

# Place-based Coastal Tourism Impacts and Residents' Quality of Life: A Case of Mirissa Coast, Sri Lanka

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**Abstract**— *Tourism, particularly coastal tourism is conceived as instrumental in transforming the society economy and the environment of a locality. Beyond the research on environmental dimension, only a limited number of empirical work could be noted on its impact on the social dimension-Quality of Life (QOL) of a community. Further, the available studies are mostly descriptive and explored residents' perceptions of the impacts and resultant attitudes on QOL, and thus, of limited use for planning purposes. Therefore, this research examines the impacts of coastal tourism on quality of life of residents and its spatial variations as observed in Mirissa, a popular tourist destination in Sri Lanka. Both descriptive statistics and spatial interpolation methods are used to measure the impact of tourism on quality of life. The data was obtained from a questionnaire survey, interviews and observations. The research finds that coastal tourism impacts positively on the quality of life of the residents at the beginning stage of tourism development. There is a spatial variation of perceived quality of life in different parts of the tourism development area, experiencing more dispersed pattern towards the country side.*

**Keywords**— *Coastal tourism, Impacts, Quality of Life*

## I. INTRODUCTION

The Southern Coastal region, spanning from Beruwela to Tangalla of Sri Lanka, is reputed as one of Asia's popular and fastest growing tourism destination (Teddell and Bandara, 2004). The main tourist attractions are along the Galle Road, which contains sandy beaches with shallow water, coral reef observation areas with spots ideal suited for surfing, diving areas and whale watching places. In 2014, Sri Lanka derived 4.8% of its Gross Domestic Product directly coming from tourism (The Authority on World Travel and Tourism, 2015) and the present development policies have given high priority for its development by investing a substantial amount of funds in planning, integrated coastal management and development of infrastructure in the potential tourism areas, particularly along the coastal belt in the country. However, the inability to mobilize the support of the local

community in terms of participation and commitment in the processes of planning and implementation, lack of understanding and demonstration of social and financial benefits of improved planning and resource management hinders the materialization of objectives of tourism planning and development policies (White, Barker and Tantrigama, 1997).

'Researchers have investigated resident attitudes towards tourism development in recognition that tourism-related activities cannot be planned in isolation of their dependencies on other human activities and natural processes (Raymond and Brown, 2007). Tourism planning advocates in the sense that tourism can generate direct and indirect socio-cultural and economic benefits, while bringing negative impacts owing to the carrying capacity and other social and environmental issues (Inskip, 1991). Therefore, it is important to relate tourism development to the residents' quality of life as the support of the community is essential for planning, successful operation and sustainability of tourism (Jurovski and Gursoy, 2004).

In this background, the main objective of this paper is to explore place-specific, particularly tourism development node specific, residents' attitudes towards tourism impact on their QOL by using both traditional questionnaire and interview methods as well as a contemporary spatial modelling method. The paper first, explores the quality of life of residents in the Mirissa coastal tourism area in relation to tourism development impacts by employing questionnaires and interviews. Second, the pattern of residents' perception of tourism effect on QOL is spatially visualised by using Geographical Information System (GIS) based spatial analysis, and third, incorporate the place-based tourism development characteristics into those spatially visualized maps to classify tourism development nodes, thereby examining the differences of tourism impact between those classified development nodes. Finally, findings will be discussed, contributing for future research and tourism planning. A comprehensive identification of this phenomenon is important for planning the tourism area, because general descriptive impacts are not supportive to spatial decision

making (Raymond and Brown, 2007). Although few studies about residents' attitudes on coastal tourism impact are to be found, there is a research gap relating to the spatial or place-based analysis of residents' attitudes.

## II. LITERATURE REVIEW

### *Coastal Tourism*

The United Nations World Tourism Organisation (UNWTO) defines tourism as "the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes" (UNWTO, 2007). The coastal tourism activities are based on coastal or marine resources that are natural or man-made, and located within the coastal strip. The history of the coastal tourism goes back to the eighteenth century. It is based on the unique resources connected with sun, sand, sea water, scenic beaches, richness of fauna and flora, seafood, and so forth. Among the benefits that sustainable coastal tourism provides to the society are creating job opportunities, contribution of foreign earnings and government revenues and social benefits (Honey and Krantz, 2007).

Literature highlights some coastal tourism development nodes that can operate for accommodation of tourists. For example, the Department of Planning and Infrastructure, Western Australia (2004), has introduced a coastal tourism planning framework to Ningaloo coast and identified several coastal tourism nodes based on its historical use patterns, tourism demand and future scenarios and community feedback. Accordingly, the identified categories are tourism node, minor tourism node (catering for up to 200 beds, provide camping and provision of supplies and services is limited), ecolodge node, homestead tourism node, coastal camping, dispersed camping and day use site (Baker, Anda, Jennings and Ho, 2004; Shaw and Jones, 2012). Among those categories, homestay and ecolodge are considered as widely discussed categories giving benefits for both tourists and local community.

