

Sri Lanka Journal of Food and Agriculture (SLJFA)

ISSN: 2424-6913
Journal homepage: www.slcarp.lk



Research Paper

Potential visitors of spice tourism and their intended future behaviour: a case study in the *Kolonna* Divisional Secretariat Division of Sri Lanka

S.H.P. Malkanthi

Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, Belihuloya, Sri Lanka
malkanthi09@gmail.com  <https://orcid.org/0000-0002-2438-9976>

Article History:

Received: 2 February 2017
Revised form received: 17 May 2017
Accepted: 30 June 2017

Abstract: Agro-tourism attracts visitors to an area, which is used primarily for agricultural purposes. Spice tourism is a form of agro-tourism that allows a specific land area for the benefits of the visitors to gain knowledge and experience of various spice crops, while roaming around the cultivations while feeling the aroma of spices. This study

examined the potential visitors of spice tourism and their intended future behaviour regarding agro-tourism in spice gardens in the Kolonna Divisional Secretariat Division (DSD) of Sri Lanka. A field survey was conducted for 40 local and foreign visitors who had visited three popular tourist destinations, namely, Maduwanwela Walawwa, Panamure Ethgala and Wavulpane Limestone cave in Kolonna. The results revealed that the middle-aged, educated, employed people with higher levels of income and living in urban areas are the potential visitors of spice tourism. Although their knowledge about spices was high, the awareness on the concept of spice tourism was low. However, visitors were willing to visit and study spice gardens as tourism destinations, and would also stay one to two days and purchase spice products. Therefore, it is worthwhile to establish spice tourism destinations in spice gardens in Kolonna for the benefit of visitors as well as spice growers.

Keywords: *Kolonna, potential visitors, spice gardens, spice tourism, Sri Lanka*



This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Introduction

Spices constitute an important group of the state's agricultural commodities, which are virtually indispensable in the culinary industry. Many spices have antimicrobial properties. This may explain the reason for using spices more commonly in warmer climates, which have more infectious diseases, and its' more prominent in the meat industry, which is particularly susceptible to spoilage. A spice may have other uses as well, including medicinal, religious, rituals, cosmetics or in perfume production, or as a vegetable.

Sri Lanka, a tropical island in the Indian Ocean, has been renowned for centuries for the variety of spices grown in the country. Thus, the country was also known as the "Spice Island" due to the quality spices produced. During ancient times, the Greeks, Romans, Arabs, and western nations maintained links with Sri Lanka through the spice trade (SAPPTA, 2013). Sri Lanka has continued to be an important global source of spices including cinnamon, pepper, cloves, cardamoms, nutmeg, mace and vanilla (SAPPTA, 2015).

Well distributed rainfall throughout the year, moderate temperature, the ever green environment, widespread irrigation facilities, and the fertile lands have created a rich environment for the cultivation of various spice crops in the country. The export volume of spices in 2013 up to the month of October has increased sharply by 40.38% as compared to the same period in 2012. Exports of pepper, cloves and essential oils also have shown significant increases of 81.82%, 23.35%, 22.55%, respectively (SLEDB, 2014). The spice sector has performed extremely well in terms of value as well as volume. Exporters have been able to achieve this mainly, due to successful performance in existing markets as well as due to emerging export markets. Sri Lanka has exported the largest quantity of pepper (21,330 tons) in 2013 becoming the fourth largest exporter in the world, however, Sri Lanka's share in overall global market is only 8% (SAPPTA, 2014). Under the spice sector development plan, the contribution of spices to the economy is expected to be boosted to 5% by 2020 from 0.4 % that it now commands in 2010 (Department of National Planning, 2010).

