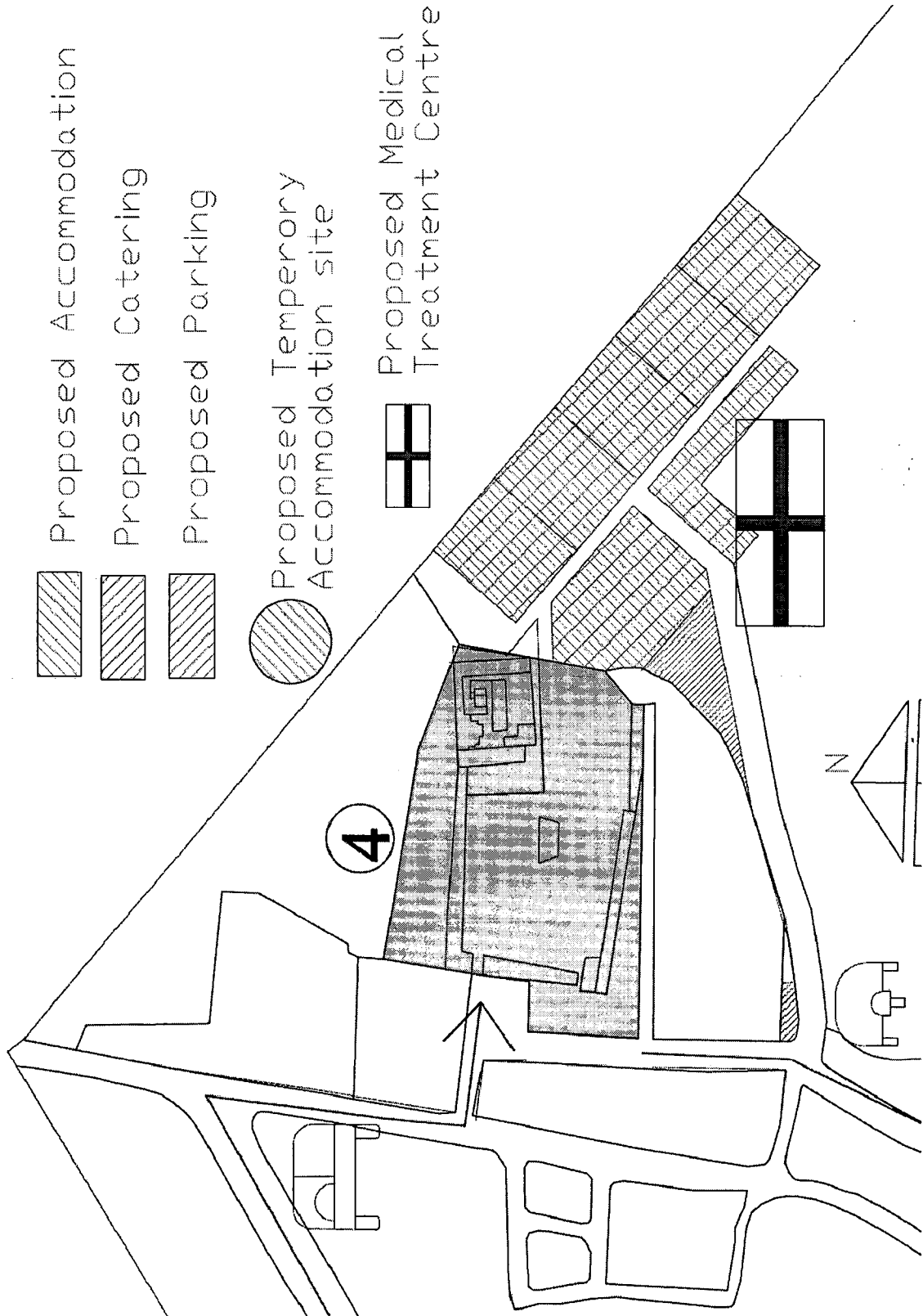


APPENDIX D:-
Proposal at Ambala Lake:-



APPENDIX E:-

Proposal at Jain Temple:-












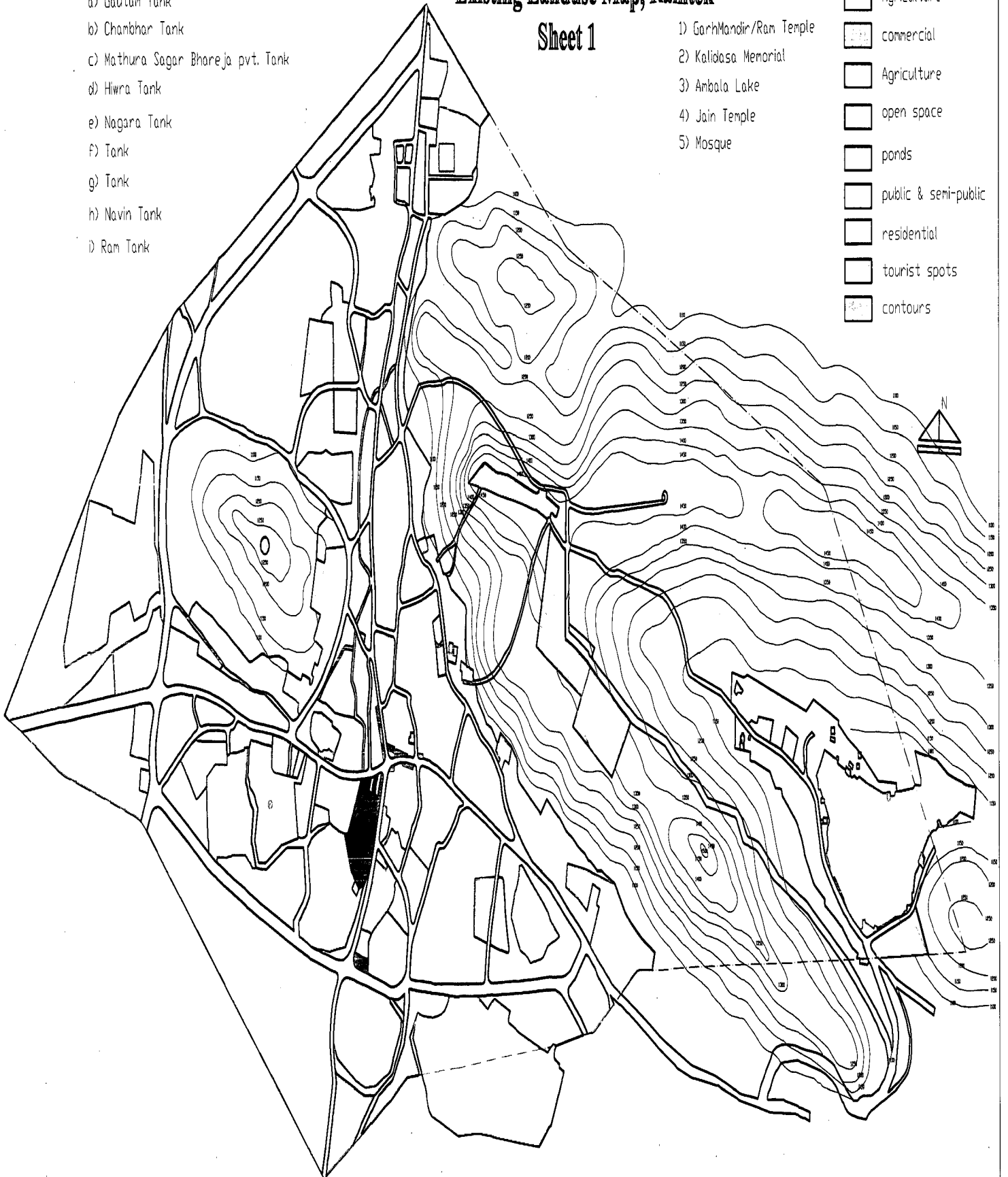
Existing Landuse Map, Ramtek

Sheet 1

- a) Gautam Tank
- b) Chambhar Tank
- c) Mathura Sagar Bhoreja pvt. Tank
- d) Hiwra Tank
- e) Nagara Tank
- f) Tank
- g) Tank
- h) Navin Tank
- i) Ram Tank

