



Motivation for Adventure Tourism through Off-Roading - A Study in the Hill Areas of Kerala, India

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Abstract

Increase in the number of participants who are interested in Off-Roading Trips has contributed to the growth of the local tourism economy of the hill areas of Kerala, but it was found that Off-Roading without any control, would create serious repercussions to the natural environment in the areas. The study focused on the popularity and the significance of Off-Roading Trips in the Hill Areas of Kottayam, Idukki, Pathanamthitta and Wayanad and suggests strategies to be adopted so as to improve sustainable Off-Roading practices in the regions.

Keywords: Tourism Motivation, Off-Roading, Adventure Tourism, Responsible Tourism

1. Introduction

There are a number of external factors that control the flow of tourists to a destination. One such factor is Adventure Tourism, which includes adventure related travel and other adventure activities like hiking, trekking to name just few. Adventure

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Travel also includes recreational activities that have a high degree of risk. It can involve speed, height, physical effort and the use of highly specialized gear, which can be related to Off-Roading and thereby promoting the same as a tourism product. The Adventure Tourism sector is actually an industry that has a very high potential to generate income, and the tourist attention to this industry is comparatively less in India when compared to other countries.

1.1 Introduction to Adventure Tourism

Adventure Tourism is a type of tourism that involves different forms of exploration and travel to remote areas that are often unknown to the tourists, where the traveller can expect the unexpected! It is a kind of niche tourism that involves high degree of physical risk, excitement as well as cultural exchange, and a lot of interaction and engagement with nature. Adventure Tourism is one of the fastest growing segments in the travel market today and it has been drawing in more and more people on a yearly basis. The term, 'Adventure' remains different for different people and it depends on the traveller and their tastes towards the activities that define the term for them. This type of travel therefore offers classic experiences and activities that are intense to the core and offers results in the most pure form, bringing individuals outside their comfort zones.

Adventure Tourism is the travelling and exploring of places so as to get a new experience, along with the involvement of controlled risk elements and personal challenges, in wild and exotic settings (Morrison & Sung, 2000). Adventure Tourism is normally identified by the risk element in the complete journey and the tourism experience that comes with it (Ewart, 1989; Hall, 1992; Fennell, 1999), the amount of physical effort put in by the travellers (Ewart, 1989) and the need for specialized skill sets that are required to have successful participation (Lawton et al., 2001). The nature of Adventure Tourism is mainly characterized by the ability to provide the travellers with decent levels of sensory stimulation with the support of physically challenging experimental components (Muller & Cleaver, 2000). This kind of tourism involves mountains, lakes, and other locations that are referred to

as 'escape locations' that can offer the tourists, feelings of adventure and risk perception throughout the entire journey.

Adventure travel is always fun with extra side of adrenaline rush in every activity that is combined in the trip. This is also considered as a unique way to discover new landscapes and cultures through travel, by packaging recreation, enjoyment, education and a lot of thrill. Adventure Tourism has different forms that include land, water and aerial adventures. This form of tourism is also more challenging as it takes tourists into regions that otherwise would have very less frequency of visits by tourists and the access to the locations are also restricted or not that easy. Thus, the popularity of this form of tourism is less within the travel sector and hence it needs to be given importance. There are different forms of adventure tourism, namely Sky Diving, Bungee Jumping, Jet Boating, River Rafting, Cave Exploration, Zip Lining, Cannoning and Off Road Driving, to name just few.

1.2 Introduction to Off Road Tourism

Off Road Driving is a form of Adventure Tourism that experienced rapid growth in the last few years. A simple definition of Four Wheel Drive (4WD) Tourism is 'the tourism experiences that the consumer and the supplier perceive as heightened in value through the use of 4WD Vehicles.' This definition allows for the experiences to be on or off road, to be completely dominated by use of the 4WD Vehicle and for the activities to be part of a larger trip experience. Mainly due to an increase in wealth and in tourist desire to experience adventure activities during times of recreation, this form of adventure activity with the use of Off Road Vehicles can offer significant importance in gaining public attention and in increasing revenue generation.

