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Impact of Seasonal Variation on Travel and Tourism Sector: A Study of the Post Civil Unrest in Arugam Bay in Sri Lanka

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Abstract

The purpose of this study is to identify the effect of seasonality on the tourism and hospitality industry in Arugam Bay after the civil unrest across the different firms in tourism. This study uses both quantitative and qualitative analyses using primary data. Fifty questionnaires give valid responses that were used for analysis. Out of 80 questionnaires, the average response rate was 62.5%. An exploratory study, descriptive analysis, and an Independent Sample Test were used to identify the potentials of tourism, the overall impact of seasonality, and the impact of seasonality across different travel and tourism sector of the study area. According to the results, 83%, 75%, 68%, and 59.9% of firms agreed on the impact of seasonality on environment, workers, supply, and quality of services, respectively in Arugam Bay. It also concluded that the impact of seasonality on workers, supply, and quality of services is not the same among all the categories of firms except environment. The variation in seasonality in the travel and tourism sector is because of the lack of regional planning considering the types of firms in the tourism sector. Also, insufficient resources and lack of consistent capacity between various firms in the sectors are also course variations because of the effect of seasonality.

Keywords: Tourism, Travel, Arugam Bay, Seasonality

JEL Classification Code: L83, R4, O53, Q54

1. Introduction

Travel and Tourism across the globe have developed as an important economic sector which provides many advantages in the direction of economic growth (Lee & Syah, 2018; Mustafa, 2015; Mustafa, 2019) and sustainable development in numerous countries by offering new and innovative opportunities (Mishra et al., 2016; Mishra & Rout, 2012; Munshi & Mishra, 2016). Travel and tourism are two benefactors which reduce poverty (Scheyvens & Russell, 2012; World Tourism Organisation, 2010) and improve economic development (Bianchi, 2018) by creating new employment (Snyman, 2012). Seasonality in tourism and travel is commonly revealed as a problematic aspect that chunks the sustainable economy in a period. Generally,

seasonality has two faces, such as peak and off. During the peak, earning level and incomes are higher than expected. At the same time, off-season provides a battlefield for combat and survival (Butler, 1998). Seasonality is also defined as “Temporal imbalanced in the phenomenon of tourism” (Butler, 1994). The mysterious complications that cannot be addressed in seasonality are no mechanism that has been found so far intended for measuring seasonal variation that reflects many problems in economy and sustainability.

Arugam Bay is a seasonal tourism spot located in Pottuvil Pradeshiya Sabha of Ampara district in the Eastern province of Sri Lanka. It is located about 325 km traveling distance from Colombo (Ratnayake & Hapugoda, 2017). It is one of the top 10 surfing terminus in the world (Planet, 2010). The seasonality of Arugam Bay starts from March and ends with October. November to February is identified as off-season. Usually, in the seasonality period, Arugam Bay attains more income than regular days. Also, domestic tourism has identified weekends even in off-season. Endless beach, Elephants, Beach surfing, famous tea, and winds are the key reason and stimuli for tourist arrival in this place (*Sri Lanka tourism named a top travel destination, 2020*). During the civil war in Sri Lanka, tourism spots were distressed by terrorism. There was impoverished income earned by the

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tourism sector. Once the civil war was over, Sri Lanka's tourism rates grown dramatically (Mustafa, 2019), and tourism related industries are considered as an essential factor for the sustainable development of the country.

Generally, 55% of females and 45% of Male tourists visit ArugamBay during the seasonality. 53% of those tourists age between 21 and 30. This means younger tourists like ArugamBay rather than other tourist spots due to the Surfing nature of the beaches which is helped by favorable wind. Also, mostly well-educated tourists only visit ArugamBay, and out of that, 31% have completed University degree programs. Per tourist money spending per day is from 51 dollars to 71 US dollars on an average. Hence the income of ArugamBay tourism is relatively high, and the seasonality period of ArugamBay is broad; hence the sustainability of the economy in Sri Lanka by ArugamBay is highly effective. From a survey of 86 tourists, it could be identified that tourists visit ArugamBay for several purposes. Out of 86, 9% of tourist replied that it's an attractive and cheap place for enjoyment. 5% visit for having fun with ArugamBay culture and 81% visit the place for surfing. In the traveling site, public vehicles used by 48% of tourists, 35% hired a vehicle for their visits, and 12% travel with friends (Pathirana & Samarathunga, 2018).

