
POTENTIAL ECOTOURISM DEVELOPMENT AND ITS IMPACT ON LOCAL COMMUNITIES: A CASE STUDY OF DHENKANAL

Bharat Bhusan*1, Swapna Sarita Swain*2, Dr. Piyush Ranjan Rout*3

*1M Plan Student, Department Of Planning, Odisha University Of Technology And Research, Bhubaneswar, Odisha, India.

*2Assistant Professor, Department Of Planning, Odisha University Of Technology And Research, Bhubaneswar, Odisha, India.

*3Lecturer, Department Of Planning, Odisha University Of Technology And Research, Bhubaneswar, Odisha, India

ABSTRACT

This paper examines the local people's viewpoint and tourists view point on ecotourism development in Saptasajya and Kapilash, located in Dhenkanal district of Odisha. Local community's perception and intention towards the socio-economics dimensions of ecotourism, that is sustainable community development and local communities' participation in ecotourism planning and management were measured. Additionally, the paper appraises whether there is consensus between the community attitude and intentions towards ecotourism development of the area. The analysis is based on data collection and survey through questionnaire interview with the local people living in and around the Saptasajya and Kapilash tourist sites. The survey findings show that the local people are in support for ecotourism development and improvement of the area, but there are some onsite issues and demands of people which need to be addressed. It is suggested that the issues, potential tourist site development and improvements options need to be looked upon. As well as for effective local community development, the local communities demand, socio-economic issues need to be addressed and a community empowerment framework need to be proposed so as to create awareness among the people so they may get equitable benefits emerging from ecotourism activities of the study area.

Keywords: Ecotourism, Local Community, Sustainability, Livelihood, Development.

I. INTRODUCTION

Tourism may be defined as the movement of the people outside their usual environment to another place (with the intention to return) for a minimum period of twenty-four hours to a maximum of six months exclusively for leisure and pleasure. Tourism is not limited only to activities in the accommodation and hospitality sector, transportation sector and entertainment sector with visitor attractions, but tourism and its management are closely linked to various major functions, operations and procedures that are followed in various areas related to tourism. Tourism as an economic sector contribute significantly to development and economic growth of a region by creating employment opportunities directly or indirectly, through supply of goods and services necessary for tourism activities and maintenance. On top of that tourism provide socio-economic benefits to the region (i.e., SMEs development, employment generation, infrastructure development etc). Tourism has become one of the fastest growing industries and a medium of foreign exchange and job generation for many countries. It is one of the most remarkable socio-economic phenomena. Odisha is well known for mainly 4 types of tourism: Rural/Tribal tourism, Cultural/Heritage tourism, religious tourism and Eco tourism. Odisha has a great vantage point in field of ecotourism.

Ecotourism

As per The International Ecotourism Society (TIES), ecotourism is being defined as "responsible travel to natural areas that conserve the environment, sustains the well-being of the local people, and involves interpretation and education". Ecotourism is an element of sustainable tourism. Ecotourism has deemed to be an effective tool for sustainable tourism, which is why various developing countries are now adapting it and including it in their economic development and conservation strategies. Ecotourism involves visiting natural sites to learn, study or to carry out various nature based outdoor activities which are environment friendly. It is basically tourism which allows the tourist to experience the nature and enables the socio-economic growth and development of local communities.

Odisha state is well known for its beautiful bounties of nature like valleys, hills, mountains, waterfalls, gorges, soaring peaks with rich wildlife in their own habitats. It is a land of vast potential for development in ecotourism sector and for tourist looking to experience the nature and wild landscape in a sustainable way, Odisha holds something for everyone.

Ecotourism in Odisha

Ecotourism is gaining momentum in Odisha. People are getting attracted more towards nature camps and areas with wild landscapes, especially in rural regions, as they want to experience more about the nature, so it can create a new unexplored tourism market in Odisha. On the other side, from a socio-cultural standpoint, ecotourism can help in building awareness around environmental and social issues. Both local population and visitors, get more knowledge about the surrounding environmental wealth i.e., it creates an ecological and social conscience. Ecotourism can work as a tool in sustainable development of local community and at the same time it shall help in preserving the environment and wild life. It provides an alternative source of income to the local communities, which help in the development of their economic condition. Ecotourism helps in preserving the integrity of the tourist spots. Its focuses on preservation and conservation of local environment and historical heritage as well as supporting the local community culture and encouraging them to protect and look after the natural resources which attract the tourist to those area.

