

A Study on Waste Management to Enhance Green Tourism-An Empirical Observation of Cherai Beach in Kerala

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ABSTRACT

Kerala has a lengthy coastal line across the state which includes many commercially significant tourist beach spots. In the era of globalization, the economic diversification and technological improvement has created a conducive environment for the tourism sector in the state. Many attractive and enjoyable beaches are here in this region as tourist destinations. Recently, Cherai beach has emerged as one of the favourite tourist destination of Cochin region. This coastal region has a unique historical and cultural tradition. It is believed as the ancient Muzris port was a nearby port of Cherai beach. This study is an attempt to examine the tourist potentials of Cherai beach, to analyse the direction of the tourist's arrivals and to assess the environmental problems those have emerged as a part of tourism development in the region. For flourishing beach tourism in Cherai requires the effective collection and disposal of wastes which are heaped as a result of increased number of both the domestic and foreign tourists. Pallippuram Grama Panchayath has began various activities for generating awareness among the general public towards cleanliness, waste treatment & waste disposal for promoting tourism in the coastal region of Cherai.

KEYWORDS: Beach tourism, New tourism, Solid waste, Environmental Challenges, Waste management, Incineration of Wastes, Kudumbashree project, etc.

1. INTRODUCTION

Human mind has an inherent bent towards travel. Man has been enthralled by travel and tourism even from the earliest historical period. Recreation and refreshment are the most important motives involved in participating tours and travels by common man. Tourism is a leisure activity which involves a discretionary use of time and money. Recently, the increased income of the people, availability of more leisure time and developed transportation facilities have contributed much for the rapid development of tourism industry in the country as well as the world across. To travel is a natural desire of human beings. Actually tourism is a service industry. Both the domestic and foreign tourists need and expect better service in tourist destinations, which are related to trip planning, booking reservations, efficiency in transportation or any other type of facilities that are related to their trips. Tourism is one of the largest industries in the world. It can contribute much to the development of the regional as well as the national economy. Effective and successful development of tourism sector of the country requires the development various sectors such as infrastructure facilities, effective marketing of the tourism products, proper preservation of natural resources and more than that the cleanliness of the tourism centers and the availability of the facilities in the concerned regions.

BEACH TOURISM IN KERALA

Kerala, the southern state of India which is considered as the ‘God’s own Country’, located on the Arabian Sea coast is an attractive destination for tourists and has a lot to offer in terms of tourist attractions. Mini video encyclopedia on tourist destinations in Kerala State is now available in internet and over 3,000 videos made by Kerala Tourism Department. It traces the pictures of the last 16 years. An e video catalogue of 3,000 footages is available on the Internet for a glance of the backwaters, hills, and other tourism products of the State. The e catalogue keralatourism.org/video catalogue/ is a mini video encyclopedia on Kerala and what it has to offer to travelers. A pioneer in integrating technology in promoting the destination both in India and abroad, the product the product is also first of its kind as no other destination had such an attempt.

THE CONCEPT OF GREEN TOURISM

Green Tourism is otherwise known as Sustainable Tourism. Green tourism takes into account the needs of the local residents and the environment. It also considers the impact that occurs in future. It is relevant to any tourism business whether it is rural or urban. It should focus on ecotourism. Promotion of Green tourism can reduce the negative environmental and social impacts of tourism operations. It can benefit the environment by conserving resources. Green tourism attempts can reduce waste and attracts new customers. It also benefits the local community and supports the local economy. Green tourism tries to reduce congestion and pollution and enhances the natural environment.

