

# Development of Tourism Infrastructures and its Impact on Economy and Environment- A Case of Kaipholangso Tourist Spot in Karbi Anglong District of Assam, India

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## ABSTRACT

This paper is an attempt to explore the development of tourism infrastructures and its impact on economy and environment at Kaipholangso tourist spot in Karbi Anglong district of Assam. The tourist spot has been established in 2016 with initiative taken by the Kaipholangso Waterfall Chingthur Committee a local entrepreneur of Kakojan village. Infrastructure facilities like road from Kakojan village to waterfall, electricity, drinking water, market shed and toilet are operating. Tourists from different places are visiting the site and the local people have earned their livelihood directly and indirectly from this tourist spot. The study found that 20 per cent of the households are directly earning their livelihood and shaping rural economy. Uses of non-degradable particles impact the sustainability of the environment in the tourist spot. Local body and concern district authority need to take initiative for eco-friendly environment by restricting use of non-degradable particles within the tourist spot is the urgent need of the hours.

**Key words :** *Environment, Infrastructure, Rural economy, Sustainability, Tourism*

## Introduction

Tourism plays a vital role in earning livelihood for sustaining as well as promoting locally available things to outside world. Khullar (2006) mentioned that tourism in India has a strong relevance to economic development, cultural growth and national integration. Chutia (2015) in his research paper highlighted that tourism is now-a-days considered as an important industry which has vast scope for the generation of income and employment. It is one of the world's fastest growing industries, a major source of foreign exchange earner of a nation and a measure for resolving interstate and inter-community conflict. Indian Tourism Statistics, 2023 stated

that tourism continues to play an important role as a foreign exchange earner for the country. In 2022, foreign exchange earnings (FEEs) from tourism were US \$ 17.611 billion as compared to US\$ 8.797 billion in 2021, registering a growth of 100.19% and achieved 57.33% recovery as compared to pre-pandemic year 2019. Bhattacharya (2022) stated that there is a sizeable demand towards nature-based tourist attractions, viz- wildlife, national parks, sanctuaries, etc. There is every possibility of expanding tourism venture to all such protected areas of Assam, which are rich in terms of varied flora and fauna. Das (2013) in his research work has mentioned that tourism has the greatest potential for generating income and employment opportunities

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in Assam because the state is endowed with flora and fauna and exceptionally rich in bio-diversity. Roy (2020) in his studies stated that ecotourism practices provides an opportunity for sustainable use of biodiversity resources and can be used to improve the well-being of forest dependent local communities. Ronghang and Sen (2022) in their study mentioned tourism potentials and resources available in Karbi Anglong district but remained undiscovered and unexplored till date in many places. Karbi Anglong district has diverse geographical features like hills, plains valleys with numerous rivers, streams and springs along with its rich flora and fauna. Mother Nature has indeed blessed to Karbi Anglong with potentialities for tourism industry in the district. Tourism is of the instrumental for sustainable human development for employment generation, environment regeneration and more importantly for development in the remote area. One of the missions of tourism department is to establish Karbi Anglong as hot tourist destination in the World Tourism Map (Achievement Booklet, 2019-20). The Karbi Anglong Autonomous Council (KAAC) has been great endeavour for tourism department and the department has been involved development of sustainable tourism infrastructure like construction of tourist lodges, availing roadside amenities and cafeteria. New tourist spots have been identified and developed and the tourism department has been undertaking various schemes to provide adequate facilities for tourists; several schemes are undertaken by the department in every corner of the district (Achievement Booklet, 2022). The notable tourist destination in the district includes

Taralangso (Karbi People's Hall), Recreation Park, Garampani (Hot springs), Langvoku, Longsokangthu, Kangthilangso, Paklongkam, Koka, Ronghang Rongbong, Bichikri, Khanduli, Umswai, Putsari etc. From 2016 Kaipholangso located to the north-eastern part of the district is one of the newly established tourist spot under Rongmongve development block in Kakojan revenue village. Developments of tourist spot though bring greater revenue but negative impact on environment due to unhygienic uses of non-degradable particles is a matter of concern in every tourist spot. The present study tries to highlight the development of tourism infrastructures and explore its impact on economy and environment at Kaipholangso tourist spot in Karbi Anglong district of Assam.