Agro-tourism is the practice of attracting visitors to an area used basically for agricultural purposes (Che *et al.*, 2005; Barbieri, 2010; Schilling *et al.*, 2012). It attracts tourists to rural areas as a form of relaxation, enjoyment and education. Nevertheless, this provides an option for farmers or entrepreneurs to diversify their farming, and use hospitality operations that will attract more economic activities to rural areas. Agro-tourism can be viewed as small scale, low impact, education focused and recreational (Wicks and Merrett, 2003; Wall, 2006). Moreover, it can be explained as "a commercial enterprise on a working farm, or agricultural plant, conducted for the enjoyment of visitors while generating supplement income for the owner" (Mahaliyanaarachchi, 2014). The agricultural diversity of the Sri Lanka has further created opportunities for agro-tourism. Though agro-tourism in Sri Lanka is still in its infant stage, the country has a huge potential to grow in this sphere, as it has been an agricultural country for a long period (Malkanthi and Routry, 2012).

Spice tourism is a form of "agro-tourism" that allows a specific land area for the benefits of the visitors to gain knowledge and experience of various spices, while roaming around these spice cultivations and feeling the aroma of spices by themselves. It is a sort of viewing and experiencing something, which visitors have never seen or felt before. Studying about spices including processing of the same, accommodation in the farm houses or cabanas in spice lands, stalls to sell spice products and restaurant to taste spicy cuisines, are some of the facilities that can be experienced by visitors while on spice tourism (Prabhudesai and Kunde, 2011). In addition, a variety of Sri Lankan spices provides ideal grounds for traditional Ayurvedic practices, which is an ancient form of medicine and considered the science of long life, using natural remedies to achieve physical and mental wellbeing. Herbs, spices and their natural oils play a prominent role in Ayurveda massage and alternative therapies. Thus, these spice gardens offers tourists memorable visits with unique experience.

The *Kolonna* Divisional Secretariat Division (DSD) is situated in the Ratnapura district of Sri Lanka in the Sabaragamuwa Province. Other than agricultural plantations, herbal and spice cultivations are scattered throughout the *Kolonna* area. Black pepper, cardamom, citrus, cinnamon, cloves and nutmeg are among the wide range of tropical spices available in in the region. *Kolonna* is especially famous for small-scale pepper and cinnamon cultivations. The increasing production of the smallholder sector of *Kolonna* could be due to the continuous support and assistance provided by the government to the spice sector. Meanwhile, some farmers are engaged in processing and value addition to spice products as well. Although, most of the farmers in *Kolonna* cultivate one or a combination of several spice crops and earn a significant level of income, harvesting of spice crops is mainly done once a year. Rest of the time, they do not have any other significant sources of income leaving many members of their families unemployed. Furthermore, this farming community faces financial difficulties when price reductions take place in the world trade for spices during the harvesting season in the area. These issues suggest the need for alternative

employment opportunities to ensure livelihood of the spice growers.

The objectives of this study were to assess the profile of potential visitors and their intended future behaviour, to identify the factors associated with willingness to visit spice tourism destinations, to identify the factors associated

with willingness to purchase spice products and to analyses the expected as well as the conditions experienced in spice tourism in an existing tourism destination. The outcome of this study was expected to provide useful information to the farmers to understand the future demand for spice tourism in the in order to initiate spice tourism destinations using their own spice cultivations.

Conceptual framework of the study

As illustrated in Figure 1, agro-tourism is a sub sector of tourism industry and is becoming gradually popular at present in Sri Lanka. Agro-

tourism can be further categorized as tea tourism, rubber tourism, spices tourism, etc.