Lanier and Berman (1993) explains homestay venues as "private homes in which unused rooms are rented for the purposes of supplementing income and meeting people". Although the use of the term "homestay" seems different in different countries, and as a community-based tourism product that involves small entrepreneurs in the development of localized tourism products and services (Ibrahim and Razzaq, 2010). It is to accommodate tourists in a village with a local family, enabling the tourist to learn about local lifestyle, culture, nature (Hjulmand, Nielsen, Vesterlørkke et al. 2003). The homestay blends tourism and recreation due to the demand for access to hinterlands, more leisure time, fresh air, better private mobility (Zainuddin and Bakar, 2008). In Sri Lanka,

homestay is befitting the purpose of accommodating tourists, intending an interaction between the local community with the tourists giving opportunity to the tourist to experience Sri Lankan way of life. ". Sri Lanka Tourism Development Authority (SLTDA) defined 'Homestay Units' as "a house occupied by a family with at least one room up to a maximum of five guest rooms which is/are ready to accommodate tourists where the tourist and the hosting family interact with each other".

*Ecolodges* describes as the places where the accommodation facilities and services established in, or near, natural areas visited by eco-tourists. They are considered as a critical component of ecotourism as their design and operation can influence the natural environment, their employment practice (Osland & Mackoy, 2004). Russell et al. (1995) define an ecolodge as "a nature-dependent lodge that meets the philosophy and principles of ecotourism", which embraced principles of sustainability, managing, conserving the natural environment on which it depends, and providing economic benefits to the local community and the industry. In Sri Lanka, 'ecolodge' should be "eco-friendly, nature, environment and people friendly accommodation facility built in and around protected areas, pristine natural locations, using traditional building materials such as wattle and daub, bamboos, thatched with coconut *kadjan* or *illuk* (leaves of trees)" (Sri Lanka Eco Tourism Foundation, 2016).

### *Residents' Quality of Life and Coastal Tourism*

QOL is defined and measured differently depending on the different circumstances and disciplines. According to Mathew and Sreejesh (2017), QOL is the degree of well-being as per people's perception. World Health Organisation (WHO) defines QOL as individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns'. Much of the recent literature on QOL centres on four domains, namely

Source: Authors

Table.1: Literature review on QOL

Author	QoL Domains	Indicators
Mathew and Sreejesh (2017)	Material well-being  Community well-being  Emotional well-being  Health and safety well-being	Income and employment, income at current job, economic security of job, family income, pay and fringe benefits, cost of living, real estate taxes, cost of basic necessities  People, services and facilities, community life, community environment  Leisure activity, spare time, influx of tourists, spiritual activity, religious services, cultural preservation, cultural exchange, spiritual life  Health, air quality, water quality, garbage, accidents and crime rate, environment cleanliness
Woo, Kim and Uysal (2015)	Four essential life domains: material, community, emotional, and health/safety life domains	
Kim, Uysal and Sirgy (2013)	Material well-being Community well-being Emotional well-being Health and safety well-being	Income and employment, cost of living Facilities, people who live in the community Spare time, leisure life, cultural life
Khizindar (2012)	Material well-being, Community well-being, Emotional well-being, Health and safety well-being	
Aref (2011)	Material well-being  Community well-being  Emotional well-being  Health and safety well-being	Income, current job, economic security of job, pay and fringe benefits, increase real estate taxes, increase of cost of living, increase cost of basic necessities  Improve the conditions of the community environment, increase the community services, increase the community facilities, improve the community residents wellbeing  Spare time, leisure activity, leisure life, cultural life  Increase the air quality, increase the water quality, increase the accident rate, increase the crime rate, increase the safety and security
Andereck and Nyaupane (2010)	Community well-being  Urban issues  Way of life	Preserving peace and quiet, feeling safe, clean air and water, city services like police and fire protection, a stable political environment, good public transportation, the beauty of community, quality of roads, bridges, and utility services  The prevention of crowding and congestion, controlled traffic, controlled urban sprawl and population growth, Litter control, popular zoning/land use  Personal life quality, the preservation of my way of life, a feeling of belonging in my community, resident participation in local government, having tourists who respect my way of life

Community pride and awareness	The image of my community to others, an understanding of different cultures, awareness of natural and cultural heritage, community pride, opportunities, to participate in local culture
Natural/cultural preservation	Preservation of wildlife habitats, preservation of natural areas, preservation of cultural and historic sites
Economic strength	Strong and diverse economy, stores and restaurants owned by local resident, the value of my house and/or land, enough good jobs for residents, plenty of retail shops and restaurants, fair prices for good and services
Recreation amenities	Plenty of festivals, fairs, museums, having live sports to watch in my community, quality recreation opportunities
Crime and substance abuse	The prevention of crime and vandalism, the prevention of drug and alcohol abuse

*material well-being, health and safety well-being emotional well-being and community well-being.* Table 1 summarises the domains and indicators discussed by different authors pertaining to the concept of QOL.