After the civil unrest of Sri Lanka, ArugamBay tourism is considered a high potential location that influences the countries income. Though it helps to develop a country with its natural characteristics, seasonality plays a significant role in ArugamBay tourism even when the extended tourist season. This study aims to identify the seasonal variation in ArugamBay tourism and travel sectors, proposed a method to get success during the seasonality in ArugamBay Sri Lanka. After the instability of the country, Arugam Bay is a rapidly growing district of the country in the tourism sector. Arugam Bay has a suitable climate, topographical features, historical background, cultural specialty, and good scenic viewpoint. But seasonality presents many issues that require special attention and strategies. In particular, seasonality affects the number of tourist's arrivals to a region and which can threaten the viability of businesses in a region. Seasonality can affect the tourism businesses through various Channels such as Workers, Supply of goods and services, quality of the services, and enjoyment. Besides, seasonality has been considered as a crucial problem in regional planning.

2. Literature Review

2.1. Travel Sector

As stated by Peg et al. (2012), travel industries gets stronger in summers when compared with winters due to the holidays and weather conditions. Most tourists and

passengers travel to visit attractive places, relative places, and new tourism spots during festival times such as New Year, Easter, Christmas, and so forth (Hakim & Merkert, 2016). Also, Mercer and Beck (2017) stated that travelers utilize weekends to travel to different places to acquire entertainment and pleasure. Vigil et al. (2016) identified that, during the seasonality period, travel sectors like flights and other travel vehicles getting the dynamic price for travel relevant services which is relatively higher when compared to the regular days (Berg et al., 2017; Gallego & van Ryzin, 1994). Hence, it is apparent that there is a demand in tourism and travel sectors during the seasonality period. Proper strategy in each sector during the seasonality will increase the economy comprehensively. Also, from Allergen et al. (2013), it is clear that several factors influence the demand in the travel sector, which include regional, cultural, and the budget of the tourists. The travel industry in general offer fair prices except in high tourist seasons (Baker et al., 2015). Market and Webber (2018) proved that in September 2013, the passenger seat reservations of Asia-pacific, American, and European airlines were 80.3% while it declined to 76.6% during December. It indicates the seasonality factor in the sector and passengers select their preferred places according to the tourist season.

2.2. Tourism Sector

Seasonality has been branded as a critical feature in tourism for a very long time. Martinez and Morales (2015) identified that seasonality had positive and negative effects on the travel and tourism sectors. However, most studies and researchers criticize that fluctuation in the number of tourists on seasonality basis causes problems to firms and destinations rather than benefits (Martin et al., 2014; Nadal et al., 2004; Sainaghi, 2010). This seasonal variation brings three categorical impacts: economic, socio-culture, and ecological (Cannas, 2012). "Tackling Seasonality" is one of the key features among tourism corporations (Baum & Hagen, 1999a), destination managing associations (Pechlaner et al., 2010; Sainaghi, 2006; Sheehan et al., 2007), and even some public sectors (Baum, 1999; Dwyer & Forsyth, 2009). Also stated by Connell et al. (2015) that battling seasonality is one of the main issues in various tourist areas. As declared by many studies and researchers that to resolve the problem of seasonality in the tourism sector organizing events and festivals can be better options than all other option to pull tourists. (Baum & Hagen, 1999b; Getz & Page, 2016; Sainaghi & Mauri, 2018; Walle & Getz, 1994).