2. OBJECTIVES OF THE STUDY

The major objectives that are confined to this study are

- To examine the tourist potentials of Cherai beach.
- To assess the environmental problems those have emerged as a part of tourism in Cherai region.
- To examine the various initiatives under taken by the local self government in the management of solid wastes of the Cherai beach

AREA OF THE STUDY

The area of study was confined to Pallippuram Village in Ernakulam district where Cherai beach is located. It is somewhat the northern region of Ernakulam (Vypeen)-Munambam (Pallippuram Fort) which has a route length of 37 kms. Aluva is the nearest railway station and Cochin Air Port (Nedumbassery) is 21 kms away from the beach. The Arabian Sea on the western side and thickly growing coconut trees around the region and Chinese fishing nets on the various waterfronts adds beauty to this tourist destination.

3. METHODOLOGY OF THE STUDY

For the purpose of this study a sample survey has been conducted with the help of a pre planned interview schedule. A total of 250 tourists were interviewed, which included 68 foreigners (27.2 per cent), 24 inter state tourists (9.6 per cent) and 158 domestic tourists (63.2 per cent). The period of survey was from March to May 2015. As a part of the study thirty hotels that come under various categories, which are located at Cherai and the neighbouring places such as Parur,

Kodungallur, Aluva and Ernakulam were also visited. Relevant information and data were also collected from the office of the Pallippuram Grama Panchayath regarding the collection and disposal of wastes from the concerned region.

AN OVERVIEW OF CHERAI BEACH

Cherai is a coastal region belonging to Pallippuram Grama Panchayath, in Paravur Taluk, a suburb of the Cochin city, in Kerala. Cherai Beach is located on the north-end of the Vypeen Islands, located around the northern parts of Cochin city. It is an ideal beach which always calm and quite with peaceful waves and wind. It is a widely visited tourist spot as it is suitable for swimming. This beach is lined with wonderful coconut trees and paddy fields. This golden sandy beach is a unique combination of the sea and the backwaters. Line of Chinese fishing nets and the thick coconut groves on the harbor sides are very much attractive. The Nearest railway station to Cherai is Ernakulam North and the nearest airport is Cochin International Airport, Nedumbassery. This coastal region has played an imperative role in the history of modern Kerala as it is the birthplace of two prominent political intellectual of modern Kerala such as Mathai Manjooran and Sahodaran Ayyappan. Gowreeswara Temple is one of the chief Hindu temple located here and it is maintained by 'Vijnana Vardhini Sabha'. This temple is known as 'Kerala Pazhani'. The festival of this temple is one of the principal events in the District of Ernakulam and it is most often celebrated during the last weeks of January and the main attraction of this festival is the 'Pooram with Elephants'. The other well-known temple of this region is Azheekkal Sree Varaha Temple which is one of the oldest temples in the state and it is owned by Gowda Saraswatha Community.

Tourists would be taken to the sites in boats to avoid traffic congestion and pollution. More than twenty modern boat jetties have been planned to construct for this purpose. However, eight of them have already completed. There would be thirteen tourist circuits for the area and the conversation works related to this project is the joined effort of around three thousand craftsmen. The important tourist sites that are conserved as a part of this project include Paliyam Nalukettu, Paravur Jewish Synagogue and Kottapuram fort. Two or three markets, six restaurants and an amphitheatre were also newly maintained as a part of the project. According to the Tourism Department of the State, the 'Spice Route Project' organised by the government promises a lot to the tourism industry. In connection with the launching of the 'Spice Route Project' the government has arranged discussions with the ambassador of more than thirty countries in Europe, Asia and the Far East in this regard. The 'Spice Route Project' is set to redraw the ancient trade route that linked Kerala with the world. A memorandum of understanding was signed with UNESCO for this. The five new destinations were also identified in the travel mart, organised as a part of Muziris Heritage namely, Bekal fort Athirapilly waterfalls, Cherai beach, Kollam and Cheruthuruthy.