The increase in the number of tourists who are interested in Off Road Driving is actually contributing to the economic growth of the country, but along with its problems relating to the issues in the natural environment like soil erosion due to uprooting of small plants from the soil. Due to an increase in the number of tourists and because of the different kinds of tourists, it is highly essential to select the sites with its remoteness as an important criterion while choosing the holiday destinations. This will also help the

tourists to experience the freedom that they might prefer in certain areas. In India, the use of 4WD Vehicles is very common nowadays, but this was not the scenario a decade back. People used to drive less in the past, but not anymore. This has resulted in such adverse impacts and sustainability issues that it has urged the issuance of an executive order in order to control the use of 4WD Vehicles. This has also impacted the pollution level as these vehicles produce more carbon emissions during the Off-Road activities. Even though these issues have been highlighted, there is still an increase in the number of 4WD Vehicle registrations in India, which clearly indicates the passion towards Off Road Driving.

One of the main reasons for the increase in popularity of Off Road Tourism is the complex and the changing relationship between the 4WD Vehicles and the Drivers, who perceive their aspirations for leisure trips, with the search for new sites and locations that offer freedom to both mind and body. Off Road Vehicle categories are based on the type of tyres and the number of axles used by the vehicles, and the Federal Chamber of Automotive Industries defines 4WD Vehicles as Sports Utility Vehicles that can be used in adventurous sports activities. Tourist routes and attractions are lined up together so as to promote more self-driving experiences to these destinations (Hardy, 2003; Ware & Budge, 2002). 4WD Tourism also has a particularly strong link between the vehicle and the location (Scott, 2002) as the vehicle is a necessity to access the destinations and to undertake the desired activities. Travellers are also able to undertake specific activities like camping, fishing and trekking, which require the storage capacity, the off-road and power-related capabilities of a 4WD Vehicle. Drivers reveal that they use their 4WD Vehicles as the main key to unlock these kinds of travel experiences. Today, there are 4WD Clubs all-over the country that network like-minded individuals to choose locations based on the reviews of travellers who have already visited the places before.

1.3 Introduction to the destinations in Kerala that offer Off-Road experiences

There are numerous locations in Kerala that offer Off-Road adventure and most of these places remain unidentified until and

unless travellers visit them. The study mainly concentrates on the Off-Roading Destinations in the more notable districts of Kottayam, Idukki, Pathanamthitta and Wayanad in Kerala.

Kottayam District is located in the South West of Kerala and it is the only district in Kerala that does not border either with the Western Ghats or with the Arabian Sea. The district is bordered by lower hills in the east, and lakes and paddy fields to the west. The district has its own tourist importance due to its panoramic backwaters, beautiful paddy fields, picturesque hills and mountains. Because of these geographical features, the district enjoys the advantage of having many Off-Roading locations. Few of these locations are under construction and some are open to tourists.

Idukki District has a vast forest reserve that covers almost half of the district. The district lies on the Western Ghats of Kerala. The urban locations in the district are densely populated and the villages are less populated, and the district is mainly known for its vast spice plantations and hence it is also called the Spice Garden of Kerala. The roads through the mountainous areas of the district are more tuned to host Off-Roading adventures and this makes Idukki as the most popular location for Off-Roading Events. Due to its geographical features, the district does not have air and rail connectivity.

Pathanamthitta District lies in the southern part of Kerala. Considered to be one of the richest districts in Kerala, the district is completely landlocked with other districts of Kerala and with the state of Tamil Nadu. The district enjoys all forms of geographical features including highlands, midlands and lowlands, and they are also covered with dense and thick forests, with a lot of sightseeing spots thereby making the terrain highly accessible for 4WD Vehicles. The district hosts many Adventure Clubs.

Wayanad District is actually set high on the Western Ghats rising up to a height of 2100 mts in altitude. The district has a thriving tribal population, and it also shares land border with the state of Karnataka. The district has numerous trekking spots and locations, many of which are yet to be discovered. The terrain is also blessed with forest cover and hills, so as to organise different kinds of

adventure activities and many Off-Road tracks and destinations can be seen in the district. But, the district remains less popular and its potential is yet to be identified as an Off-Road Destination.

