



Plant Archives

Journal homepage: <http://www.plantarchives.org>
DOI Url : <https://doi.org/10.51470/PLANTARCHIVES.2023.v23.no1.008>

APITOURISM IN AGRITOURISM: A FUSION OF GREENERY, APICULTURE & TOURISM IN THE VALLEY OF JAMPUI HILLS OF NORTH EAST INDIA

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(Date of Receiving : 16-09-2022; Date of Acceptance : 27-11-2022)

ABSTRACT

Present era is the era of rapid changes towards modernization or urbanization. Due to the unsustainable and unhealthy approaches people are experiencing unpredictable jolts in the form of global pandemic, pest outbreaks, natural disaster etc. Therefore, sustainable growth approaches are the need of the hour. In that perspective, agritourism has a strong potential in achieving the balance between sustainability and development. Rich natural forest resources of Jumpai hills in North East opens an opportunity window to make this place a hub of apitourism in agritourism sector. Apitourism, a magnificent form of tourism intermingled with beekeeping as a traditional profession and with bee products in ecological, food and medicinal aspects. Linking between beekeeping with ecotourism brings greater value to the beekeeping sector, thereby attracting the development of apitourism. The main focus of considering such approaches is to raise awareness as to the importance of bees towards mankind, enriching knowledge about the use and effects of bee products, apitherapy and importance of our natural world, together with such fundamental values as health, family, creativity, connection and harmony. There is a greater scope of apitourism in the eco-forest of North eastern Jumpai hills, which would be providing a wide range of direct or indirect ecosystem services and livelihood opportunities for the society. These tours combine country's distinctive heritage and rich beekeeping tradition and is aimed at travellers who favour healthy and eco-friendly pursuits. This paper tries to summarize the possibilities of apitourism in agritourism sector and also highlights the challenges that might create hurdles in achieving the stated goal.

Keywords: Apitourism, Beekeeping, Agritourism, Jumpai hills, Livelihood.

Introduction

Agriculture is the backbone of our national economy as it nurses us by food and other raw materials. The 21st century is a period of intense economic growth and depletion of natural environment by dysfunctioning many ecosystem and biodiversity (Barbara, 2014). Progressive and prosperous globalization threatens the behaviour, traditions, culture and integrity of local societies throughout the globe (Cawley and Gillmor, 2008). Recent trends in urbanization is putting a threat towards traditional ethnic cultures. In such case, agritourism with beekeeping is a new concept that can revolutionize agricultural sector by interacting with tourism business, resulting in boosting the socio economic development without putting heavy load upon the environment. In this context, bees play a significant role in the pollination of different plant species. Estimates have suggested that bees pollinate approximately 90% of the flowering plants needing pollination, and approximately 75% of these plants serving as food. It is noteworthy to mention that many intrinsically associated cultivated plants or species would not exist without bees; thus, a world without bees would be rather different than the world we know (Basualdo and Bedascarrasbure, 2003). The association of humans with *A. mellifera* is seen in the earlier times as evidenced by the

widespread presence of ancient Egyptian bee iconography dating to the Old Kingdom, approximately 2400 BC (Crane, 1999). However, the pressures on honeybee populations, resulting from threats by modern pesticides, parasitoids, predators and diseases, have raised awareness of the economic importance and critical role this insect plays in agricultural societies across the globe. From environmental point of view it is now high time to counter these negative impacts and implement sustainable development principles that can tackle over the pros.

Tourism is the best armour to conserve the cultural, ethical and natural values. Recent trends in tourism highlights in pro-environmental forms of travelling; eco and agritourism; nature and cultural tourism. Apiculture is the perfect example of productive conservation, where economic development, natural resource conservation and ecological services co-exist. Tourists search for active forms of recreation time however not only physical but also the cognitive one. Also opportunity to gain new experiences, knowledge, to meet natural and cultural specificity of a site becomes the motive for many tourist trips (Barbara 2014). An excellent example of such form of tourism is apitourism. The FAO of the UN positions small-scale beekeeping in the development discourse as a "Sustainable livelihoods