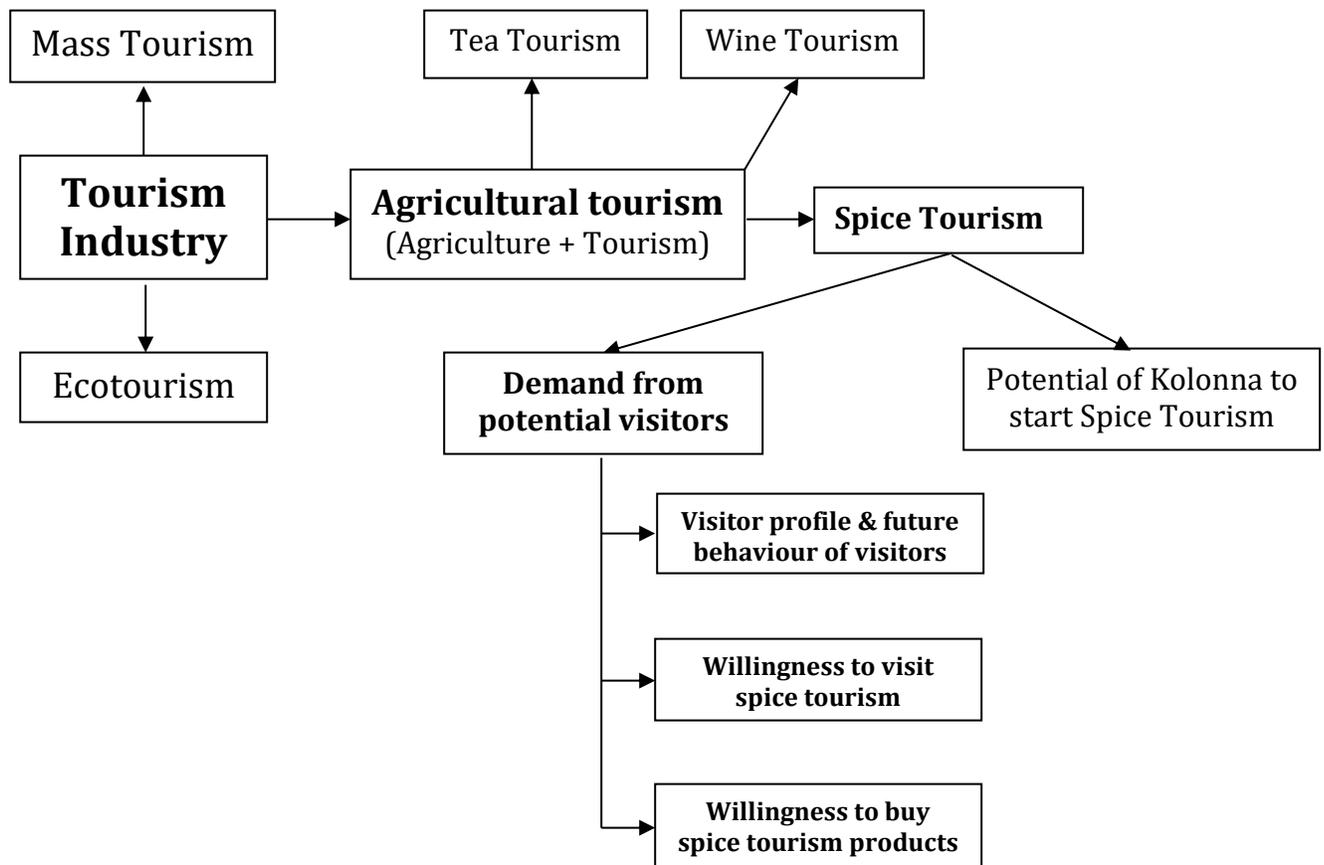


Figure 1. Conceptual framework of the research study

Study Location

The study area for this research was Kolonna Divisional Secretariat Division (DSD) of the Ratnapura district in Sri Lanka. It is a potential area to promote spice tourism, as it is a successful

spice growing area including places of interest to visit. While there is a large number of spice cultivating farmers, the agro-climatic and soil conditions in this area are favourable for spice

cultivation. As illustrated in Figure 2, the study area comprises of 29 Grama Niladhari (GN) Divisions (LGEP, 2011).

As noted earlier, tourism industry is also functioning well in Kolonna. Among the several popular tourist destinations, Maduwanwela Walawwa, Panamure Ethgala and Wavulpne Limestone cave have attracted more visitors over the years. Although visitors are relatively low during off seasons, about 5,000-7,000 tourists visit the three tourist destinations monthly during the tourist season. Out of them, 400 – 600 are foreign tourists (LGEP, 2011). Apart from these three tourism attractions, Sinharaja rainforest, Gongala

mountain range and the natural water falls adjoining the area are few other famous location visited by the nature lovers. Locations with historical and religious values have also attracted tourists to the region. “*Omalpe Purana Tampita Vihara*” is one such important religious place that has attracted people due to its paintings belonging to the Kandyan kingdom era (LGEP, 2011). As there is an already established tourism industry in the study site, it was assumed that there may be a potential to initiate and promote spice tourism in the area. As there have been no studies to evaluate this potential, this study was an attempt to meet this requirement.