2. Off-Road and Travel Motivation

The push and pull factors are the main reasons for travel motivations. The push factors refer to the energy of the individuals, the high motivation level and the desire to travel. On the other hand, the pull factors refer to the external forces which can influence an individual with the initial desire to travel (Dann, 1981). Off-Road safaris are now part of tours conducted within a price range of INR 5000 to 15000 and they are considered as not-so-very costly activities thereby having a recognizable commercial signature in the industry (Buckley, 2007). Objectives and goals of travel motivations for Off-Road are the memorable experience, escape and change of scenery to mention a few (Kwortnik & Ross, 2007). For many, the motivation for Off-Road can be to meet new and likeminded people with similar tastes and socialization interests. Again, it is to be noted that Off-Road activities are not round-the-year experiences and for all members in the community; it is taken up only by few who are actually interested in it and that too only once or twice a year. From the perspective of travel decision-making, it is only for those who are highly motivated in participating in adventure activities by overcoming the challenges of driving constraints.

2.1 Travel Constraints during Off-Road

The motivation for Off-Road serves as the energizer but there are numerous constraints that can filter the demand for Off-Road Tourism. Within the interpersonal, intrapersonal and structural constraints, the interpersonal constraints refer to the barriers that are caused due to social interactions with the family, friends, and with members in the society, the intrapersonal constraints are defined as the individuals' psychological attributes like attitude, anxiety, stress, and perceived self-skills that might be inhibited by oneself while participating in adventure activities, and the structural constraints consist of factors that affect the persons intentions while performing such activities like the availability of

time, accessibility and the use of economic resources (Heberlein, 2005). The often cited constraints that are related to adventure travel are the lack of time, financial considerations, emotional and physical costs, health status, lack of information, approval and family responsibilities, age, perceived disability and security concerns, to name few (McGuire et al., 1986; Romsa & Blenman, 1989).

2.2 Environmental impacts of Off-Roading

Off-Roading as an adventure or recreation activity can harm the environment if not handled well, as individuals today are much concerned about the environment and about nature. The curiosity in the minds of the participants and the audience towards Off-Roading activities can be whether it could have negative impacts on the environment and if it so does, can the negative effects be reduced with the right strategies. One such solution was the 'Tread Lightly Strategy' that was introduced in 2011, which offers sustainable ways of living in the areas with long-term positive effects on the nature of the place. By following the strategy, the cost of maintenance of the destination can be reduced and drastically cut down, to a very limited amount and thereby the money can be diverted for other useful development purposes. The vegetation and the soil on the track have to be taken care of, while also ensuring the safety of the wildlife and the freshness of the air (Buckley, 2004). Soil degradation due to the use of Off-Roading Vehicles for recreation activities also depend on factors like climate, topography, texture of the soil, and the design and maintenance of the Off- Road Trails (Oliver et al., 2009). Soil erosion is the highlighted problem and the soil on the trail is eroded all the time, which is normally an irreversible process. The erosion usually occurs because of the unsafe driving of the vehicles on the trails. The soil also gets contaminated with the pesticides that are used in the nearby agricultural lands. Erosions are mostly found in the wet lands and in the steep and sloppy areas (Bellamy et al., 1971).

Big vehicle tyres can also crush plants, plant seeds and roots through undue stress. These are not just confined to the short plants and shrubs on the tracks but also next to them due to the larger sizes of the vehicles, thereby affecting the herbivorous

livestock. Noise pollution and destruction of the natural habitats can also affect the animal life in the area. Most of the vehicles use a two-stroke engine that emits more poisonous gases into the atmosphere. This affects the air quality in the region by depositing more than 30 percent of un-burnt fuel and gases in the atmosphere. Because of all these reasons, the Government has now introduced specific laws that request the participants to maintain their vehicles, and to also ensure proper environmental standards during the Off-Roading activities. The rules for the sound frequency levels of the vehicles while on the tracks are also discussed. 4WD Vehicles are supposed to maintain a sound decibel level of a maximum of up to 94db on the tracks (Crimmins, 2006). Hence, the environment has to be given due importance, while at the same time the participants should enjoy to the maximum, during engaging in Off-Roading activities.

2.3 Social impacts of Off-Roading

It is a myth today that the drivers of 4WD Vehicles are young 'hooligans' who tear up the forests and the grassland environments with no regard to their own safety. Off-Roading is considered as an activity that is noisy and dirty, and which does not interests the social community. This kind of an image has been created in many human minds through the media and through other sources. But, only a few are responsible for such kind of anti-social activities and because of whom the image of Off-Roading is being ruined in the perception of the larger community. There are a good number of senior aged members in the society who participate in Off-Roading activities and their presence is proof that the participants are extremely respectful and they also care for the safeguard of the environment. Off-Roading activities can also bring in a lot of income to the local community in the region. And due to the stringent laws in place, their social life and privacy are also protected even though there might be an increase in the number of travellers who might visit the area to take part in these activities (Crimmins, 2006).