Christaller (1964) proposed tourist area life cycle theory to show the relationship between tourism and quality of life. It illustrates, three stages of the life cycle, namely discovery, growth, decline. Further, Butler (1980) explains the life cycle with six stages such as exploration stage, involvement stage, development stage, consolidation stage, stagnation stage, and decline stage. Haywood (1986) by modernizing Butler's tourist area life cycle, defines four stages as the beginning stage, the growth stage, the maturity stage and the decline stage. Later, certain other scholars use this tourist area life cycle theory for the furtherance of their studies.

Martin and Uysal's (1990) work on the relationship between tourism life cycle and carrying capacity reveals that each development stage has its own carrying capacity. Accordingly, in the beginning stage, limited number of tourists can be accommodated due to lack of physical facilities, whereas carrying capacity might be favourable on a social level. On the other hand, at the maturity stage, facilities might be at its peak, enabling to accommodate more tourists. At this point, host community might be aggressive towards tourists. O'Reilly (1986) found that social attributes (e.g. crowding due to local activities), cultural attributes (e.g. damaging the local culture) can cause to limit carrying capacities in addition to those physical facilities available. Several studies have been undertaken on residents' perceptions of coastal tourism. Kibicho (2004) evaluates the tourism situation in Kenya's coastal region with the emphasis on how the local people are being involved in tourism development in the region, and how such

integration could be used as a means to win the vitally needed local community's support for the industry. The main methodology is based on interviews conducted with the local people living in Kenya's coastal region. The analysis of the questions puts forth in this study leads to the conclusion that tourism development in Kenya's coastal region has impacted on the local people's well-being. The key finding of this analysis is that people who are involved in tourism activities have a relatively positive perception about the industry in comparison to those who are not involved. These results suggest a relationship between the local community's level of involvement and their support for tourism.

Raymond and Brown (2007) compare the attitudes towards coastal tourism by using both questionnaire survey and spatial preferences. The results from spatial attribute data demonstrate the place specific difference in acceptance of tourism development. Therefore, they suggest spatial attribute method containing in an inclusive method can bridge the pro-development and antidevelopment preferences in both local and regional scales.

Sharma and Dyer (2009) examine the differences in residents' perceptions of tourism development impacts by means of location of their residence, gender, age, annual household income level, ethnic background, occupation and the level of education attained. A questionnaire survey has been used to collect data from residents of the sunshine coast region. The findings of the study reveals that residents living in the coastal area with high tourist activity, derived more positive impacts on tourism than those residents living in hinterland areas. Paradoxically, the residents of hinterland areas were more likely to perceive more positive social impact than those living in coastal areas. The results further suggest that the residents

of suburban areas perceived more positive economic impact when compared with the residents of rural or urban areas. Certain shortcomings in previous studies highlights, the need of study on residential attitudes towards coastal tourism. Most of the studies have adopted a questionnaire survey method, suggesting to undertake spatial analysis.

### III. METHOD

This study focuses Mirissa coast and its environment as the study area. It is one of the zones in South Coast Resort Region that has been proposed as suitable areas for tourism development and for national investment in tourism in terms of beach resort and fishing community. As per the previous discussion in the literature related to the tourist area life cycle theory, this study area is considered as an area that experience the beginning stage of tourism development.

The most frequently cited four QOL domains in the recent literature (Table 1) namely, 1) *material well-being* which includes five indicators (increased family income, increased employment opportunities, increased opportunities for business, increase house prices and increase land value) ; 2) *health and safety well-being* which includes five indicators (Not influence to increase crime rate, not influenced for a tendency to use drugs, not influenced to abuse occurrence, increased health care and increased environmental cleanness); 3) *emotional well-being* which includes five indicators (Increased relationship with religious place, not influenced to change the religion, increased involvement of leisure activities, Improved knowledge of western music, influenced to imitate water sports); and 4) *community well-being* which includes eight indicators (increased condition of road, increased water facilities, increased electricity facilities, increased telephone facilities, not influenced to change their food consumption pattern, not influenced to change clothing pattern, influenced to increase the relationships with foreigners and influenced to improve multi-linguistic skills), were subjected for the survey and analysis.

Unstructured interviews and structured questionnaire were used to collect data on QOL domains (23 indicators) of residents. For the questionnaire survey, 166 heads of households (60% female and 40% male between 30-60 years old were selected from six (6) GNDs based on stratified sampling method. The questionnaire consisted basic demographic factors and twenty-three perceived quality of life indicators followed by four domains in conjunction with Likert Scale questions (5- strongly agree, 4- agree, 3- not make any impact, 2- disagree, 1- strongly disagree). Likert scale rating denotes an individual's value judgement related to tourism impact on each indicator.

