

Access and Availability of Water for Sustainable Agritourism Development in Konkan Region, M.S, India

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Abstract

Agritourism is the act of visiting working farm for recreation purpose. It comprises of two sectors, agriculture and tourism. Both these sectors are known for the intensive consumption of water. The water is required for irrigating crops as well as acts as a natural tourism resource for agritourism industry.

Maharashtra state is one of the pioneer states in agritourism development in India. The first agritourism centre in Maharashtra state was initiated in Konkan region and many thereafter. The water rich Konkan region of Maharashtra state stands out from the rest of the state due to its 720kms. long water front, fresh fish, wet climate, rivers, distinct geography, rich tourism potential and horticulture products.

The paper incorporates both primary and secondary data through case study as the qualitative research approach. The case studies reveal that agritourism centres tend to locate in the proximity of the water body and have constructed on-farm water reservoirs to seek tangible and non tangible benefits from water resources for sustainability of the farm.

The study concludes that both accessibility and availability of water bodies play a crucial role in influencing the selection of location of agritourism centres and its long term sustainability. Presence of water is a basic infrastructure need for agritourism development which further adds the attractiveness of the natural location and increases the aesthetics of the agritourism centre.

KEYWORDS- Konkan, access, availability, water, agritourism location

Introduction

Agritourism is the act of visiting a working farm or any agricultural, horticultural, or agri-business operation for enjoyment, education, or active involvement in the activities of the farm or operation (Che, Veeck, & Veeck, 2006). It is a cross roads of agriculture and tourism (Pittman, 2006). Both these sectors are known for the intensive consumption of water. The water is required for irrigating crops as well as acts as a natural tourism resource for tourism industry.

1 Literature Review

According to Roberts and Deery (2008), marine/ coastal aspects of the environment are one of the ten attributes those contribute to the development of successful agritourism. The National Survey Recreation and the Environment found that the primary reason for visiting a farm is to enjoy the rural scenery around the farm (Cordell, 2004). Laurie S. Z. Greenberg (2006), have pointed out that “accessible location and attractive landscape” is important part to check agritourism potential. Zheng, (2004) has expressed the need to learn to utilize intangible resources like rural environment, natural scenery, natural water

body, fresh countryside air for agritourism development. Brian G. Baskerville, (2013) has confirmed in his studies that the most successful agritourism operations in Nebraska, USA were in close proximity to the rivers.

2 Objectives of the Study

- To study comparative advantage of proximity of water body to the agritourism centres.
- To identify tangible and non tangible benefits of on farm water bodies in sustainability of agritourism centres.

3 Study Region

Maharashtra state is one of the pioneer states in Agritourism development in India. The



first agritourism centre in Maharashtra state was initiated in Konkan region and many thereafter. The Konkan region of Maharashtra state of India is a coastal estuarine plain with 720 kms. long coastline. It is situated between the Western Ghats and the Arabian Sea. Palghar is the northern and Sindhudurg district is southern district of the Konkan region. The region has unique geography than the rest of the Maharashtra state. Konkan region receives very high annual rainfall (in excess of 3,000 mm). Although Konkan region is water-rich