### Study area

The undivided Karbi Anglong is one of the oldest and largest autonomous hills district districts of Assam (Fig. 1). It lies between 25°33' to 26°36' North latitudes and 92°7' to 93°54' East longitudes, and comprises total geographical area of 10,434sq.km. According to 2011 census data it has 956313 populations with the density of 93 persons/Km<sup>2</sup>. The district is bounded by Golaghat and Nagaon districts in the north and to the south is bounded by Dima Hasao district, Nagaland and Meghalaya states. In the east lies Golaghat district and to the west is bounded by Meghalaya state and Morigaon district. The region at different times was ruled by different dynasties such as the Varmans, Palas, Kacharis (Dimasas), Ahoms and then the British. Apart from this, parts of it were also ruled by the Karbis and Jaintias (Phangcho, 2001).

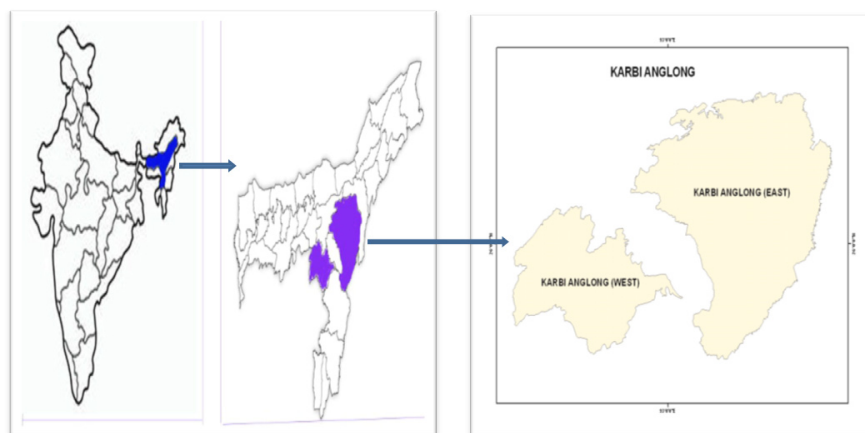


Fig. 1. Study Area, Karbi Anglong

Source: Prepared by the scholar

The district came into being on June 23, 1952 with legislative, executive, financial and judicial powers in accordance with provisions laid down in the Sixth Schedule of the Constitution of India. It is politically an autonomous unit consisting of three subdivisions Diphu, Hamren and Bokajan. This of physical and cultural setting. With diverse physical setting the district is endowed with plenty natural resources. Blessed with rich biodiversity resources some patches of the hills, rivers, streams are extremely beautiful to look at which attract tourists from different places. Kaipholangso water fall is one of the newly established tourist spot situated at 26°33' 42.888" North latitudes and 93° 36'09.631" East longitudes. The tourist spot is located within Kakojan village area having bestowed with rich flora more specifically bamboo (*Dendrocalamus hamiltonii*). The word 'Kaipholangso' has a combination of two Karbi words *kaipho* means bamboo and *langso* means stream. It is located just 5km away to the south of Bokaghat town and not varies from Kaziranga National Park too. Visitors from different places come to visit this place and enjoy the tranquil of the stream and the waterfall. It is one of the best places to refresh from busy workload and enjoy the exciting sight of the waterfall and the stream as well.

## Research Methods

Required information is collected through structured questionnaire and responses are recorded by interviewing to stakeholder and the local vendors who are selling out their products in the tourist spot. Secondary data such as books, journals, reports, and census data are also used to strengthen further reliable information. The collected data is processed using simple statistical technique and conclusions are drawn. To reveal the impact of economy and environment both qualitative and quantitative approach is applied to arrive at final conclusion. Photography is used as it is one of the visual medium of qualitative research.