For attracting tourists, a variety of strategies (Garnham, 1995) is adopted by the tourism sectors (Ramayah et al., 2011). To attract the seasonal tourists, as stated by Zhang and Kulendran (Zhang & Kulendran, 2017) based on

reference from Hong Kong Tourism Board (2013) that, Hong Kong provides information regarding seasonality as an advertisement to promote tourism among tourists which includes climates information as follow; spring (March to May & Average temperature 17 °C – 26 °C), summer (June to August & average temperature 26 °C - 31 °C), autumn (September to November & average temperature 19 °C - 28 °C) and winter (December to February & 12 °C - 20 °C). So based on the information provided, tourists get ideas about the seasonal period; hence they plan to attend the spot as their wish. Kulendran & Dwyer (2012) and Ridderstaat et al. (2014) went through the regression model to compute climate variables on seasonal variation apart from the economic factors. The result of those studies demonstrated that seasonal variation deviates from the annual mean (Gil-Alana & Huijbens, 2018), which indicates the oscillation of tourism activities from one season to another season. Hence, tourism sector is highly dependent on seasonality and appropriate strategies needs to be adopted to maintain sustainability based on seasonality opportunities. As stated by Mishra et al. (2018) that, seasonal variation happens due to the changes in weather conditions at numerous tourist spots, which generates fluctuation in tourist arrivals; hence it is challenging to retain a sustainable economy across the country. Also, they said that in India, in the calendar's first and fourth quarters are peak levels in tourist arrival, second and third quarters are lean seasons; thus, for the second and third quarter, tourist destinations and the tourism sectors need to find strategies to ensure survival during the lean season.

Seasonality provides both positive and negative effects in travel and tourism sectors; in the positive side, it provides a multiplicity of impact in tourism, which includes packing, supply and estimating accomplishments; numerous employments (Cannas, 2012), sustainability in economics (Martinez et al., 2019), cash flow, business investment and tourism management (Pegg et al., 2012) whereas negative side delivers strategies and actions to survive the lean season (Baum, 1999). Also mentioned by Jang (2004) that on the positive side, seasonality offers higher price with low quality and low satisfaction products to tourist due to the huge tourist crowd has a positive effect on tourism and at the same time it negatively affects the tourists. During August, in ArugamBay, 55% of female tourists and 45% of male tourists arrived. Approximately 53% of tourists in ArugamBay tourist were aged between 21 to 30 years. Tourists from Russia, the USA, England, Belgium, and Spain have the most number of tourist visitors to ArugamBay. Tourists from France and Germany has 13% and 10% of traffic respectively during the peak season in ArugamBay. Well-educated tourists typically arrive in ArugamBay, 31% of tourist have their degrees, 39% are government sector employees and 19% are private-sector

employees. 20% of unemployed tourists visit Sri Lanka for surfing purposes. A typical tourist who arrives in in ArugamBay spends 60 to 70 US dollars per day during the peak time; it will slightly decline to USD 50 in the semi-off season and completely drops in the off-season. A study conducted by DO et al. (2020) reveal a relationship between the Management Accounting Information Usage, Market Orientation and Performance” in the Vietnam tourism firms. This study suggested that to have a better decision-making process, tourism firms must be aware and must focus on management accounting information.

3. Objectives

This research tries to study how seasonality affects the tourism and hospitality industry. The main objective of this research is to study the impact of seasonality on the tourism and hospitality sector after the civil unrest in the Arugam Bay of Sri Lanka. Further, the following sub-objectives were selected to make a detailed study through this research.

1. To identify the potential for seasonal tourism in the area of study.
2. To explore the impact of seasonality on the travel and tourism sector in the study area.
3. To analyze the variation of the impact of seasonality across the categories of the firms.

4. Methodology

This study has used the mixed-method approach, which includes Qualitative Method and quantitative research methods. The qualitative method of the research has been used for conducting semi-structured interviews and discussions. Quantitative Methods were used for the analysis of the collected data from the questionnaires. The Questionnaires were distributed to collect the primary data among the respondents. SPSS statistical software was used for data analysis.

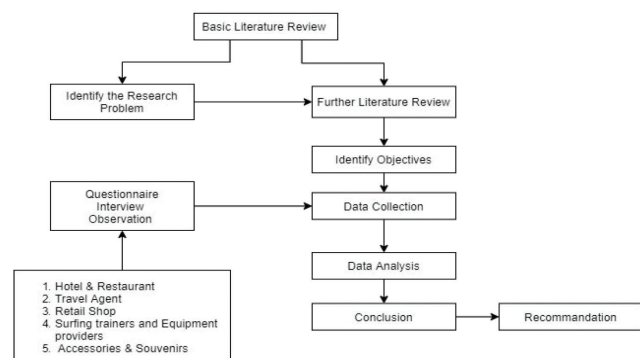


Figure 1: Methodological Framework

4.1. Data Collection

The travel and tourism sector have been mainly categorized in five parts in the Study Area