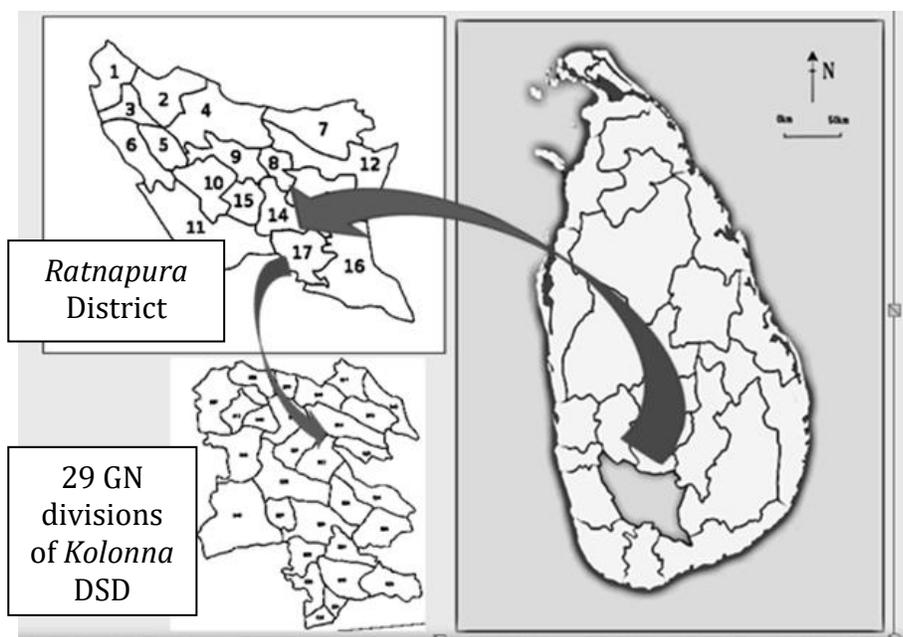


Figure 2. Sri Lanka Map showing Kolonna Divisional Secretariat Division (DSD) divisions in Ratnapura District and the Grama Niladhari (GN) divisions in the Kolonna DSD

Research Method

The survey research design was applied to collect data from visitors to the sites. A pre-tested researcher-administered questionnaire was used as a data gathering tool. From the visitors to the aforesaid three tourism destinations, 40 visitors (34 locals and 6 foreigners) were randomly selected due to the time and budget constraints. Though the sample was small, given that around 6000 visitors annually visit this area, the standard deviations of the variables were found to be

marginal, justifying the small sample size selected. Data collection was done during January-April 2015. Descriptive statistics, chi square tests and paired T-tests were used to analyze the data using SPSS software at $p=0.05$. Descriptive statistics were used to evaluate the socio-economic factors of visitors’ profile and intended future behaviour of visitors. Chi square tests ($p=0.05$) were applied to find out the association between socio-economic factors of visitors and their willingness

to visit spice tourism and to purchase spice products. Visitors' expected and experienced conditions for ten tourism attributes (personal safety of visitors, accessibility to the area, participation in recreational activities, availability of educational activities, getting experience on tourism activities, availability of local transport services, availability of the local foods, friendliness of local people, availability of other cultural/historical attractions, possibility of

buying local products) were measured using 5-point Likert scale and the results were compared using paired t-test ($p=0.05$). Ten hypotheses were derived with regard to expected and experienced conditions of ten tourism attributes of the existing tourism destinations (e.g. H_0 : There is no difference in expected and experienced conditions of personal safety of visitors, H_1 : There is a difference in expected and experienced conditions of personal safety of visitors).

Results and Discussion

Results of the study have been arranged in four sections as visitors' profile and intended future behaviour of visitors, factors associated with willingness to visit spice tourism destinations and factors associated with willingness to purchase Potential visitors' profile provides important information where tourism industry is concerned. It helps to predict and plan future tourism

spice products and expected conditions of tourism attributes of existing tourism destinations by visitors.

