

Explication for Haphazard and Uncontrolled Development Around the Pilgrim Centre-mohta Devi and Its Impacts in Its Vicinity

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Abstract:

There are various Pilgrimage sites having sacred value in India, which are visited by millions of people at many festivals and occasions. It is becoming difficult to achieve the increasing requirement of the pilgrimage as there is exponential growth thus, it requires a change in the city architecture or development of specific area around the pilgrim center. The study focuses on the different factors that affect the Pilgrim centers and its surrounding vicinity with respect to planning. Small area or region around the pilgrim center is studied, and different factors are identified which results in chaos at the peak time when there is maximum footfall of the pilgrims. They can be studied in two forms first is Physical factors (Tangible) and other is non-physical (Intangible). Physical factors are related to building services, façade, materials Street activity, Number of shops in the vicinity of the pilgrim center. And second is Non-physical factors are related to Economic value, land value, religious and social value and noise pollution due to traffic which majorly affects the vicinity. They have been documented by visual observations and studied through survey done on site. Future scope is studied to increase the tourism facility and increase the economy of the area. Conclusion have been drawn after identifying the impact of the components that are related to the temple and the immediate surroundings on the city planning.

Keywords: Physical factors (Tangible), non-physical factors (Intangible), Cultural Heritage, Spatial Configuration

Aim: Planning the area of pilgrim center and its immediate surroundings, to avoid kiosks at the peak period of pilgrimage.

Objectives:

1. To provide solution for upcoming need of floating population of the city having pilgrim center.
2. To study the issues and challenges faced by the pilgrims visiting the pilgrimage and local people.

I. INTRODUCTION

Pilgrimage has developed over the years, initiating from the age of Mahabharata, where in Bhagwat Gita, the holy scripture which explains about the pilgrimage and its auspicious places having power of spirituality. Devotees come with a faith to visit the pilgrimage. The path towards pilgrimage is called as the “yatra”; the walking journey where people gain spiritual experience. There are numerous activities that are taking place during this journey.

Pilgrimage provides a lifetime opportunity for the devotees, visiting the sacred place leading them to achieve higher level of perception. A mass movement is observed during the important festivals and rituals due to maximum flow of people. Thus, there is a need of providing provisions to minimize the inconvenience of devotees visiting the pilgrimage at the peak period. The increasing pilgrimage helps in social, cultural, and economic development of the city. Due to the increase in technology and urbanization there is rapid growth in development of the city leading to increasing demand of infrastructure development. Hence, there is a huge fluctuation in the population which resulted in encroachment of existing infrastructure. Thus, a question arises how we can accommodate this floating population, so special provisions had to be done in planning the spaces with proper zoning as per the utilization. While studying the parameters as per different site locations and conditions, we observed insufficient facilities provided and issues faced by the pilgrims in context to space allocation for various activities taking place in surrounding area of pilgrim center. Thus, proper analysis should be done.

A. PILGRIMAGE AND ITS IMPACT

(PHYSICAL AND NON- PHYSICAL)

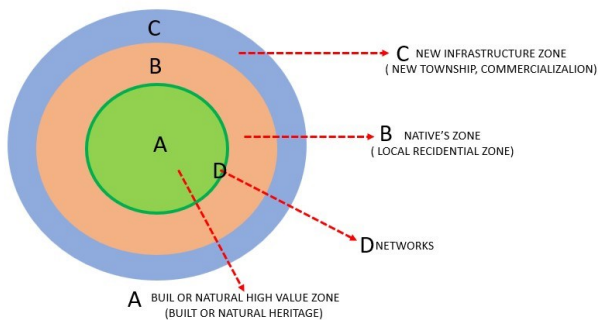
The parameters with due regards to small area leads to transformation of immediate vicinity of the Pilgrim center. Through their Architectural forms and Function the Pilgrim center marks their Presence in city. Religious tourism in the city has increased due to increase in economic aspect and by preserving the historical and cultural values which had evolved due to social interactions.

Issues faced

1. Physical Factors:

- i. Affected City Infrastructure. (Infrastructure may include, services required for proper functioning of the pilgrim center, connectivity, and access to pilgrim center).
- ii. Accumulation of tourist infrastructure (shops, residential buildings, restaurants, etc.) within the vicinity of Pilgrim center.
- iii. Transitional stage (before and after) of development of pilgrimage center and in its vicinity.
- iv. Religious connectivity between pilgrim center, city, and people.