II. STUDY AREA

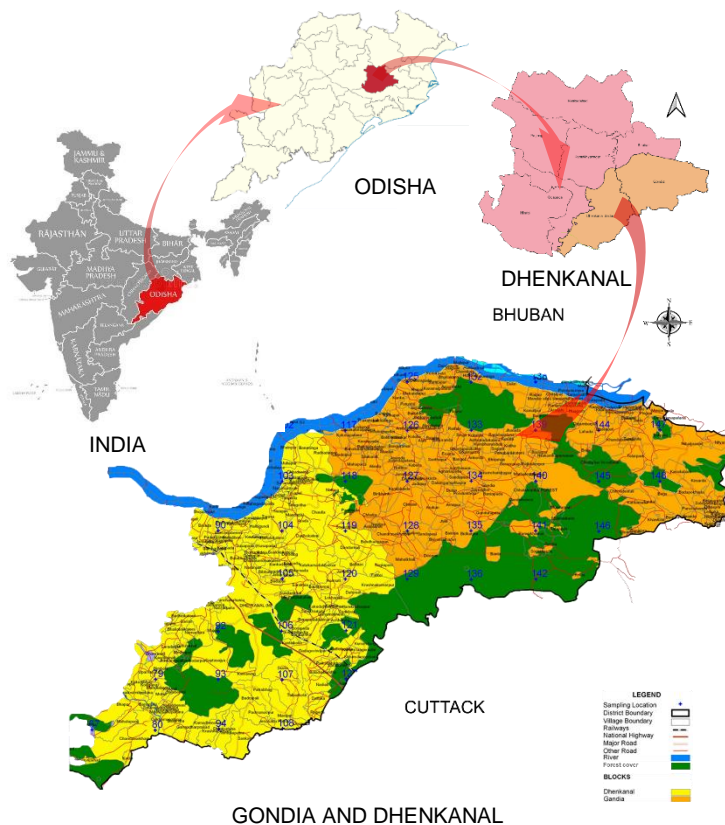


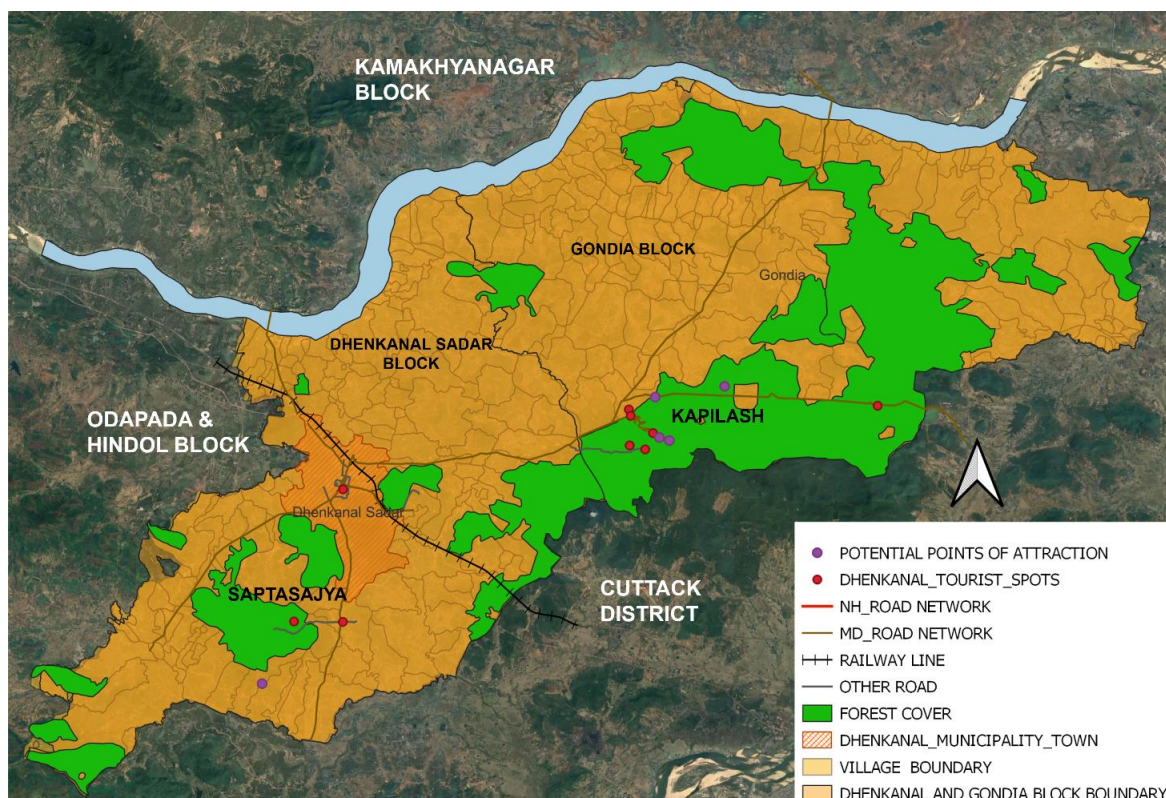
Fig 1: Map of Gondia and Dhenkanal Sadar Block Source:Google