- Hotel and Restaurants.
- Travel Agents
- Retail Shops
- Surfing trainers and equipment providers
- Accessories and souvenirs

A structured five-point Likert scale questionnaire was given to all sample units. There is no ethical issues in the collection of data. Participation in the data collection process is voluntary and data is collected anonymously. The questionnaire analyzed the following aspects:

Table 1: Different aspects of the impact of seasonality

Workers	Q1	Work distribution
	Q3	Confrontation between workers
Quality of Services	Q2	Service quality
	Q4	Shortage of Services
	Q5	Congestion for service consumption
Supply	Q6	Increase in costs
	Q7	Effect of prices
	Q8	Extra facilities & services supply
Environment	Q9	Physical erosion
	Q10	Disturbance of wildlife
	Q11	Congestion
	Q12	Heavy use of environment

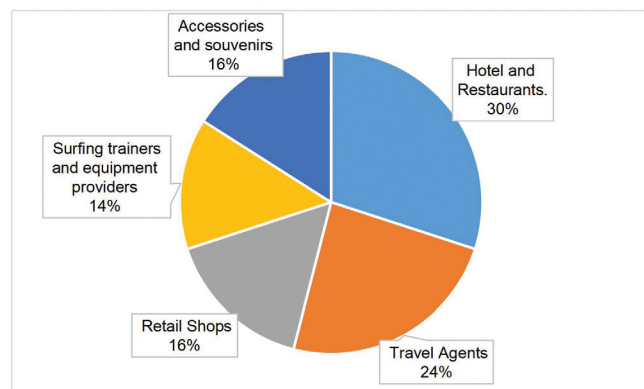


Figure 2: Types of firms based on respondents

4.2. Data Analysis

Data Analysis consisted of 3 parts to achieve the objective completely

- i. Exploratory Study: Potentials for Seasonal tourism in the study area
- ii. Descriptive analysis of the overall impact of the Seasonality Tourism and Hospitality sector of the study area.
- iii. Independent Sample Test: Impact of seasonality across different Tourism and Hospitality sector of the study area.

5. Results and Discussion

The questionnaire was made available to the firms in the study area; together, 80 questionnaires were distributed directly to the firm by a convenient sampling method. Participants can have the English, Tamil, or Sinhala Questionnaire according to their preference; from the 80 questionnaires distributed, 54 responses were recorded (67.5%) and out of that 50 gave the valid responses that were used for analysis. The overall response rate was 62.5%. The majority of the sample’s respondents, 30%, were Hotel and Restaurants, followed by Travel Agents 24%, and Retail Shops 16%. As regards the location of the tourism sector, Surfing trainers and equipment providers were 14%, Accessories, and souvenirs were 16%.

5.1. Exploratory Study

The island of Sri Lanka is a small universe in itself. In the current tourism scenario, it has become famous for different forms of tourism, Such as Agro tourism, Health Tourism, Dark Tourism, Urban tourism, and Cousin Tourism. Even though it is an island, Sri Lanka is famous for Beach tourism. Arugam Bay is one of the most famous spots for surfing. It is categorized under the top 10 surfing destinations in the world. According to a structured interview used in this study, it was found that surfing is the leading and only reason for the tourist arrivals to the Pottuvil area. Here surfing becomes one of the crucial components of tourism. Various direct and indirect employment opportunities are created due to the tourist influx in the area. The attractions of Arugam Bay are numerous and cater to visitors with different interests. It is fantastic to visit this place, which has altogether very different attractions for the tourists.

Seasonality is a vital point to determine the level of tourism in Arugam Bay. There is two different season one is off-season and other is the Peak season. Peak season starts from March to October, and November to February is off-season. The arrival of the domestic tourists are high in December. Most of them come merely for visiting the place therefore, there is not much income generation during this period.