## Results and Discussion

Kaipholangso waterfall is situated at 26°33' 42.888" North latitudes and 93° 36'09.631" East longitudes under the revenue village of Kakojan in Rongmonve block in Karbi Anglong district of Assam. Kakojan village has total 159 households accounting 805 populations of which 400 are males and 405 are fe-

males. Majority of the households are dependent on shifting cultivation and bamboo plantation. The tourist spot is endowed with varied flora where luxuriant canopy of bamboo and species of plants and climbers are grown well. It was after the formation of Kaipholangso Waterfall *Chingthur* (Development) Committee in 2016 the spot is known to the outsiders. Since then large numbers of visitors from different places have come and witnessed the charming beauty of the waterfall. Infrastructures like sky walk covering 300 metres length has been constructed under Assam Darshan Scheme spending amount of .7 corers to facilitate visitors for easy walk up to waterfall. Connectivity road from village to waterfall, seating shed, bridges over the stream, drinking water facility, toilet, open parking space, electricity and market shed are the infrastructures facilities availing in the tourist spot. Flows of tourists are comparatively higher during winter than that of summer season as per information provided by the committee. An impact of economy and environment within this tourist spot is briefly outlined in the following subheads:-

### Impact on Economy

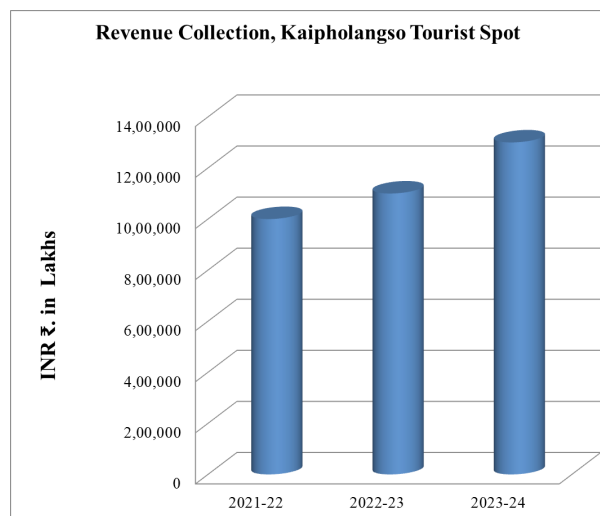
Local entrepreneur that is Kaipholangso Waterfall Chingthur Committee looks after the functioning of the tourist spot. At present the committee collected entry fees from visitors and maintain the smooth functioning of the tourist spot since from inception. It has a working strength of eleven persons of which five are appointed as permanent and six persons are on daily wage basis. As per information provided by the committee it requires approximately.50000/- per month for paying wages and other maintenance charges in the tourist spot. Flows of tourist fluctuated from winter to summer seasons. Comparatively numbers of tourist found more during winter season than that of summer season. In average per day flows of tourist found 1000 to 1500 persons in winter which comes down to only 100 to 500 tourists during summer season. The unfavourable climatic condition during summer season is the main reason for not having larger tourists in this spot. As flows of tourist is fluctuated the per day entry fees collection also varies from winter to summer. Per day entry fees collection was accounted .5000/- (in average) during winter and .2000/- during summer season. Table 1 shows annual revenue collection from 2021 to till April 2024. During the year 2021-22 accounting .10, 00000/- was collected

and increased to .11, 00000/- in 2022-23 which has further increased to .13, 00000/- in 2023-24. From this fact, that revenue collection has been increased and boost the economy of the local people directly and indirectly. As every day numbers of tourists have been coming this place and so local people have an ample scope for selling out of local products particularly Karbi traditional bag, scarf, shawl, jacket, local craft, vegetables and earned a source of livelihood. At present total 15 shops were operating while numbers soars approximately to 30 shops during winter season.