LAND USE PATTERN OF PALLIPPURAM GRAMA PANCHAYATH

Sl.No	Village	Land Area in Hectares				
		House Plots	Area under Crops	Unclaimed Land	Fallow Land	Total
1	Pallippuram	607	158	385	7	1157
2	Kuzuppilly	374	Nil	123	Nil	497
TOTAL		981	158	508	7	1654

TABLE NO 1

(Source: Office of the Pallippuram Grama Panchayath)

Pallippuram panchayath has a high literacy rate and it is 93.34 percent. Likewise, this region has a high density of population also. According to the Census report 2011, the density of population of the panchayath is 2467 per Sq.Km. The Socio-economic aspects of the Pallippuram panchayath is furnished in Table-2

SOCIO-ECONOMIC ASPECTS OF PALLIPPURAM GRAMA PANCHAYATH

Sl.No	Item	Specification
1	Formation of Pallippuram Grama Panchayath	3rd December 1963
2	Revenue Villages	1. Pallippuram 2. Kuzhuppilly
3	Number of Wards	23
4	Block Panchayath	Vypeen
5	Block Panchayath Divisions	1. Munambam 2. Kuzhuppilly 3. Cherai
6	Taluk	Kochi
7	Assembly Constituency	Vypeen
8	Parliament Constituency	Ernakulam
9	Land Area	16.66 Sq Km
10	Total Population	41100
11	Male Population	20107
12	Female Population	20993
13	Density of Population	2467 / Sq.Km
14	Female Male ratio	1044:1000
15	Male Literacy Rate	96.25 %
16	Female Literacy Rate	90.59 %
17	Total Literacy Rate	93.34 %

TABLE NO 2

(Source: Office of the Pallippuram Grama Panchayath)

ACCOMMODATION Facilities in Cherai Region

Accommodation is an integral part of tourism infrastructure. The survey has revealed that accommodation facilities that are available in Cherai beach region were very low. Hotels that come under star grades and such categories are essential for attracting the foreign tourists. In the study area there were only three star hotels. Of the total foreign tourists, 86.76 per cent depended on hotels located at Cochin region. Only 7.59 per cent of the domestic tourists stood at hotels of Cherai region. In the case of inter state tourists this was only 4.17 per cent.

PROSPECTS OF TOURISM INDUSTRY IN CHERAI BEACH

The World Tourism Organisation forecasts that international tourism will continue to grow at the average annual rate of 4 per cent. By 2020, Kerala may emerge as the top tourist destination in India. In the state beach tourism has much potential for the faster development. The numbers of retired people are out crossing the younger generation. This will surely promote tourism industry in the state. Beach tourism has entered in the list of 'New Tourism' in the state. Rapid developments that are taking place in Cochin region can boost up the tourism industry in the state, especially the Ernakulam District. Cochin has emerged as the industrial capital of the State. Construction industry

is also on the prosperous path. All these can undoubtedly stimulate the tourism industry in the neighbouring localities of Cochin.

ENVIRONMENTAL CHALLENGES RELATED TO CHERAI BEACH

Beach tourism in Cherai was on road of prosperity since 2001. Before that this was not a considerable tourism spot for the tourists especially the foreign tourists. Since then it has much popularity mainly due to the deliberate efforts of the Tourism Department of the state. The beach has become a major source of income to the Pallippuram Panchayath. Gradually developments took place in infrastructure and service sectors. But the Tsunami Disaster that took place in December, 2006 totally destructed the beach. Immense efforts were required to restructure the beach in an attractive manner. Now a day around thousands of tourists visit the beach. The peak months of tourism ranges from December to May. The South West monsoon period that covers April August is off season. But during this period many adventurous tourists visit the beach to chase the vigorous rain, wind and waves.

The most disturbing problems related to the development of beach tourism in Cherai are lack of adequate home stays and standard hotels. As far as the domestic tourists are concerned, satisfactory toilet facilities are not available in a reliable way. Another notable problem is related to the waste management. The disposal of plastic wastes and pet bottles make environmental problems. Proper management of these would be needed for the protection of the beach premises and thereby attract the travelers.