The study areas are the Saptasajya and Kapilash of Dhenkanal district. The study area covers parts of 2 blocks of district, which are Gondia block and Dhenkanal Sadar block. The Saptasajya forest area is a well-known Nature camp, getting a lot of visitors. It is located in Dhenkanal sadar block. Kapilash is located in Gondia block of Dhenkanal district. In Kapilash, a significant area is covered with forest, along with hilly regions, which is the Kapilash hill. The Kapilash forest got designated as wild life sanctuary in year 2011. The wild life sanctuary covers an area of 125.5 sq km. The study areas are well connected through road network and railway network. The study area Saptasajya can be accessed through NH 655 via Athagarh and Kapilash can be accessed through the Tangi Road through Kapilash wildlife Sanctuary. The Saptasajya and Kapilash are connected through the

main district road, which passes through the Dhenkanal town. The Dhenkanal town is the main urban centre, providing all the required urban facilities and services, ie transport, accommodation, healthcare, etc. The Dhenkanal town has the main bus stand and railway service (Dhenkanal Railway station). The distance between Saptasajya and Kapilash is 31.8 Kms. The Gondia Block is connected to Dhenkanal sadar through main district road.

The Saptasajya is a natural forest reserve with nature camp and is deemed as an ecotourism site. The area is surrounded with beautiful forest covered landscape and hills. It is a well-known spot for picnic. The Saptasajya forest covers an area of 24.06 sq. km. A large number of tourists come to this place usually during December and January for picnic and recreation. Also, a temple is situated dedicated to Shri Ram is situated near the base foot hill of saptasajya. The Saptasajya are a group of hills connected side to side and climbable. Near Saptasajya, a small village named as Sadeibareni is situated, which is renowned for its bell metal and Dhokra handicraft. The village houses 45-50 families. Around 130 artisans of this village are engaged in dhokra handicraft making which is the source of their livelihood. The major buyers are the tourists who come to visit the Saptasajya hills. The village act as a point of attraction enhancing the tourism reputation of Saptasajya.

Then as of Kapilash, it is well known as a religious tourist spot, for the renowned Chandrashekhar Mahadev temple is situated on the Kapilash hill. It is well known for its scenic beauty and act as a great vantage point for land scape and sight viewing. The Tapoban Mahima ashram is also situated on Kapilash hill which is also a local attraction. The forest area near and over the Kapilash hill is been declared as wildlife sanctuary. It houses a wide ranges Flora and fauna. In Flora, Sal, is the dominant species of trees in this sanctuary. Other notable flora include Amla, Asan, Bela, Bija, Dhaura, Gmabhari, Jamu, Kadamba, Kanchan, Kangara, Karanja, Kasi, Kendu, Kusum, Mahul, Mango, Mundi, Phasi, Sidha, Simul and Teak. In the core area of the sanctuary, traces of Lamiaceae were found. Important Fauna includes a variety of animals like Asian elephant, golden jackal, Grey langur, Bengal fox, Indian crested porcupine, Indian giant squirrel, Indian peafowl, Sambar deer, Striped hyena, Wild boar, and various varieties of birds, lizards etc. A Medicinal plants conservation area is also located at the foothill of the Kapilash hill forest. A Deer Park is also situated near Kapilash foot hill, which is a local attraction.



Map 1: Study area location, road linkage and connectivity

Source: primary

Thousands of people visit the tourist spot. These sites receive visitors all year long. Most people visit Kapilash mainly for religious cause, and people come to Saptasajya for nature and recreation purpose. Also, during various festival seasons, these sites receive a considerable number of tourists. The peak season of tourist inflow ranges from **October to February**. The tourists visit both Kapilash and Saptasajya throughout the year, but the **highest footfall** is seen in the month of **January, then December** followed by **November** and **October**. Also, during religious occasions, like in Ram Navami, Mahashivaratri there is considerable tourist inflow. During Shravan month, which is around July-August, Kapilash receives a considerable number of tourist and devotees.