**Table 1.** Entry fees Collection, Kaipholangso Tourist Spot

| Years   | Annual Entry Fees Collection in INR. |
|---------|--------------------------------------|
| 2021-22 | 10,00,000                            |
| 2022-23 | 11,00,000                            |
| 2023-24 | 13,00,000                            |

Source: Field Survey, 2021 & 2024



**Fig. 2.** Revenue Collection, Kaipholangso Tourist Spot

Table 2 stated annual income of 15 respondents or families where their sole earning is selling out their products to the visitors at this tourist spot. Of the 15 respondents, 7 families earned their annual income ranges 0.1 lakh to 0.2 lakhs, 5 families were accounted .2 lakhs to .3 lakhs and 3 families stated that their annual income were above .3 lakhs. It is understood from this figure that these 15 families are directly earning their livelihood from this tourist spot. It can be concluded that Kaipholangso tourist spot has provided ample scope of earning

sources for the local community in Kakojan area.

**Table 2.** Annual Income of family, Kaipholangso Tourist Spot

| Annual Income in INR | No. of Family (Respondent) |
|----------------------|----------------------------|
| Above .3 Lakhs       | 3                          |
| .2 to .3 Lakhs       | 5                          |
| .1 to .2 Lakhs       | 7                          |

Source: Field Survey, 2024

**Impact on Environment:** Though establishment of tourist spot has ample scope for earning sources for livelihood but ill management and maintenance in-situ would be affected negatively to the physical environment in the tourist spot. This subhead is discussed based on the field observation how this tourist spot is negatively impact the serenity of the environment at present and what would be in near future. The water of the stream bears very clean it seems no dirty can be consumed without filtration. In some spot of its channel heap of cutting trees and bamboos are lying, which indicates destroying of greenery forest cover along the stream and it adjoining area. It is seen that shifting cultivation is being carried out in the upper part of this stream as death remnant of bamboos and trees are brought to downstream (Fig. 4: Left picture). Land along the valley of the stream mostly belongs to individual and thus conserving the whole areas is a matter of concern as stated by the committee. Fragmentation of land ownership in and around the tourist spot would affect collective decision for conservation of the area. Used of non- degradable things like plastics and glass bottles have witnessed unhygienic environment in the tourist spot. It is observed bottles of cold drinks and other intoxicated drinks are lying in the stream which would affect the natural beauty as well the ecological balance of the water of the stream (Fig 4: Right picture). A heap of non-degradable



**Fig. 3.** Image of Kaipholangso Entry Gate and Waterfall  
Source: Clipped by the author (12/05/2024)





**Fig. 4.** Polluting the serenity of the stream

materials were thrown beneath the sky walk bridge. It is also observed that broken bottles of intoxicated drink are lying along the bridge and staircase. In conclusion the tourist spot is deteriorating the physical natural environment to some extent due to uses of non-degradable particles by the picnickers.

### Conclusion

The establishment of Kaipholangso waterfall as tourist spot since 2016 has been recorded increasing numbers of tourists flow round the year and earned sources of livelihood along with promoting the concept of eco-tourism in the district as particular and the state in general. About 20 per cent of the families of Kakojan village are directly sustaining their livelihood from this tourist spot by engaging in the stakeholder and selling of their local and others products. Promoting the concept of eco-tourism along with shaping rural economy is not merely bringing positive impact in-setu conservation of biodiversity resources. The site is going to deteriorate the physical serenity due to unhygienic throwing of non-degradable particles by the picnickers. The local community and the stakeholder of Kaipholangso Waterfall Chingthur Committee should take preventive measures by restricting use of non-degradable particles within the tourist spot along with increasing working staff including cleaner in order to keep eco-friendly environment for more sustainability of the tourist spot. The tourist spot is facing proper road connectivity, transport, accommodation, hotels, government initiatives etc. In order to overcome these hurdles tourism department, the local government (KAAC) and the state government should come forwards and take bold

initiatives for development of tourism industry for generating employment and income opportunity for younger generations in the district.

### Conflict of interest

There is no conflict of interest stated by the authors

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