approach", contributing to livelihood security, especially in rural communities where access to income is limited. Bees, nature and humans co-exist within a delicate symbiotic relationship. (Shiffler, 2014). Beekeeping in pottery vessels was started about 9,000 years ago in North Africa and domestication of bees is shown in Egyptian art from around 4,500 years ago (Shiffler, 2014). Round the globe, civilizations are driving nutritional and economic benefits from bees through honey hunting and traditional beekeeping in the form of honey, beeswax, pollen, propolis, royal jelly and other products in spite that most importantly, the pollination of flowering plants and maintenance of biodiversity (Salque, 2015). Estimates have suggested that bees pollinate approximately 90% of the flowering plants needing pollination, and approximately 75% of these plants serving as food (Pantoja, 2017). All bee species directly depend on the resources of the natural world, undoubtedly the central cause of the pests and disease that threaten apiculture today (Shiffler, 2014). Linking beekeeping to other industries such as tourism adds higher value to the sector, as there exists a current tendency toward ecotourism and agritourism. Apitourism consists of guided visits to apiaries where the tourist will wear a beekeeper suit, learn about beekeeping, apitherapy, and also can taste hive-derived-products. The opportunity for new experiences surrounding specific natural and cultural realities in a region is increasingly fostering tourist trips. Many countries have documented apitouristic activities. For example, Slovenia is a pioneer in the implementation of apitourism in which ideal ecosystems favour the activity, strengthening sustainability and environmentally friendly projects (Sivic, 2013). Acknowledging the importance of apiculture, this write up tries to highlight the role of beekeeping on Agritourism and livelihood development. Present study analysing the prospects and challenges of agritourism based apitourism in North-Eastern state of Tripura. It will maintain a bright potentiality of socio-economic development in terms of rural tourism. This study is based on secondary data collected from various published sources like books, journal, magazine, reports, publications, etc. The findings were discussed in the light of published literature. The main objectives of the study are:

- i. To understand the prospects of agritourism in Tripura.
- ii. Scope of apitourism in the north eastern Jampui hills.
- iii. To identify various challenges and opportunities it might face.

Concept and Prospects of Agritourism In Tripura

Third smallest state of Tripura is well blessed with natural and cultural Heritage sites, land of undulating hills and plains with luxuriant green cover and exotic flora and fauna. *Agritourism*, mainly involves in agriculture based operation that brings visitors to a farm or ranch and gives an immense pleasure to the visitors by engaging them in farm activity, enjoying the natural farm environment and experience the authentic taste culture of rural societies. Thus, *it can pave a way in* revitalizing agriculture and rural development through employment generation (Deka and Sarma, 2019). An agritourism farm represents the hub of tourism services and a rural network, where agri-food products and tourism services meet consumers demand for relocalization and triggers to motivate further direct business opportunities between tourists and other rural community actors (Amirato and Felicetti, 2014). In India, agritourism has

also been emerged as a futuristic strategy towards tourism business, which was initiated in 2005 at Malegaon village, near Baramati, Maharashtra by Agri Tourism Development Company (Deka and Sarma, 2019). There are lots of possibilities that agritourism can provide. Such as, state government can raise good amount of revenue out of it, improves transboundary relationship, helps in maintaining ecological sustainability, also provide greater market opportunities for farm products and farmer's standard of living, last but not least it creates awareness about scientific methods of farming and prohibit the farmers from using any harmful pesticides or chemicals in their farm.

Scope of Apiculture in Tripura

From time memorial apiculture is an ancient practice followed in every civilised culture round the globe. Apiculture as a non-land based income generating tiny industrial sector is fast emerging an important component of present day strategies for integrated rural development and off-farm employment for sustainable livelihoods. Tripura is one of the fast emerging state in honey producing destination and generating employment for many. A honey processing centre has been set up by Tripura Khadi and Village Industries Board, which is playing a vital role to tap the state's potential in making honey. The government is laying stress on training more farmers to start bee-keeping to increase the honey production (Ani, 2016). There are huge potentiality in bee keeping in tripura. Currently there are 11026 numbers of bee colonies among 490 numbers of registered bee keepers, which are producing only 797 kgs of raw honey (Sivaram, 2012). Recently, Tripura Khadi and Village Industries Board has have trained around 2,000 people for beekeeping in various villages and targeting another 700 farmers. They have noticed high enthusiasm among trainees in various blocks and panchayats because this can be a very good income source for either educated or any illiterate person and it does not need much extra effort (Ani 2016). There is huge demand of honey but the number of bee keepers is less as compared to the demand. Therefore, Khadi Board is trying to increase the number of bee keepers by organizing various training programmes and gradually it is increasing.

