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First Report on Ecotourism Potential in Sorsan Region of Rajasthan

Renu Meena^{1*}, Ram Prakash Saran² and Veena Chourasia¹

¹Department of Zoology, Government College, Kota (India)

²Department of Zoology, Jai Narain Vyas University, Jodhpur (India)

*Corresponding authors: renumeena@outlook.com

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ABSTRACT

Ecotourism an emerging concept deals with the conservation of natural resources through socio-economic development of the local communities. The protected areas and reserve forests are located mainly in remote areas where the locals depend on the natural resources for their survival. Development of the ecotourism sites not only leads to economic development, but also social and cultural development. Sorsan is hunting prohibited and protected area located in Anta tehsil of Baran district of Rajasthan and have high potential to be developed as ecotourism site. Ecotourism in Sorsan region will able to create employment opportunities for the local peoples and will improve the quality of living of the participants. Successful ecotourism planning and implementation will bring social empowerment through community involvement, community cohesion, infrastructure improvement and cultural awareness. There is need to devise better and rigorous policies aiming profitable ecotourism in Sorsan which is socio-economically operative, culturally unconventional and environmentally sustainable.

Key words: Community; Conservation; Local; Protected area; Sustainable; Wildlife.

INTRODUCTION

Tourism is one of the world's largest industries. As awareness is increasing, economy is developing, transport facilities is breaking barriers of unreachability and reducing distance, communication is becoming ever more active and as countries of the world are coming close to each other through the rapidly changing to liberalization, privatization and globalization, the tourism industry is growing exponentially (Kunjuraman and Hussin 2016.). Tourism sectors are often regarded as an industry without chimneys as this industry one the least polluting industry. However, tourism has often been opposed by those who are very sensitive to cultural and environmental values. Tourism has

been suspected to be an enemy of wild life and environment (Wight 1993). Nevertheless, despite its negative ecological, social, and cultural implications, it is almost impossible to wish away tourism. Tourism is so close to human psyche that we cannot imagine human life without tourism. Of course, its negative implications must be properly addressed and it must be turned into an industry of social, cultural and ecological values. Eco-tourism is perceived as an alternative to the conventional tourism (Bagul and Din 2016).

Ecotourism is a somewhat new concept, and it is still often misunderstood or misused. While the term was first used in the 1980s, the first broadly recognized definition, The (International) Ecotourism Society (TIES) in 1990 which states

that ecotourism is “Responsible travel to natural areas that conserves the environment and improves the well-being of local people”. Ecotourism is now defined as "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education". Education is meant to be inclusive of both service providers and tourists (TIES 2015).

Eco-tourism, as the name implies, deals with the biological part of the natural environments (Singh 2015). Eco-tourism is a form of tourism involving fragile, pristine, and relatively undisturbed natural areas, intended as a low-impact and often small scale alternative to standard commercial mass tourism (Weaver 2001). Eco-tourism focuses on socially responsible travel, personal growth, and environmental sustainability. It typically involves travel to destinations where flora, fauna and cultural heritage are the primary attractions (Tripathi 2016).

Eco-tourism focuses on local cultures, wilderness adventures, volunteering, personal growth and learning new ways to live on our vulnerable planet (Sankaranarayanan 2014). It is typically defined as travel to destinations where the flora, fauna, and cultural heritage are the primary attractions. Responsible ecotourism includes programs that minimize the adverse effects of traditional tourism on the natural environment, and enhance the cultural integrity of local people. Therefore, in addition to evaluating environmental and cultural factors, initiatives by hospitality providers to promote recycling, energy efficiency, water re-use, and the creation of economic opportunities for local communities are an integral part of ecotourism (Andrade and Rhodes 2012).

ELEMENTS AND PLANNING FOR ECOTOURISM

Ecotourism has been considered as a tool/ strategy for sustainable development. This point of view claimed that ecotourism not only protects the environment but contributes to socio- economic development and strives for sustainability (Weaver 2006). As the TIES existing definition included only two (Conservation and Local Communities) of the three pillars of ecotourism, the inclusion Interpretation now holds a place. Therefore, TIES revised definition is "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people and involves interpretation and education" with the specification that education is to staff and guests (TIES 2015). (Figure 1).