TOURISM CONSTRAINS IN CHERAI BEACH

Lack of adequate infrastructural facilities is one of the troubling factors related to the development of Cherai beach. Even though there has been considerable development in the infrastructure facilities during the last several years in the region, it is not sufficient to attract a rational number of visitors either domestic or foreign. Recently the government has taken initiatives to lengthening and modifying the existing road networks under 'Musiris Heritage Project'. Shortage of parking area is another hurdle.

Another obstructing issue is the lack of accommodation facilities. In the near future, the tourism potentials of Cherai beach will heavily depend upon the accommodation facilities that are available in the region. Accommodation is an important part of tourism infrastructure. Travelers require an affordable staying facility at the end of the day. The number of hotels which are working in the near by areas are not sufficient, there is much scope for upcountry accommodation facilities and restaurants.

Problems related to sanitation also exist in the beach area. As far as the visitors are concerned, toilets and other sanitation facilities are inadequate in the region. In order to solve this problem by constructing e-toilets, sanitation facilities can be provided for the use of tourists and can keep the environment clean.

Dumping of garbage and other waste materials like plastic items has become a major threat to the beach environment. Disposal of waste in beach areas has become a common practice. Lack of scientific protection of the beach premises and the absence of apt processing of wastes makes the problem more aggravated. However the beach is still untidy with plastic and other litter that are an eyesore. Majority of the tourists opined that they like the beauty of beach but the cleanliness of the

place is little unpleasant. Another issue indicated by the travelers is the inadequate number of route maps and sign boards at the beach. A campaign to clean up beach premises and appropriate solid waste management is essential for improving the functioning of the tourist spots.

CHERAI BEACH IN MONSOON SEASON

Most often, as far as Cherai beach is concerned, during the south-west monsoon season ranging from June to October is a disastrous period. In 2013 monsoon season, the unprecedented rains coupled with rough seas have buried beaches from Andhakarazhi on the Alappuzha-Ernakulam border to Cherai in the north in ankle-deep debris washed ashore by the waves. The Cherai beach, which is the most popular beach in Ernakulam district, has been washed out completely in the rains. This is normal during the rainy season. The natives of the region said that the beach usually erodes fast and is formed again after the rains subside. They also opined that the authorities had shown little interest in maintaining the Cherai, Pallippuram and Munambam heritage areas, including the beach. Even though the walkway and basic amenities such as toilets have been established in the beach, it lacks proper maintenance. Recently, after new facilities came up under the support of the tsunami rehabilitation fund, facilities were handed over to District Tourism Promotion Council (DTPC). The DTPC has taken the necessary steps for the renovation of the restaurant building on the Eastern sides of the beach, at a cost of Rs 11.55 lakh.

A trip from the sandy beach of Cherai to Azhikodu beach, located in Thrissur district, fifteen kilometers from Cherai is also eye-catching. Athirappilly and Marottichal waterfalls are the two main tourist destinations in Thrissur district. Marottichal is located about fourteen kilometers away from Thrissur city. Beautiful and serene Marottichal is a stunning place which is the home to two elegant waterfalls namely Olakkayam and Ilanjippra which are unexplored and virgin, making it one of the finest spots for spending some tranquil moments amidst the nature. The cool breeze blowing and the splashing waters enable the visitors to enjoy the silence and peace of nature. An Olakkayam waterfall provides great space for refreshment and enjoyment after an adventurous trek. The Ilanjippra waterfalls, four kilometers from Olakkayam waterfalls also offers a beautiful and calm environment for the visitors. Both these waterfalls are enriched with the wide variety of flora and fauna and the mind blowing views of the dense evergreen forests. It is always advisable to move in groups to avoid any dangerous encounters as this ecological sphere plays hosts to a number of large animals including elephants. These waterfalls provide a wonderful view of nature's beauty at its best with the waters falling from a cluster of rocks to the valley below.

