

Modern Project Management for Heritage Conservation: Tourism Development for Forts in Maharashtra, India

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ABSTRACT

Modern project management techniques are essential for heritage preservation. Implementation of conservation proposals through management is more effective in terms of duration taken and on time completion. The paper deals with the study of forts in Maharashtra Region for the feasibility and potential to develop them as a tourist destination through conservation and preservation. The paper discusses the issues, constraints and potential of tourism in the study area for the future development. And suggest a methodology and guidelines for planning and development of forts considering Eco-Tourism to promote the Tourism activity. Affordability of people is increased due to Globalization and IT Sector, so there is demand for this kind of development. Since there are 350 odd forts in Maharashtra, standing as silent sentinels to history there is a very high Tourism Potential which could develop through the preservation and conservation of the same. Ideal management techniques for the same are to be identified and appropriate recommendations are to be suggested as an outcome of study.

1. INTRODUCTION

Tourism in the form of activity influences the regions in which it is developed and received with economic, social, cultural, and environmental dimensions. In most of the development programmers and studies the focus is given only on economic and social dimensions where as environmental dimension is under estimated or ignored. Therefore, it is essential to maintain the balance between tourism and the environment which helps to develop the policy for the tourism development of an area and imposition of the special limits. Thus, the tourism does not lead to the degradation of the environment and in long terms to the tourist disdain of an area, but in its protection or its conservation. In other words, the environment influences the tourism and vice versa. The environment of region is negatively influenced most times by the increase of tourism, whereas the growth of tourism depends on the quality and characteristics of the environment. *Thus it becomes necessary to conserve and preserve the forts in Maharashtra which would not only develop tourism but also raise the economic, social, cultural, and environmental dimensions of Maharashtra state.*

Maharashtra is the third state of India, both in area and population. It is located on the west coast line along the lush green Konkan region. Nestled in the Western Ghats and the Sahyadri mountain range are several hill stations and water reservoirs with semi-evergreen and deciduous forests. The Vidharba region of Maharashtra, with its dense forests, is home to 350 odd forts, beaten by the sea waves, lashed at by the torrential Deccan rains, or scorched in the blazing sun, stand imposing ramparts and crumbling walls.

Nowhere in the country would you encounter such a profusion of forts and such variety. Sited on an island, as Murud-Janjira or Suvarnadurg, or guarding the seas as at Bassein or up amidst the Sahyadries, as at Torna and Raigad, whose ziz-zag walls and rounded bastions sit like a scepter and crown amidst hills turned mauve.

Tourism today becomes a major industry. Local people get employed and government gets foreign exchange. In 1989, nearly 13laks foreign tourists visited India. The number increased by 5.3% in 1990. India also made considerable progress in local tourism. In 1989, nearly 5crore Indians reported to have taken out tours to various places in the country.

Maharashtra is well linked by good transportation network to major cities/ growth centers all over India.

There is a need to preserve and protect the forts and at the same time there is a need to educate people and to create employment in order to fight poverty and misery. One way to deal with this problem is to find the carrying capacity. Any tourism beyond the acceptable carrying capacity should be strictly prohibited. The carrying capacity can be in relation to environment, social and economical. In the environmental approach it is defined as the ability of natural resources and ecosystem to support the tourism development. Shelby (1987) proposed more general definition for carrying capacity: The level of use of an area without exceeding the certain levels.

2. TOURISM DEVELOPMENT

According to Oxford Dictionary, the meaning of word TOURISM is a Business of providing accommodation and services for Tourist who visit a place for pleasure.

There are number of reasons why carrying capacity can be benefit to Maharashtra,

1. The tourist destinations absorb the tourism growth before the negative results become perceptibility by host community.
2. Visitors will experience the quality service in the form of food, accommodation and transport.
3. It helps to plan the tourism in such a way that it is not a burden to any part of the area.
4. Material and technical infrastructure help to save the energy, the guaranteed cleaning of waste and the taking of remedial measures for the protection of local environment and
5. It helps the management to plan the strategy which reflect a predetermined set of environmentally and socially desirable conditions

3. POPULAR FORTS IN MAHARASHTRA

Ahmednagar Fort

Ahmednagar Fort is one of the best designed forts in the entire state of Maharashtra. At the same time, it is also counted amongst the impregnable forts of India. The fort is situated in the Ahmednagar district and dates back to the year 1559.