Study area current Scenario

The Saptasajya forest has been deemed as an ecotourism spot, but the site is being not properly developed or maintained. The tourist convenience centre is not properly maintained. Mere beautification and repair work has been done, which is not up to par. No proper development work has been done to improve and enhance the Saptasajya nature camp. Tourist who come to visit the Saptasajya, return disappointed for there is no necessary service facilities available and there is lack of attractive recreational activities, which makes the site unvisitable for second time as per tourists. There are no accommodation facilities available near the Saptasajya region except for a nature camp bungalow of two suites, accommodating only 4 people at once. It is managed by District Forest department. There are no proper options for tourist to stay near the site.

The Sadei bareni handicraft village situated near Saptasajya, though renowned for its handicraft industry, the village itself is very underdeveloped. The communities are the tribal people enlisted as Situla tribal, who practise the ancient dhokra handicraft making. Kapilash hill is mostly well known for the renowned Chandrashekhar temple and beautiful forest landscape but no proper development has been done to the site. There are some places which has potential for ecotourism development but no proper steps have been taken.

Livelihood and people's involvement in tourism sector

Both tourist sites regions are majorly rural. Major economic activity of the study area block is agriculture. Around 45% of working populations are engaged in agriculture related activities. Less than 2% of working population of the study area blocks are engaged in tourism sector. The people who are involved directly or indirectly in tourism sector are mainly the community of handicraft village, the hotels and lodges owners and employees, the small restaurants owners, transport like hired cabs, mini buses, small convenience shops. There is no proper community awareness or programs functioning related to involvement of local people into the tourism sector.

III. METHODOLOGY

The aim of the study is to analyze the present ecotourism condition of the site and propose a systematic framework for community-based tourism and assist in socio-economic growth of local communities through involving the people in ecotourism sector of the study area. Detecting the short comings and finding opportunities for improving it. According to the aim the objectives were to assist in community development by providing the alternate source of livelihood to local community which is more sustainable, to identify the gap in tourism infrastructure in the potential tourist sites of Gondia and Dhenkanal sadar by analysing the problems and issues faced by the tourists, to propose strategies for community development through tourism sector. The study follows a site study design, literature analysis and also onsite person to person interview with the local communities who are involved in tourism sector directly or indirectly and also analysing inputs of the visiting tourists.

IV. ANALYSIS

For primary data collection, field survey work was done on the site and surrounding villages. According to the Indian census data of 2011, Saptasajya consisted of 1091 residents and 268 households and Patrabhag village consisted of 2836 residents and 672 households, and In Kapilash region, in Deogan consisted of 2343 residents and 486 households and Sorisiapada consisted of residents 737 and 138 households. Most of the local residents between the ages of 15 and 60 were either studying or engaged in agricultural activities, small household industries and other works like in private or government jobs. Therefore, a quota sampling of local residents was implemented to equally represent different age and gender groups from both communities. Cluster method was applied to interview local residents, in Saptasajya, Patrabhag and in Deogaaan as many communities in

these villages are directly or indirectly involved in tourism for their livelihood. Convenience Sampling method was used to collect data from the tourists visiting the sites.

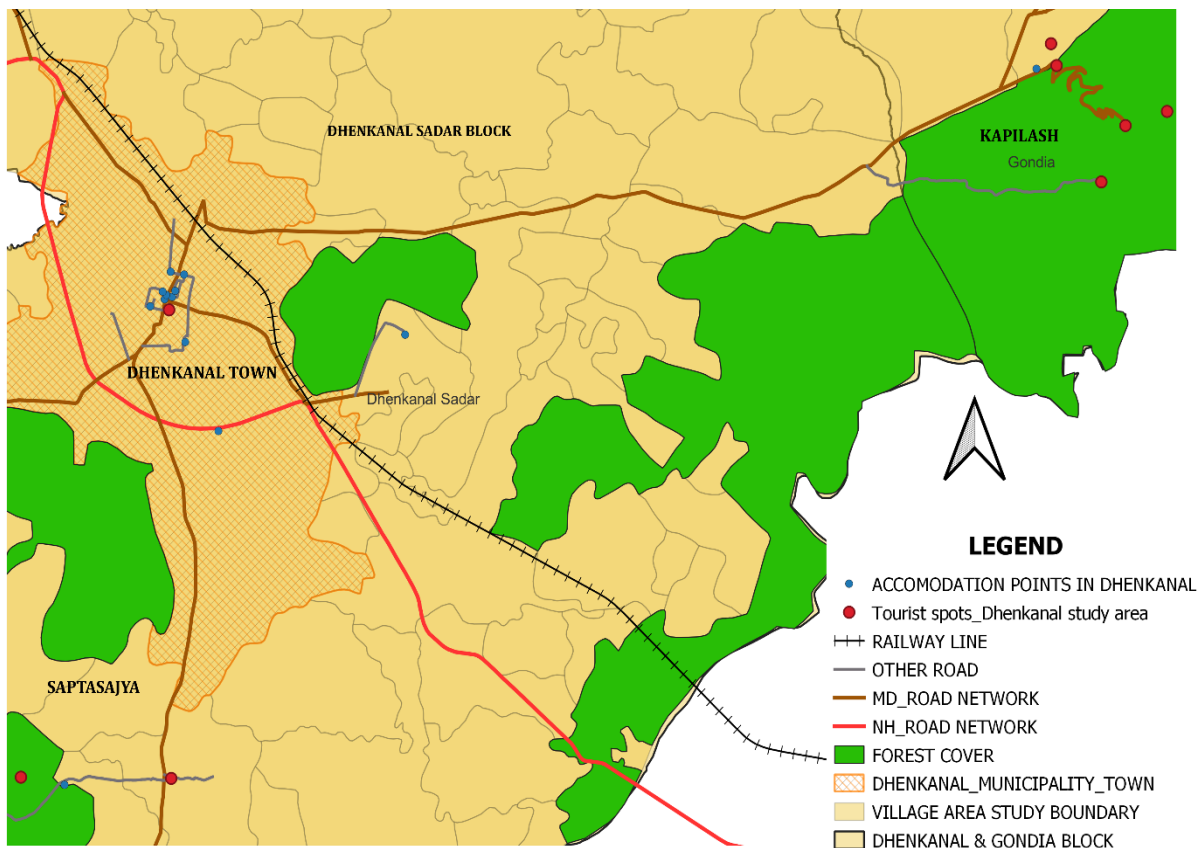
Tourist preferring to stay in study area