The area is divided in different zones like the core area i.e., the Pilgrim center or high value zone, then the native’s zone i.e. residential zone and outer is new infrastructure zone. The vehicular network connects the outer two zones with each other and is restricted to core high value zone. The pedestrian access is limited to high value zone, where there is increasing floating population throughout the year.



- a) High Value Zone: This is the core zone with high Potential value. It consists of built or natural pilgrim heritage.
- b) Native’s zone: This zone is called as residential zone due to the local settlement. It overlaps with high value zone, due to social interactions and economic impact. The economic benefit of tourism will be more in this zone and the quality of life of local population can be achieved through planned development. This zone is for conservation of culture, architecture value, and local economy.
- c) New infrastructure zone: The outer zone of the pilgrim centre is the new development zone which meets the tourism requirements and promote the tourism leading to city growth. By understanding the market trends through

market analysis & their demands, the need of the tourists is to be assessed for the Tourism Product Development (Tourism Product Development is a key factor demanded by tourists visiting cities.) which will help to create a strategy that will match tourists’ needs and demands, (such as shopping centre, restaurants, accommodation etc.)

- d) Networks: Network is the connectivity of zones for accessibility between, new Infrastructure zone and native zone having strong linkages. The access to high value zone should be restricted, to protect the heritage from the impact of tourism development.

(URDPFI Guidelines, 2014. Ministry of Urban Development)

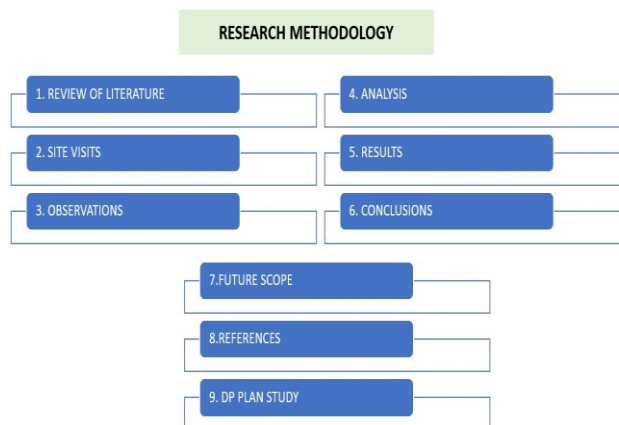
2. Non-Physical Factors:

- i. The impact of factors that affect the city life.
- ii. The impact on the generic development of the Pilgrim center on the economic and social development and the increase in the living standards.

II. METHODOLOGY

The study of pilgrimage is done by both qualitative and quantitative approaches. The methods adopted are data collection, analysis of data, field observation, literature review and interviews of the local people and devotees. The spatial configuration and pattern of activities at various locations is studied by surveying the specific pilgrim site. The two different locations of pilgrim site having different site context i.e., Hilltop, and inner-city core area having different spatial requirements are being studied.

The study has been conducted in following phases:



III. LITERATURE REVIEW

Different research papers related to the topic were studied, and then inferences are made from it which helps as an author to know different areas that need to be studied and what solutions can be provided for proper connectivity and development of the areas surrounding the pilgrimage site.

As per the research papers studied, few important inferences were identified as below:

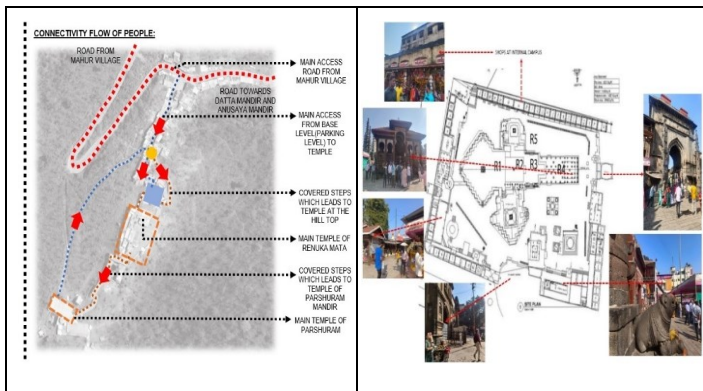
1. The pilgrim site is divided in three zones, according to the importance and usability of the space. For proper functioning of pilgrim center, it is necessary to manage the tourist movement and the spatial development in surrounding areas. Thus, unplanned, and uncontrolled development around the pilgrim center may cause kiosk during peak periods.
2. To meet the growing needs of pilgrimage, we require proper planning of such spaces so that there is a proper connectivity and undisturbed flow of people which may help in retaining the social and cultural value of that pilgrim site.
3. Documenting the environmental problems and examining the socio-cultural constructs that emphasizes the quality of sacred place.
4. Looking at the present scenario most of the forest had been cleared to accommodate the increasing population and serve the multitude of religious tourism /pilgrims. Thus, there is direct need of reforestation and planting of native plants species. This can be achieved by providing awareness to local people about the traditional knowledge in relation to conservation of flora.