Apitourism: The New Tourism Craze

Apitourism is a new discipline and very fresh approach to sustainability. It is a form of tourism connected with beekeeping as a traditional profession and with bee products in ecological, food and medicinal aspects. The tourism include visits in apiaries, open-air museums, bee park and bee museums where a tourist has an opportunity to observe a beekeeper's work, method of producing honey, olfactory experience of its properties and specifics, apitherapy, can find out about other bee products (pollen, wax, bee bread, royal jelly), also can watch how bee colony live, and visitors are able to recognize ecological correlation between man and bees. In recent times apitourism has been developed as answer to every day more demanding community striving for better, healthier life style, adopting local philosophy of "eat local and healthy products." Apitourism can be opportunity for all beekeepers around the world. It is about authentic travel which enriches one's life and strengthens one's connection with nature, culture and society. This merger of apiculture and travel opportunities thus becomes apitourism.

Such tourism may be developed on the basis of the already existing beekeeping museums and open-air museums, but it depends upon the mentality of the owners of apiaries. This would be a balanced income generating source without destroying ecological habitat along with maintaining the forest biodiversity. Development of apitourism is an opportunity to activate rural areas, to create new jobs and to promote a region's culture and tradition. A country that is the leader of the apitourism market is Slovenia (Sivic, 2014) where apitourism became one of the branches of tourism that is very attractive both for domestic and foreign tourists. In the last 5 years, the dynamic development of apitourism was recorded in Poland, Germany, the Czech Republic, Lithuania, Ukraine (Oleynik and Iaromenko, 2012) and Spain (Shiffler, 2014).

Jampui: A Potential Agro-Tourism Attraction

Jampui is one of the best natural attractions of North Eastern Tripura. This permanent seat of eternal spring features excellent climatic condition, virgin greenery, beautiful orange garden, peaceful surroundings, beautiful orchids and rich cultural heritage. Different seasons offer different pleasures to the tourists at Jampui hill. During the rainy season, clouds form at the foot of the hills. These clouds slowly rising through the day which makes feel like someone in middle of the clouds (Tripura tourism, 2020; Govt. of Tripura, 2020). The highest peak points 'Betling chhip' offers breath-taking views of sunrise and sunset and excellent panoramic sights of the lovely villages of Mizoram, Chittagong hill tracts and various other hill ranges of Tripura. In March to May various species of orchids and other wild trees bear flowers. The hill range has 11 villages inhabited by Lushai and Reang tribes that inhabit in the hill range have a very strikingly distinct cultural identity. They are quite well-off people, having neat and clean houses well equipped with modern amenities (Bhattacharya 2015; Barbara et al., 2014). The slopes of the Jampui Hills are perfect for growing orange plantations for which the place is famous for. During the month of November, Jampui Hills host Tripura's biggest festival, i.e., the Orange and Tourism Festival (Srushti, 2018). Back in 60s, people used to grow orange for local consumption but exploration of these quality oranges helped in improving the economy of Jampui (Jampui hill-Wikipedia, 2020). Now, a large number of tourists, both domestic and foreign, participate to witness the festival. A grand fair with stalls selling Tibetan handicrafts, oranges, tea leaves and coffee beans is organized, which is sold to tourists visiting the hills. The quality of orange was so good that it won first position at fruits exhibition at New Delhi in the mid-80s. Since then, Jampui became famous as a place where best quality oranges are grown commercially (Cawley and Gillmor, 2008). Recent day's government also pushes to improve the state's tourism. However, due to spread of orange disease like milky dew, dieback, and attack by pests, about two-third of the orange plantations has been wiped out. At present, Orange festival has been discontinued due to decline in orange productions and for other reasons. A new era of Betel Nut, locally known as KUHVA cultivation started by the people of Jampui since the last few decades to boost the economy (Cawley and Gillmor, 2008). The climate in Jampui is pleasant and balmy throughout the year, temperature variation in the hill range is very nominal in all seasons making it an ideal tourist destination to go at any time (Barbara, 2014; Bhattacharya, 2015).

For selection of a proper site for setting up an apitourism belt recent techniques like GIS & MCDA can be implemented. Multi-criteria decision analysis (MCDA) is a group of techniques supporting decision making and providing a framework consisting of multiple evaluation opinions and criteria, followed by selection of an appropriate course of action. Recent decades geographic information systems (GIS) has gained acceleration in agricultural land use planning, which would be a supplementary technique and in synergy with MCDA for assessment of territory suitability for beekeeping (Amiri and Shariff, 2012; Pal *et al.*, 2021), environmental planning (Bojórquez, 2001) and forest restoration (Orsi, 2010), among others.