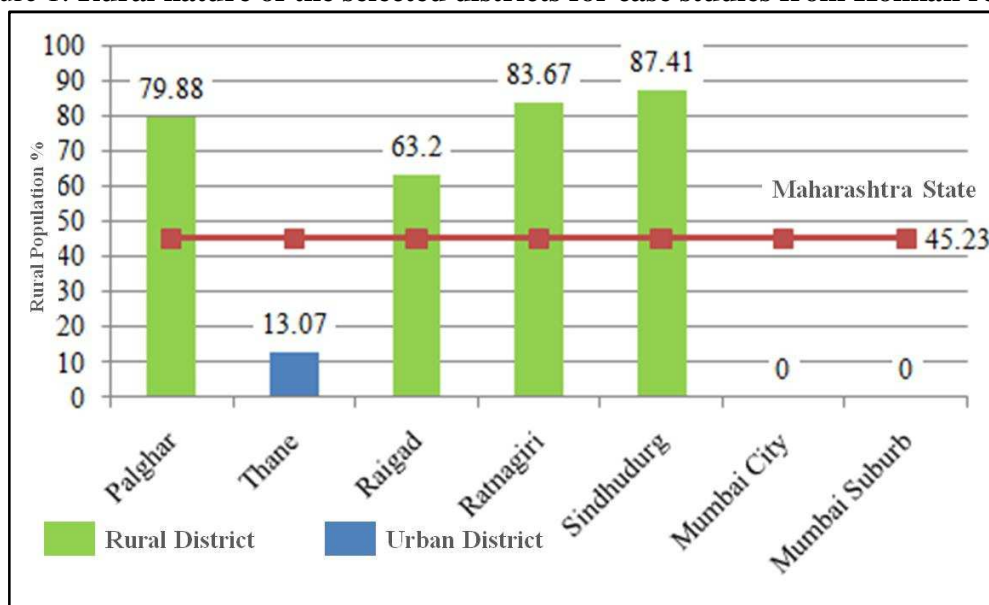
region of the state; the steep and rugged topography, non perennial short and swift rivers causes scarcity of water. The hot humid climate is suitable for growing horticulture products. The Konkan region comprises of seven districts like Mumbai City, Mumbai Suburb, Thane, Palghar, Raigad, Ratnagiri and Sindhudurg.

4 Research Methodology

The study deployed Case Study method, followed by Qualitative Research approach to facilitate the in depth analysis. The case studies helped in identifying the most influencing location factors for agritourism development in Konkan region. Interview method was used to collect information of the selected agritourism centres. Field observation, field photographs and field notes were supplementary methods. The paper incorporates both primary and secondary data.

Agritourism is subsector of the rural tourism (Phillip et al., (2010)). Hence rural districts of Konkan are selected for identifying the case studies. The rural population of these districts is more than the state of Maharashtra (45.23 percent). Out of seven districts of Konkan region, Palghar, Raigad, Ratnagiri and Sindhudurg districts are identified as rural districts (Figure 1). Hence case studies are selected from these rural districts of Konkan region.

Figure 1: Rural nature of the selected districts for case studies from Konkan region



Source- Population Census, 2011

Four Case studies from the four rural districts are randomly selected (Table No. 1) because they perceived to have well established agritourism centres and differ from the typical; small or socially disadvantaged producer.

Table No.1: Selected Case studies from rural districts of the Konkan region

Sr.	District from Konkan	Name of the Agritourism Centre
1	Palghar	Tarpa Agro-Eco Tourism
2	Raigad	Saguna Baug- Agro Tourism Farm
3	Ratnagiri	Devrai Krushipartatan Kendra
4	Sindhudurg	Macchli Farm Stay

Source- Field work

5 Discussion and Findings of the Study

The unique geography of the Konkan region offers different agritourism products than the rest of Maharashtra state. Dotted serene beaches, marine biodiversity, orchids of the mango, grooves of coconut, lush greenery, and Sea front are the primary differentiator to the rest of Maharashtra, are strengths thereby providing opportunities for agritourism development in region. It translates into comparative territorial advantage in terms of proximity of water resources over the rest of Maharashtra state. Moreover access of water bodies like Sea or Backwater adds the fresh fish to the platter of the local cuisine and delicacies.

The field investigation and comparative study of the four case studies have highlighted the need to locate in proximity of the natural water body as follows-

Table No. 2: Proximity of the water body and its Benefit to the agritourism centres

Sr.	Agritourism Centre	Natural Water body	Distance from Water body (in Kms.)	Benefit of Water Body
1	Tarpa Agro-Eco Tourism	Sea Beach	1.5	Off-farm activity, Publicity and Marketing
2	Saguna Baug- Agro Tourism Farm	River,	0.0	On farm activity and off-farm activity, Publicity and Marketing
		Waterfall	0.0	
5	Devrai Krushipartatan Kendra	Dam	0.0	Irrigation, Farm aesthetics, Rural ambience
7	Macchli Farm Stay	3 Sea Beaches and Backwater	7.0	Off-farm activity, Publicity and Marketing

Source- Field work

Tarpa Agro-Eco Tourism - It is located in Rampur at Thane district and is just one and half kilometre from Dahanu beach. Proximity to beach has given rise to the off-farm activities like Sunset hike to the beach. This agritourism centre has dug Farm Lake for rain water harvesting and it is also used for on farm recreation like crossing the lake with Zip line.