NEW INITIATIVES FOR ENRICHING TOURISM IN KOCHI AND THE NEED FOR NEW INVESTMENTS

Many villages and parts of Ernakulam and Thrissur districts will be part of the Spice Route development initiatives, for which an MoM was signed between UNESCO and Kerala Tourism. The artefacts discovered from the region suggest links to the spice trade that flourished two millennia ago. The state and the centre have together contributed around Rs. 90 crores for this project. This endeavor can promote academic exchange, intercultural dialogue and joint heritage conservation projects among 31 countries. For promoting spice route, Kerala and UNESCO will mobilize bilateral and multilateral collaboration with other countries involved in ancient spice trade. In order to promote heritage conservation, several historical areas of Kerala linked with the ancient spice trade and route will be developed under this agreement.

The incidence of tsunami events has generated the need for an urgent attempt to fence the flooding and erosion. Local governments can implement effective beach protection package to protect the main areas and other specific beach features. Construction of beach parks for the public entertainment can enhance the scenic beauty of the beach. Grama Panchayat should restrict new construction projects in the areas close to the coastline. Proper caring and maintenance of long beach areas can provide good beach quality and can secure that the beach is exposed to waves, as the waves maintain the attractive sandy beaches. This will of course enable the tourists for safe swimming.

Majority of the visitors (84.1 per cent) informed that the beach should be illuminated during the evening hours so that the tourists can spent more time at the beach even after the sun set. Construction of multi shed and tree houses (Eru madam) can offer the tourists sufficient facilities to take rest and take pleasure in seeing the sea breeze.

Though Cochin region is fastly developing, it is lacking in investment in tourism sector. With the proper initiatives and encouragements from the government private investment can be intended for the development of tourism industry especially in Cochin region, which is the central part of the state. Service sector is fastly developing in the state and tourism is a part of it. Therefore there is much scope for increased profitability in the sector. The spreading out of tourism related activities normally supplement the job opportunities and income of the people of the locality. Another important factor is that the development of Cherai beach may widen the market for the products of that locality. Such products can be identified as handicrafts, handloom products, processed spices products, processed marine products etc. Chendamangalam which is the centre of 'Chendamangalam Kaithari' is a neighboring locality of Cherai. The Kochi Muzris Biennale of 2013 and 2014 has received much attention across the world and has improved the status of the state in the cultural tourism map. These two biennales had a global perspective in terms of theme and participation. Of course these kinds of innovative initiatives can strengthen the tourism sector of the state.

AN OVERVIEW OF THE SOLID WASTE MANAGEMENT IN PALLIPPURAM GRAMA PANCHAYATH

Solid waste comes from various spring which include residential, commercial, institutional, and industrial actions. Numerous types of wastes, most often, cause immediate danger to the humanity and the environment. The disposal of solid waste (SW) which includes garbage and rubbish things those are mostly decomposable, including dry materials such as glass, paper, cloth, or wood and including the food waste. In General, the wastes can be categorized based on its source, like domestic, industrial, commercial and institutional. On the basis of its contents it may be belonging to the organic material like plastic paper, metal, glasses, etc. According to the hazard potential wastes can be grouped as flammable, toxic, non-toxic, infectious, radioactive etc. Proper and efficient management of these solid wastes can reduces and eliminates unpleasant incidences on the human health and the environment. These efforts can certainly supports economic development and the improved quality of life of the residents of that locality.

The collecting, treating, and disposing of various kinds of solid materials is popularly termed as Solid-waste management. This waste is removed as it is harmful to the environment and the human beings. Rude disposal of solid waste in coastal areas can create unsanitary conditions, and these conditions in turn can lead to pollution of the beaches which are the hot spots of the tourists. Dumping of solid wastes on the parts of the beach leads to the spread of germs, insects and

diseases. Proper management of the solid-waste is a difficult task as far as the local self government is concerned. It is mainly due to the emergence of technical and complex challenges related to it. Due to a variety of reasons such as economic, social and administrative problems the management of wastes becomes a tedious task. In other words, the solid waste items are the unwanted and useless hard materials generated from combined residential, industrial and commercial activities in a given area.