Daulatabad Fort

Daulatabad Fort is a magnificent fort situated in Maharashtra, at a distance of around 13 km from the Aurangabad city. It forms a part of the Daulatabad city, which was earlier known as 'Devigiri'. The fort, perched at a height of approximately 60 ft, dates back to the 12th century.

Panhala Fort

Panhala Fort is situated at a distance of approximately 19 km from the Kolhapur city of Maharashtra. Counted amongst the largest as well as most significant forts of the Deccan region of India, it stands perched at an altitude of around 850 m above the sea level.

Janjira Fort

Janjira Fort is situated in the Murud town of Maharashtra. Infact, the Island Fort serves as one of the major attractions of the town. Murud served as the erstwhile capital of the Siddi rulers of Janjira in the earlier times. Today, Janjira is counted amongst the few sea forts of India and lies 2 km inside the town.

Raigad Fort

Raigad Fort is a magnificent hill fortress, situated in the Raigad district of Maharashtra. It lies approximately 125 km away from Pune and serves as one of the major excursion of the city. The fort once served as the capital of Chhatrapati Shivaji, the Great Maratha king, in the 1674.

Shivneri Fort

Shivneri Fort is one of the most magnificent as well as historically rich forts of India. It is situated at a distance of approximately 90 km from the Pune city of Maharashtra. The fort dates back to the time period when Shivaji was not even born yet. Shivneri Fort was built under the aegis of Sahaji.

Sinhagad Fort

Adding to the attraction of the Pune city is the Sinhagad Fort, which lies in the vicinity of the city. The fort stands perched on a hill, at an altitude of approximately 700 m above the landscape that surrounds it. The height at which the fort stands has resulted in its being very popular.

Sindhudurg Fort

Maharashtra is known for its rich historical legacy. The land has been a silent witness to some of the most gruesome battles that have been fought in India. One such symbol of the rich historical past is the mighty Sindhudurg fort. It is situated in Sindhudurg district.

4. CONSERVATION ETHICS AND IMPORTANCE OF STRUCTURAL ASPECTS.

4.1 Ethics in Conservation:

Standard ethics to be observed are,

- i. The structural condition of the building, before any intervention and all methods and the material used during the treatment must be fully documented reversible intervention.
- ii. Historic evidence must not be destroyed, falsified or removed for authenticity.
- iii. Any intervention must be the minimum necessary.
- iv. Any intervention must be governed by unswerving respect for the aesthetic, historical and physical integrity of cultural property.

Any proposed intervention should be:

- i. Reversible
- ii. Not prejudice for future intervention
- iii. Not hinder the possibility of later access to all the evidence.
- iv. Allow maximum amount of existing material to be retained.
- v. Be harmonious in color, tone, texture, form and scale. It also should be easily identifiable.
- vi. Should sufficiently be qualified in various aspects and thus it becomes multidisciplinary.

4.2 Procedures of Conservations:

- Inventories
- Initial inspections
- Continued documentation

4.3 Degrees of intervention:

- Prevention of deterioration (passive conservation)
- Preservation
- Consolidation
- Restoration
- Rehabilitation
- Reproduction
- Reconstruction

4.4 Values in Conservation:

Emotional Values: -

- Wonder
- Identity
- Continuity
- Spiritual and symbolic

Cultural Values: -

- Documentary
- Historic
- Archaeology
- Aesthetic and symbolic
- Architectural
- Townscape, landscape & ecological

- Scientific and technological

Use Values: -

- Functional
- Economic
- Social
- Political

5. MATERIAL HERITAGE

Emphasis must be given to organic material and dissemination of conservation techniques.