Saguna Baug- Agro Tourism Farm - It is located in Karjat tahsil of Raigad district. It is surrounded by three sides flowing perennial river Ulhas and is lifted for irrigation. It is also used for recharging the six farm lakes which covers an area of about 3 hector and stores 60,000 cubic meter of rain water. These lakes are used for aquaculture (fresh water fish cultivation). Fish species include - Indian major carps, 3 types of Chinese carps and a variety of Tilapia. As a part of on farm activity, demonstrations are shown to the tourists of harvesting fish with the help of Drag Net. The waterfalls nearby farm are common during monsoon. Tourists are taken for bathing in a waterfall.

Devrai Krushipartatan Kendra - It is located in Sangameshwar tahsil, Ratnagiri district and is situated on the bank of Nive dam reservoir. Water from Nive dam reservoir is lifted for irrigation. The agritourism owner is planning to start boat rides in the dam reservoir in future.

Macchli Farm stay - Macchli farm Stay is located in the Parule Village from Sindhudurg. This agritourism centre is located just within the range of 10kms. of exotic beaches like Bhogawe, Kille Nivati, Khavane beach and Karli backwater. Proximity to beaches and Back water has given rise to the off-farm activities like excursions to beach, Sunset hike to the beach, Mangrove walk, and boat ride to the Backwater. The farm stay has double benefit of access to the water body. A perennial stream endowed with live spring underground flowing through the property is the unique selling point of the Maachli Farm stay. The stream drops the surrounding temperature drastically, recharges the wells and added the charm to the rural ambience by thick wood along its bank.

Urban families are the major tourists segment of the agritourism industry. Urban dwellers wish to have an authentic experience which will bring them closer to the nature. Hence

are looking for real vacations which would reconnect them with land. Generally landscape in itself cannot attract unless it is developed for tourism; but it is in abundance and plenty availability of the tourism resources such as water, fertility, and greenery that makes the tourists to describe the general landscape as "natural", "pleasant", "cooler", and "fresher" (Rohit Madan, 2014). Kumbhar (2009) emphasized that location of an agritourism center should be near to the dam/lake or near to the historical place or near to pilgrimage, easy accessibility from the city.

In spite of heavy spells of rains; scarcity of water is predominant in Konkan region due to the steep, rugged slope and short swift flowing rivers which has forced most of the agritourism centres owners to utilize customary usage i.e. irrigation, rural ambience, natural attraction, farm aesthetics and innovative usage i.e. farm recreational activities, pond house, aqua culture etc. of water resources. Agritourism centres like Saguna Baug, Save Agro- Eco Farm have dug huge farm lakes to increase the farm ambience and to facilitate rainwater harvesting purpose to utilize the intrinsic value of the water. Access of Sea front is one of the attractions for many tourists coming from rest of the Maharashtra state.

Field investigation highlighted below findings of the concerned study -

- Proximity of the water body like sea beaches, river, waterfalls were used as infrastructure for advertising the agritourism centre and used as either on-farm or off-farm activities
- Agritourism centres have developed farm lakes to create rural ambience
- Farm Lakes were dug to enhance the farm aesthetics
- Farm Lakes or ponds were used for developing on farm recreational activities such as swimming, paddle boating, rod fishing, crossing the lake
- Farm Lake was used to diversify the farm income by developing aqua culture
- Farm Lake was used as the means of Rain water harvesting

Thus field investigations has confirmed the findings of the earlier studies that water bodies have great potential to develop farm recreation and act as a natural tourism resources.

Table No. 3: **Tangible and Non Tangible Benefits of Water Reservoirs on the Agritourism Centres**

Sr.	Agritourism Centres	Water Reservoir	Tangible Benefits	Non Tangible Benefits
1	Tarpa Agro-Eco Tourism	Farm Lake, Swimming pond	Rain Water Harvesting, Zip line Crossing the farm lake, Swimming in the pond	Farm aesthetics, Rural ambience
2	Saguna Baug-Agro Tourism Farm	Farm Lake	Rod fishing in farm lake, Paddle Boating in farm lake, Water Buffalo ride, Swimming in river, Kayaking in the river Aquaculture for export, USP is Pond house in farm the lake	Farm aesthetics, Rural ambience
3	Devrai Krushipartatan Kendra	Dam	Irrigation, future plan to start boating	Farm aesthetics, Rural ambience
4	Macchli Farm Stay	Stream	Rafting in the stream	The stream drops drastically the surrounding temperature, recharges the wells, Farm aesthetics, Rural ambience