Another concern is that there will be participants who do not use the right kind of 4WD Vehicles on the tracks (Kirkbride, 2010). The study goes on to state that by not using the right kind of vehicles,

the quality of the experience on the track is also affected. This can further create conflicts while sharing the experiences later. It has also been found that participants who are not that interested in this form of a recreation activity may experience lesser enjoyment and thrill, mainly because of the noise and the feeling of not being safe while participating in these forms of activities (Badaracco, 1976). This may create even reduced interest while participating in Off-Roading activities. Today, various campaigns have been undertaken by Adventure Clubs for the need to reduce the noise level at the Off-Roading sites. Not to leave out the health benefits of such kind of activities, the interested individuals need to develop a more muscular physique especially due to the varied aerobic fitness level required for the upper bodies of the drivers (Burr et al., 2009).

2.4 Economic impacts of Off-Roading

Looking back in history, 4WD Vehicles were very popular at one point of time in Kerala. Almost more than 30 years back many of the roads in the state were unpaved and 4WD Vehicles were the only means of transport to get to places. With the increased use of these kinds of vehicles, more number of tracks and roads to handle these vehicles was laid down. These tracks that were left behind by the 4WD Vehicles indirectly connected between smaller towns and villages and these were the roads that were later reworked upon to the present state that they are in today. The tourism sector also benefitted from the laying down of these tracks as the tourist spots in the destinations were easily accessible through these roads (Wilson, 2010). The economic costs thereby reduced for the small towns and villages as they were able to undertake trade and commerce as the roads were already laid down for the use of these vehicles. The local community in the places was also highly benefitted as these vehicles and roads helped them to stay connected with the neighbouring towns, supported them in their movements and helped them in their local businesses.

During Off-Roading, a trail network is created that translates into a revenue curve (Englin, 2006) with the best example being Munnar, where most of the sites were not inter-connected because of the geography of the area. With the introduction of Off-Roading,

tourists got opportunities to explore more of the wild regions in Munnar, which added more value to the tourism sector in the region as it attracted more number of visitors to the area. With the introduction of more number of 4WD Vehicles, tourists are more easily able to reach the destinations through the tracks that are laid down for the vehicles, within less time. More number of Off-Roading activities can also be planned across the length of the tracks thereby attracting more attention and more number of audiences. All these add up to the revenue earned for the tourism sector and to the area in particular. Hence, the roads that were unintentionally developed by using the 4WD Vehicles while moving through the off-beaten and forest tracks indirectly helped to better the economy of the area, and they also supported the local community in a big way. Tourists flow to the region increased and the carrying capacities of the destinations were also enhanced.

2.5 Safety and health impacts of Off-Roading

The right information about the do's and don'ts during the Off-Roading activities should be identified and it should be clearly communicated to the participants. It is challenging that the economic costs of these activities should be associated with the safety education that is offered to 4WD Drives. Accidents that have happened due to the use of 4WD Vehicles in different parts of the world are only because of the stark unawareness or due to the negligence of the rules and regulations that should be followed while driving the 4WD Vehicle (Aitken, 2009). These accidents have resulted in unwarranted medical expenses, negative effects on the quality of life, loss of work and even death. Money has to be spent and training should be initiated to educate the drivers about the right and the safe mode of handling these types of vehicles. Past studies have focused on the significance of proper guidance to be given to the drivers so as to reduce the fatalities that might occur during the use of 4WD Vehicles.