As per sample survey conducted of tourist and they were asked about their duration of stay in and near the tourist sites and their experience after visiting the sites. After survey it was observed that tourist preferring to stay in Dhenkanal for less than one day is 68%, for 1 day is 25% and for 2 days is 5%. Tourist don't usually stay for more than 2 days. The main factor behind this is that most people come to Kapilash only for religious cause, and they go back after seeing it. Also, there is no accommodation facility available nearby, except for one. As of in Saptasajya, it is situated 10-11 km away from Dhenkanal town. So various accommodation facilities are available in the town and tourist commute from the town. The main reasons they don't stay, because of absence of proper facilities in the tourist spots itself, and absence of recreation facilities for the visitors to keep them entertained. There were various issues onsite, which is demeaning the tourist spots integrity which are: -

- Lack of public toilet facility,
- Absence of proper drinking water facility,
- Poor maintenance of tourist spots,
- Public convenience centre is not functioning,
- Lack of recreational activities.

Accommodation facility:

Accommodation facility is a major issue as there is tourist movement throughout the year, but the highest footfall is around December and January followed by November and October. Through survey it was observed that maximum accommodation facilities are available in the Dhenkanal town, which is located away from the tourist sites. In total there are nine hotel/lodging facilities available in the study area block with total 170 rooms accommodating 680-700 people at one time. And the accommodations currently available do not carter the lodging requirement of tourist inflow especially during the peak period and projected future tourist inflow.



Map 2: Map showing locations of accommodation points in study area blocks

Source: Primary

Table 1: Available accommodation rooms and required gap analysis

No of hotel rooms present currently	Current Requirement of rooms	Projected room requirement for 2021 (Under normal circumstance)	Projected room requirement for 2031	Projected room requirement for 2041	Gap analysis of rooms for 2021
170	220	254	425	595	45-50

Source: Primary

Local communities Condition

Questionnaire interview and local survey was conducted in the nearby villages of tourist sites. Near Saptasajya, the dhokra handicraft village Sadei bereni is situated, which act as a tourist attraction, but no proper development is done. An Exhibition Hall facility have been built which has been inaugurated since 2018 for displaying and promoting handicraft, art & culture of the district, but it is not yet opened to public. There are some political & administrative issues which is yet to be resolved. Most of their livelihood is through selling their handicrafts, making an average income Rs 5000/- a month. Most of the buyers are tourist from foreign and outside states, traders. But recent pandemic, caused a sharp decline in tourist and their business was also hampered. There is no constant source of income, due to which the people are now shifting to other menial jobs in town. People from other nearby villages are mostly engaged in agriculture and other work categories.

As of in Kapilash, it is more of a religious centre rather of an eco-tourist site, but there are various spots around it where tourist go for nature trail, like Tapoban, Devsabha on Kapilash hill. The major activities people are engaged in related to tourism is in transportation, restaurants, convenience shops, shops selling items related to religious purposes. Etc

Local communities Viewpoint on Ecotourism development

Local residents were asked about their view and attitude towards ecotourism development based on socio-economic dimensions, which are Sustainable community development and Local communities' participation in ecotourism planning and management. A set of questionnaires was asked to the local communities and their responses were analysed.