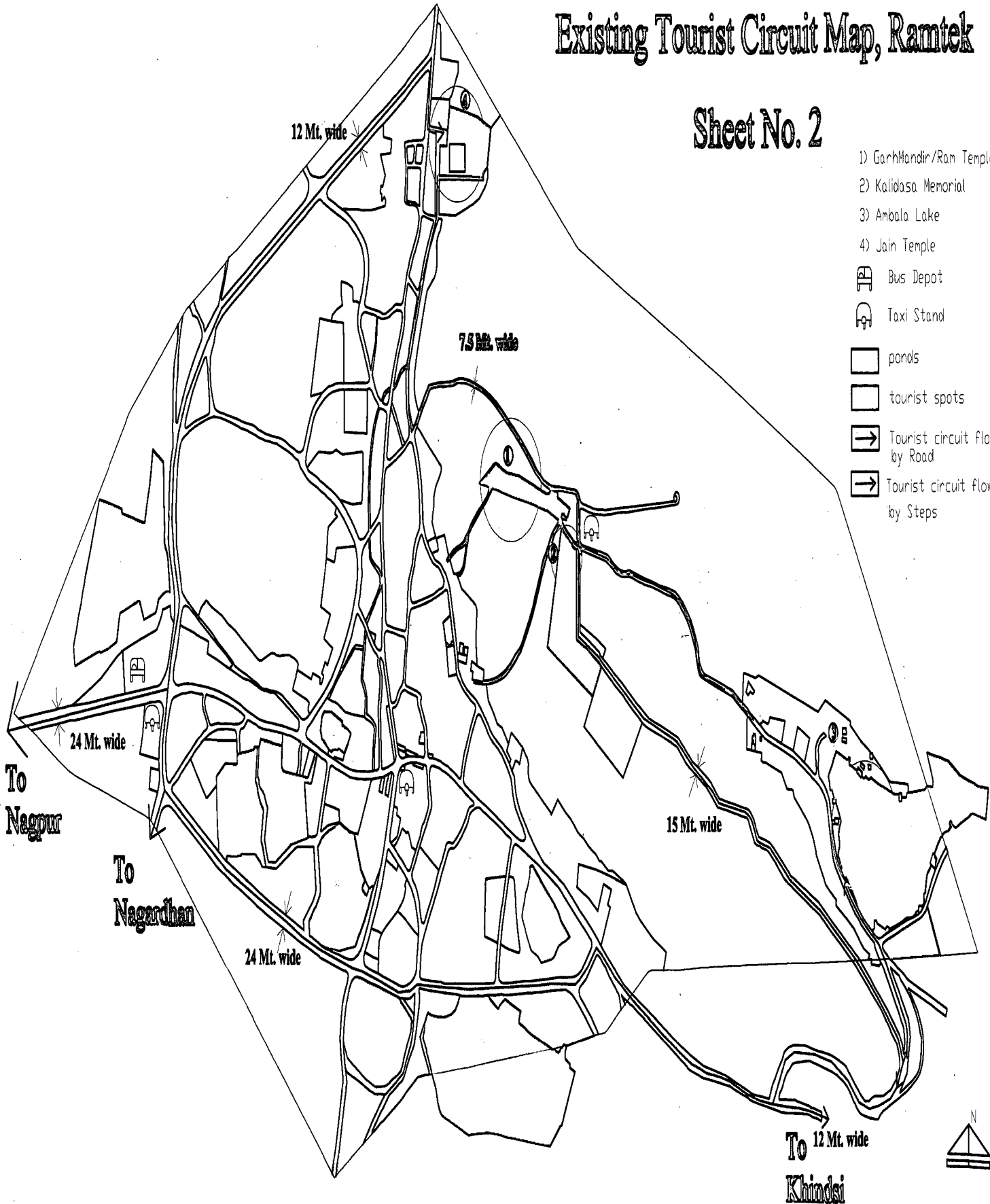
- 1) GarhMandir/Ram Temple
- 2) Kalidasa Memorial
- 3) Ambala Lake
- 4) Jain Temple
- 5) Mosque

-  Agriculture
-  commercial
-  Agriculture
-  open space
-  ponds
-  public & semi-public
-  residential
-  tourist spots
-  contours













Existing Tourist Circuit Map, Ramtek







Sheet No. 2



Proposed Tourism Infrastructure Plan, Ramtek

Sheet No. 4

-  Proposed Accommodation
-  Proposed Catering
-  Proposed Garden
-  Proposed Parking
-  Proposed Sewerage Treatment Plant
-  Proposed Overhead Tank
-  Proposed Garbage Dumping site
-  Proposed Medical Treatment Centre
-  Proposed Para Gliding Site
-  Proposed Temporary Accommodation site

- 1) GarhMandir/Ran Temple
- 2) Kalidasa Memorial
- 3) Ambala Lake
- 4) Jain Temple
-  Bus Depot
-  Taxi Stand
-  ponds
-  tourist spots
-  Tourist circuit flow by Road
-  Tourist circuit flow by Steps