Ecotourism comprise conservation, local communities and sustainable travel. This means that those who implement, participate in and market ecotourism activities should adopt the following ecotourism principles (TIES 2015):

- Reduce physical, social, behavioral, and psychological impacts.
- Shape environmental and cultural awareness and respect for local natives.
- Provide positive experiences for both tourist and local hosts.
- Provide straight financial benefits for conservation.
- Generate financial benefits for both local people and associated industry.
- Deliver memorable interpretative experiences to tourists that help raise sensitivity to host countries' political, environmental, and social climates.
- Design, construct and operate low-impact facilities for ecotourism.
- Recognize the rights and spiritual beliefs of the Indigenous People in local community and work in partnership with them to create empowerment.



Fig. 1: Pillar of Ecotourism

Most of tourism in natural areas even today is not ecotourism and thus it is not sustainable (Singh 2015). Ecotourism as a very specific form is part of the broad concept of nature-based tourism, or it can be said that ecotourism describes a nature-based operation in the field of tourism. “The most obvious characteristic of Ecotourism is that it is nature based (Weaver 2006). Conventional tourism is often impervious to the need of generating employment opportunities, especially for local community. The ecotourism, on the other hand, generates such opportunities and attempts to implement the same. While the conventional tourism is neutral to the ethics of the environment and society, the eco-tourism has strong conservation sense (Honey 2008). Ecotourism rather respects environmental, social and cultural values (Wright et al. 2015). The important differences among conventional mass tourism and ecotourism are highlighted in figure 2.

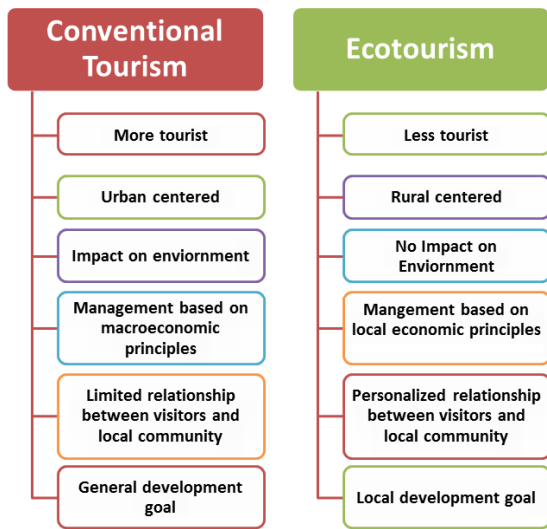


Fig. 2: Difference between conventional tourism and ecotourism.

Ecotourism is distinguished by its emphasis on conservation, education, traveler responsibility and active community participation (TIES 2015). Ecotourism is

- non-consumptive / non-extractive
- creates an ecological conscience
- holds eco-centric values and ethics in relation to nature (Figure 3)



Fig. 3: Principles of ecotourism

TIES hopes this gives clarity to those activities that are considered consumptive/ extractive and which cause behavioral and psychological impacts on non-human species. TIES consider non-consumptive and non-extractive use of resources for and by tourists and minimized impact to the environment and people as major characteristics of authentic ecotourism (TIES 2015).

The following elements are crucial to the ultimate success of an ecotourism initiative (Figure 4).

1. Ecotourism must have a low impact upon a protected area’s natural resources.
2. Ecotourism must involve stakeholders like individuals, communities, ecotourists, tour operators and government institutions, in the planning, development, implementation and monitoring phases;

3. Tourism activity must respect local cultures and traditions;
4. Ecotourism must generate sustainable and equitable income for local communities and for as many other stakeholders as possible, including private tour operators;
5. It must generate income for protected area conservation; and
6. Prior to plan ecotourism it is must to educate all stakeholders about their role in conservation.



Fig. 4: Elements of Ecotourism

Ecotourism is a type of sustainable tourism that aims at conservation of the environment through development of the indigenous communities (Scheyvens 1999; Das & Chatterjee 2015). Proper planning and execution is necessary for successful development of ecotourism site (Figure 5).