- **Conservation of oil painting:** miniature paintings, painting on cloth, wood, ivory, etc. textile, manuscripts, books, photographs, metal objects, ivories, leather, other art objects, artifacts and ethnographic material.
- **Survey of areas and buildings:** to document mural painting sites and other historical structure with their conservation requirements along with proper photographic documentation.
- **Conservation of wall painting:** bas-reliefs, moldings, carvings etc. on palaces, forts, temples and other buildings.
- **Survey of museums and private/ corporate collections:** to assess the condition of objects, need for conservation treatment storage and display.
- **Training in preventive conservation of art objects:** training in repair, restoration and curative conservation of art objects and antiquities.
- **Organization of workshops and exhibitions:** to create awareness for preservation of cultural property.
- **Organization of seminars:** related to preservation of heritage.
- **Publications:** on conservation, surveys carried out, seminars conducted, and projects undertaken.

6. SUGGESTIONS & DISCUSSIONS

Information with respect to tourism experience, environmental impact and need of carrying capacity

6.1 The findings are explained below:

A) **Tourism Experience:**

It is observed that most of the respondents enjoyed visiting all the different tourists' destinations of Maharashtra. They have visited these places during weekends and vacations. Some respondents had been to these places during weekdays also. Tourist's places are always crowded as they are more popular.

B) **Accommodation Facilities:**

Since the entire tourist places are so popular that they are always crowded. So, it is difficult to get accommodation during the peak season. In a survey it was found that most of the tourists (98%) book the accommodation well in advance. Though it is done in advance, but the tourists are not happy with the room layout of the hotel. To accommodate more people in a limited place the hotel owners have provide less amenities as compared to the required standards. So, it makes the place congested and crowded causing inconvenience to the tourists. Due to this majority of the tourists (86%) are unhappy about it where as only few people are happy with accommodation as the stay in the bungalows or farm houses.

C) **Transport problems:**

During the survey it was found that all the buses and trains were crowded (79%) especially during weekends and majority of the tourists arrange their own vehicles to reach the sites, so this creates the traffic problem at the tourist places and they do not get enough place to park their vehicles.

D) **Environmental Impact:**

Most of the surveyed respondents (89%) experienced that there would be maximum negative impact on the environment as a result of developing tourism, they experience that more forests degradation might take place in and around the area because of tremendous demands for area by encroachment of hotels and restaurants. The degradation of surrounding environment and forests might lead to the loss of energy, wild life and beauty of the area. They further emphasized that ignorance and lack of awareness at these sites may lead to increase accumulation of solid waste, increase level of air and water pollution etc. At the

same time heavy rain fall at these sites (Raighad and Matheran) have swept away the soil from top towards the down and made an area more fragile and unstable at the foundation level.

In Raighad already certain parts of the fort is falling off and destroying the landscape of the fort and pedestrian path. It was also noticed that local microenvironment is also disturbed by the continuous visit at these places. In Matheran, on the name of developmental projects, certain negative impact is occurring which is destruction of natural resources, loss of traditional knowledge of indigenous tribal people etc. These people are becoming increasing vulnerable to exploitation on the name of development activities, where tradition wisdom and knowledge and natural resources have been expropriated for business interests. These are serious concern for the survival of present world communities. According to PATA (Pacific Asia Travel Association) focuses on organizing environment friendly tourism can contribute to the development of areas worthy of conservation as well as determine the level of development. It is not the tourist's volume which causes ecological and cultural damage but the absence of adequate thought-out policies to handle any form of growth. The environmental carrying capacity is quiet ecstatic and can withstand considerable tourism growth provided it is carefully planned and managed. Thus, environmental impact assessment becomes an integral step in the consideration of any site for a tourism project.

E) Consideration of carrying capacity:

In every case it has become necessary to do a detail study about the carrying capacity of any tourist location. The carrying capacity defines the determining the maximum number of people that a location could tolerate without beginning to deteriorate. It further determines the optimal number of people required so as to sustain it both economically as well as environmentally. Maharashtra should adopt a model development that suits the need of its people and is compatible with its socio-cultural milieu

6.2 Specialty is tourism policy, law and development and a number of unique services on tourism could include:

Laws & legal frameworks

- Reviewing existing laws
- Benchmarking against international best practice and model laws
- Drafting new legislation and regulations
- Consultation with stakeholders and assistance with enactment
- Establishing and reviewing legal frameworks
- International convention review and ratification
- Arbitration, mediation, negotiation and dispute resolution