A representative sample of 30 stakeholders were randomly selected from six (6) *Grama Niladari* Divisions (GND) (the lowest administrative unit) in Mirissa for conducting interviews, and the sample comprises of 26% of hotel and restaurant owners; 16% of government officers; 26% of residents; 10% of coastal guard officers; 13% of restaurants and retail shop owners and 10% of three-wheeler drivers. These interviews were used to gather data on experiences and perceptions of tourism impacts, barriers to develop tourism. Such insight necessitated to reasoning descriptive statistical analysis, giving in-depth understanding on the phenomenon.

The analysis follows the three steps of statistical and spatial analysis. The first step of analysis is, the data of questionnaire survey computed with descriptive statistics to find the mean ( $M$ ), standard deviation (SD) and coefficient of variation (CV). The purpose of doing such analysis is to find the residents' perception of tourism impact on each QOL indicator and to confirm whether majority of residents hold the same perception.

The second stage of analysis is, the residents' perception of tourism impact on QOL is spatially visualised by using Geographical Information System (GIS) based spatial analysis. As this research ultimately aims to guide more socially acceptable tourism planning attempts, the location-based understanding of residents' perception is important. For this purpose, first, it was subjected to; 1) georeferencing the locations of houses where questionnaires are administrated; 2) feeding the value of overall perception of tourism impact to each georeferenced point; and 3) running spatial interpolation analysis of GIS to convert discrete points into a continuous surface. Then the output portrayed the locations where residents strongly agreed with tourism impact on their QOL to the locations where residents strongly disagreed.

The third step of analysis is, finding the location-based tourism development characteristics of the clusters that emerged in this process, where residents indicated that whether they agreed with the positive impacts of tourism. This identification leads to specify the types of coastal tourism development nodes. This analysis has done by using the information collected through unstructured interviews and literature review.

The final phase of the analysis is that the data of questionnaire survey is subjected to ANOVA to identify specifically, based on residents' perception, how QOL indicators were assessed between specific tourist development nodes and repeat the descriptive statistics to find the impacts on QOL in each tourism development node.



**IV. RESULTS**

Overall, in response to the question on the positive impacts of tourism on QOL, respondents agree that (*M* 3.81, *SD* .845) tourism has positively impacted on their quality of life, followed by all indicators that represent four domains have mean scores higher than or closer to the theoretical mean (*M* 3.00), suggesting that tourism enhances the QOL (Table 2). Under the ‘Material well-being’, increased land price (*M* 4.51, *SD* 0.69) increased house value (*M* 4.55, 0.69) are rated comparatively higher scores more towards strong agreements on positive impacts. Some respondents mention that the construction of tourist hotels, guest houses and restaurants are the

reasons for the appreciation of land value. Further, they state that every season at least one new hotel, restaurant or a guest house is coming up in Mirissa. A shop owner told,

‘because of the Tsunami 2004, Mirissa area was completely devastated. Due to that land and house price decreased drastically. However, in a post-war situation, tourism industry improved and hotels and restaurants close to the shoreline began to emerged. Consequently, the houses are being converted to the hotels and guest houses while value of houses is also increasing.’

Table.2: Descriptive analysis of residents’ perception of tourism impact on QOL

	Indicator	Mean (M)	Standard Deviation(SD)	Coefficient of Variance (CV) (%)
Material Well-being	Increased family income	3.6	1.48	41.21
	Increased employment opportunities	3.59	1.42	39.58
	Increased business	3.64	1.43	39.44
	Increased land value	4.51	0.69	15.51
	Increased house price	4.55	0.69	15.21
Health & Safety Well-being	Not influenced to increase crimes	3.71	0.84	22.78
	Not influenced for a tendency to use drugs	2.95	0.85	28.80
	Not influenced for a tendency for abuse occurrence	3.33	0.60	18.00
	Increased environmental cleanliness	4.38	0.54	12.35
	Increased health care	3.4	1.18	34.62
Emotional Well-being	Increased involvement of leisure activities	2.66	1.20	45.16
	Not influenced to change religion	4.57	0.68	15.05
	Increased relationship with religious place	3.07	1.35	44.03
	Improved knowledge of western music	2.60	1.21	46.56
	Influenced to imitate water sports	3.19	1.36	42.77
Community Well-being	Increased road quality	4.08	0.75	18.52
	Increased water facilities	3.75	0.89	23.92
	Increased electricity facilities	3.78	0.86	22.79
	Increased telephone facilities	3.58	1.21	33.82
	Not influenced to change food pattern	4.02	0.82	20.39
	Not influenced to change the clothing pattern	4.00	0.80	20.03
	Increased relationship with foreigners	3.8	1.34	35.29
	Influenced to improve multi-linguistic skills	3.9	1.18	30.35