Fig. 5: Ecotourism plan management

The important steps in ecotourism plan management include:

1. Resource protection: The first step in successful ecotourism planning is to define the area to be developed as ecotourism site based on ecological, scientific, economic, aesthetic, and recreational values.

2. Outline Management Zones: Protected and managed areas are most successful when overlay zones are applied for different types of uses. This ensures that activities that cause environmental impacts such as tourism or agriculture operate in least environmentally sensitive regions.

3. Establishing management: A management authority should be established that includes local resident and all stake holders. Jobs and economic benefits must stay with local community. The role of the authority is to develop guidelines, provide input on government planning and initiatives.

4. Effective marketing: Research has shown that eco-tourists are typically interested in more than one kind of activity. This is important both from a destination-wide side and from an individual operator side, when product package options are being placed together. Operators, themselves, need to offer a wide range of experiences or choices. Cooperation, partnerships and research are essential for attracting tourists.

5. Funding Sources: Conventionally protected areas have been funded and managed almost exclusively by government authorities. These provisions have been changing as government funding can run into insufficiency and conservation goals can change with political administrations. Public and private partnerships are more conjoint in the establishment of new ecotourism sites.

Increased tourism to sensitive natural areas without appropriate planning and management can threaten the integrity of ecosystems and local cultures (Bhuiyan et al. 2013; Singh 2015). The increase of visitors to ecologically sensitive areas can lead to significant environmental degradation. Likewise, local communities and indigenous cultures can be harmed in numerous ways by an influx of foreign visitors and wealth. Additionally, fluctuations in climate, currency exchange rates, and political and social conditions can make over-dependence upon tourism a risky business (Fletcher 2015; Sardiana & Purnawan 2016).

However, increase in ecotourism activities creates significant opportunities for both conservation and local peoples. Ecotourism can provide much-needed funds for the protection of protected area and other natural areas - money that might not be available from other sources (Singh et al. 2007; Stronza & Gordillo 2008).

Moreover, ecotourism can provide a sustainable economic development alternative for local peoples with few other employment options. Furthermore, ecotourism can increase the level of education and activism among travelers, making them more enthusiastic and effective agents of conservation (Chourasia & Agrawal 2011; Dogra & Gupta 2012).

STUDY AREA-SORSAN REGION OF BARAN DISTRICT

After reports of presence of Great Indian Bustard (Godawan), a near-extinct species and the state bird of Rajasthan, state government in 1984 has banned poaching or hunting of animals in sorsan region under wild life act 1972. It is known for conservation of blackbuck and other wild life. It is located in Anta tehsil of Baran district of Rajasthan.

The protected area spreads between Amalsara and Sorsan village. It stretches over 35 square kilometers between right main canal of the Chambal and the Parvan river (Figure 6). It is 50 km east of Kota (25.00° -25.80° N, 76.12° - 76.18° E) having scrubby vegetation and numerous small water bodies, which harbour amazing varieties of birds as well as animals.