Compliance, Security & Risk Management

- Legal and regulatory compliance audits, plans and programs
- Tourism security reviews, plans and advice
- Risk management reviews, plans and advice
- Stakeholder, social and environmental concerns
- Lobbying and advocacy on law and regulation changes
- Due diligence
- Troubleshooting

Governance, institutions & administrative systems

- Strengthening governance and institutions in the public and private sectors
- Funding arrangements for National Tourism Administrations
- Registration, licensing and accreditation
- Self regulation including trade associations and codes of conduct
- Safety, security and risk management
- Quality assurance systems including hotel classification
- Assuring sustainability and environmental protection

Policy, planning & development

- Formulating and implementing tourism policies and plans

- Planning and development facilitation and standards
- Implementing tourism master plans
- Privatization, joint ventures, tenders, procurement and investment incentives
- Transactions (sale, purchase, lease etc) including project appraisal and due diligence
- Land titling and project structuring including TDZs and TDCs

Trade & regional cooperation

- Regional trade agreements
- Harmonizing regional laws
- Bilateral and multilateral agreements
- International passenger transportation

Education, Training & Capacity Building

- Education
- Training and capacity building
- Research and publication

7. CONCLUSION

Tourism, if it is to be a vehicle of culture, prosperity and peace, must conserve without damaging, protect without plundering, and create without destroying. Carrying capacity in eco-tourism provides local benefits-environmentally, culturally and economically. Ecotourism is "responsible travel to natural areas that conserves the environment and sustains the well-being of local people." Our goal is to enable people to enjoy and learn about the natural, historical & cultural characteristics of the various forts in Maharashtra while preserving the integrity of the forts and stimulating the economic development opportunities in local communities.

The following implemented in the will improve the face of tourism in the coming years:

1. Development of infrastructure at the forts: Various tourism facilities such as accommodation facilities, eateries, toilets, information centre's, etc. could be developed at all destinations. For this, the incentive policy proposed will encourage private partnership in tourism related activities and infrastructure development.

2. Accessibility to the forts and wayside amenities: Approach roads could be identified to various forts in Maharashtra. The roads should be assessed for suitability (carrying capacity, quality, etc.) and could be considered for further development. Wayside amenities should also be planned while developing roads.

3. Development Control Regulation at destinations: 'Development Control Regulations' could be prepared to work as guidelines for development at and around the forts.

4. Strengthening of Bed and Breakfast scheme: The Bed and Breakfast scheme creates facilities for travelers at remote region forts (where hotel accommodation is not available) could provide income to the local people. With the increasing interest in the rural way of life and the advent of rural tourism, the Bed and Breakfast Scheme would offer excellent potential for the mutual benefit of tourists and the local population. This Scheme could be strengthened to form a part of rural micro-financing projects.

5. Recreational facilities at forts: Entertainment facilities such as children's sports, horse rides, light and sound show (based on feasibility) could be arranged at selected forts. Providing recreation and entertainment at the various forts could convert day tourists into staying tourists.

6. Public-Private-Partnership: Specific forts could be identified where public-private partnership is possible. Conservation plans could be prepared for the identified these forts.

7. Cultural Tourism: Distinctive aspects of Maharashtra's rich culture and tradition could be identified and promoted as an integral part of Maharashtra's tourism.

Identifying and promoting the State's folk arts and organize folk dance and music programmers at the forts could be arranged.

8. Crafts: Since Maharashtra has a number of exclusive handicrafts; the government could undertake the availability of the handicraft products at the various forts, which could promote the handicrafts industry in the state:

9. Information Kiosks: Government of Maharashtra could create kiosks at important airports, railway stations, bus stations and important forts to provide tourism information on an interactive basis with links to the tourism portal and on-line booking systems.

10. Creating Awareness: Create awareness among people about the importance of tourism, how to identify and plan tour options and on how to be an enlightened tourist. This could also include creating awareness about safety and environmental awareness.