These inferences help us understand the different parameters which needs to be focused during the study. Preliminary precautions that can be taken by providing design solutions or policy guidelines for proper functioning of the areas around the pilgrim center during and after the peak periods.

IV. DOCUMENTATION AND INFERENCES

RENUKAMATA MANDIR, MAHUR	MAHALAXMI TEMPLE, KOLHAPUR
1. LOCATION	
This temple is situated on a hilltop surround by forest land which is located at 2.5 km from Mahur village.	The Shri Mahalaxmi temple, is located in the core city area of Kolhapur Maharashtra.
2. YEAR OF CONSTRUCTION	
It was constructed around 800-900 years ago by Yadava king of Devgiri.	It was built in 634 C.E. Chalukya reign by Karna deva.
3. SURROUNDING AREAS	
<ol style="list-style-type: none"> 1. Datta mandir 2. Anusaya mandir 3. Mahur gad fort 	<ol style="list-style-type: none"> 1. Rankala lake 2. Shahu palace 3. Waterpark
4. TOPOGRAPHY	
Highest- 603m Lowest- 335m Average 249m No. of steps for temple- 245 steps.	The city is in the south-west part of Maharashtra. The geographical co-ordinates are, 16 degree-42' north latitude and 74 degree - 14' east longitude, and 550 m above sea level. On the western part lies range of Sahyadri hills.

TANGIBLE PARAMETERS	
1. BUILDING TYPOLOGY	
1.1. BUILDING MATERIAL AND DESIGN FEATURES	
1.The side wall and the roof of the pilgrim heritage are made up of the natural basalt stone which is available locally.	1.The walls of pilgrim heritage are adorned with exquisite carvings and many sculptures
2.The plinth of structure is also made up of stone.	2.The structure consists of 5 towers and a main hall
3.Some structures like functional hall are made in fabrication with corrugated g.i sheets for roof.	3.The idol of Mahalaxmi is very unique weighing 40 kg. Made as a monolithic structure embedded with precious stones and diamonds, which is mounted on a stone platform.
4. The walls on the sides of the pathways are around 5' from the ground. There is a gradual difference in slope.	-----
5. The hanuman temple is made up of white marble. The flooring of the multifunctional hall is of natural Kota.	-----
2. CULTURAL ACTIVITY SPACES	
1. Annually there are many festivals being conducted at Mahur for example, Navratri, Dussehra where a big fair is conducted.	1. Navratri is very prime festival of goddess Ambabai (Mahalaxmi) of Kolhapur. Every Friday Utsav murti of goddess performs pradakshina to the temple. The palakhee sohala is performed for all nine days during Navratri.
2. At festive seasons various musical events are also taken place such as bhajans, plays and acts etc	2. Every year on Chaitra pratipada (the next day of jotiba yatra) the goddess performs Nagar pradakshina
	3. Havan is taken place in campus.
3. STREET ACTIVITY AND CIRCULATION	



4. INFRASTRUCTURE SERVICES

4.1. SEWAGE SYSTEM

They have two toilet blocks one below the r.o purification tank and other is at the end near Parshuram mandir. The left-over water from the r.o purification tank is used for toilets as well as plantation

Sewage from Suraksha Bhawan enters the temple premises near the eastern door of the temple and then flows towards the northern section of the temple and is taken out via underground sewer lines near the north door (Ghati Darwaja).