Source: Authors

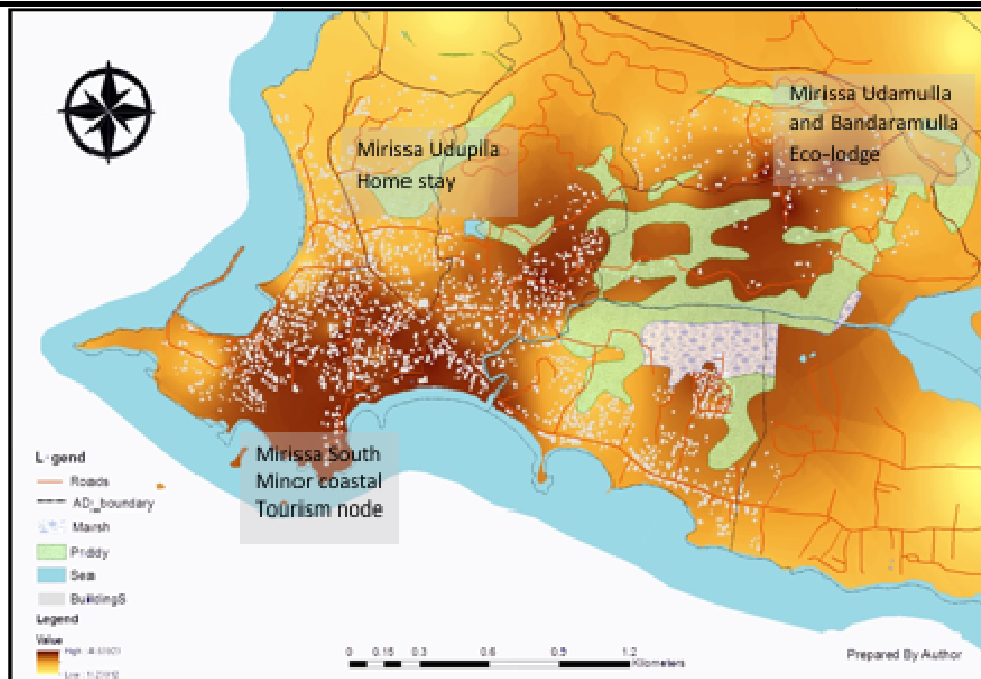


Fig.1: Predictable pattern of place-based tourism impacts on QOL

Source: Authors

Further, respondents agree that the tourism has brought in positive results (although  $M$  1.42,  $SD$  1.43 indicating a difference of perception of respondents) to their employment and business activities. They considered the hotel sector is as the main employment generating engine, and transportation sector, which includes three wheelers, cab services, boat services, is also creating new employment opportunities. At the same time, the number of small scale business ventures such as restaurants, retails and handicraft shops are also agglomerating in relation to tourism nodes. Some people engage in tourism related activities as a secondary income generating source. A fishermen expressed,

‘my income has not negatively impacted due to the activities related to the tourism. Previously, Mirissa was famous for fishery activities, and it had earned a name especially for traditional fishery techniques. After the emergence of tourism industry some tourists prefer to watch fishery activities.’

In respect of health and safety well-being, respondents agree that tourism impacted to increase the level of environmental cleanliness ( $M$  4.38,  $SD$  .54). They said, the hotels close to the sea, bear the responsibility of maintaining cleanliness of the beach area, and Waligama Municipal Council also collect solid waste regularly from the area. It is also important to note that tourism has not influenced to increase crime rates ( $M$  3.71,  $SD$  .84) and abuse occurrence ( $M$  3.33,  $SD$  .60). However, usage of drugs (a negative-sense impact) scores  $M$  2.95 and  $SD$  .85, suggesting that respondents have slightly negative feelings related to the tourism's impact on QOL. Further,

it was revealed at the interviews that some employees in the hotel sector have developed a tendency to get addicted to drug use. This confirms the findings of Andereck and Nyaupane's work (2010).

As perceived by the residents related to the indicators under emotional well-being, tourism has not influenced to change residents' religion ( $M$  4.57,  $SD$  .68), while they collectively accept that there is no change in the relationship they had with their religious places.

In terms of community well-being, residents accepted the fact that there is a development in road quality ( $M$  4.08,  $SD$  .75), water facilities ( $M$  3.75,  $SD$  .89) and electricity facilities ( $M$  3.78,  $SD$  .86) due to the influence of tourism. However, it is interesting to note that tourism has no impact to change residents' food pattern ( $M$  4.02,  $SD$  .82) and to change clothing pattern ( $M$  4.00,  $SD$  .80). This suggests that residents do have good respect on their traditional living pattern and they do not accept their dressing or food consumption pattern need to have a change or improvement in relation to tourism development. Further, it seems that residents try to preserve their traditional living styles as per tourists' demand. It is also evident from the interview that employees in hotel sector believe that they improved their knowledge in languages due to tourism. A Travel guide expressed,

‘I have more opportunities to develop contacts with tourists. I can speak more than 10 languages. It's the result of my self-studies.’

At the same time, the employees of the tourism sector accept that tourism has impact on developing relationships with foreigners. A hotel owner said, "I am a business man. So I have connections with foreigners face to face as well as via Facebook or e-mail. It is important for my business activities. Sometimes once they go back to their countries, they send presents or greeting cards during our festivals seasons."

