

Design of Agrotourism Park in Vidarbha Region: A Sustainable Approach

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Abstract: The Vidarbha region with its rich agricultural heritage and diverse cultural traditions, holds immense potential for agrotourism development. This paper explores the design of an agrotourism park in Vidarbha region, focusing on sustainable practices, vernacular architecture, and the integration of local communities. The design program emphasizes experiential learning, cultural immersion, and environmental conservation, aiming to create a unique and enriching experience for visitors while contributing to the socio-economic development of the region.

Keywords: Agrotourism, Vidarbha, rural development, sustainable agriculture, community involvement, cultural preservation, experiential learning, vernacular architecture.

1. Introduction

Agrotourism, a fusion of agriculture and tourism, has emerged as a promising avenue for rural development, offering economic diversification for farmers and authentic experiences for tourists. In the Vidarbha region of Maharashtra, India, where agriculture forms the backbone of the economy, agrotourism presents an opportunity to revitalize rural livelihoods and showcase the region's agrarian heritage. This paper outlines a comprehensive approach to designing an agrotourism park in Vidarbha, emphasizing sustainability, community involvement, and the preservation of local culture.

A. Understanding Agrotourism

Agrotourism, also known as farm tourism, is a type of tourism that allows people to experience agricultural life firsthand. It can include a wide range of activities, such as:

- Visiting farms and learning about agricultural practices
- Participating in farm activities, such as harvesting crops or milking cows
- Staying overnight on a farm
- Purchasing farm products
- Participating in educational programs about agriculture

Agrotourism can be a valuable tool for rural development. It can help to:

- Increase farm income
- Create jobs in rural areas

- Educate the public about agriculture
- Promote sustainable agriculture practices
- Preserve rural culture



Fig. 1. Farmers harvesting crops in a field

B. Agrotourism in India

Agrotourism is a growing industry in India. The country's diverse agricultural landscape and rich cultural heritage make it an ideal destination for agrotourism. The Indian government has been promoting agrotourism in recent years. In 2020, the Ministry of Tourism launched the "Dekho Apna Desh" (See Our Own Country) campaign, which aims to encourage domestic tourism, including agrotourism.

C. Agrotourism in Maharashtra

Maharashtra is one of the leading states in India for agrotourism. The state has a long history of agriculture, and its farmers are known for their innovative practices. The Maharashtra government has been supportive of agrotourism, and it has launched several initiatives to promote it.

D. Vidarbha Region: A Potential Hub for Agrotourism

The Vidarbha region, located in the eastern part of Maharashtra, is known for its fertile land and diverse agricultural practices. The region is home to a variety of crops, including cotton, soybean, and oranges. Vidarbha also has a rich cultural heritage, with a number of traditional festivals and folk arts.

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Fig. 2. Cotton fields in Vidarbha



Fig. 3. Soybean crop

2. Case Studies

A. Vednandini, Kanheri Sarap, Akola

1) Stay

The quarters are designed in a modern style that enhances the overall aesthetic.



Fig. 4. Room and dormitory in Vednandini

2) Sustainable Approaches

A pond with an area of 2 acres and a depth of 9.75 meters has been constructed on the farm to collect rainwater. This water will be used throughout the year for farming and other purposes, helping to conserve water and address water scarcity.

A vermicompost pit has been constructed on the farmland to

produce natural manure and recycle food waste collected from the park. The organic waste is broken down by earthworms, creating nutrient-rich compost that is used to improve soil fertility and support healthy crop growth. This sustainable practice not only reduces waste but also promotes eco-friendly farming.



Fig. 5. Rainwater collection pond



Fig. 6. Vermicompost pit

B. Tai Cha Mala, Deoli, Pulgaon

1) Stay



Fig. 7. Rooms constructed in vernacular style and skylight in toilet

The vernacular style of architecture utilizes materials that are locally available, creating a sense of sustainability by minimizing environmental impact and promoting the efficient use of resources.

Installing a skylight in the toilet can reduce electricity costs by minimizing the need for artificial lighting, while also bringing a touch of nature indoors.

2) Sustainable Approaches

Using a skylight in the toilet reduces the need for electricity during the day and promotes sustainable living.

The materials used in the rooms, such as mud and Mangalore tiles, are locally sourced. They help reduce heat gain, making the structure more energy-efficient and environmentally sustainable.

C. Aaranya Farm Stay, Sasan Gir, Gujarat

1) Stay

The quarters are designed in a vernacular style that complements and blends seamlessly with the surrounding environment.



Fig. 8. Living quarters

2) Sustainable Approaches



Fig. 9. Stained glass and skylight dome in toilet

The use of locally available materials in structures with sloping roofs helps reduce heat gain. Additionally, skylights and stained-glass windows in the toilet allow natural light to enter, minimizing the need for artificial lighting. These features reflect a sustainable approach to building design.

D. Design Program for Agrotourism Park

The design program for the agrotourism park in Vidarbha will be based on the following principles:

- *Sustainability*: The park will be designed to minimize its environmental impact and promote sustainable practices.
- *Community involvement*: The park will involve the local community in its planning and operation.
- *Cultural preservation*: The park will showcase the region's rich cultural heritage.
- *Experiential learning*: The park will offer visitors a variety of opportunities to learn about agriculture and rural life.

The park shall include the following facilities:

- A welcome centre with information about the park and the region
- A farm with a variety of crops and livestock
- A farmers' market where visitors can purchase fresh produce and other farm products
- A restaurant serving local cuisine
- A cultural centre showcasing the region's folk arts and crafts
- Accommodation for overnight visitors
- A nature trail
- A playground
- A camping area



Fig. 10. Traditional mud house in Vidarbha

E. Vernacular Design Practices in Vidarbha Region

Vernacular architecture, deeply rooted in local climate, materials, and cultural practices, offers valuable insights for designing sustainable and contextually relevant agrotourism facilities in Vidarbha. Traditional building techniques like rammed earth construction, use of local stone, and bamboo craftsmanship not only minimize the carbon footprint but also create authentic and aesthetically pleasing spaces that resonate with the region's heritage.

F. Sustainable Practices

The agrotourism park will incorporate a range of sustainable practices, including:

- Rainwater harvesting
- Solar energy
- Waste recycling
- Organic farming
- Composting
- Use of eco-friendly materials

G. Community Involvement

The agrotourism park will involve the local community in its planning and operation. This will help to ensure that the park is sustainable and that it benefits the community. The park will also provide employment opportunities for local people.

H. Cultural Preservation



Fig. 11. Traditional dance performance in Vidarbha

The agrotourism park will showcase the region's rich cultural heritage. This will help to preserve the local culture and to educate visitors about it. The park will also host a variety of cultural events and festivals.

I. Experiential Learning

The agrotourism park will offer visitors a variety of opportunities to learn about agriculture and rural life. This will help to educate visitors about the importance of agriculture and to promote sustainable practices. The park will also offer a variety of hands-on activities, such as harvesting crops, milking cows, and making handicrafts.

3. Conclusion

The design of an agrotourism park in Vidarbha presents a unique opportunity to promote sustainable rural development while offering tourists an enriching and authentic experience. By integrating vernacular design practices, sustainable technologies, and community participation, the park can serve as a model for responsible tourism that celebrates the region's agricultural heritage and contributes to its socio-economic well-being.

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