Prospect of Apitourism in the Valley of Jampui Hills

Review suggests 53.49% of vegetation followed by 17% tourism is most suitable criterion to determine a suitable zones for socio economically viable apitourism site (Shiffler, 2014). The vegetation diversity of Jampui can be sustained for longer time by this significant introduction of apiculture. The traditional beekeeping can be practiced within the elevation of upto 8000 ft.,so there is a good scope of apitourism in the eco-forest of Jampui hills which would provide a wide range of direct or indirect ecosystem services and livelihood opportunities for the society. In India, aerial ropeways and traditional games have a huge scope in promoting tourism and has the potential to be developed as a means of public transportation. In hilly terrains like Himachal Pradesh, inland waterways like Goa and even metropolitan cities like Bangalore, aerial ropeways can be seen as a viable alternative for public transportation also much profitable tourism business point of view.

In recent days the whole world has experienced an unforeseen situation i.e., COVID-19 outbreaks which has lead to global recession, job losses, employment scarcity in various sactors etc. So, definitely it will force an individual to think of some better remunerative alternative. In contrast of such situations apitourism could bring better prosperity to unemployed youths.

Challenges

North-east has a huge potential in the promotion of agritourism owing to its rich natural resources, diversity and rich cultural heritage making it fit for a great potential for adventure tourism. Though there are several prospects there are various problems associated with it such as,

- **Low infrastructure facility:** Because of remote and hilly locations, there are various issues in the development of infrastructural facilities. It hinders the flow of tourist in such areas.
- **Security threats:** Tourists always make some wrong perception based on one or two spot incidents.
- **Restricted area permit:** Most part of the north eastern region falls under restricted areas for international tourists under the Foreigners (Protected area) order, 1958. Intended visitors may face a long procedure of obtaining permission.
- **Marketing strategy:** Without a vital marketing strategy no one will know about the region. Through government initiatives, local people and tourists, advertisement can be achieved. All the three sector is essentially important for marketing of rural tourism sector.

- **Few accommodation facilities:** Few accommodation facilities at rural places in the whole region, e.g. homestays are running by only few individuals in some selected places over North East India.
- **Unskilled labour:** skilled as well as unskilled labour are most prerequisite for impactful hospitality of the tourist where homestays are available.
- **Natural calamities:** Tripura and the rest of the north-eastern region lies in the Zone-V of the Seismological map of India, which is regarded as the high-risk zone with respect to earthquakes. During monsoon it receives a plenty of rain water, resulting in floods, landslides etc. creating hurdles in maintaining agritourism spots suitable for tourists.
- **Moving towards urbanization:** People are started acquainting urbanized recently resulting in devitalizing the feeling or desire to live again in a rural atmosphere. So, such tourism will be fruitful if all the states collectively promote to attract tourist from rest of the country.

Way forward Roadmap:

In the announcement of 5th tranche of Atma Nirbhar Bharat package on May 17, 2020 Rs 500 crores has been allocated for bee keeping initiatives with the consideration of implementation of standards of honey, developing traceability system for honey, capacity building with trust on women, development of quality nucleus stock and bee breeders. This will lead to increase in income for 2 lakh bee keepers and quality honey to consumers.

India has moved from the rank 65 in 2014 to rank 34 in 2019 in the travel and tourism WEF's index according to recent Parliament Budget speech by Nirmala Sitharaman. She also stated that foreign exchange earnings grew 7.4 per cent to 1.88 lakh crores for the period Jan-Nov 2019 from 1.75 lakh crores. Recently government is taking much progressive initiatives to develop the tourism sector by developing a roadmap for certain identified destinations and to formulate financial plans during the year 2021. Under these plans state governments would be given specified grants by the Centre in the year 2020-21. Current budget minister has allocated Rs 2,500 crores for 2020-21 for the purpose of tourism production (Hargunani, 2020).

One can come forward to take such government opportunities with an innovative mind set to make a best possible combination of agri enterprise with tourism which would pave a way for a new sunrise in rural community.

Conclusion

Agritourism is most relevant in developing states like Tripura where farmland has become fragmented due to population growth and where landless families do not have enough employment opportunities. This can improve economic status of poor household in the state. The added income from rural tourism can also contribute to the revival of vanishing folk art and handicrafts. Merging apiculture in agritourism allows one collection of natural honey from the forest and traditional cultivation and the other therapeutic use of it. Present apitourism model will offer an additional value to classical way of beekeeping especially for young or unemployed people to decide for beekeeping as professional carrier, raising awareness about the importance of the bees to the mankind through its educational approach. In recent

times apiwellness has been developed as answer to every day more demanding community striving for better, healthier life style, adopting local philosophy of "eat local and healthy products." Apitourism can be opportunity for all beekeepers around the world. It is about authentic travel which enriches one's life and strengthens one's connection with nature, culture and society. This merger of apiculture and travel opportunities thus justifies apitourism in agritourism sector.