4.2. WATER SUPPLY

The area of Mahur village and Mahur gad gets water from Penganga River. They have water purification plant at the base of the fort. And then this water is lifted at the water tank at the hilltop from where the purified water is circulated. They have water filters at specific intervals

The city has main sources of water, Bhagwati River, Panchganga river, kalimba lake. The water is supplied from 4 jack wells installed by kmc. 4 water treatment plants are operated and maintained by kmc, which helps in purifying water before supplying. The connection holders are supplied water through direct pumping from distribution system. Water ATMs are installed in the temple campus for visitors at specific intervals

4.3. ELECTRICITY

They have their own dp, generator and meter room.

They have their own dp, generator and meter room

4.4. BHAKTA NIWAS

Jagdamba bhakta Niwas is in Mahur which is around 2.5 km from the temple. There are few dharmshalas and hotels in Mahur. Insufficient accommodation in Mahur is observed.



There are hotels and lodging rooms outside the temple premises. As it is in city; facilities of accommodation are better.



4.5 LOCKER ROOM

Lockers are given in the trust office which is provided near the temple on the hilltop.



Locker is placed in the temple premises. Near the entrance gate. No valuables are allowed in the temple premises.



4.6 DINNING HALL AND PRASADALAYA

Is Located at The Base of The Temple



There are hotels the temple premises and outside the temple



4.7 COMMERCIAL SHOPS



Commercial shops are placed in the way to temple on the hill. And, at the base of the hill.





Commercial shops are placed in the premises of temple, and outside the temple.



4.8 TOILETS

<p>There are 2 toilet blocks on the hilltop, in the temple premises. And then you have no toilet blocks at the base. There is no provision for feeding room.</p> 	<p>There is no toilet in the immediate temple premises. Toilet facilities are placed at secondary zone of temple, in hotels etc. There is no separate provision for feeding room.</p> 
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4.9. RITUAL HALL

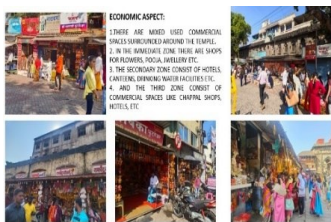
<p>There is no separate space for conducting religious rituals. There is a common hall, with temporary structure, which is used as multipurpose hall.</p> 	<p>There is no separate space for conducting rituals like havan and pooja. It is conducted in the garbhagriha, which causes disturbance in the flow of people.</p> 
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INTANGIBLE PARAMETERS



1. ECONOMIC ASPECT AND LAND VALUE



Land value: Renuka Mata mandir is located 2.0 km away from Mahur, which is not developed comparatively. As the temple premises are located outskirts of the city the **land value is moderate** here.

Land value: Kolhapur is blessed with certain geographical benefits that has proved to be an advantage in developing the economy of the city. There are large number of tourist spots which makes it an important tourist center. As the temple is in the core city area, due to scarcity of land the **land value is high** here.



2. AIR AND SOUND POLLUTION

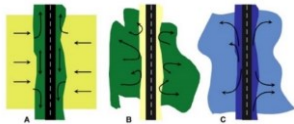
<ol style="list-style-type: none"> 1. Sound pollution is caused due to larger population growth and increase in vehicular density. 2. As Mahur is located away from main district Nanded it has low sound pollution. 3. The temple is in the hilly areas of forest the trees help to balance the polluted air in the surrounding. Thus, there is low air and sound pollution in Mahur at current situation. 	<ol style="list-style-type: none"> 1. The increase in air pollution is attributed to vehicular emissions due to highly congested and traffic prone area. 2. Apart from vehicular emissions the other sources of pollutions identified in the city include industrial activity in an around the city, stone quarries, construction activities, road- dust re-suspension are the few factors. 3. The parking spaces are immediately placed in the campus. 
<p>3. RELIGIOUS VALUE</p>	

<p>Renuka Devi of Mahur is one of the shakti peetha of Maharashtra. Since ancient times it is famous pilgrim site. Shri Renuka mata is situated here, there are many led ends of creation of this area and</p> <p>2. There are three core shrines in the abode of shri Renuka devi and her darshan brings salvation to the living being. Devotees believe that mother Renuka has been protecting her devotees since time immemorial.</p> 	<p>The increase in air pollution is attributed to vehicular emissions due to highly congested and traffic prone area.</p> <p>2. Apart from vehicular emissions the other sources of pollutions identified in the city include industrial activity in an around the city, stone quarries, construction activities, road- dust re-suspension are the few factors.</p> <p>3. The parking spaces are immediately placed in the campus.</p> 
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V. OBSERVATIONS AND ANALYSIS