Recently the Pallippuram Grama Panchayath has started new initiatives for the management of solid wastes in the regions of Cherai Beach. The Local self government has begun a technological approach to solid-waste management during the year 2015. Even though, years back, the authority of the Grama Panchayath has established waste bins on the coastal roads of the Cherai Beach to collect and wastes created by the tourists, it was not sufficient to meet the issues related to the dumping wastes in the premises of the beach. Even then, most of the tourists who are coming from other Districts and other States were disposing various kinds of wastes including plastic bottles and carry bag on land or in water.

During the year 2015, there has been significant progress in solid-waste treatment and disposal practices made by the Pallippuram Grama Panchayath. Actually these notable efforts took place by the beginning of the year 2015 and it has become a full-fledged reality by the end of the year. A number of processes are involved in this endeavor which includes the collection of all types of wastes, its transportation, processing and the disposal of residues. An overall monitoring of these efforts are also effectively done by the authority of the local self government.

WASTE MANAGEMENT BY USING KUDUMBASHREE UNITS

During the year 1987-1988, UNICEF and Government of India initiated Urban Basic Services (UBS) as a poverty alleviation programme and as a part of this CDS system evolved in Kerala. Kudumbashree, a unique programme of poverty alleviation with full participation of women, especially poor women, was launched formally by Government of Kerala on 17th May 1998. The word Kudumbashree means prosperity to the family. The basic aim of the Kudumbashree Mission is to eradicate absolute poverty through concerted community action under the leadership of Local Self Governments, by facilitating organization of the poor, combining self-help with demand led convergence of available services and resources to tackle the problem of poverty. Principally it is a women-oriented participatory approach for community development and poverty diminution. It aims at the prosperity of the economically backward families in the state of Kerala with various programmes. These programmes are mainly related to creation of opportunity for their social security and empowerment. The slogan of the mission is reaching out to families through women and reaching out to community through families. Firstly this programme was implemented in eight towns in Ernakulam and five towns in Alappuzha districts of Kerala. By the end of the fiscal year 2012 this programme has been launched in 291 gram Panchayats.

The Minister of local self government is the Chairman of KDMS Mission and the Secretary to Local Self Government is Vice Chairman. At state level, KDMS Mission Office is located at Thiruvanthapuram to coordinate the overall activities. Executive Director heads the team of staff appointed by the government for the coordination of the programme. There is a district mission office in each of the 14 districts with a district mission coordinator who is responsible for co-ordinating all the activities at district level.

Pallippuram Grama Panchayath has begun Information, Education and Communication (IEC) activities for generating awareness among the general public towards cleanliness, waste treatment & waste disposal for promoting tourism in the coastal region of Cherai. These activities include the formation of rural committees, conducting group meetings in respective wards, publicity through local cable network, distribution of pamphlets, erecting of Banners, Slides in film theatres.

Pallippuram Grama Panchayath has deployed 2 trucks and 15 Kudumbashree members, on daily payment basis, to collect the solid wastes of the region for efficient cleaning of the beach. They have identified more than ten locations as waste collection points. These wastes are collected daily in the morning and in tourism season, if required; the collection may be made twice in a day. The wastes that are collected from various points are then transported to the treatment plants. The Panchayath authority is effectively and successfully managing this venture, covering most of the residential areas, the commercial shops and hotels of the coastal region. A centre has been started to recycle this waste with an investment of six lakhs. Currently, more than two hundred metric tons of waste is collected from the Cherai beach in this manner and it is transported to the processing plants. The Panchayath authority has introduced a new concept of Gate to Dump since 2014. For this purpose, authority has identified a contractor to collect the waste from residential units in the morning hours and under his initiative there are 15 Kudumbashree women member workers are doing this cleaning labour. The Pallippuram Grama Panchayath provides all basic services to the tourists who are visiting the Cherai beach such as street lighting, collection of sewage; solid waste management, water supply, maintenance of roads and providing authentic information facilities to the arrivals are some of the key services.