The participants involved in this sport should possess more stamina due to the roughness in the activity involved. Moreover, as the 4WD Vehicles are designed to be used on unpaved and rough roads, the driving can produce a large amount of dust and pollution that could affect the participants inside the vehicle as well

as the people standing and watching the sporting activity (Wolfe, 2015). This can cause breathing and inhalation problems and it is therefore recommended to avoid these kinds of activities during the summers and during the dry seasons. Safety masks and goggles can eliminate this risk to a certain extent and they are often mandatorily required while participating in Off-Road activities during any time of the year. A lot of body pain can also be caused due to the excessive jerks and shakes that are caused while driving the vehicles over the rough and tough terrains. This will affect the back muscles and the back bone of the drivers in the long run. And most importantly, because of the fun and thrill that could be experienced in this form of a sporting activity, it can turn into an addiction in the minds of the youngsters thereby affecting their mental state of health (Silberman & Andereck, 2006).

2.6 Land use impacts of Off-Road

Large areas of land are required to build the tracks and landscape the terrain for the use of 4WD Vehicles. Land is normally procured from the owners through multiple rounds of negotiations, and sometimes even with the involvement of the Ministry of Natural Resources, the Federal and the Provincial Governments. The organizers of the Off-Road Activities have the freedom to design the trails but there are basic guidelines to be followed. Permits and legislations have to be procured well in advance. Only the tracks and the areas around the tracks should be tampered with, and that too in tune with the needs of the 4WD Vehicles. With less impact on the surrounding areas, the environment is also taken into its well being, and this creates a better image on the sustainable use of the land in the minds of the participants.

3. Methodology of Research

3.1 Need for the study

The studies that were previously carried out were based on the structure of Adventure Tourism and its products in terms of the business concepts. Past studies had revealed that the tourists' needs to visit the destinations had to be ascertained more constructively so as to determine the appropriate visitor opportunities in the sector, and this understanding of how the travel motivations

influenced tourists' behavioural intentions was fundamental for tourism planners and marketers to make the right decisions (Beh & Bruyere, 2007; Li et al., 2010). Today, Adventure Tourism is showing a significant growth in the entire country through the result of a large number of heterogeneous factors and rich landscapes that support all forms of sports ranging from water to inland activities. This, even though the sector is characterised by different elements that offer physical and psychological challenges, dangers and risks, uncertain outcomes and surprising explorations (Swarbroke et al., 2003). Very few studies in the past have concentrated on Off-Roading as an Adventure Sport in promoting tourism. And even though the activity is gaining a lot of prominence in the Hill Areas of Kerala in South India, no studies have thus far been carried out on the topic. The study therefore seeks to understand the motivation level of tourists in undertaking Off-Roading Tourism in the above mentioned tourist destinations in the state.

3.2 Sources of data and sample used for the Study

The primary data for the study was collected by employing a structured questionnaire with questions relating to the area of the study. Secondary data was collected through intense review of literatures, in the form of information and research articles available in research journals, magazines, academic books, newspapers, online websites and from other related sources.

The number of respondents used for the study was 160 and they were selected from the Hill Areas of Kerala, particularly from the districts of Kottayam, Idukki, Pathanamthitta and Wayanad. Through a Simple Random Sampling Technique, groups of respondents were selected from the larger populations, with each respondent having an equal chance of being included in the sample. The data was then directly collected from them by administering the questionnaire.

3.3 Process of undertaking data collection and data analysis for the study

Based on the review of literatures from the previous studies, the research gap was identified, based on which the research objectives

were framed. With the support of the research objectives, a structured questionnaire was prepared with a good number of Likert Scale Questions. The questionnaire was then subjected to a pilot study. After the reliability of the questionnaire was established through the pilot study, the questionnaire was circulated to collect the responses from the respondents in the population of the region, under the scope of the study. The filled in questionnaires were then translated and analyzed with the support of SPSS Version 20 and Microsoft Office Tools. The results were then interpreted to arrive at the final findings from the study.

4. Findings from the Study

Majority of the respondents used for the study were male and they fell under the age group of 21 to 30 years. This implied that majority of the respondents were students, followed by employees of private firms, business associates and government employees. Most of the respondents also stated that they had the money to spend on adventure related activities as they showed a good amount as their annual income ranging from INR 3 to 15 Lakhs. Even though majority of the respondents owned their own 4WD Vehicles, there were a good number of respondents who did not have 4WD Vehicles of their own. It was also found from the study that majority of the respondents did not belong to any kind of 4WD Clubs or Associations. Hence it was inferred that the participants did not have to be members of any 4WD Clubs or Associations to undertake or participate in Off-Roading activities. The respondents considered Off-Roading to be an Adventure Tourism Sport and majority of them agreed that they were motivated to undertake Off-Roading as a sporting activity. For this purpose, they were willing to modify stock body parts of their 4WD Vehicles. Due to the strong level of motivation, the respondents undertook frequent Off-Road trips; that is majority of them undertook an Off-Road trip at least once in 3 months or sometimes even more frequently.