However, it is also important to note that the mean values of some indicators (other than demographic factors) do not represent the perception of all the respondents. For example, some indicators that comes under emotional well-being (increased involvement of leisure activities, improved knowledge of western music, influenced for imitating water sports) and material well-being (increased family income, increased employment opportunities, increased business) This finding makes conceptual sense whether the underlined variation is owing to the spatial variation (other than demographic factors) of dispersion of different types of tourism development nodes. Thus, the overall impact is analysed spatially, and following

over the interior area creating tourism impacts to be felt in the inner part of the area.

Initial interviews conducted with the residents highlighted the different reasons why tourists prefer arrivals in Mirissa as their destination. Enumerated among the attractions were beauty of the environment, fare prices, safety and diverse leisure activities. However, it was the beauty of the environment (68%) that attracted most tourists, who preferred to visit paddy fields, small streams, swamps and birds. Those natural features enhance the value and unique beauty of the area. It reveals that tourists were not only interested in beach but attracted to green areas. Further, people describe Mirissa as a tourist destination that provides affordable prices for tourists. At the same time, the quality of the surrounding environment is acceptable as it is a crime free area. Further, the visitors who come to Mirissa mostly prefer to stay in hotels, homestay, ecolodges, and guest houses which are readily available. In the interviews, it revealed that homestay is the most preferable accommodation among tourists (40%).

Table.2: Descriptive analysis of QOL domains in tourism development nodes

Node	Domain	Mean	Standard Deviation	Coefficient of variance
Coastal minor tourism node	Material well-being	4.00	.92	23%
	Health and safety well-being	4.32	.47	10%
	Emotional well-being	3.05	.54	17%
	Community well-being	3.22	.65	20%
Homestay node	Material well-being	4.52	.70	15%
	Health and safety well-being	4.14	.57	13%
	Emotional well-being	4.33	.52	12%
	Community well-being	4.10	.66	16%
Ecolodge node	Material well-being	4.34	.80	18%
	Health and safety well-being	4.19	.37	8%
	Emotional well-being	3.84	.81	23%
	Community well-being	3.74	.71	18%

Source: Authors constructed

section presents the results that were observed. Tourism impact distribution pattern as perceived by residents, presented in the Fig. 1 goes towards the inner areas of the Island than along the coastal belt. Different shades of darken colour presented in this figure denotes the proximity of the respective development nodes, but benefits they derive vary depending on the nature of the activities of the nodes. The gradient ( $M > 3.5$ ) depicts the locations where residents consider tourism is positively impact on QOL or in another words, the residents of these areas are strongly agree on the positive tourism impact on QOL domains. This finding urge to find the types of tourism activities proceeding in these nodes.

According to the findings at interviews, the main reason for this pattern is owing to the presence of potential, diverse environment features for tourism dispersed all

As mentioned, three development nodes were classified for study purpose; Mirissa South Minor Coastal Tourism node, Mirissa Udupila Homestay node and Mirissa Udumulla and Bandaramulla Eco-lodge node. In case of Mirissa, it is quite apparent that places of natural beauty have influenced for distribution of those tourism nodes. The Mirissa South area is predominantly used as minor tourism nodes where most of the hotels, rest houses are located close to the shoreline. Thus, it becomes obvious that activities, mostly preferred by tourists are sun bathing, surfing, and swimming. The north side of Galle Road (Mirissa Udupila) is classified as 'homestay tourism node'. Udupila is located somewhere away from the main arteries and the residents tend to provide accommodation for tourists with moderate level facilities when compared with hotels. Moreover, Mirissa has earned a name as a



centre for Ayurvedic therapy practiced in eco-lodges located in Mirissa-Udumulla and Bandaramulla area. Those places are well connected with the natural environment comprising paddy fields, swamps and bird habitats. The nature lovers mostly prefer these lodges which are designed and constructed in an eco-friendly manner. These clusters are classified as 'ecolodge node'. It is of interest to know how QOL indicators were assessed between specific tourist development nodes as revealed by the combining the results of spatial interpolation analysis (see Fig. 1). Comparing three nodes in terms of overall QOL, the ANOVA test confirms that these three nodes - minor tourism node, homestay and eco-lodge node - differ with regard to tourism impact on QOL ( $F$  14.203,  $P$  .000). Moreover, the descriptive statistics of each domain in respect to three nodes is considered (Table 3). The analysis shows the respondents of all three nodes are in agreement that tourism has positively impacted on material well-being and health and safety well-being. However, the results show the respondents of minor tourism node and eco-lodge node are having a neutral perception (tourism does not make any difference) about the emotional well-being and community well-being. Some reasons behind such perception might be ;1) coastal tourism node is facilitated with physical infrastructure not merely because of tourism, rather it is closer to a main artery of Sri Lanka (Galle Road); 2) the tourists who spend the time in these nodes are mostly mingle with tourism entrepreneurs than the local community; 3) the eco-lodge nodes are developed with environmental infrastructure than physical infrastructure such as roads, water supply, electricity and telephone, thus, the local community cannot enjoy the externalities; 4) the tourists who retreat in eco-lodges, might prefer to be away from people, having less interaction with the local community. Nevertheless, respondents of homestay nodes strongly agree that they gain community well-being ( $M$  4.33,  $SD$  .66) and emotional well-being ( $M$  4.10) due to tourism activities. As already mentioned, the reasons might be; 1) tourists reside in local homes to share the local culture that facilitates more interactions with local community; and 2) physical infrastructure is essential for houses to provide comfortable living environment. Accordingly, it can be noted that homestay tourism nodes create more benefits to the local community.