References

- Amiri, F. and Shariff, A. (2012). Application of geographic information systems in land-use suitability evaluation for beekeeping: A case study of Vahregan watershed (Iran). *African Journal of Agricultural Research*, 7(1): 89–97.
- Ammirato, S. and Felicetti, M. (2014). The Agritourism as a means of sustainable development for rural communities: a research from the field. *International Journal of Interdisciplinary Environmental Studies*, 8(1):17-29. Available at:DOI: 10.18848/2329-1621/CGP/v08i01/53305
- Ani (2016). The government is laying stress on training more farmers to start bee-keeping to increase the honey production. *Business Standard*. Available at: <https://www.business-standard.com/>
- Barbara, W. (2014). Api-tourism in Europe. *Journal of Environmental and Tourism Analyses*, 2(1): 66-74.
- Basualdo, M. and Bedascarrasbure, E. (2003). Rol de las abejas en la polinización de cultivos. IDIA XXI. *Revista de Información sobre Investigación y Desarrollo Agropecuario Del INTA* 5: 18-22.
- Bhattacharya, R. (2015). Rural Tourism in Tripura. *Rural South Asian Studies*, 1(1).
- Bojórquez, L., Díaz-Mondragón, S. and Ezcurra, E. (2001). GIS-based approach for participatory decision making and, land suitability assessment. *International Journal of Geographic Information Science*, 15: 129–151.
- Cawley, M. and Gillmor, A. (2008). Integrated rural tourism: concepts and practice, *Annals of Tourism Research*, 35(2): 316-337.
- Crane, E. (1999). *The world history of beekeeping and honey hunting*. London: Duckworth.
- Deka, T. and Aparupa Sarma, A. (2019). Agritourism and Rural Development in North-East India: Prospects and Challenges. *Advances in Economics and Business Management*, 6(5): 415-417.
- Hargunani, B. (2020). Budget 2020: Govt. to Setup Archaeological, Maritime & Tribal Museums; Picks 5 Iconic Sites. Available at: <https://www.republicworld.com/india-news/union-budget/archeological-maritime-tribal-museums-by-govt-to-be-set-up-in-india.html>
- Jampui Hills, District North Tripura, Government of Tripura. India. (2020). Available at: <https://northtripura.nic.in/tourist-place/jampui-hills/1>
- Jampui Hills-Wikipedia (2020). Available at:https://en.wikipedia.org/wiki/Jampui_Hills_4
- Oleynik, V. and Iaromenko, S. (2012). Problems and prospects of development of green rural tourism in Ukraine, *Regional Formation and Development Studies* 6:67-73.
- Orsi, F., Geneletti, D. and Newton, A. (2010). Towards a common set of criteria and indicators to identify forest restoration priorities: An expert panel based approach. *Ecological Indicators*. 11: 337–347.

- Pal, S., Bhattacharya, S. and Sahni, S.K. (2021). Stingless beekeeping for sustainable agriculture: An area to ponder. *Agriallis*. 3(12): 9-14.
- Pantoja G., Contreras, C., Grimau, L. and Montenegro, G. (2017). Determination of suitable zones for apitourism using multi-criteria evaluation in geographic information systems: a case study in the O'Higgins Region, Chile. *Ciencia e Investigación Agraria*. 44(2):139-153.
- Salque R.M., Regert M. and Evershed R. *et al.* (2015). Widespread exploitation of the honeybee by early Neolithic farmers. *Nature*. 534 (7607): 226–227. Available at: doi: 10.1038/nature15757
- Shiffler, K. (2014). Api-Tourism as Added-Value: The Case of La Ruta de la Miel in Chile Master of Science in Agroecology Norwegian University of Life Sciences.
- Sivaram, V. (2012). Status, prospects and strategies for development of organic beekeeping in the South Asian Countries. Division of Apiculture and Biodiversity, Department of Botany, Bangalore University.
- Sivic, F. (2013). Apitouristic. *Bee World* 90(3):66–67.
- Srushti (2018). The Orange Festival of Jampui Hills at Tripura. Native Planet, Travelguide. Available at: <https://www.nativeplanet.com/travel-guide/the-orange-festival-of-jampui-hills-at-tripura-003640.html>
- Tripura Tourism (2020).<http://tripuratourism.gov.in/node/1552>