Table 2: History of ArugamBay tourism

Period	Description	
Earlier 1985	<ul style="list-style-type: none"> Hippie Tourists Kajan huts for accommodations to tourists 	<ul style="list-style-type: none"> Marketing towards sharing information to the people Coconut stud used as Surfing board
1985	<ul style="list-style-type: none"> Peak Season 	<ul style="list-style-type: none"> Further ten hotels created
1987	<ul style="list-style-type: none"> Affected by the civil war 	<ul style="list-style-type: none"> Tourist arrival declined
1995	<ul style="list-style-type: none"> Tourist arrival started 	<ul style="list-style-type: none"> Ten surfing points were identified
2000	<ul style="list-style-type: none"> Development of nearby attractions Increase in the number of the local tourists 	<ul style="list-style-type: none"> Surfing competition started
2004	<ul style="list-style-type: none"> Effect of Tsunami 	<ul style="list-style-type: none"> Destroyed the place
2009	<ul style="list-style-type: none"> War comes to an end Issuing licenses 	<ul style="list-style-type: none"> Development of infrastructure facilities
2020	<ul style="list-style-type: none"> COVID 19 effect The tourism sector could not achieve the peak season income of ArugamBay 	<ul style="list-style-type: none"> Zero amount of tourist arrival Only the tourist stayed who were not able to get back to their homes Prices for the product low

Source: ArugamBay Tourism development Authority, Community through the interview and field observation

In peak season, surfing is the main reason to visit the place and it offers great climate, and the weather is beautiful for surfing and because of that this place becomes a great attraction for young tourists. Adventure is one of the essential motives for ArugamBay tourism. Even in the off-season, the place is excellent for spending time as the place offers a calm and peaceful environment. Table 02 explains the history of the Tourism in Arugam Bay area.

As the tourism industry developed over time, the community also developed, and their standard of living increased.

5.2. Descriptive Analysis

Sri Lanka Tourism is highly dependent on seasonality. According to the different weather conditions and climate, it naturally abounds with different leisure places. People from different countries come to Sri Lanka on a particular season

Table 3: Types and destination tourism

Types of Tourism	Description
1. Beach Tourism	<ul style="list-style-type: none"> ✓ Arugam Bay Beach
2. Sports and adventure tourism	<ul style="list-style-type: none"> ✓ Surfing Arugam Bay (Surfing points) <ul style="list-style-type: none"> komari Crocodile rock Pottuvil Point Arugam Bay Pottuvil Beach Main Beach Panama Yala Rights
3. Cultural and Heritage Tourism	<ul style="list-style-type: none"> ✓ Okanda rock ✓ Magul Maha Viharaya ✓ Muhudhu Maha Viharaya ✓ Lahungala National Park ✓ The kudumbigala
4. Wildlife and Nature Tourism	<ul style="list-style-type: none"> ✓ Kumana ✓ The Yala National Park ✓ Crocodile Rock ✓ SandRidge
5. Eco-Tourism	<ul style="list-style-type: none"> ✓ Lagoon Eco Tour ✓ Threatened Mangrove forest ✓ Replanting Mangrove Habitat

Source: ArugamBay Tourism development Authority, Community through the interview and field observation

to enjoy seasonal charms that the place offers. Arugam Bay is a destination that is very well known as a surfing point in Sri Lanka and is famous for seasonal tourism. Tourism begins in March and peaks in August and September. There is a high positive impact on tourism services to develop the Pottuvil Area by encouraging community-based sustainable tourism (Purnomo et al., 2020; Than et al., 2020; Van Vu et al., 2020). Therefore, the development should ensure the specific measures for seasonality benefits. According to the literature summary, several key points related to tourism impact of seasonality have been mentioned earlier in table 01. According to that, this study tries to analyze the seasonality in different aspects, such as:

- Impact of Seasonality in workers
- impact of seasonality in the quality of services
- impact of seasonality in supply
- impact of seasonality in the environment

These aspects were captured through different statements given as a structured Questionnaire to the different firms in ArugamBay. The multiple response analysis was used to count the overall impact of seasonality of this study. The following tables gave a summary of the people's responses:

According to table 4, 75% (agree & strongly agree) of the firms confirm that seasonality impacts the workers. They agreed that there is an unequal work distribution during the season. It creates a confrontation between workers who are working during season and during off-season. Even though 11% of the firms do not have the same opinion, they refuse the impact of seasonality among the workers.