## V. DISCUSSION AND CONCLUSION

This paper discusses tourism impact on QOL in one coastal tourism area in Sri Lanka that comes under the preliminary stage of the development based on residents' perception. Residents accept that Mirissa is improved due to tourism, which in turn passed the way for the

advancement in their QOL. The study further demonstrates the existence of three types of tourism nodes in Mirissa, namely, minor tourism nodes; homestay tourism nodes and ecolodge. The closer to the tourism nodes, the higher QOL is recorded from the residents, but the dimensions that are contributing are varied according to the nature of tourism activities. Residents' of the homestay tourism node have positive attitudes of all QOL dimensions. Further, different types of tourism development nodes record different level of impact, but generally, these nodes have positive impacts on QOL, while some indicators, particularly, negative impacts are at neutral level as reported by some scholars, for example, Andereck and Nyaupane (2010), Martin and Uysal (1990) and Var and Kim (1989). The most significant finding of this research is that the tourism nodes in Mirissa indicate an inward spread towards land than spreading linearly along the coast.

According to the present discourse relating to a conceptual issue of coastal tourism highlights that there is a heavy impact on coastal physical environment in terms of urban sprawl in linear form (Marina, et al, 2009). Thus, in the long term these negative impacts could erode the economic benefits deriving from tourism because it tends to destroy natural assets in coastal areas which consist beauty of the landscape, coastal ecosystem and biodiversity. However, it is often discussed that tourism can have a negative influence on the environment in terms of the destruction of natural resources, and the proliferation of litter, garbage, and waste (Andereck and Nyaupane, 2010; Tosun, 2002), particularly at the maturity stage, threatening to carrying capacities related to tourism development (O'Reilly, 1986). Thus the main challenge that remains to be addressed is how to develop coastal tourism patterns that would not affect the benefits deriving from tourism nor the benefits drawing by the local people, and at the same time upgrade the quality of the natural resource base. In this sense, many of Sri Lanka's coastal areas including Mirissa coast inherently possess high scenic ecological and cultural environments that could carefully plan and develop in a way it secures this organic form towards inner areas of the coastal belt and carrying capacities for further development, as growth beyond this capacity can happen diminishing returns on tourism investments impact (Kim, Uysal and Sirgy, 2013). More research work supported by case studies needs to be undertaken in this direction to delve into this aspect discussed in research works, as the environmental impacts of coastal tourism could be minimized if the development activities are best more towards land side. This planning and development can happen with integrating the different types of nodes making trade off benefits, while minimizing negative

impacts.

This study has some limitations. First, residents' perceptions regarding the perceived value of tourism development impacts might be different depending demographic factors as well as the type of destination and the context. Thus, residents' demographic characteristics should be considered in the future research. Second, conducting in-depth study with diverse stakeholders, including planners, business owners may help us better understand the tourism impacts and QOL and the role of tourism development stages and nodes. This is a preliminary step to understand the way tourism impacts on QOL is perceived by its residents, connecting place-based studies towards tourism planning and management.