The study found that there was no significant relationship between the age of the respondents and their participation in Off-Road trips. Therefore, irrespective of the age, the respondents were highly motivated to participate in Off-Roading activities along with the intentions for Sightseeing, Camping, Wildlife Viewing, Stress Relief

and Relaxation, Thrill and Excitement, and mainly for Adventure in the Hill Areas of Kerala.

Already established routes were normally preferred for Off-Road trips. This justified the fact that most of the respondents were aware of the significance of safeguarding the sustainability of the environment, and being responsible while undertaking these kinds of trips. The respondents rarely took an unknown route for their Off-Road activities and if they ever did, it would have been because they were unaware of the route or they would have lost their direction. Respondents liked their Off-Road trips to not be planned all the time as they enjoyed the thrill of being part of such unplanned trips and because such unplanned trips required less preparation. The respondents always preferred to visit new Off-Road destinations during the trips as they enjoyed visiting new places. Even though they had their favourite destinations, they rarely repeated visiting the same places all the time. Respondents always preferred to travel on Off-Road trips with their friends and colleagues, or with their family and their relatives. It was surprising to note that very few respondents preferred to undertake the trips with Clubs and Associations, or with 4WD Tour Companies or by themselves.

The study found that there was a significant relationship between the preference of the Off-Road destinations in the Hill Areas of Kerala and the participation in Off-Road activities. The respondents preferred Idukki and Kottayam as the most preferred Off-Road destinations in the Hill Areas of Kerala. Of all the Off-Road activities addressed in the study namely, Sightseeing, Camping, Wildlife Viewing, Stress Relief and Relaxation, Thrill and Excitement, and Adventure, majority of the respondents considered Adventure followed by the Thrill and Excitement as the most important factors to participate in Off-Road trips in the Hill Areas.

Of all the factors that could influence an Off-Road trip, the respondents considered Safety and First Aid to be the most important, followed by the Location, Food, Weather, Nearby Attractions, Accommodation Facilities, the presence of Experienced Co-Drivers and Recovery Vans, and Basic Amenities like Electricity

and Toilets, all in that order. The study also found that various strategies like offering Passes to Visitors to watch the Off-Road events, Promotions through Social and Mass Media, Road Shows and Co-branding with Tour Operators, all can be used to market Off-Road destinations.

Majority of the respondents suggested that Off-Road should be promoted as a Sustainable Tourism Activity in the Hill Areas of Kerala. This was mainly because they felt the strong need to undertake measures and precautions in order to safeguard the environment during Off-Road, like establishing proper tracks for the 4WD Vehicles to use, avoiding Areas with Wild Flora and Fauna, encouraging One Day Programmes, preventing the Overcrowding of Viewers, maintaining the Vehicles with Less Modifications on the Stock Body Parts, and proper Waste Management Techniques. All the respondents unanimously agreed that all these factors should be taken up immediately in the Hill Areas of Kerala and they should be given equal importance in order to promote Off-Road as a Sustainable Tourism Activity in the regions.

5. Suggestions Offered through the Study

As the study found that majority of the respondents were young, Off-Road Recreational Activities should be targeted on the individuals in the lower age category or the youth. Off-Road Recreational Activities not only attract students, but also private employees, business associates and government employees. Therefore, irrespective of the professional qualifications, Off-Road Recreational Activities can be promoted among individuals belonging to different professions.

Off-Road involves high cost due to the maintenance of the 4WD Vehicles and it also involves high registration cost to participate and for the use the designated tracks. Therefore, efforts can be made to target individuals with Higher Income. As a good number of interested individuals do not own their own 4WD Vehicles, 4WD Clubs and Association can offer these types of vehicles on rent. This initiative, if publicised, will attract more individuals to take up memberships in these Clubs and Associations. The Clubs and

Associations can also orient their members on modifying the Stock Body Parts of their 4WD Vehicles. These modifications can be kept to the minimum so as to abide by the rules and regulations in the region. Participants can also be oriented on the importance of safeguarding the sustainability and ecology of the environment, while undertaking these activities. The participants should be given strict instructions, so that they follow the designated tracks, without deviating away into the natural areas.