Quality of services consists of low Service quality, Shortage of Services, Congestion for consuming services. According to table 5, 59.3% of the firms agreed on the impact of seasonality on the quality of services. According to their point of view, during the peak season, as there is a huge demand, there were many challenges faced in offering a faultless service to the tourists. Inadequate management in firms causes these failures. On the other hand, 34.7% disagree on the impact of seasonality on the quality of services. They mentioned that even though there is a higher demand for the services during the peak season, they do not lower the quality of the services provided as it will cause reduction in demand in future.

The impact of seasonality on supply consists of increase in costs, effect of prices, and extra facilities & services supply. According to table 6, 68% of the firms give their positive suggestion on the impact of seasonality among the provision of goods and services; compared to the off-season, the price of the product and services are high in peak season due to the increase of demand and increase in the labor cost. Also, during the seasonal period, the suppliers try to increase the extra services and facilities to maximize the profit by attracting more tourists. Nevertheless, 30 % of firms disagree on the impact of seasonality on supply because some firms do not provide any extra services during the peak season; therefore, the cost of supply does not increase.

According to table 7, 83% of firms confirm that seasonality has an impact on the environment. However, in the case of the environment during the peak season, Heavy use of the natural environment, Physical erosion of footpath, and other natural resources was affected by the higher amount of tourist arrivals. In the area surrounding the beaches, several kinds of polluting activities are done by the locals and the travelers.

5.3. Independent Sample Test

In Arugam Bay there are several types of firms that are involved in tourism. This study has been identified as the main five groups to check the level of impact of the seasonality across groups. There are five primary division in the travel and tourism sector: Hotel and Restaurants,

Travel Agents, Surfing trainers, and equipment providers, Retail Shops and Accessories and superiors. According to the interview with the different kinds of entrepreneurs in the study, they had given different kinds of opinions about the seasonality impact. Therefore, it is essential to find whether these independent samples are from an identical population.

Kruskal-Wallis test is a Non-parametric Independent Sample Test equivalent to the one-way ANOVA. Kruskal-Wallis compares the medians or distribution of two or more samples to determine if they have come from different populations. The distributions do not have to be expected, and the variances do not have to be equal. These different study types of firms are considered as Independent variables, and their opinions are considered as dependent variables. The standard hypothesis to test the distribution is as given below:

H_0 : Impact of seasonality distribution is same across the categories of the firm

H_1 : Impact of seasonality distribution is not same across the categories of the firm

Table 8 explains the hypothesis summary to show how the various firms are affected in different ways by seasonality. The significance value is less than 0.05 in the first three hypotheses. Therefore, the null hypothesis of the first three components was rejected. Therefore, it emphasizes the impact of seasonality on workers, quality of services, and supply were different across the categories of firms in the ArugamBay. Despite this, the impact of the seasonality in the environment is the same across the categories of the firm. The significance value is 0.124, which is greater than 0.05, cause to accept the null hypothesis. Therefore, it summarizes that every firm's different categories are having an impact on the environment throughout the season. Also, Hotel and Restaurants, Travel Agents, Retail Shops, Surfing trainers and equipment providers, Accessories, and souvenirs confirmed that in peak season, the environment is positively affected by the local, foreign people, and anglers. Observation in the study area also witnesses pollution in the immediate beach area. Plastic waste dump was found near the bushes within the beach area.

According to table 09, Hotel and Restaurant, Travel Agents are highly agreed (Strongly agree, agree) on the impact on seasonality on workers. Besides, 31.3%, 21.7% of the Accessories and souvenirs & Surfing trainers and equipment provider firms, respectively, disagreed (Disagree, Strongly disagree) with the impact of seasonality on workers. Therefore, it concludes that seasonality impacts favorably on the workers who provide their services for the hotels and the restaurants and travel Agents. Simultaneously, it had a similar effect on workers in Accessories, souvenirs, surfing trainers, and equipment provider firms. It also moderately influenced retail shop workers.