Table2: Local people's response towards ecotourism development

Statements	Not in favour (%)	In favour (%)
Dimension 1: Sustainable Community Development		
1.Waste reduction	0.00	100.0
2.Tourist littering	98.2	1.8
3.Crowding of tourist in the community	36.1	63.9
4.Accepting the negative tourism impact for essential local development	62.8	37.2
5. Increasing non local tourism investment	63.9	36.1
Dimension 2: Participation in ecotourism planning and management		
1.Communicating and linking with local government for ecotourism development and planning	1.5	98.5
2. Participating in ecotourism planning	12.5	87.5
3.Increasing employment opportunities in field of ecotourism	7.3	92.7

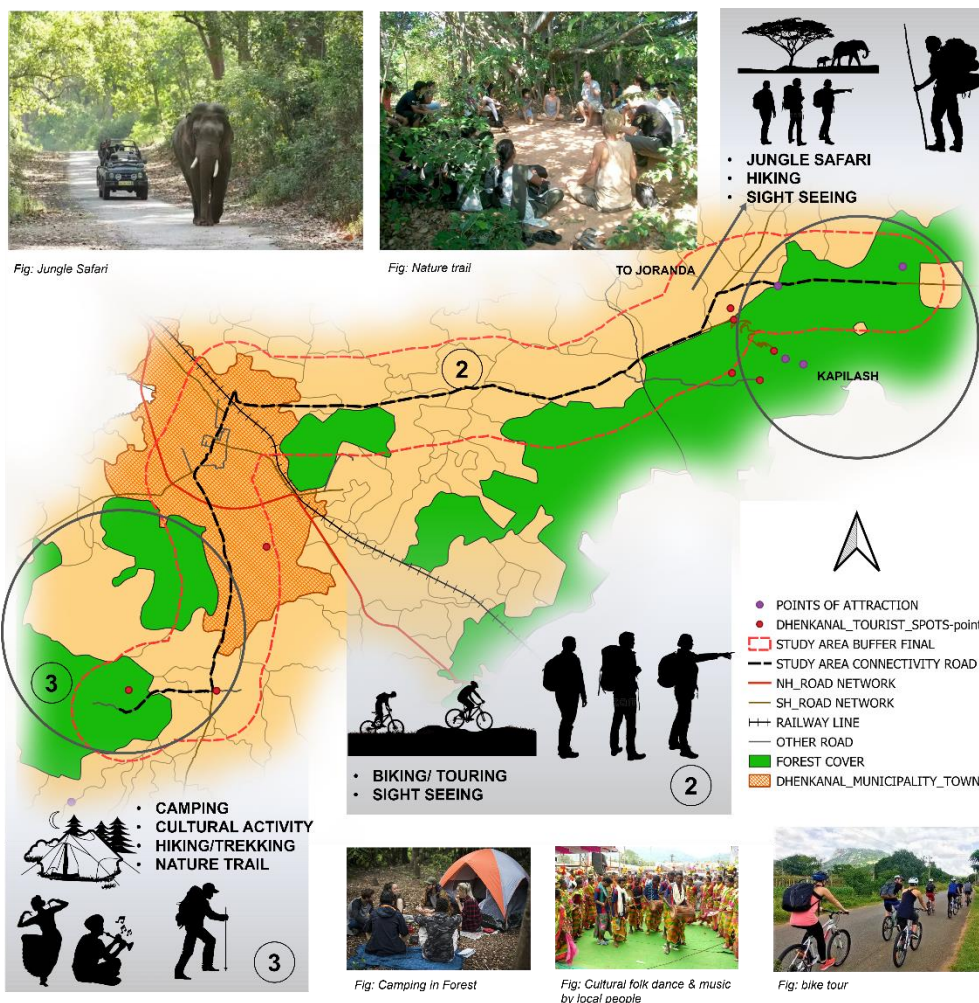
Source: Primary

V. RESULTS AND RECOMMENDATIONS

The Overall study showed the attitude of the local people and communities. The study findings showed that most of the responses are in favour of development and improvement of the ecotourism and ecotourist sites. The local people are willing to get involved in the planning and development process for their social and economic betterment of their community and region.

Recommendations for Inclusion of new tourism activities

KAPILASH AND NEARBY AREA: The Kapilash hill has great points for Hiking/trekking. It provides a great vantage point for sightseeing and picturesque view. the Kapilash sanctuary is situated at the base of the hill in which provision for Jungle Safari and Nature trail can be introduced, which will draw tourist as well as generate revenue. A Medicinal plant conservation area is situated near Kapilash, which can be developed into a sylvan trail walk, medicine reserve park.