### REFERENCES

- [1] A.M. O'Reilly, Tourism Carrying Capacity: Concept and Issues, *Tourism Management*, 7(4), pp.254-258, 1986
- [2] A.T. White, V. Barker and G. Tantrigama, Using Integrated Coastal Management and Economics to Conserve Coastal Tourism Resources in Sri Lanka, *Ambio*, 26(6), pp.335-344, 1997
- [3] A.Zainuddin and K.A.Bakar, Service Quality in Homestay Tourism A Case Of Malaysia. *International Journal of Management Cases*, 10(3), pp.455-468, 2008
- [4] C. Jurowski, & D. Gursoy, Distance Effects on Residents' Attitudes toward Tourism. *Annals of Tourism Research*, 31(2), pp. 296-312, 2004
- [5] C. Raymond, & G. Brown, A Spatial Method for Assessing Resident and Visitor Attitudes towards Tourism Growth and Development, *Journal of Sustainable Tourism*, 15(5), pp. 520-540, 2007
- [6] C. Tesdell, and R. Bandara, Tourism as a Contributor to Development in Sri Lanka: An Overview and a Case Study, Working Paper on Economics, Ecology and the Environment, The University of Queensland, 2004.
- [7] C.Tosun, Host Perceptions of Impacts: A Comparative Tourism Study, *Annals of Tourism Research*, 29(1), pp.231-253, 2002
- [8] Department of Planning and Infrastructure, Ningaloo Coast Regional Strategy Carnarvon to Exmouth, Western Australia Planning Commission (WAPC), Perth WA, 2004, Last accessed 28 December 2016, [http://www.wapc.wa.gov.au/dop\\_pub\\_pdf/FD\\_STL\\_US.pdf](http://www.wapc.wa.gov.au/dop_pub_pdf/FD_STL_US.pdf)
- [9] E. Inskeep, *Tourism Planning: An Integrated and Sustainable Development Approach*. Van Nostrand Reinhold, 1991
- [10] E. Woo, H. Kim, & M. Uysal, Life Satisfaction and Support for Tourism Development, *Annals of Tourism Research*, 50, pp. 84-97, 2015.
- [11] F. Aref, The Effects of Tourism on Quality of Life: A Case Study of Shiraz, Iran, *Life Science Journal*, 8(2), pp. 26-30, 2011.
- [12] G. Wescott, The Theory and Practice of Coastal Area Planning: Linking Strategic Planning to Local Communities, *Coastal Management*, 32(1), pp.95-100, 2004
- [13] G.E. Osland, and R. Mackoy, Ecolodge Performance Goals and Evaluations, *Journal of Ecotourism*, 3(2), pp.109-128, 2004
- [14] L.G.Hjulmand, U.Nielsen, P.Vesterlørkke, et al., Tourism as a Development Strategy in Rural Areas Adjacent to the Crocker Range National Park, Sabah, Malaysia, 2003, URL: <http://www.arbec.com.my/pdf/art8janmar03.pdf>.
- [15] K. Kim, M. Uysal, and M.J. Sirgy, How does Tourism in a Community Impact the Quality of Life of Community Residents?, *Tourism Management*, 36, pp. 527-540, 2013
- [16] K.L Andereck and G.P. Nyaupane, Exploring the Nature of Tourism and Quality of Life Perceptions among Residents. *Journal of Travel Research*, 2010
- [17] K.M. Haywood, Can the Tourist-area Life Cycle be Made Operational?, *Tourism Management*, 7(3), pp.154-167, 1986
- [18] M. Honey, & D. Krantz, *Global Trends in Coastal Tourism*, Washington DC: Center on Ecotourism and Sustainable Development, 2007
- [19] M.T.M. Khizindar, Effects of Tourism on Residents' Quality of Life in Saudi Arabia: An Empirical Study, *Journal of Hospitality Marketing & Management*, 21(6), pp. 617-637, 2012.
- [20] P. Lanier and J. Berman, Bed-and-breakfast Inns come of Age, *The Cornell Hotel and Restaurant Administration Quarterly*, 34(2), pp.15-23, 1993
- [21] P.V. Mathew, & S. Sreejesh, Impact of Responsible Tourism on Destination Sustainability and Quality of Life of Community in Tourism Destinations, *Journal of Hospitality and Tourism Management*, 31, pp. 83-89, 2017.
- [22] R. Jones, & B.J. Shaw, (Eds.). *Geographies of Australian Heritages: Loving a Sunburnt Country?*, Ashgate Publishing, Ltd, 2012.
- [23] R.W. Butler, The Concept of a Tourist Area Cycle of Evolution: Implications for Management of Resources, *The Canadian Geographer/Le Géographe Canadien*, 24(1), pp.5-12, 1980.
- [24] Sri Lanka Eco Tourism Foundation, *Ecolodges in Sri Lanka*, Last accessed 26 December 2016,

<http://www.ecotourismsrilanka.net/index.php?p=ecolodge>

- [25] Sri Lanka Tourism Development Authority, Home Stay Units, 2016, Last accessed 26 December 2016, [http://www.sltda.lk/home\\_stay\\_project](http://www.sltda.lk/home_stay_project)
- [26] T.Var, and Y.Kim, Measurement and Findings on the Tourism Impact, *Unpublished Paper, Department of Recreation, Park and Tourism Sciences, Texas A&M University*, 1989
- [27] The Authority on World Travel and Tourism, Travel and Tourism; Economic Impact 2015, Sri Lanka, 2015, Last accessed 28 December 2016, <https://www.wttc.org/-/media/files/reports/economic%20impact%20research/countries%202015/srilanka2015.pdf>
- [28] W. Christaller, Some Considerations of Tourism Location in Europe: The Peripheral Regions-Underdeveloped Countries' Recreation Areas, *Papers in Regional Science*, 12(1): 95-105, 1964
- [29] W. Kibicho, W. Community Tourism: A Lesson from Kenya's Coastal Region. *Journal of Vacation Marketing*, 10(1), pp. 33-42, 2004
- [30] Y.Ibrahim, and A.R.A. Razzaq, Homestay Program and Rural Community Development in Malaysia. *Journal of Ritsumeikan Social Sciences and Humanities*, 2, pp.7-24, 2010