Table 4: Impact of Seasonality in workers

		Responses		Percent of Cases
		N	Percent	
Impact of seasonality in workers	strongly agree	55	55.0%	110.0%
	agree	25	25.0%	50.0%
	neutral	9	9.0%	18.0%
	disagree	10	10.0%	20.0%
	strongly disagree	1	1.0%	2.0%
Total		100	100.0%	200.0%
a. Group (2 Questions – Q1, Q3)				

Table 5: Impact of seasonality in Quality of Service

		Responses		Percent of Cases
		N	Percent	
Impact of seasonality in Quality of Service	strongly agree	68	45.3%	136.0%
	agree	21	14.0%	42.0%
	neutral	9	6.0%	18.0%
	disagree	25	16.7%	50.0%
	strongly disagree	27	18.0%	54.0%
Total		150	100.0%	300.0%
a. Group (3 Questions – Q2, Q4, Q5)				

Table 6: Impact of Seasonality in Supply

		Responses		Percent of Cases
		N	Percent	
Impact of Seasonality in Supply ^a	strongly agree	71	47.3%	142.0%
	agree	31	20.7%	62.0%
	neutral	3	2.0%	6.0%
	disagree	24	16.0%	48.0%
	strongly disagree	21	14.0%	42.0%
Total		150	100.0%	300.0%
a. Group (3 Questions – Q6, Q7, Q8)				

Table 7: Impact of Seasonality in Environment

		Responses		Percent of Cases
		N	Percent	
Impact of Seasonality in Environment ^a	strongly agree	120	60.0%	240.0%
	agree	46	23.0%	92.0%
	neutral	17	8.5%	34.0%
	disagree	13	6.5%	26.0%
	strongly disagree	4	2.0%	8.0%
Total		200	100.0%	400.0%
a. Group				

Table 8: Hypothesis Test Summary

	Null Hypothesis	Sig.	Decision
1	The distribution of the impact of seasonality in workers is the same across categories of the firm.	.000	Reject the null hypothesis.
2	The distribution of the impact of seasonality in the quality of services is the same across categories of the firm.	.000	Reject the null hypothesis.
3	The distribution of the impact of seasonality in supply is the same across categories of the firm.	.000	Reject the null hypothesis.
4	The distribution of the impact of seasonality in the environment is the same across categories of the firm.	.124	Retain the null hypothesis.

Table 9: Impact of Seasonality in workers across the firms

			Impact of Seasonality in workers					Total	
			strongly agree	agree	neutral	disagree	strongly disagree		
Types of firms	Hotel and Restaurant	Count	20	10	0	0	0	30	
		% within Type firm	66.7%	33.3%	0.0%	0.0%	0.0%		
	Travel Agents	Count	19	5	0	0	0	24	
		% within Type firm	79.2%	20.8%	0.0%	0.0%	0.0%		
	Retail Shops	Count	4	6	3	3	0	16	
		% within Type firm	25.0%	37.5%	18.8%	18.8%	0.0%		
	Surfing trainers and equipment providers	Count	5	3	3	3	0	14	
		% within Type firm	35.7%	21.4%	21.4%	21.4%	0.0%		
	Accessories and souvenirs	Count	7	1	3	4	1	16	
		% within Type firm	43.8%	6.3%	18.8%	25.0%	6.3%		
	Total		Count	55	25	9	10	1	100
	Percentages and totals are based on responses.								
a. Group (2 questions – Q1,Q3)									

Table 10: Impact of seasonality in Quality of Service across the firms

			Impact of seasonality in Quality of Service					Total	
			strongly agree	agree	neutral	disagree	strongly disagree		
Type firm	Hotel and Restaurant	Count	24	6	5	10	0	45	
		% within Type firm	53.3%	13.3%	11.1%	22.2%	0.0%		
	Travel Agents	Count	17	7	0	4	8	36	
		% within Type firm	47.2%	19.4%	0.0%	11.1%	22.2%		
	Retail Shops	Count	16	0	0	3	5	24	
		% within Type firm	66.7%	0.0%	0.0%	12.5%	20.8%		
	Surfing trainers and equipment providers	Count	10	4	0	0	7	21	
		% within Type firm	47.6%	19.0%	0.0%	0.0%	33.3%		
	Accessories and souvenirs	Count	1	4	4	8	7	24	
		% within Type firm	4.2%	16.7%	16.7%	33.3%	29.2%		
	Total		Count	68	21	9	25	27	150
	Percentages and totals are based on responses.								
a. Group (3 Questions – Q2, Q4, Q5)									