There is scope to identify new Off-Road destinations across the Hill Areas of Kerala, so as to minimize the negative impacts in only few regions. Efforts should be taken so as to identify the Off-Road destinations closer to tourist attractions so that tourist traffic visiting these attractions can also be diverted to the Off-Road destinations and thereby increase tourist visits to these sites. Such areas should also be situated in locations with a pleasant climate as that is one of the factors that could influence the number of tourists visiting the place. Initiating one-day 'Trail Package' Programmes for Off-Road trips like those existing for camping can also support to a great extent in encouraging Sustainable Tourism Practices in the destinations. This will help to control and put a check on the overuse of the trails, and will thereby help to sustain the environment in the long run. The 'Trail Packages' can include sightseeing, wildlife viewing, a lot of thrill, excitement and adventure, and relaxation. Camping can also be incorporated into these packages, near to but away from the Off-Road tracks. Such 'Trail Packages' will also attract groups of family and friends.

Safety and first aid should be mandatorily ensured in all the Off-Road destinations as this is the top most priority for the participants. In addition, Accommodation, Food, and Basic Amenities should also be taken care of at or near the destinations. Every Off-Road destination must have a Well-Equipped Recovery Van in case of any kind of emergency and for immediate help. As majority of the participants are in the young age group, Social and Mass Media, and Road Shows, along with providing Free Passes to visitors and co-branding with Tour Packages can also be used so as to increase the awareness about this type of a Recreational Activity. All these promotional activities should also focus on Off-Road being perceived as a Sustainable and as a Responsible Activity.

Strong efforts should be under taken to establish proper tracks in the Off-Road destinations, and to initiate periodic and strict inspections of the 4WD Vehicles. This will ensure that the rules and regulations are being followed. Care must be taken in order to avoid areas of Wild Flora and Fauna, control the Overcrowding of Viewers and to initiate proper Waste Management Techniques at the destinations.

Kottayam, Idukki, Pathanamthitta and Wayanad have already been identified as popular and most preferred Off-Road destinations in Kerala. Destinations with similar characteristics should also be identified across the other Hill Areas of Kerala in order to improve and to attract more number of individuals to take up Off-Road as recreational activity.

5.1 Conclusion

The study was successful to a great extent in identifying and in analysing the feasibility of Off-Road as a significant adventure activity in the Hill Areas of Kerala. Increase in the number of participants who are interested in Off-Road trips have contributed to the growth of the local tourism economy of the regions, but it was found that if Off-Road was allowed to be continued without any control, it would create serious repercussions to the natural environment in the areas. The study focused on the popularity and significance of Off-Road trips in the Hill Areas of Kottayam, Idukki, Pathanamthitta and Wayanad Districts and it suggested strategies to be adopted to improve the sustainability of Off-Road practices in the regions. With the implementation of the suggested strategies and with the support of the right environmental regulations, the negative impacts on the environment caused due to Off-Road can be reduced, and at the same time Off-Road trips can be used to increase the visitor attraction to the Destinations.

5.2 Scope for Further Studies

The study mainly focused on the Motivation for Off-Road in promoting Adventure Tourism in the Hill Areas of Kerala, with specific reference to the regions in Kottayam, Idukki, Pathanamthitta and Wayanad Districts. Had the study been

conducted in the other regions of South India, the results could have been different. The use of Demographic and Psychographic Variables that can have an impact on Tourist Motivation were also limited in the study. If more dimensions of Motivation were considered for the study, the findings might have been different from the ones obtained.

Another area of the study that went unexplored was the Technology, its impact and significance in promoting interest towards Off-Roading, especially with the support of 'Virtual Reality'. The study mainly focused on Off-Roading from the perspective of the participants; had the study been focused on the perspective of the Local Community residing in the identified regions, an altogether different image of Off-Roading as a Recreational Activity would have been obtained. Then, altogether different initiatives could have been proposed to safeguard the environment around the trails.

The study was very general in nature and it can be used as a foundation study for further studies to be carried out on the importance of Off-Roading in promoting Adventure Tourism and other forms of Extreme Sports Tourism.

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