Potential visitors' profile

activities successfully. The important socio-economic factors of visitors' profile are presented in the Table 1.

Table 1. Visitors' profile (n=40)

Socio-economic factor	Percentage (%)	Socio-economic factor	Percentage (%)
Age (years)		Type of occupation	
<18	07	Self employed	17
18-30	13	Government employed	20
30-45	24	Private sector employed	29
45-60	37	Unemployed	16
>60	19	Other	18
Gender		Monthly household income (LKR)	
Male	48	25,000- 50,000	03
Female	52	51,000- 75,000	23
Education level		76,000-100,000	45
No formal education	02	125,000-150,000	21
Up to grade 5	05	>151,000	08
Up to G.C.E O/L	19	Living area of visitors	
Up to G.C.E A/L	22	Urban	88
Diploma or Degree	52	Local	12

LKR = Sri Lanka Rupee

The profile of the visitors was studied through socio-economic characteristics including age, gender, education level, type of occupation, monthly household income and living area of visitors. Most of the visitors (56%) were middle-aged and above. However, similar percentages of male (48%) and female (52%) visitors were present. In terms of level of education, most of the visitors (52%) had a diploma or qualification

above. Thus, it was clear that most of the visitors have relatively high educational attainments. Furthermore, most of them were engaged in different types of occupations. The majority of visitors were had a monthly income higher than 76,000.00 LKR, which is well above the average monthly income of a normal Sri Lankan family, *i.e.* 46,207 LKR (DCS, 2013). Most of the visitors (88%) were from the urban areas. Previous

studies have also reported similar features of the visitors, where middle-aged, educated, employed with higher income levels and urban sector people have created a higher demand for such tourism destinations (Huh, 2002; Ainley, 2010; Malkanathi and Routray, 2012; Leco *et al.*, 2013).

Intended future behaviour of visitors

The intended future tourism behavior of potential visitors was studied in detail using several factors. The findings are presented in the Table 2.

Table 2. Intended future behaviour of the visitors (n=40)

Factor	Percentage (%)
Type of travel group	
Tour group	21
Family	56
Friends	10
Partner	13
Mode of travel	
Own vehicle	53
Hired vehicle	24
Public vehicle	10
Other	13
Awareness on agro-tourism	
Yes	31
No	63
Not responded	06
Willingness to study about agro-tourism and spice tourism	
Yes	84
No	11
Not responded	05
Willingness to visit in spice tourism destinations	
Yes	91
No	04
Not responded	05
Length of stay	
1 day	65
2 days	23
3 days	03
Not responded	09
Willingness to purchase spice products	
Yes	52
No	26
Not sure	23
Spices which visitors are willing to purchase	
All the spices	53
Pepper and Cinnamon	31
Clove and Cinnamon	05
Pepper and Clove	05
Not responded	06
Reason for purchase spices	
Better quality	24
Fresher	49
To support local farmers	21
Not responded	06

As shown in Table 2, most of the visitors had visited these tourism places with families (56%) using their own vehicles (53%). However, most of them (63%) did not have adequate awareness in this regard. Despite this, majority of the visitors (84%) were willing to study about agro-tourism and spice tourism. Furthermore, majority of them (91%) were willing to visit spice tourism destinations and a significant proportion of them (88%) would prefer to stay one or two days in these destinations while 52% of them were willing to purchase spice products from these destinations mainly due to the product freshness. A significant proportion of visitors (21%) is

willing to buy spice products as a support for local farmers. The results clearly demonstrated background setting and potential for spice tourism operations in this study area.

Factors associated with willingness to visit spice tourism destinations and willingness to purchase spice products in Kolonna DSD

Six important socio-economic factors associated with willingness to visit spice tourism destinations and also willingness to purchase spice products were identified. These attributes were tested using the chi square test and the findings are presented in the Table 3.