Table 11: Impact of Seasonality in Supply across the firms

			Impact of Seasonality in Supply ^a					Total	
			strongly agree	agree	neutral	disagree	strongly disagree		
Type firm	Hotel and Restaurant	Count	20	10	0	9	6	45	
		% within Type firm	44.4%	22.2%	0.0%	20.0%	13.3%		
	Travel Agents	Count	18	6	0	6	6	36	
		% within Type firm	50.0%	16.7%	0.0%	16.7%	16.7%		
	Retail Shops	Count	16	3	1	4	0	24	
		% within Type firm	66.7%	12.5%	4.2%	16.7%	0.0%		
	Surfing trainers and equipment providers	Count	16	5	0	0	0	21	
		% within Type firm	76.2%	23.8%	0.0%	0.0%	0.0%		
	Accessories and souvenirs	Count	1	7	2	5	9	24	
		% within Type firm	4.2%	29.2%	8.3%	20.8%	37.5%		
	Total		Count	71	31	3	24	21	150
	Percentages and totals are based on responses.								
a. Group (3 Questions – Q6, Q7, Q8)									

According to the table 10, the impact of seasonality in Quality of Service is highest among the Retail Shops, 66.7% at the same time lowest among the Surfing trainers and equipment providers, which denotes 33.3%.

According to table 11, seasonality has a higher impact on the supply of surfing trainers and equipment providers. The reason is that their supply highly depends on the season. Surfing is possible in selected periods in ArugamBay. Even during season, it has a lower impact on the supply of accessories and souvenirs, 58.3% in the study area. Because throughout the year, the prices and the costs are the same in these types of firms. Besides, they do not engage in any kind of extra facilities or service provision during the season.

6. Conclusion

Tourism is a dynamic industry, which boosts economies by generating income, employment, investment, and other benefits. Seasonality plays a significant role in the tourism sector. Sri Lanka highly depends on season tourism. ArugamBay is one of the seasonal tourism destinations in Sri Lanka. According to the study, peak months for arrivals falls from August to September in ArugamBay.

Also, the highest number of arrivals have been recorded in December too. ArugamBay witnessed that a strong impact of seasonality exists in the tourism sector. According to the results, 83%, 75%, 68%, and 59.9% of firms agreed that the impact of seasonality on the environment, workers, supply, and quality of services respectively in ArugamBay. At the same, it also concludes that the impact of seasonality on workers, suppliers, and quality of services is not the same among different categories of firms. The seasonality affects positively on the workers who work in the hotel and the restaurant industry. Simultaneously, there is a similar effect on workers in firms dealing with accessories, souvenirs, surfing trainers, and equipment provider firms. It also moderately influence retail shop workers.

Moreover, the impact of seasonality in quality of service is highest among the retail shops and lowest among the surfing trainers and equipment providers. Also, seasonality has a higher impact on the supply of surfing trainers and equipment providers, lower impact on the supply of accessories, and souvenirs. Despite this, every firm in different categories pursue an impact on the environment throughout the season. The variation in the impact of the seasonality in the tourism and travel sector is the lack of

regional planning with consideration of the types of firms in the tourism sector—also, the lack of training for the workers. Insufficient resources and lack of consistent capacity between various sectors are also the reason for variation in results.

7. Recommendations

1. Tourism planning should consider the different levels of impact of seasonality across the categories of firms.
2. Places should be appropriately identified during the seasonality period and explore the tourist.
3. Based on the seasonal period, the foods, events, religious festivals should be thoroughly planned, and individual agendas should be developed with the help of the community.
4. Building new resorts and artificial tourism destinations.
5. Develop and offer different forms of tourism, especially explore the beach and indigenous tourism
6. Using climate at maximum utility level to become a good competitor.
7. Find the unknown geographic places, which could be, attract more tourists.
8. Increasing awareness about tourism destinations in ArugamBay through social media.
9. Inverse the hope of the tourists, which he or she desires to come by increasing garden facilities and environment friendly places.

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