Source: Field work

In true sense Agritourism is the participatory type of tourism which allows the tourists to participate in rural and agriculture related activities for hands on training. Tourists are more interested in experience oriented farm recreation. They are thrilled to bath under waterfall or in the stream, they are excited to swim in the river or ponds, they do not want to miss boat ride or Kayaking in the Sea, they are more fascinated to enjoy Dolphin Watch or Crocodile Safari, delighted while fishing in the river. The urbanites become nostalgic when visit agritourism centres and want to enjoy this experience by their children who are brought up in the cement concrete jungle and digital virtual world. Rohit Madan, (2014) has observed that association of water bodies near agritourism centres are essential to create rural ambience and making urban tourists, who faces water shortages in their everyday life, comfortable. Rurality is a unique selling point for holidays in countryside. Customers look for high quality and unspoiled scenery, for peace, quiet and for the personal attention which small scale tourism can offer their guest (Krippendorf, 1987). Therefore accessibility of water body becomes the determining factor of location of agritourism centres in Konkan region.

6 Conclusion

Water is a popular natural attraction for the urbanites that are the main tourists segment of the agritourism centres. Both access to the natural water body in the form of proximity to River, Sea, Backwater, Dam, perennial Stream or availability of the water reservoir in the form plays a crucial role in long term sustainability of the agritourism development. Agritourism centres from Konkan region are taking advantage of their region's abundant natural resources to great success. This underlines that sustainable exploration of available water resources and access to water body is the crucial factors in attracting and sustaining agritourism centres in Konkan region.

References

- Baskerville, Brian G., "Building a GIS Model to Assess Agritourism Potential" (2013). Theses and Dissertations in Geography. Paper 18.<http://digitalcommons.unl.edu/geographythesis/18>
- Busby, G., & Rendle, S. (2000). The transition from tourism in farms to farm tourism. *Tourism Management*, 21, 635-642.
- Che D, Veeck A and Veeck G (2006) Demographic characteristics and motivations of Michigan agritourists.Pp 98-103.Retrieved from: http://www.nrs.fs.fed.us/pubs/gtr/gtr_nrs-p-14/13-che-p-14.pdf? on 22.4.2014.
- Cordell, K. (2004). Outdoor Recreation for 21st Century America – A Report to the Nation: The National Survey on Recreation and the Environment. Venture Publishing, Inc., State College,
- Krippendorf ,J.1987, The Holiday makers; Understanding the impact of Leisure & Travel , Oxford: Heinemann.
- Madan, Rohit (2014), Agri-tourism in peri-urban Mumbai and Pune : ecological citizenship and rural-urban linkages in the Global South, Cardiff University, uk.bl.ethos.633559
- Phillip, Sharon. Hunter, Colin and Blackstock, Kirsty, (2010). A Typology for Defining Agrotourism. In: *Tourism Management*, Volume 31, Issue 6, Elsevier Ltd, pp. 754-758. Cited from <http://dx.doi.org/10.1016/j.tourman.2009.08.001>
- Pittman, H. M. (2006). Planting the Seeds for a New Industry in Arkansas: Agritourism. The National Agricultural Law Centre, [cited: 7.5.2013]. Available from http://www.nationalaglawcenter.org/assets/articles/pittman_agritourismseeds.pdf
- Zheng, J. X. (2004). Economic analysis on recreational agriculture (In Chinese). In H. C. Guo, & J. X. Zheng (Eds.). *Development of tourist and recreational agriculture and rural tourism in mainland China and Taiwan* (pp. 71-85). Xuzhou, Jiangsu: China University of Mining and Technology Press. (PDF) *The Prospects of Agritourism Development in China*. Available from: https://www.researchgate.net/publication/299656325_The_Prospects_of_Agritourism_Development_in_China [accessed Oct 18 2018].
- savefarm.in
- sagunabaug.com
- maachli.in
- [https://www.telegraphindia.com/1060319/asp/ look/](https://www.telegraphindia.com/1060319/asp/look/)