Table 3. Factors associated with willingness to visit spice-tourism destinations and willingness to purchase spice products in *Kolonna*

Factor	willingness to visit spice tourism destinations			willingness to purchase spice products		
	Chi square value	Degree of freedom	P value	Chi square value	Degree of freedom	P value
Age	04.404	1	0.036*	1.371	2	0.504
Gender	01.970	1	0.160	1.423	2	0.436
Educational level	09.219	1	0.002*	7.160	2	0.028*
Occupation	01.184	1	0.277	4.252	2	0.119
Household income	10.835	1	0.001*	7.646	2	0.022*
Living area	05.386	1	0.027*	7.465	2	0.024*

*Significant at 95% Confidence Interval

Four out of six socio-economic factors, namely, age, educational level, household income and living area of visitors had significant positive associations with willingness to visit agro-tourism destinations (Table 3). Furthermore, three out of six socio-economic factors, namely, the educational level, household income and living area of the visitors had significant positive associations with willingness to purchase spice products in *Kolonna DSD*.

Comparison of visitors' expected and experienced conditions of tourism attributes existing in the tourism destinations

The expected and experienced conditions by visitors regarding ten attributes of the tourism

destinations were also identified and were tested using paired t-test (Table 4).

Of the ten attributes assessed, except "friendliness of the local people" (attribute 8), all the other attributes had negative mean differences. As mean values are negative and significantly different, H_0 related to those attributes were rejected and H_1 was accepted, suggesting that these attributes in the study sites had conditions lower than the expected levels. However, even the mean difference of the 8th attribute was statistically not significant. Thus, H_0 of the attribute 8 can be accepted suggesting that there the expected and experienced conditions with regard to this attribute is the same.

Table 4. Comparison of visitor expected and experienced conditions of tourism attributes of existing in tourism destinations (n=40)

Attribute	SD	Mean	Mean difference	95% CI for mean difference	T value	P value
1. Personal safety of the area						
Expected level	0.71432	4.45000				
Experienced level	0.74722	1.42500	-3.02500	2.68928, 3.36072	18.23	0.0000
2. Accessibility of the area						
Expected level	0.78078	4.57500				
Experienced level	0.70892	2.40000	-1.03497	1.84400, 2.50600	13.29	0.000
3. Participate in recreational activities						
Expected level	0.86787	4.37500				
Experienced level	0.69982	1.85000	-2.52500	2.14876, 2.90124	13.57	0.000
4. Availability of educational activities						
Expected level	0.67178	4.40000				
Experienced level	0.67511	1.57500	-2.82500	2.51025, 3.13975	18.15	0.000
5. Getting experience on tourism activities						
Expected level	0.71432	4.45000				
Experienced level	0.74722	1.42500	-3.02500	2.68928, 3.36072	18.23	0.000
6. Availability of local transport services						
Expected level	1.32795	3.92500				
Experienced level	0.74421	1.40000	-2.52500	2.03386, 3.01614	10.40	0.000
7. Availability of the local foods						
Expected level	1.06096	4.05000				
Experienced level	0.63851	2.95000	-1.10000	0.69159, 1.50841	5.45	0.000
8. Friendliness of the local people						
Expected level	0.87560	4.45000				
Experienced level	0.94699	4.22500	0.22500	-0.040979, .490979	1.71	0.095*
9. Availability of other cultural/historical attraction						
Expected level	1.13680	3.80000				
Experienced level	0.82858	2.32500	-1.47500	0.96810, 1.98190	5.89	0.000
10. Possibility of buying local products						
Expected level	1.32795	3.92500				
Experienced level	0.82858	2.32500	-1.60000	1.07875, 2.12125	6.21	0.000

Significant at 95% confidence interval

Conclusion

Considering the important features of the potential visitors as revealed in this study, it can be concluded that there will be a sustainable level of demand for spice tourism operations in the area highlighting the potential for spice tourism development in this area. Adults and elders with good educational backgrounds and higher level of monthly income and living in urban areas would create a good demand for spice tourism in the

study area. Improving level of main tourism attributes is extremely important to develop the tourism destinations as it helps increasing the length of stay, repeated visits and also publicity of the destination. However, as the sample size used in this study was relatively small, and was only from a single location, these findings need to be considered as indicative and further research is warranted.