RECOMMENDATIONS: PROJECT MANAGEMENT

Basic Project Management

“Project management is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. Project management is accomplished through processes, using project management knowledge, skills, tools, and techniques that receive inputs and generate outputs.” Restoring of construction come in many shapes and sizes from a new design to specific updates of existing spaces. Regardless of the size of project, the processes associated with project management can be scaled to fit the needs of the project. Although the conservator will not be the lead on the construction project, the language and processes should be learned to support the construction process and to ensure that outcomes for the project are met. Through an understanding of the project management process, the conservator will have a better sense of what needs to be done at what stage and by whom.

Key Elements

A project, at its core, has a definite starting and ending point and is undertaken to create a new product, service, or deliverable. To ensure fulfillment, project management processes focus on distinct elements flowing and interacting in a logical manner. These elements include initiation, planning, executing, monitoring and controlling, and closing and they interact with each other on a continual basis. In addition to the core processes; project management also incorporates other concepts that are key to success. These include the management of scope, risks, human resources, communication, procurement, and integration. For conservators working on a building project, the management of scope, risks, and procurement will be the most important because these concepts will define the size, shape, and layout of the construction.

Software

Project management software comes designed for various types and sizes of projects. It includes scheduling, cost control and budget management, resource allocation, and communication elements, which help keep the complexity of large projects organized and under control. Some programs to consider include Microsoft Project (microsoft.com/project) and the open source option Redmine (www.redmine.org). There are larger software lists available at www.web-based-software.com/project-management and www.cyberciti.boz/open-source-project-managment-software.html. For most conservators, the software can be helpful for creating and managing schedules and budgets on the scale needed for a construction project and for those in larger institutions, some software may already be licensed to your organization and freely available. The following sections will lay out each individual process and how each relates to what the conservator needs to do to ensure the satisfactory completion of the lab space.

Planning

The planning process involves gathering information from many sources to develop, identify, define, and mature the scope, costs, and schedule for the project. The project manager should involve all the appropriate stakeholders, including conservation staff, regardless of whether a new construction is planned, or the project is a renovation. This is the most critical aspect of the whole project for conservation to be intimately involved in. As the conservator begins working on the specific plan for construction, it is helpful to dissect the project into its component parts. Breaking down the plan into scheduling, research, specifications, and budgeting phases makes each stage more manageable and promotes more accurate and thoughtful planning.

Scheduling

Scheduling is allocation of resources.

Steps in Project Scheduling Phase

Scheduling is done in the following steps

1. Calculate: detailed control information.
2. Assign: timings to events and activities.
3. Give: consideration to the resources.
4. Allocate: the resources.

Methods of Planning and Programming-

Managers at all the levels need improved techniques at all stages in project to

1. Define the work to be performed.
2. Develop more realistic schedule and cost estimates based on resources planned to perform the work.
3. Determine where resources should be applied to best achieve the time, cost and technical performance objectives,
4. Identify those areas developing potential delays or cost overruns in time to permit corrective action.

Following are the methods which can be used Method for restoring of construction.

1. Bar Charts and Milestone

Bar Charts were introduced by Henry Gantt around 1900AD.

Bar chart represents pictorial representation in two dimensions of a project by breaking it down into a number of manageable units or activities for planning and control shown on one dimension or axis and the duration assigned to these activities.

So, we can consider one example:

Restoring of Construction in this we can break that project into activities by giving them duration and will get flow chart of that activities we can sort activities like

- Need for Restoring
- Research
- Risk Management
- Budget
- Specifications
- Construction Execution
- Maintenance

And by breaking activities in this manner will know about the duration of that project

2. Network Methods**a. PERT- Program Evaluation and Review Technique**

The PERT system uses a network diagram consisting of events which must be established to reach project objectives. PERT uses event-oriented network diagrams in which successive events are joined by arrows in which precise time determination for various activities cannot be made.

PERT system is preferred for those projects or operations which are of non-repetitive nature or for those projects.

b.CPM - Critical Path Method

The whole project consists of a number of clearly recognized jobs or operations, called activities. Activities are usually operations which take time to carry out and on which resources are expended. Junction between activities are termed as events.

CPM networks are generally used for repetitive type projects, or for those projects for which accurate estimate of time for completion of each activity can be made and for which cost estimation is very useful for construction projects.

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