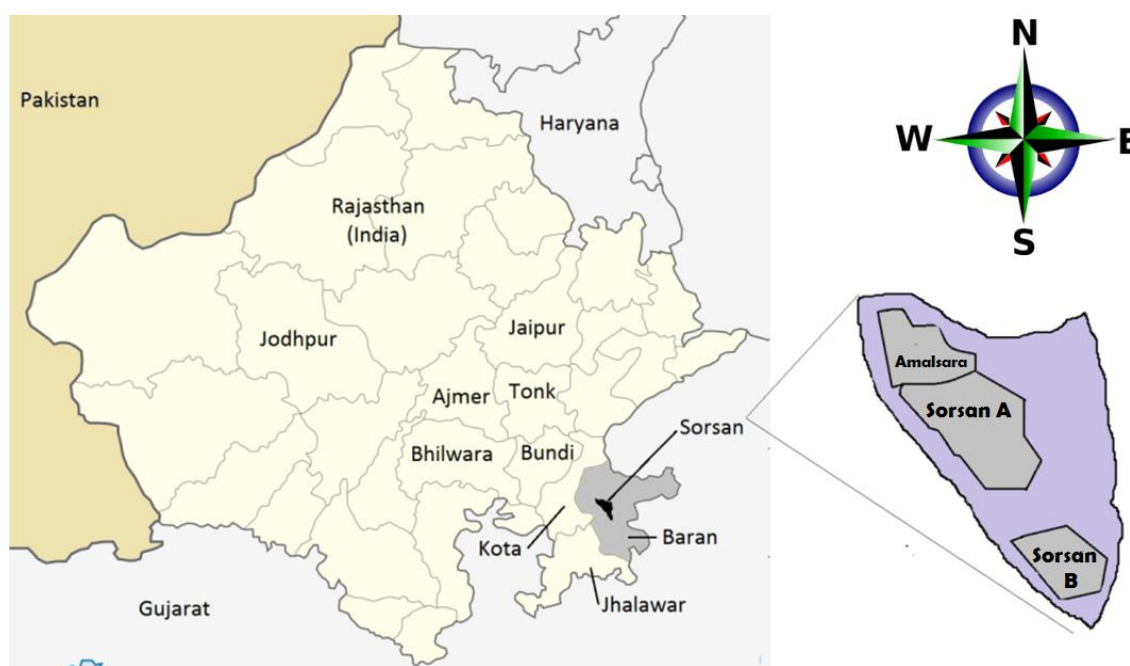


Fig. 6: Map of potential ecotourism Sorsan region.

ECOTOURISM POTENTIAL FOR SORSAN REGION

The Sorsan region has high potential to designate as blackbuck sanctuary and also has high tourism potential due to good transportation facility from Kota and Baran districts. Comfortable accommodation facility with natural habitat are available in nearby cities as Anta, Kota, Bundi and Baran at a distance less than 50 Km. Sorsan is blend of spirituality coupled with wildlife adventures (Figure 7). The Brahmani Mata Temple, the Amalsara huts and the Nagda are religious sacred establishments which allow tourist to stay and witness spirituality with a closer vicinity of natural wild life and beautiful forest. Sorsan Mataji temple, also known as Brahmani Mata Mandir (Figure 7A) is located at a distance of 20 km from Baran in Sorsan village. The statue of Brahmani Mata is situated under the large natural rock in the cave. The temple houses a special oil lamp, ‘Akhand Jyoti’ which is believed to be burning

uninterrupted since last 400 years. Every year, on shiv ratri (Jan-Feb), a fair is organised in the temple premises. Near the temple on the steam there is anicut (small dam) which when filled with water increases the beauty of place. Tourism department has initiated many activities like boating and water sports which attract local tourists.

Within this region at Amalsara six spacious and beautiful huts are constructed with modern facilities to attract and accommodate night stay of wildlife loving tourists (Figure 1B). Place also has two watch towers for tourist to spot wild animals and have grand view of natural scenic beauty (Figure 1C). Nagda is a small rural village and have many major tourist attractions near to it. Important attractions are Kanyadash-Bilasgarh, Kapildhara, Manihara Mahadevji Mandir, Nahargarh Fort, Ramgarh Bhand Devra Temple, Tapasviyo ki Bagechi, Suraj Kund. Here one can witness rural life very closely within close proximity and can explore native fauna and their ethnic use.