Solid waste management is new gen term which stands for garbage management. In most of the tourist centers, the proper and scientific management of solid waste, or garbage, is a prominent issue. Development of travel and tourism is a sign of modern society. The flourishing of tourism industry, most often, generates far more solid waste than earlier. The increase in the number of both the domestic and foreign tourists, always generate large quantity of solid waste, not only directly in the beach areas, but indirectly in hotels and restaurants that are functioning in the locality. Various kinds of solid wastes heap up on the roads due to improper disposal system. People clean their own shops and litter their immediate surroundings which affect the community including themselves. These types of dumping, under uncontrolled atmosphere, normally lead to the materialization of unhygienic conditions. This gradually produces foul smell and breeds various types of insects and infectious organisms besides spoiling the aesthetics of the beach sites. Disposal of solid wastes such as non degradable matters and other hazardous wastes may spread on land and can cause changes in physicochemical and biological characteristics of the beach and thereby affect the entire scenic beauty of the coastal belt and the quality soil. Disposal of toxic substances may percolate to the land and it will pollute the ground water. All these may also create many health problems in the region too. Burning of the mixture of these various types of wastes pollute the air, which have the potential to cause various types of ailments including cancer and therefore these wastes should be properly collected and scientifically be recycled.

INCINERATION OF WASTES IN PALLIPPURAM GRAMA PANCHAYATH

In common language, incineration means to burn the wastes or something else until nothing is left but ashes. Incineration is a waste treatment system by using high temperature and therefore it is occasionally described as thermal treatment of wastes. It converts waste materials into heat, gas, steam and ash. Since 2014, Pallippuram Grama Panchayath has taken initiatives to install an incinerator and it became a reality during the year 2015 for the management of wastes. An

incinerator is a mechanism or unit used to burn garbage and other types of waste until it becomes ash. It is an instrument, which generate high levels of heat inside the furnace and as a result of this heat the waste is burned quickly and efficiently. Incineration is a disposal method in which solid organic wastes are subjected to burning so as to convert them into ashes. This method is useful for disposal of residue of solid waste management.

4. CONCLUSION OF THE STUDY

Many attractive and enjoyable beaches are here in Kerala as tourist destinations. Recently, Cherai beach has emerged as one of the favorite tourist destination of Cochin region. This coastal region has a unique historical and cultural tradition. This study is an attempt to examine the tourist potentials of Cherai beach, to analyse the direction of the tourist's arrivals and to assess the environmental problems those have emerged as a part of tourism development in the region. For flourishing beach tourism in Cherai requires the effective collection and disposal of wastes which are heaped as a result of increased number of both the domestic and foreign tourists. Pallippuram Grama Panchayath has began various activities for generating awareness among the general public towards cleanliness, waste treatment & waste disposal for promoting tourism in the coastal region of Cherai. The Panchayath authority has deployed 2 trucks and 15 Kudumbashree members, on daily payment basis, to collect the solid wastes of the region for efficient cleaning of the beach. They have identified more than ten locations as waste collection points. These wastes are collected daily in the morning and in tourism season, if required; the collection may be made twice in a day. The wastes that are collected from various points are then transported to the treatment plants. The local self government of Pallippuram Gram Panchayath is effectively and successfully managing this venture, covering most of the residential areas, the commercial shops and hotels of the coastal region. A centre has been started to recycle this waste with an investment of six lakhs. Currently, more than two hundred metric tons of waste is collected from the Cherai beach in this manner and it is transported to the processing plants. The proper maintenance and cleaning of the beach area can ensure the development of this tourism spot in future. In near future it will be one of the attracting tourism centers of the state.

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