Challenges faced during the peak period and the planning efforts that should be taken as given below:

CHALLENGES FACED	
1. RENUKA MATA MANDIR, MAHUR	
ISSUES IDENTIFIED	DEVELOPMENT AND PLANNING EFFORTS TO BE TAKEN
<p>1. The increasing floating population severely impacts the environment, by problems like solid waste disposal and surface water with rampant deforestation which is caused due to provision of amenities and facilities for the tourists.</p>	<p>1. Solid waste management should be implemented.</p>
<p>2. Generally, the places like small towns with population barely about 1 lakh or so local authorities with inadequate funds and infrastructure cannot manage such sudden increase of demand for basic infrastructure and amenities</p>	<p>1. To create jobs and entrepreneurial opportunities in tourism sector and ensure supply of skilled work force.</p> <p>2. Engagement of residents and communities' integration of local business in tourism value chain.</p> <p>3. To enhance contribution of tourism in Indian economy by increasing the visitation stay and spend.</p>

<p>3. In addition to inadequate infrastructure, these religious places face following environmental problems due to increase in footfall:</p> <p>A) pollution of rivers, lakes, and water bodies.</p> <p>B) Lack of insufficient sanitation facilities and untreated sewage disposal.</p>	<p>1. Recycling water prevents pollution by decreasing the amount of wastewater. Recycled water can be used to help create or replenish wetlands and wildlife sanctuaries.</p>
<p>4. The development of surrounding areas of pilgrim center by providing facilities and amenities on hilltop comes at cost of exploitation of natural resources and deforestation.</p>	<p>1.To maintain the green cover, restrict the activity till certain area by creating a buffer space or corridor.</p> <p>2.The vehicular and pedestrian movement can be restricted to certain area. This will help to maintain a balance between the nature. Thus, to a certain amount we can retain the green cover and wildlife.</p> 
2. MAHALAXMI TEMPLE, KOLHAPUR	
<p>1. Land and building: multiple activities and change in activities encroachment, illegal construction, huge floating population.</p> <p>2. As per the sanctioned DPR in year 2000, the city has recorded decrease in agricultural land by 50%. The agricultural land is converted into non-agricultural plots and building infrastructure.</p>	<p>1. Remove all the illegal encroachment, which will increase the usable area and increase the carrying capacity of road.</p> <p>2. Create a hawker's zone to remove the encroaching hawkers from footpath.</p>

<p>1. Traffic and transportation: congestion and narrow roads, lack of parking, slow moving and mixed traffic, loss of heritage buildings, change in character, street scape, architecture features, increase in air and noise pollution etc.</p>	<ol style="list-style-type: none"> 1. Developing parking policy and dedicated parking zone. 2. multi-level parking spaces should be constructed specially in the congested area. 3. Vigilance during construction activities and air pollution strategies as suggested in griha rating system is highly recommended as immediate strategy to reduce air pollution in the city. 4. Road sweeping and washing using treated wastewater from STP's for reducing resuspension of the roadside dust particles which may arise due to vehicular movement.
<p>3. Infrastructure services and amenities: shortage of physical and social infrastructure services, spatial congestion, lack of open space, encroachment on public land</p>	<ol style="list-style-type: none"> 1. To maintain the green cover of the city, the municipal corporation regularly undertakes the tree plantation drive. 2. Kolhapur Municipal Corporation has established tree authority to regulate various activities pertaining tree plantation, tree census, developing nurseries, organize, exhibition and extend support for tree plantation drive. 3. Kolhapur Municipal Corporation has established a biodiversity monitoring committee to help map the city's biodiversity and plan measures to conserve local fauna of the city. (Environmental status report Kolhapur city 2015-16)

VI. CONCLUSION

This article discusses the influence of religious tourism on the surrounding vicinity of pilgrim site and its impact on local community. Various factors lead to spatial and functional changes in the surrounding areas of pilgrim site. These factors are classified in two types of Tangible and Intangible, Tangible factors are location of site, building typology, street activity, and footfall of people, and intangible factors consists of, religious value, economic value land value, etc. During the festive seasons, there is a great demand of religious and cultural activities at the peak periods, the sudden rise in the floating population leads to increase in kiosks due to insufficient amenities and facilities for the visitors, creating inconvenience for them. Thus, the study of above two case studies, helps us identify various faced during the peak periods

at different site context. These problems are observed and then documented.