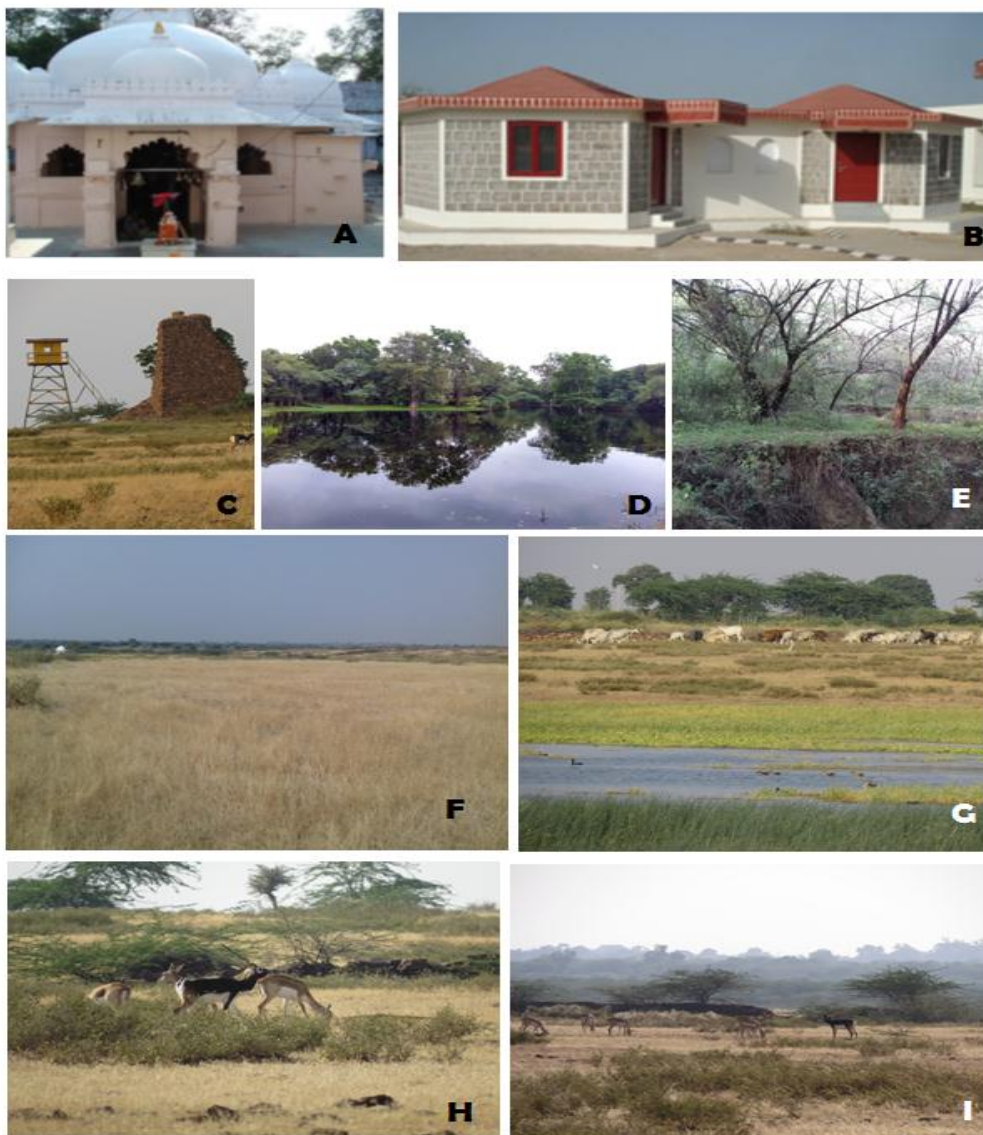


Fig. 7: Sorsan is blend of spirituality coupled with wildlife adventures

Sorsan region is very eco-diverse area; it has several structurally and functionally identifiable ecosystems, such as different types of forests, grasslands, pastures, river catchments, ponds and swamps (Figure 1). The potential of Sorsan region to attract wild life lovers, bird watchers and sacred

explorers is immense. It is time to take planned marketing strategies such that this region can be promoted and its wild life wealth could be presented among potential tourist (Figure 8). In this area hunting, poaching and capturing of animals is not allowed.



Fig. 8: Wild life in Sorsan region.

It has around 2000 blackbucks (*Antelope cervicapra*) and 250 chinkara (*Gazella bennettii*). Besides the blackbuck various mammalian species are found in sorsan region including wolf (*Canis lupus*), Hanuman langur (*Semenopethicus entellus*), Indian gerbil (*Tatera indica*), Jackal (*Canis aurius*) and small Indian civet (*Vivericula indica*). Some other species of mammal present are namely Hare (*Lepus nigricolis*), Squirrel (*Funambulus palmarum*) and species of rodents.