Map 3: Additional recreation activities in the study area

Source: Primary

DHENKANAL TO KAPILASH ROAD:From Dhenkanal to Kapilash, the distance is about 24 kms. Travellers can organise & go on a bike tour, enjoying the beautiful sight of hills and forests which stretches alongside the whole way. Small interest points like handicraft kiosks can be provided along the way. People can enjoy sightseeing and marketing.

SAPTASAJYA AND NEARBY AREAS: The Saptasajya hills have lot of potential for new recreational activities like for camping, hiking/ trekking. Provision for camping facility can draw the tourist who are more interested in outdoor nature activities. Near Saptasajya, there are villages, where the local communities could provide

cultural entertainment like folk dance, music, local cuisine which will attract a lot of visitors both domestic and international.

Strategies for additional Income generation

Introduction of various tourism related activities to employ local people and increase personal income. This can be done through various mediums. Some of the recommendations are as follows.

1. **LOCAL PRODUCTS AND HANDICRAFT SELLING:** By selling the local products and handicrafts to tourist, the local people will be able to earn money, increasing their personal income. Local products other than handicrafts, other products like honey, lac, mahua flower, etc and agricultural products like pulses etc can be sold to tourists in the tourist spots at good price. Programs can be initiated through which the local people can sell their products to outside through custom order or online medium, which shall be maintained and controlled by local people with collaboration with government or NGOs.
2. **TOURIST GUIDE, CAB SERVICES, RENTAL BIKE OR SCOOTER SERVICE:** Local guides need to be provided for convenience of tourists and guiding them in sight seeing, touring, etc. The guides must be trained to communicate in various languages. Cab and taxi service will provide employment to the local people. Also, rental bikes or scooters can also be provided to tourist to tour around the local areas. These services may be managed by local people or through government & local people partnership.
3. **VOCATIONAL TRAINING ON TOURISM SECTOR FOR LOCAL PEOPLE:** There is a need for skilled and trained manpower in tourism sector, so it is an important factor. Tourism education will help the communities and local people living near the tourist sites to create local bodies and enhance leadership skills, develop planning capabilities and reinforce skills in tourism marketing. The aim is to develop tourism professionals, with keen understanding of tourism and with the skills needed to work out a career within ranges of tourism businesses. The objective is to allow the local people to study the tourism industry and develop skills which will be helpful in tourism sector of the area. The skills include guiding skills, communication with the tourists, information to visitors, hospitality and customer care.
4. **CREATING AWARENESS ABOUT SUSTAINABLE TOURISM:** Through government programs and NGOs, the local people shall be taught about community-based tourism and its merits, which will be helpful in socio-economic development of local regions. They shall be integrated into ecotourism development program of the region, which shall generate various employment opportunities. An empowerment framework shall be designed through which, local communities shall be provided with certain control over the tourism development of the region which will develop leadership skill and management skill in the people, using which they shall contribute their skill and knowledge in ecotourism development of the region.
5. **ADDITIONAL RECREATIONAL FACILITIES FOR TOURISTS:** Other than religious and picnic, additional recreational facilities like local site tour, volunteering in handicraft workshops, hiking and trekking on the hills, music and folk-dance events, regional fair organisations can be provided for the tourists to make their stay period long and get entertained. Tourist can also volunteer in local activities like collection of local products with the communities. It gives the tourist the chance to immerse themselves in another culture and create a consensus between them and the local community.

A Jungle safari initiative is undergoing, in Kapilash Sanctuary. The Jungle safari project will attract more tourist. Provision of such activities will attract more people to visit the tourist sites and surrounding areas. The activities will provide entertainment to the tourist, as well as create potential development and improvement in socio-economic status of local people and communities and infrastructure development of surrounding areas too.

Strategies for increasing tourist inflow

Through involvement of local government, Private sectors and voluntary agencies, steps shall be taken for marketing and development of tourist sites. Private bodies can be invited to invest in the tourism sector of the region in long term view and involving the local people by creating jobs in tourism sector. Development of tourism sector can be done by promoting tourism of the region both in state and country level. Establishing contacts and linkage with various travel agencies, hotels, lodging, transport, cab services for tourist hospitality, transport and service. Marketing for tourism can be done through websites, social medias, paid advertising, newspapers, brochures, billboards, etc.