Recommendations

According to the findings of the study, it is likely that there is a significant future demand for spice tourism in the area from a specific group of visitors. Farmers should also consider the visitors' profile and develop spice tourism destinations according to their requirements. Although visitors are willing to visit and stay in spice tourism destinations, farmers should arrange suitable educational and awareness programs for the visitors. A special program to give hands on experience in spice tourism is important. Furthermore, incorporation of better recreational and entertainment programs, cultural, historical and religious events, health improving activities in spice tourism will increase the attraction of visitors. As visitors are willing to purchase spice products, farmers should pay attention on high quality products, packaging, labeling and

displaying those products in an attractive manner. Availability of products for marketing in various quantities such as packed in 100 g, 250 g, 500 g, 1 Kg and so on is also important. Special attention should be paid to develop the main tourism attributes in their destination and also in the area. Facilities for the visitors to enhance their participation in recreational activities, educational activities, getting experience on tourism activities, availability of local foods and other cultural/historical attractions, and possibility of buying local products on their own should be facilitated. Furthermore, the farmers need support from the local and national level government to develop personal safety conditions, the road system of the area, and to establish a good local transport service to attract more visitors for spice tourism.

References

- Ainley, S. (2010): A Profile of Canadian Agritourists and the Benefits They Seek. *J. Rural Community Develop.*, 5: 58-75.
- Barbieri, C. (2010): An importance-performance analysis of the motivations behind agritourism and other farm enterprise developments in Canada. *J. Rural Community Develop.*, 5(1-2): 1-20.
- Che, D., Veeck A., and Veeck G. (2005): Sustaining production and strengthening the agritourism product: Linkages among Michigan agritourism destinations. *Agric. Human Values*, 22: 225-234
- DCS. (2013): Annual Report, Department of Census and Statistics, Colombo, Sri Lanka.
- Department of National Planning. (2010): *Vision for the Future: The Development Policy Framework of Government of Sri Lanka* Colombo: Ministry of Finance and Planning.
- Huh, J. (2002): Tourist satisfaction with cultural / heritage sites: The Virginia Historic Triangle. MSc thesis, University of New Haven, Connecticut, USA.
- Leco, F., Pérez A., Hernández, J.M., and Campón A.M. (2013): Rural tourists and their attitudes and motivations towards the practice of environmental activities such as agrotourism. *Int. J. Environ. Res.*, 7(1): 255
- LGEP. (2011): Draft Initial Environmental Examination. Kolonna Solid Waste Management Subproject, Ministry of Local Government and Provincial Councils for the Asian Development Bank.
- Mahaliyanaarachchi, R.P. (2014): Agro Tourism. Department of Agribusiness Management, Faculty of Agriculture Sciences, Sabaragamuwa University of Sri Lanka.
- Malkanathi, S.H.P. and Routray, J. K. (2012): Visitor satisfaction in agritourism. *International J. Agric. Manage.*, 2(1): 30.
- Prabhudesai, S. and Kunde, S. (2011): ICT in Agro-Tourism-A case study of Pascoal Organic Spice village, Goa. *IJCA Proc. Third Annual Global Business, IT and Management for Economic Development Conference*, November 2011.
- Schilling, B., Sullivan, K. and Komar, S. (2012): Examining the economic benefits of agritourism: The case of New Jersey. *J. Agric, Food Syst, Community Develop.*, 3(1), 199-214.
- SAPPTA. (2013): Annual Report 2012/2013. The Spices and Allied Products Producers' and Traders' Association, Sri Lanka.
- SAPPTA. (2015): Annual Report 2014/ 2015. The Spices and Allied Products Producers' and Traders' Association, Sri Lanka
- SAPPTA. (2014): The voice of spices, Sri Lankan newsletter, The Spices and Allied Products Producers' and Traders' Association Colombo, Sri Lanka.

SLEDB (2014): Annual Report, Sri Lanka Export Development Board, Colombo, Sri Lanka.

Wall, G. (2006): The nature of urban and community tourism. W. Jamieson (Eds.), Community Destination Management in Developing

Economics. The Haworth Hospitality Press, New York.

Wicks, B.E. and Merrett, C.D. (2003): Agro tourism: an economic opportunity for Illinois. *Rural Res. Rep.*, 14 (9):1-8.