Reptilian fauna like Chameleon (*Chameleon zeylanicus*), Oriental garden lizard (*Calotes versicolor*), Snake-eyed lacerta (*Ophisops jerdonii*) and Snakes like Indian cobra (*Naja naja*),

Krait (*Bungarus caeruleus*) and Rat snake (*Ptyas molurus*) are commonly found in this region.

During monsoon season insects are very abundant in Sorsan region, which attracts many birds, including blue cheeked bee-eater, white-eared bulbul, orioles, quails, partridges, robins, shikra, white throated kingfisher, weavers, greater coucal, little egret and waterfowl such as bar-headed and greylag geese, common pochards, teals, common moorhen and pintails. Flocks of immigrants, such as warblers, flycatchers, larks, starlings and rosy pastors can be seen during winter season.

This region has all potential to become bird and blackbuck tourist sanctuary. Emphasis must be placed on capitalizing the unlocked potentials of marketing and conservation. This is right time when the government and local population have to come together for the conservation of the Sorsan wild life region. Tourist started to flock to Kota region with the purpose of wildlife tourism meaning that conservation strategies are required.

DISCUSSION AND CONCLUSION

Only 12-13 percent of earth's surface is covered by national parks and other conservation areas in total, it is vibrant that these areas alone will not guarantee the survival of species and ecological communities, even in absence of the impacts of ongoing global change. Therefore it is essential that biodiversity rich regions outside protected area be managed in ways that allow protection and conservation of biodiversity as much possible (Ceballos-Lascurain 1996). For conservation and protection, creating a network for effective technology application between biologist, research, forest department and local people can help. One such alternative is community based ecotourism. Ecotourism with proper planning will help local community as well as conserve important biodiversity area (Kiss 2004). For promoting growth to the ecotourism development the government as well as the local people has to take initiative

Ecotourism site indicators are able to set the foundation to develop and ecological landscape as major tourist site. The important indicators for success of ecotourism for any protected region are shown in figure 9 (Bagul and Din 2016).

One of the important reasons for the development of Sorsan region as potential ecotourist site is its wide range of wild flora and fauna and the spiritual association of local communities with nature. Government must take appropriate steps for survival and development of Sorsan wild life sanctuary. The serious effort of government using appropriate technology is very important. The state government, forest department and researchers needs to encourage local community and generate awareness among them for protection of natural habitat and explain them importance of eco-tourism in this region.

Research is required to determine the potential role of local communities in participation and support for integrated wild life tourism conservation initiatives followed by increasing role of social and economic incentives (Hwang et al 2011). Management and planning of ecotourism and conservation of target wildlife species both must go side by side. Research and support are also needed to facilitate economically feasible development initiatives of ecotourism in Sorsan area to assist

conservation (Chourasia & Agrawal). There is need to determine whether what circumstances, and by what means, local communities can be financially benefited from such projects. Similarly, an investigation of existing mechanism and barriers to community participation must be conducted (Dogra and Gupta 2012).



Fig. 9: Important Ecological Indicators

As many areas of high biodiversity are currently under increasing pressure from tourism (Pickering 2010) and are frequently exposed to increasing negative ecological footprints (Wackernagel 1996), it is critical that visitors' perceptions as well as factors influencing existing perceptions of protected areas are investigated and included in future management plans to achieve conservation improvements (Worku 2017). In addition, research is also wanted to determine the best possible ways to positively influence tourist attitude and behavior regarding wildlife conservation through various forms of wild life tourism activities.

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REFERENCES

- Andrade G, Rhodes J. 2012. Protected Areas and Local Communities: an Inevitable Partnership toward Successful Conservation Strategies?. *Ecol Soc* 17: 14.