Enhancement and Infrastructure development of the tourist site

- After gap analysis, it was found that there was shortage of accommodation facilities. And no lodging facilities were available near the tourist sites. Small scale eco cottage or dormitory type accommodation can be provided near the Saptasajya region as many tourists come here for the Sadei bareni handicraft village. Some of the tourists are usually art students or artists who are learning new art forms and they usually stay for some days. They can stay and learn the craft work from the dhokra artists.
- Tourist sites need to be maintained properly. Local communities and NGOs can perform cleanliness drive and create awareness among the people to keep their surrounding clean. Also, rules and regulations must be enforced by the maintenance authority of the tourist spots so that the tourists visiting the place must also do their part, i.e., use dustbins, avoid littering, making the site plastic free zone etc.
- Basic amenities like drinking water facilities and public toilet facilities must be provided not only in tourist sites, but also along the tourist transit route. A minimal fee can be charged to use the service which will be helpful in maintaining the facility as well.
- Provision of parking and transport facilities shall be provided near tourist sites. Other necessary service like emergency healthcare, banking facilities should be provided which shall also benefit the local communities along with tourist.

VI. CONCLUSION

Ecotourism is a form of tourism, which is usually generated or located in cradle of nature, and its aim is to make the visitors appreciate nature and local culture, creating a mutual consensus, and includes active involvement of local communities, generation of benefits and income for development of local region. Ecotourism is a part of sustainable tourism and has a complex effect on environment, but it also generates benefits and income. It helps in revenue generation of the region as well as it creates a positive socio-economic effect on the local region. It's been observed in the last few years, there has been a rise in ecotourism travel. People are more interested to travel places which are close to nature, away from city rustle, and it's opening up a new market of tourism. Odisha is slowly becoming a hub of ecotourism, as there is lots of potential ecotourist sites. Through proper development and framework function, it will help not only in tourism development of the state, but also help the local people and communities in sustainable and socio-economic development of the tourist region.

VII. REFERENCES

- [1] Priya, Nishi & Bhavya, Khamesra. (2021). Development of rural tourism through entrepreneurship -A study on Sadeibereni in Odisha.
https://www.researchgate.net/publication/352351521_Development_of_rural_tourism_through_entrepreneurship_-_A_study_on_Sadeibereni_in_Odisha
- [2] Scheyvens, Regina. (1999). Ecotourism and the Empowerment of Local Communities. *Tourism Management*. 20. 245-249. 10.1016/S0261-5177(98)00069-7.
https://www.researchgate.net/publication/223109664_Ecotourism_and_the_Empowerment_of_Local_Communities
- [3] Lai, Po-Hsin & Nepal, Sanjay. (2006). Local perspectives of ecotourism development in Tawushan Nature Reserve, Taiwan. *Tourism Management*. 27. 1117-1129. 10.1016/j.tourman.2005.11.010.
https://www.researchgate.net/publication/222985110_Local_perspectives_of_ecotourism_development_in_Tawushan_Nature_Reserve_Taiwan
- [4] <https://www.orissapost.com/built-at-whopping-rs-5-crore-dhenkanal-dokra-crafts-village-to-be-functional-soon/>
- [5] <https://www.orissapost.com/kapilash-sanctuary-to-have-jungle-safari-soon/>
- [6] <https://www.orissapost.com/saptasajya-tourist-destination-in-dhenkanal-to-undergo-facelift-operation-soon/>
- [7] <https://www.ecotourodish.com/saptasajya-nature-camp.php>
- [8] <https://dhenkanal.nic.in/>
- [9] Zacarias, Daniel & Loyola, Rafael. (2017). How Ecotourism Affects Human Communities. 10.1007/978-

3-319-58331-0_9.

https://www.researchgate.net/publication/319523768_How_Ecotourism_Affects_Human_Communities

- [10] Gupta, Shiv & Prakash, Chandra & Rout, Prakash. (2020). THE VALUE CHAIN APPROACH IN COMMUNITY BASED ECOTOURISM : A CONCEPTUAL FRAMEWORK ON SUSTAINABLE MOUNTAIN DEVELOPMENT IN THE JAUNSAAR-BAWAR REGION OF UTTARAKHAND. Vol. 01., 24-32.

https://www.researchgate.net/publication/343335286_THE_VALUE_CHAIN_APPROACH_IN_COMMUNITY_BASED_ECOTOURISM_A_CONCEPTUAL_FRAMEWORK_ON_SUSTAINABLE_MOUNTAIN_DEVELOPMENT_IN_THE_JAUNSAAR-BAWAR_REGION_OF_UTTARAKHAND

- [11] District Census Handbook Dhenkanal: Census of India 2011.

- [12] <https://dot.odishatourism.gov.in/sites/default/files/Statistical%20Bulletin%202020.pdf>