In the 1st case study of Renuka Mata devi at Mahur, the temple is located at the hilltop in the forest area. Thus, the main issue here is availability of land, providing amenities can cause exploitation of natural resources and will be responsible for wildlife extinction. So, to avoid this buffer zones should be created which will act as a barrier. The vehicular activity should be restricted at certain area. Various issues like sewage and waste disposal, should be recycled or properly treated. The 2nd case study is located in the urban area, thus problems faced here are different than those identified at the hilltop areas. The main issue here is traffic, transport and parking etc. due to its location in core city area. no proper planning of infrastructure is done which leads to encroachment in public spaces. Thus, policies should be implemented to overcome such problems and find solutions.

Thus, the impact of these factors on the immediate surroundings are different in these two case studies due to its site context. The development of infrastructure around the pilgrim center varies in both the cases, thus we need to provide different design solutions for visitors reducing its impact on the local infrastructure and community during and after the peak period of festivals as per the site conditions to retain its existing religious and cultural value.

Deriving the parameters from the above two case studies, and identifying the issues faced during the peak period along with finding the solutions, we also focus on studying the pilgrim site of Mohata devi and its surrounding vicinity. Mohata Devi temple is in Pathardi taluka, district Ahmednagar, Maharashtra. This temple is dedicated to kulaswamini shri Jagadamba devi. It has a high religious value as it is considered as the small sacred part of one of the shakti peetha's in Maharashtra that is Renuka mata mandir Mahur.

VII. FUTURE SCOPE

After studying the above case studies, we understand that, to preserve the religious value of that particular pilgrim area we need to focus on increasing religious Tourism and its route with the approach of linking the important pilgrim centers in the nearby areas. This will lead in developing a tourist circuit. The development of such kind of corridors will help in revitalizing the local economy. The visitor's footfall will increase remarkably which will affect in boosting the local economy and promote local arts and crafts, local food, local religious and cultural value. The route can be designed beautifully with nodes with necessary facilities and amenities, which will act as a refreshing point during the journey. To make tourist visit this pilgrim sites from start to end proper signages should be provided, guiding the people.

Tourist Circuit development in Mohata devi temple areas along with the surrounding pilgrim sites will directly impact on the local development and economy and will generate employment to the local people.

Thus, the above case studies, Renuka Mata temple Mahur have a scope of developing as the area urbanizable areas according to the census definition of government and Mahalaxmi temple of Kolhapur is already an urban city which is governed by KMC i.e. Kolhapur Municipal Corporation.

The pilgrim site of Mohata devi at pathardi, is also surrounded by different pilgrim centers in the surrounding vicinity of 15 - 20 km range of area. Thus, along with the development of mohata devi we can also develop the peripheral pilgrim sites, to increase the flow of tourists in that area, by developing a tourist circuit.



Surrounding places to visit nearby Mohata devi temple

1. MADHI TEMPLE

- It is 51 km away from Ahmednagar towards east. Madhi is east of Nivdunge village. Pathardi is 10 km from Madhi.
- There are three roads to go to Madhi one from Pathardi, second from Nivdunge and third one from Tisgaon.
- Samadhi is of shri Kanifnath one of Navnath.



2. SHRI KSHETRA MACHINDRANATH SAMADHI MANDIR MAYMBA SAWARGAON

- One of the famous, spiritual, and religious places of shri machhindra Nath Maharaj.
- The temple is in the high and hilly area, ideal time to visit on Amavasya.
- The place has got beautiful hilly location, the temple premise is having strong positive vibes around it.
- The best time to visit in rainy season.



3. VRUDDHESHWAR TEMPLE:

- Vruddheshwar is not an ordinary temple. This is the temple of Mahadeva/Lord Shiva in the beautiful deep valley.
- This is sacred place in which occurrence of Lord Shiva.
- This sacred place having great legend. The “Pinda” grows on the special day i.e. “Shivaratri” once in 12 years.
- The place also famous for “Ayurvedic” Plants.



4. MOHATADEVI TEMPLE

- Temple is a temple of a Goddess in Pathardi taluka of Ahmednagar district in Maharashtra. This temple is one of the largest temples of Goddesses in Maharashtra.
- 9 km east of Pathardi town.
- South Indian style temple

Temple-town of Renuka Mata.

Yatra is celebrated during Navratri



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