- Bagul AHBP, Din SAM 2016. Developing Success Indicators for Ecotourism Site. *World Appl Sc J* 34: 1697-1701.
- Bhuiyan AH, Bari A, Siwar C, Ismail SM, Islam R. 2013. Measurement of Carbon Di-Oxide Emissions for Ecotourism in Malaysia Middle-East *J Scient Res* 13: 1224-1229
- Ceballos-Lascurain H. 1996. *Tourism, ecotourism and protected areas*. Gland, Switzerland: IUCN.
- Chourasia V, Agrawal LC. 2011. Potential of Ecotourism in Hadoti Region. *South Asian J Tourism Herit* 4:161-172
- Das M, Chatterjee B. 2015. Ecotourism and Empowerment: A Case Analysis of Bhitarkanika Wildlife Sanctuary, Odisha, India, IIM Kozhikode Society and Management Review 4: 136–145
- Dogra R, Gupta A. 2012. Barriers to Community Participation in Tourism Development: Empirical Evidence from a Rural Destination. *South Asian J Tourism Herit* 5:129-142.
- Fletcher R. 2015. Nature is a nice place to save but I wouldn't want to live there: environmental education and the ecotourist gaze. *Environ Edu Res* 21: 338-350.
- Honey M. 2008. *Ecotourism and sustainable development*. Washington, D.C.: Island Press.
- Hwang D, Stewart W, Ko D. 2011. Community Behavior and Sustainable Rural Tourism Development. *J Travel Res* 51:328-341.
- Kiss A. 2004. Is community-based ecotourism a good use of biodiversity conservation funds?. *Trends in Ecol Evol* 19: 232-237.
- Kunjuraman K, Hussin R. 2016. Participation in Ecotourism Development: Are They Empowered? *World Appl Sc J* 34: 1652-1658.
- Perkins H, Brown P. 2012. Environmental Values and the So-Called True Ecotourist. *J Travel Res* 51: 793-803.
- Pickering CM. 2010. Ten factors that affect the severity of environmental impacts of visitors in protected areas. *Ambio* 39:10-11.
- Sankaranarayanan KG. 2014. Behavioral approach of eco-tourists to nature and environment. *Radix Int J Res Social Sc* 3: 1-12.
- Sardiana IK, Purnawan NLR. 2016. Indigeneous community, ecotourism and sustainability: Experience from Tenganan Dauh Tukad traditional village. In: Radzi et al (eds) *Heritage, Culture and Society*, Eds., Taylor and Francis group, London, pp 591-594
- Scheyvens R. 1999. Ecotourism and the empowerment of local communities. *Tourism Management* 20:245-249.
- Singh T, Slotkin M, Vamosi A. 2007. Attitude towards ecotourism and environmental advocacy: Profiling the dimensions of sustainability. *J Vacation Market* 13: 119-134.
- Singh V. 2015. Eco-Tourism as a Sustainable Alternative to Conventional Tourism. *J Tourism Hospit*, 4:168.
- Stronza A, Gordillo J. 2008. Community views of ecotourism. *Annal Tourism Res* 35: 448-468.
- TIES. 2015. The International Ecotourism Society (TIES) – 2015. www.ecotourism.org
- Tripathi KL. 2016. Tourism to Ecotourism: A Tour. *Int J Humanities and Social Sc* 3: 27-29.
- Wackernagel M, Rees M. 1996. *Our ecological footprint: Reducing human impact on the earth*. Philadelphia, PA: New Society Publishers.
- Weaver DB. 2001. *Ecotourism*, John Wiley & Sons: Milton.
- Weaver DB. 2006. *Sustainable Tourism: Theory and Practice*, Oxford: Elsevier Butterworth Heinemann.
- Wight P. 1993. Ecotourism: Ethics or Eco-Sell? *Journal of Travel Research* 31: 3-9.
- Worku M. 2017. The Role of Forest Biodiversity Conservation Practices for Tourism Development in a Case of Tara Gedam Monastery, South Gonder Zone, Ethiopia. *J Ecosyst Ecography* 7: 231-236.
- Wright J, Hill N, Roe D, Rowcliffe J, Kumpel N, Day M, Booker F, Milner-Gulland E. 2015. Reframing the concept of alternative livelihoods. *Conservation Biol* 30: 7-13.